GLASS AND VESSELS

LEFT. Georg examines the glass finds from the 1938 excavations at Kyrksundet, Hiittinen. Photo: Janne Harjula 2023.
RIGHT. Georg with a glass fragment he found during excavations at Slottsmalmen in Raseborg. Photo: Maija Holappa 2016.

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UNTANGLING THE STORY OF 16TH- AND 17TH-CENTURY ENGRAVED GLASS DRINKING VESSELS

ABSTRACT

Despite differences in shapes, sizes, and colours, some European glass vessels from the 16th and 17th centuries share similarities in decoration. They are covered in intricate diamond-point engravings of fine lines forming floral and foliage motifs, scroll, foliate, and spiral borders, and occasionally, birds, people, and animals. Many of these vessels are attributed to glassworks in Austria (1570–1600) although several other workshops used similar elements in their engraved decorations. Six sites are introduced here to identify the potential engravers of 23 fragments with comparable decorations from Finland, Estonia, and Latvia. Variations in design and dating are described and addressed.

Keywords: engraved glass vessels, post-medieval glass, European glass, diamond-point engraving, glass consumption

INTRODUCTION

Opportunities for material culture research have been constantly expanding in the recent decades. Finding parallels from richly illustrated catalogues of museum collections and archaeological sites was perhaps the easiest way to identify artefacts or their fragments for decades and continues to be a reliable method today. However, with the digitisation of research collections across the world and the move towards accessibility and optimised reuse of data,[1] we now have access to a growing number of comparative datasets coupled with publicly accessible photographs, all in increasingly higher quality. It has also never been this easy to establish contact and change information with other researchers which allows for collaboration and dissemination of knowledge at a level and speed which has previously been out of reach for most researchers.

All this can be useful in the study of obscure and rare archaeological artefacts. In this paper, several digitised and published catalogues of archaeological finds and museum collections were studied to collect examples of *façon de Venise* vessels with diamond-point engravings that employed fine lines for hatching and used scroll and foliate borders and hatched spiral bands as part of the design. These compositions appear, at least partially, on fragments found from Finland, Estonia, and Latvia.

The goal was to map the data from this region and establish whether the fragments can be associated with glassworks in Austria, namely Innsbruck and Hall-in-Tirol where this design was commonly used or whether there were any other potential engraving workshops where they could have been decorated. For this, information on vessels from other glassworks using the technique and similar designs was collected building on the author's preliminary study in 2022.[2] This raw dataset has been made available via DataDOI, an Open Access repository.[3] Mapping the regional data also allowed for a look at the consumption sites of vessels of this kind as well as the dating and typological variations.

EARLY STAGES OF THIS STUDY

Fourteen colourless cylindrical drinking vessel fragments with engraved borders and depictions of birds and plants were found in Tallinn (Fig. 1), Estonia in 1986 but their provenance and dating had remained unknown and the fragments unpublished. Whilst going through thousands of photographs of the objects stored at the Corning Museum of Glass (CMoG), a peculiar parallel was made in 2020. The collection is home to a tall colourless cylinder pedestal beaker (*Stangenglas*), made of colourless glass, and decorated with diamond-point engravings of a peacock, surrounded by plants and framed by intricate scroll and foliate borders above and below bands of hatched spirals.[4] Although the birds on the vessel found from Tallinn were smaller, there was no mistaking the similarity of the decorations of the two vessels (Fig. 2, 5), especially the use of thin parallel lines for hatching (filling in), the design of the borders, and the decorative elements (birds).

CMoG contains the largest collection of historic glass in the world. It boasts the 'most comprehensive collection of glass'[5] and a representative portion of the collection of over 50,000 objects has been digitised. However, the beaker with the peacock was not the only vessel in CMoG's collection that had been diamond-point engraved in this style. It transpired that there were a few other vessels that were decorated in a comparable manner although almost all the drinking vessels differed by shape and size. One of the vessels is not colourless but cobalt blue.[6] Most of the vessels from CMoG's collection had been associated with the 16th century glassworks in Hall-in-Tirol in modern-day Austria and were believed to have been decorated in Hall-in-Tirol or nearby Innsbruck.[7] As the decorations were not identical *per se*, in the original publication detailing the drinking ves-

FIGURE 1. Early 17th-century cylindrical drinking vessel with engraved birds from Tallinn (TLM 28149: 246-253, 271). Photo: M. Küttim, Tallinn City Museum.

FIGURE 2. Beaker (*Stangenglas*) (about 1600). CMoG 73.3.449. Gift of Jerome Strauss. Image licensed by The Corning Museum of Glass, Corning, NY (www.cmog.org) under CC BY-NC-SA 4.0.

sel found from Tallinn,[8] the connection to the Austrian Royal Chamber of Glass was made only tentatively.

The vessel fragments from Tallinn are stored at Tallinn City Museum. At the museum's request, the study was extended in 2022 to collect information on other engraved drinking vessels with analogous decorations. Seven intact vessels with similar designs kept in museum collections in the United States (CMoG and the J. Paul Getty Museum), generally donated by or bought from antiquarians and collectors with no distinctive provenance were identified.[9] Prof. Georg Haggrén was able to provide an example of a fragment with diamond-point engravings from Turku Castle in Finland.[10] Two partially preserved or reconstructed vessels, a goblet and a beaker, kept at Lüneburg Museum (*Museum Lüneburg*) were also identified[11] as well as a glass fragment with a scroll border from Hüti glassworks.[12] In total, twelve vessels with analogous decorations and dating (1580–1600) were examined in 2022 – five from archaeological sites and seven passed down through the centuries. Despite the small selection, it was evident that there are variations in the style or 'handwriting' of the designs not to mention the completely different shapes of the vessels.[13]

In the 2022 study, only the vessels stored at CMoG had been identified as potentially having been decorated at Innsbruck. For the other vessels, only the production site of the vessel was discussed – for one of the J. Paul Getty Museum vessels, a goblet, it was speculated to have been either Murano or Tuscany in Italy[14]; for the two vessels from Lüneburg, it was suggested that the vessels were made in Germany or the Low Countries.[15] This obviously does not mean that they could not have been decorated in Innsbruck but what are the other options? Which workshops used the scroll and foliate border and hatched spiral bands as motifs on 16th–17th-century engraved drinking vessels?

ENGRAVED GLASS AND FURTHER DATA COLLECTION

During the 2024 study, a variety of diamond-point engraved drinking vessels from the 16th and 17th centuries were identified in literature and digital collections in addition to the finds published in this article.[16] When compiling the dataset, the focus was on the decorations. As the quality of the images varied a lot, and some objects only had black and white images or no images at all, physical descriptions of characteristics (impurities, tinge, weathering) were avoided so as not to produce erroneous data. As thickness is not uniform in the same vessel and was only provided for two of the vessels

stored in museum collections out of the 120 entries on the dataset, this metric was not included but could be expanded on in the future. The width of the vessel was often omitted from the collection catalogues, but the height tended to be included, although with covered vessels, it is sometimes unclear whether the lid is included in the height of the vessel. Further information for each item can be found from the references provided in the dataset.

Diamond-point engraving was widely used as a decorative technique in Western and Southern Europe at the time.[17] The ancient technique was reintroduced by Muranese glassmaker Vincenzo d'Angelo dal Gallo around 1534 when he started using diamond-point engravings to decorate the edges of glass mirrors. He received a patent for ten years for the decoration of blown glass vessels with engravings but by the 1550s, the technique had begun to be widely practiced[18] despite it often being attributed to the glassworks in Hall-in-Tirol or Innsbruck.[19] Although in this article, most of the engravings are produced by scratching the surface of an annealed glass vessel with a diamond, engravings can also be done by holding the surface against a rotating copper wheel which is fed with an abrasive.[20]

The 16th-century diamond-point engravings can be characterised by the use of lines – a bold outline is generally hatched with thinner scratches of parallel lines. Bohemian engraved vessels are said to be decorated with various figures whereas at the glassworks at Hall, the only figural depictions are imperial eagles.[21] In the Low Countries, there was relatively little change in the technique in the 17th century and hatching with parallel lines was used until the end of the century when stippling[22] took over as the preferred technique.[23] Some of the workshops and engravers still employing hatching with parallel lines used similar floral, foliage, and bird motifs as found on earlier vessels, for example Willem Mooleyser who was active in the Netherlands from 1663–93. [24]

In the case of the objects under study here, the decorations can be dated by engraved dates on the vessels or the vessel typology. In other cases, it is also possible to identify the engraver or potential workshop by monograms or signatures. With the help of these securely dated stylistic elements, it becomes easier to date other vessels or fragments thereof with similar decorations. In the following section, 16th-and 17th-century glassworks where diamond-point engraving with hatches of thin parallel lines, scroll and foliate borders, and/or hatched spiral bands were used are examined to establish how the designs of the workshops differ.

ARE INNSBRUCK AND HALL-IN-TIROL THE ONLY OPTIONS?

Austria – Hall-in-Tirol (1534–1635)

As already mentioned, there were glass workshops in Hall-in-Tirol and Innsbruck in Austria in the 16th century. The vessels made at these workshops have been described in detail by Erich Egg.[25] The glassworks in Hall-in-Tirol (*Glashütte Hall in Tirol*) were notable in the production of *façon de Venise* colourless glass.[26] Archduke Ferdinand I gave Wolfgang Vit(t)l the right to start producing glass in Hall-in-Tirol in 1534, but Wolfgang went bankrupt and died in 1540. The glassworks were taken over by Sebastian Höchstetter who operated the site until his death in 1569. During Sebastian's time, Italian workers were replaced by locals and the Hall-in-Tirol glassworks income increased significantly, mostly thanks to the sale of window glass.

Artistically, diamond-point engraving (Fig. 3a), gilding,[27] and 'German-style' pattern-moulded decorations (ribbing, diamond patterns) began to be used. Egg has argued that the vessels were not painted or gilded on site[28] and that the same engravers that worked at Innsbruck also decorated the

FIGURE 3. Engraved cylindrical beaker from A – Hall-in-Tirol (GL/283), dated 1570–1580, B – covered goblet from Innsbruck (1836&A-1855), dated 1570–1600, and C – goblet with a ribbed knop from Crutched Friars (C.4-1967), dated to 1578. Photos: Egg 2008 [1962], fig. 65; © Victoria and Albert Museum, London; © The Fitzwilliam Museum.

vessels made in Hall-in-Tirol, being based in Innsbruck.[29] Sebastian's brother, Johann Chrysostomus Höchstetter who took over the site, had to compete with the Innsbruck glassworks founded by Archduke Ferdinand II in 1570 as well as increasing imports from other European glassworks and economic crisis at the end of the 16th century.[30] The glassworks still persevered until 1635/1649 under his son Hieronymus Höchstetter after Johann's death in 1599, although quality had decreased by this point.

Excavations were carried out at the site of the glassworks in 2008–9 due to property development.[31] The archaeological finds confirmed that crown glass was produced in high quantities at the site and that the products included vessels made from colourless (greyish) and coloured glass (blue, green, red). In museum collections, conical goblets[32] and tall cylindrical beakers[33] attributed to the Hall-in-Tirol workshop can be found, but window glass, tankards, plates, and drinking vessels with lids were also produced at the site.[34] They often depict the Yggdrasil or heart motif and foliate and scroll borders. Although thin spirals can be found on vessels attributed to Hall-in-Tirol, hatched spirals are rare and have a distinct thick S-shape to them.[35] Among the workers, Antonio Montano, a Venetian worker has been identified by name as he was the only Italian worker that joined the glassworks during Johann Chrysostomus's period, but his vessels were likely not decorated in diamond-engravings.[36] Vessels associated with him are tall gilded and engraved drinking glasses.[37]

Austria – Innsbruck (1570–1591)

Unlike the glassworks in Hall-in-Tirol, the glassworks at Innsbruck (*Innsbrucker Hofglashütte*) were founded by archduke Ferdinand II at Ambras Castle and as such, became the court glassworks. Ferdinand II had moved to Innsbruck in 1567, and although the standard at Hall-in-Tirol was high, it could not live up to stately demands in terms of raw materials and technical skills, and Ferdinand went on to establish his own glassworks in 1570. The glassworks were staffed by Venetian glassmakers and used Italian raw materials, allowing the glassworks to produce the most elaborate vessels and objects which can be considered comparable to Venetian glass in their quality. Many of these objects

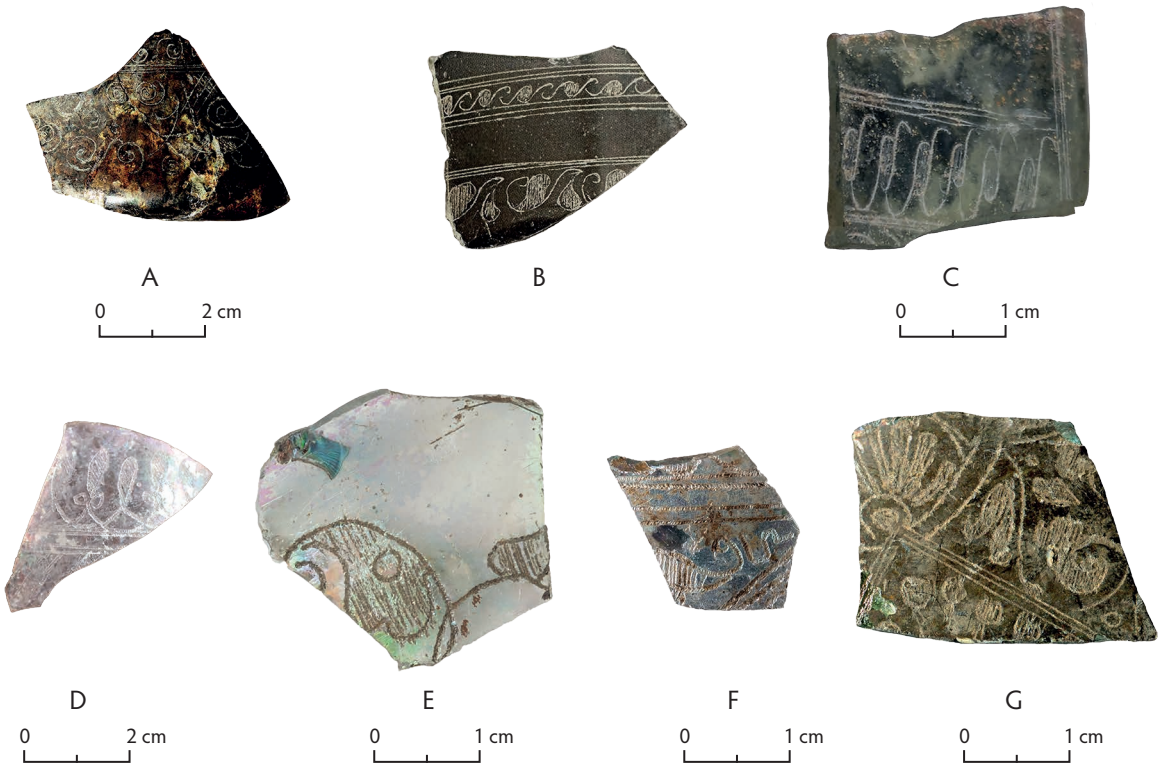

FIGURE 4. Engraved drinking vessel fragment: A – Bryggholmen (dated to 1586–1638). Engraved drinking vessel fragments: B – Wieda am Harz (dated to 1607–23); C – Hüti (dated to 1628–64); D– Turku (dated to the late 16th century); E – Cēsis, F – Cēsis, and G – Rauna (all three dated to the 17th century). Photos: Henricson 2016, fig. 9; Stephan 2021, fig. 93a; M. Reppo; M. Hirvilammi; A. Opoļskis; G. Kalniņš.

were prominently displayed in his castle at Ambras which was itself decorated with some elements such as faceted diamonds that appear on the glass.[38] With Italian glassmakers at Innsbruck and Hall-in-Tirol, it is notable that decorative elements such as the thin spirals also appear on glassware of probable Italian origin from the same period.[39]

The glassworks at Innsbruck produced many one of a kind, individual, and made-to-order creations and showpieces which sets it apart from Hall-in-Tirol. Earrings, rosaries, decorations, buttons, figurines, artificial flowers, glass pictures with intricate fused figurines, trick vessels, and elaborate royal vessels were made here using colourless and coloured glass.[40] Most of the vessels have some sort of gilding, enamelled scenes, and/or applied decorations (prunts, figurines) in addition to diamond-point engraving (Fig. 3b) as decoration although not all vessels from Innsbruck are engraved. Interestingly, Innsbruck armorers used similar decorations in their etchings.[41] The same has been noted for decorated silver and pewter objects in England.[42] Foliate and scroll borders and thin spirals were used at Innsbruck, but none of the vessels from Innsbruck have bands of hatched spirals.[43]

England – Crutched Friars (1571–1592)

16th–17th-century diamond-engraved vessels with foliate and scroll borders are often associated with Austria, Bohemia, and Germany (see above and below), however there are some workshops

beyond this region where diamond-point engraving was employed in the style under consideration here. In 1571, a glass production site had been set up in Crutched Friars in London, England by nine Italian glassworkers under French glass maker Jean Carré's ownership who had arrived in England in 1567 to produce glass. In 1575, a Venetian glass maker named Giacomo (Jacopo) Verzelini who had joined the site 4 years prior was put in charge of the glassworks. He received a monopoly for producing Venetian glass in England from 1575–96 but the site operated until his retirement in 1592.[44]

The vessels produced at Verzelini's glassworks were made of colourless glass and decorated with diamond-point engraving or gilding. Verzelini goblets often have hollow inverted baluster stems which may be ribbed and/or gilded. The engravings were done locally. It is unclear how many engravers were employed but only one is known by name – Anthony de Lysle. He had emigrated to England from France. Anthony de Lysle is the only recorded glass engraver in 16th-century England; he also decorated pewter. Many of the preserved vessels from Verzelini's glassworks are believed to have been engraved by him (Fig. 3c).[45] The characteristic engravings of Verzelini vessels include foliate decorations and wavy scroll borders.[46]

Sweden – Bryggholmen (1586–c. 1638)

Sweden is generally not known for its *façon de Venise* glass production. However, from Bryggholmen glassworks, twelve greyish colourless fragments of engraved vessel glass have been found among other fragments in the Venetian style. The twelve fragments have been compared to finds from Olomouk in Czechia and from Stockholm in Sweden.[47] The fragments belong to vessels that may have been engraved on site or brought with the German masters as examples to base their work on.[48] They are decorated with bands of swirly thin spirals and similar spirals on the panels (Fig. 4a). Their preservation is poor, the surface of the glass is weathered brown and has lost most of its opaqueness. Bryggholmen glassworks produced octagonal-fluted beakers (*Passglas*), other beakers with optical ribbing and applied decorations, labware, medicine bottles, jars as well as flat glass, including painted and coloured stained glass.[49]

Czechia – Nové Hrady, Vilémova Hora (1589–1620)

Originally founded by Vilém z Rožmberk (Wilhelm von Rosenberg) in 1551 and operated by Italian glassworkers, the Southern Bohemian production site in the Gratzen Mountains in modern-day Czechia by the Austrian border is of interest as well. The site was temporarily abandoned during the Eighty Years' War (1568–1648), but production resumed in 1589 and at this time, enamel and diamond-point engraving started to be used to decorate the vessels. In literature, the site is often mentioned by its German name – *Wilhelmsberger Hütte* at Gratzen (*Nové Hrady*). The site was later called the old glassworks – *Staré hutě* or *Althütte* as a new site (*Nové Hutě*) where *façon de Venise* was also produced was built in 1623.[50]

A tall cylindrical clear colourless beaker made at this site was decorated with an enamelled figure of Lady Justice. However, the same foliate and scroll border and hatched spiral band ornament in diamond-point engraving described in this paper can be found below and above the painted figures.[51] The products of this site include tall cylindrical beakers with painted and diamond-point engraved scenes and richly decorated plates with painted or diamond-point engraved floral designs.[52]

Germany – Wieda am Harz (1607–1623)

Recent research in Germany has yielded cobalt blue as well as colourless glass vessel fragments with a greyish tinge and many bubbles, decorated with scroll and foliate borders and bands of hatched spirals (Fig. 4b) from a glass production site in Wieda am Harz near Walkenried Abbey in Lower Saxony.[53] The site is some 560 km from Innsbruck. Here, two glassworks operated between 1607–23, staffed by glassworkers from Hesse, from the Ore Mountains (*Erzgebirge*) on the border of Czech Bohemia and German Saxony, Southern Thuringia, and the Franconian Forest in Northern Bavaria. The products from Wieda am Harz were decorative and of high quality – the glassworks supplied the Ducal court of Braunschweig, in particular under Duke Friedrich (1591–1634) in Wolfenbüttel.[54] Römers, Humpens, tall cylindrical beakers, squat beakers, lion-stemmed goblets, flasks, phials, jugs, and other vessels were produced here. Enamel, gilt, and applications were used as decoration and coloured glass was also made at Wieda.[55]

OVERCOMING LACK OF CONTEXTUAL INFORMATION

The preservation, engraved dates, and identified engravers allow for a narrow dating of museum artefacts. The following section describes archaeological finds from Finland, Estonia, and Latvia that are decorated in diamond-point engraving to establish, how these fragments compare to the products of the glassworks described above. Unfortunately, the archaeological finds examined in this article do not include detailed information on contexts. This is especially true for the finds discovered during the Soviet period in Latvia and Estonia. Further archival research is needed to identify their exact find situations, although for all the archaeological finds described below, the general site where they were found is known. Despite the lack of accurate contextual information, the overall history of these sites can provide some clues on the potential dating, and therefore, the potential glassworks where the vessel may have been engraved. Finding parallels, or even identical matches for diamond-point engraved designs from the glassworks described can then be attempted. But first – the decorations must be identified.

Lai Street 19/21/23, Tallinn (TLM 28149: 246–253, 271)

The fourteen greyish colourless glass vessel fragments found from Tallinn Old Town in 1986 all come from the same context.[56] As thirteen fragments can be joined together and the fourteenth is a match in terms of decoration, the greyish tinge of the colourless glass, and the iridescent cloudy bluish sheen of weathering, it is also clear the fragments are from the same vessel. The fragments were found during excavations at Lai St. 19/21/23 which has been built up at least since the 15th century. The garage, which lay above the find spot, was situated in the southern part of the plot, formerly known as Aida St. 4. The plots on this address belonged to wealthy merchants, manor owners, and town burghers. One of the most notable owners was the Eckholt family, who was of Nuremberg noble origin and who may have potentially owned the drinking vessel as the plot belonged to the family from 1543–1631.[57]

Due to the preservation of so many fragments, most of the decorations can be described. Under the scroll and foliate border, a spiral band, hatched with parallel lines can be found. Separated by an undecorated band, the upper half of the decorated panels is highlighted by horizontal parallel lines. The panels are separated by leafy plants with flowers, and depict standing birds – hen (grouse),

cockerel, buzzard, and a fourth, unidentified bird. Straight below this panel is again a hatched spiral band, followed by a scroll and foliate border in wreaths (Fig. 5). On the lower edge of the vessel, a thick pincered glass trail forms an imitation of a braided trail.[58] The base has a hole in it – it may have rested on a mount made of precious metal (silver) or a stem, perhaps even with a lion stem as other cylindrical beakers of this kind.[59]

Lai Street 19/21/23, Tallinn (AI 8553: 18, 500, 1292, 1296)

Just as the 2022 study was in the process of publication, it transpired that in 2021, four more greyish colourless drinking glass fragments with diamond-point engraving had been found during archaeological fieldwork at the same address in Tallinn Old Town as the plot was being redeveloped. In this instance, the finds were uncovered from the northern area of Lai 19/21/23 from a room in a basement of a standing building. All four were discovered from a layer of organic rich soil or manure.[60] Three of the fragments were from the same square,[61] the fourth one was found in the neighbouring square[62] but they are likely all from the same vessel as the fourth fragments fits together with two of the fragments discovered from the other square. They are slightly weathered with a similar iridescent cloudy bluish sheen as the previously described vessel.

These fragments (Fig. 6) have a simple foliate border of two curved lines looping with each other and forming ovals with which likely have ball-shaped finials. Below this simple band, a border of plain leafy plants and leaves is placed above a crowned eagle looking right, the so-called Tirolean eagle. The eagle appears to be the only stylistic element on its panel, separated from other panels by a leafy plant. The other panels are unfortunately not visible. The eagle and the foliage are hatched with

FIGURE 5. Decorative elements on the cylindrical drinking vessel from Tallinn. Drawing: Monika Reppo.

FIGURE 6. Three of the engraved drinking vessel fragments discovered from Lai Street 19/21/23 in 2021 (AI 8553: 18, 500, 1292). Photo: Monika Reppo.

FIGURE 7. Fragment of an engraved drinking vessel from Lai Street 19/21/23 (AI 8553: 1296). Photo: Monika Reppo.

thin parallel lines. The fourth fragment has an upper border with the same curved lines looping with each other, finishing in ball-shaped finials (Fig. 7). The border below it is also the same – formed of simple leafy plants. Below it, a simplistic flower with five petals can be found, surrounded by pointed leaves. Due to the concave shape of the four fragments, they do not appear to have been part of a cylindrical beaker but may belong to a tankard instead.

Hüti glassworks (AM 17966 PK 4521 LI: 16)

Although colourless glass was not made at Hüti (1628–66), a nearly colourless, slightly green-tinged engraved flat glass fragment was found during the excavations of the site in 1958–61. It appears to be a neatly executed practice piece where a spiral band is preserved. The spirals are hatched with thin parallel lines, the border itself is formed by thin horizontal lines (Fig. 4c). The fragment has lost some of its opaqueness due to blooming and the surface is covered in small gold brown weathered spots. The discovery of this fragment and another, less expertly engraved fragment with a border with three crosses[63] was proof for Maks Roosma that glass engraving was a decorative technique used for vessels produced at Hüti glassworks.[64] However, to our knowledge, colourless glass was not produced in Estonia for the next 150 years, and these two fragments are the only examples of engraved glass from Hüti. The glassworks at Hüti did have a connection with glassworks already described above – Bryggholmen.[65] Both employed members of the Wentzell family[66] and were under the influence of the de la Gardie family; they were both also island glassworks.

Turku Castle (TMM 21502: 82)

A small fragment of greyish colourless glass with a border with long oval loops, hatched with slanted parallel lines and a simple scroll border, also hatched with slanted parallel lines (Fig. 4d) has been found from Turku Castle (A.D. 1280) in 1957–58 and is kept at Turku Museum Centre (TMM).[67] It

was discovered from the southern side of the castle from an area which was called Pajapiha (Forge bailey) in the 16th century after the blacksmiths' workshops in the area. In the 18th–19th centuries, the area became known as Vankipiha (Prison bailey) as the south wing of the forecourt began to be used as a prison in 1776, although prison cells were near this spot already in the 17th century.[68] The shape of the vessel cannot be determined from the shape of the fragment, but it does not appear to have been a cylindrical drinking glass due to the curvature of the fragment. The surface of the fragment is weathered with an iridescent pinkish-white sheen.

Cēsis Castle (CMP 77: 84)

In 2023, two diamond-point engraved colourless fragments were identified in the glass assemblage of Cēsis Castle and one from Rauna Castle in Latvia, all of them likely found in the 1970s.[69] The first fragment from Cēsis Castle (c. A.D. 1214) is decorated with two pointed, curved leaves (Fig. 4e). One of the leaves has an unhatched circle in the middle, the other leaf is partially preserved. The fragment may be from a cylindrical beaker or a cylindrical goblet. The glass has a whitish tinge. The fragment has started to lose its opaqueness and has greenish iridescent weathered sheen on the areas that have been engraved.

Cēsis Castle (CMP 78)

Another small greyish colourless fragment with a surviving border was also found from Cēsis Castle in the 1970s. It is unclear what decorative motif is used – it is likely a foliate border or leafy border but the visible edge of one of the elements is hatched with thin parallel lines (Fig. 4f). There is an empty narrow band below it. One decorated panel is partially visible, hatched with thin parallel lines. It is possible that the panel depicts birds and leafy plants. The fragment appears to be from a cylindrical beaker or cylindrical goblet. The fragment is weathered, the glass has lost of most of its opaqueness with brown weathered spots and iridescent cloudy bluish sheen on the surface.

Rauna Castle (CM 41567)

Quite different from the other fragments from Latvia, the fragment from Rauna Castle (A.D. 1262) is of slightly greenish-bluish colourless glass and has a much 'busier' design where multiple hatched circles or 'bubbles' are encased in a rectangle and a potential daisy is encased in an oval (Fig. 4g). There is also foliage outside of the rectangle and oval. The fragment may be from a cylindrical beaker or cylindrical goblet. The fragment is poorly preserved, its surface is weathered light brown and no longer opaque.

DISCUSSION

Several workshops which operated in the second half of the 16th and 17th century across Europe and used foliate and scroll borders, hatched spiral borders, and fine parallel lines for hatching in their application of diamond-point engraving to decorate colourless or blue drinking vessels were described in the first half of this study. Looking at similarly decorated archaeological finds from Turku, Tallinn, Hüti, Cēsis, and Rauna, could these have been made at any of the described workshops? Based on stylistic analysis and vessels with analogous designs, the vessel fragments found from Lai

Street 19/21/23 in 2021 (Tirolean single-headed eagle) may have been decorated at Hall-in-Tirol. The best analogue for the 2021 vessel in terms of decorations is a silver-mounted tall cylindrical goblet[70] from Johann Chrysostomus Höchstetter's period although the 2021 vessel has a different shape.

A mount would also explain the lack of a stem for the vessel found in the 1980s. As no spirals can be found on vessels associated with Innsbruck, and the birds on the vessel found in 1986 are not hatched but are sparsely decorated with curved lines, this vessel may also have been decorated at Hall-in-Tirol. It should be noted however that for the fragments found in the 1980s, the scroll and foliate border and hatched spiral bands found on vessel fragments from Nové Hrady in Czechia (see above) are executed in a similar style.

With Hüti, the decoration may have been made locally as a practice piece or reached the glassworks via its connection to Bryggholmen where diamond-point engraved vessel fragments have also been found. Stylistically, the spirals resemble those on the vessel fragments found from Lai Street in 1986. The loops on the fragment from Turku seem to be unique. None of the vessels listed on the Open Access dataset bear resemblance to the fragment from Turku. Only some finds from Innsbruck[71] and Crutched Friars[72] have ovals, but these are not looped nor as expertly executed. Hypothetically, the fragment from Turku could be from a Venetian vessel rather than a *façon de Venise* vessel.[73]

Based on similar leaves with unhatched circles[74], the fragment from Cēsis with a leaf with an unhatched circle may have potentially been decorated at Hall-in-Tirol. The other fragment from Cēsis is preserved too fragmentarily to identify a workshop with certainty but it stands out from the rest of the finds as the engraved lines run very deep. The fragment from Rauna Castle differs in its style from the Austrian vessels as the design is busy and employs a lot of floral elements and circles. It is reminiscent of a goblet kept at the British Museum[75] which is thought to have been made either in England or in Venice.

Although the high status or rarity of vessels with diamond-engraved decorations of this kind has been questioned,[76] it is notable that all archaeological finds described in the second half of this article do indeed come from high status contexts – castles and a plot within town walls owned by high status individuals. These contexts seem to support the idea that archaeologically found diamond-point engraved vessels do convey the high status of the sites and their owners. Further research with each site to identify the users and owners during the period that corresponds to the date of the vessels will allow determining another type of provenance that as has been demonstrated with the finds from Aida Street in Tallinn – the vessels' use history.

CONCLUSIONS

This study was based on readily accessible data on *façon de Venise* vessels with diamond-point engraved scroll and foliate borders and/or bands of hatched spirals kept in museum or private collections across the globe. The dataset was published Open Access to assist in further research and could be expanded further, for example to include finds associated with Italian workshops and more detailed descriptions of the objects. Finds from seven archaeological contexts were examined and six sites where such designs were used were introduced. As shown here, with the influx of new data and a growing number of easily accessible sources, most notably those supplemented with high-quality images, the typological analysis, and identification of fragmentarily preserved vessels can be attempted, no matter the distance.

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NOTES

1 Wilkinson et al. 2016.
2 Reppo 2022.
3 Reppo 2024.
4 CMoG.73.3.449.
5 Corning Museum of Glass 2024.
6 CMoG.79.3.294.
7 Reppo 2021: 377.
8 Reppo 2021.
9 Reppo 2022.
10 TMM 21502: 82.
11 LM 0:157-4, LM 18:4-166.
12 AM 17966 PK 4521 LI: 16.
13 Reppo 2022: 93.
14 84.DK.451; Hess & Husband 1997: 122.
15 Ring 2003: 84.
16 See Reppo 2024.
17 Whitehouse 2004: vi.
18 Page 2004: 17.
19 Egg 2008 [1962]: 136.
20 CMoG Glass Dictionary, Engraving.
21 Egg 2008 [1962]: 141.
22 Covering the surface of an object by numerous small dots or specks to form shaded patterns and decorations.
23 Norman 2003: 51–2.
24 Brattinga 2021.
25 Egg 2008 [1962].
26 Page 2004: 41.
27 In this article, no separation is made for cold gilding or gold enamel when using the term 'gilded.'
28 Egg 2008 [1962]: 115.
29 Egg 2008 [1962]: 141.
30 Egg 2008 [1962]: 136, 142.
31 Zanesco 2009: 4.
32 KMW KK 10191.
33 KMW KK 10190
34 See Reppo 2024.
35 See e.g. BM.1881,0626.7
36 Egg 2008 [1962]: 132, 145.
37 KMW KK 3277; KMW KK 3304.
38 Egg 2008 [1962]: 124.
39 84.DK.541, Cl. VI n. 02923 or see the *Gagliana grossa* wreck (1583) collection, e.g. Lazar & Willmott 2006.
40 Egg 2008 [1962].
41 Egg 2008 [1962]: 116.
42 Willmott 2002: 29.
43 See Reppo 2024.
44 Polak 1975: 76–80.
45 Willmott 2002: 29.
46 See Reppo 2024.
47 Henricson 2016: 74.
48 Henricson 2016: 75.
49 Henricson 2016.
50 Geiselberger 2002: 41–2.
51 KMW KK 10198.
52 KMW KK 10226.
53 Stephan 2021: 86, 138–9.
54 Stephan 2021: 138–9.
55 Stephan 2021: 104–9.
56 Lange 1988: 15, 20.
57 Reppo 2022: 97–101.
58 Reppo 2021: 377.
59 KMW KK 3313; KMW KK 3314.
60 Tomson & Randoja 2024.
61 AI 8553: 18, 1292, 1296.
62 AI 8553: 500.
63 AM 17966 PK 4521 LI: 17.
64 Roosma 1966: 65–6.
65 Henricson 2016: 69.
66 Reppo 2023: 401–2.
67 Access provided digitally by Georg Haggrén, Jere Leppänen (TMM), and Tanja Ratilainen (TMM).
68 Nieminen 2019: 28, 46–8.
69 Access provided digitally by Gundars Kalniņš (Cēsis History and Art Museum).

70 KK 10196. See Reppo 2024 for more details.
71 690-1884; HA 29.
72 C.4-1967; C.523-1936.
73 See also Lazar & Willmott 2006: 34, 49, fig. 30.
74 E.g. GL 1310.
75 BM.1891,0224.8.
76 Henricson 2016: 75.

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AI – Tallinn University archaeological research collection (Tallinna Ülikooli arheoloogia teaduskogu)

AM – Foundation Estonian History Museum (SA Eesti Ajaloomuuseum)

BM – British Museum

CM – Cēsis History and Art Museum (Cēsu Vēstures un mākslas muzejs)

CMoG – Corning Museum of Glass

CMP – National History Museum of Latvia (Latvijas Nacionālais vēstures muzejs)

DK – J. Paul Getty Museum

ERA – Archive of the National Heritage Board of Estonia (Muinsuskaitseameti arhiiv)

HA - Coburg, Kunstsammlungen Veste

KMW KK – Vienna Art History Museum, Cabinet of Curiosities (Kunsthistorisches Museum Wien, Kunstkammer)

LM – Lüneburg Museum

TLM – Tallinn City Museum (Tallinna Linnamuuseum)

TMM – Turku Museum Centre (Turun maakuntamuseo)

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Riikka Tevali

MEDIEVAL DINING WARE FROM THE BOTTOM OF THE *FINSKA SKÄREN*

Finds from the Vidskär shipwreck

ABSTRACT

The Vidskär shipwreck was discovered in 2003 in the Finnish Archipelago Sea, and two copper alloy tripod cooking pots and a copper alloy flagon were lifted from the site in subsequent archaeological fieldwork. The items are stored in the Finnish Maritime Museum. The site is to this day largely unresearched. This paper describes the metal finds and discusses their dating and context, both in shipwrecks and the medieval and early modern society. Metal dining ware are rare finds from settlement sites but are frequently discovered from contemporary shipwrecks.

Keywords: maritime archaeology, copper alloy vessels, shipwreck, middle ages, early modern period

INTRODUCTION

Vidskär is an island in the middle of a stretch of open sea of the Finnish south-western archipelago. The island is called Wydskär in Petter Geddas chart over the northern Baltic Sea 1695[1], which also depicts the old sailing route between Stockholm and Turku (Fig. 1a–b). The island is a little different from others in the vicinity in that it is not accompanied by a string of smaller islets and skerries surrounding it from all directions. Instead, this c. 55 hectares large island is the only focal point within miles, along the southern route from the sea towards the Finnish mainland and its largest medieval town, Turku. The surrounding area is known as unsheltered and choppy sea, which is best to cross in good weather. However, in fair winds it is also one of the very few routes, where it was possible for ships to pass to the inner archipelago towards the Finnish mainland in deep waters. The route came in from the sea along the western side of Utö and travelled northwards from Vidskär toward a natural harbour named Myshamn and onwards. The route is also described by Johan Månsson in the mid-17th century[2]. Månsson instructs sailors who are unfamiliar with adjacent waters to acquire a pilot either from Utö or Jurmo.

Here, by the northern shores of the Vidskär island, a find was made in 2003 by divers from the diving club Nautic Club. They discovered two large tripod cooking pots or cauldrons made of copper alloy, seemingly bronze, and lifted them from the site. The Maritime Archaeological

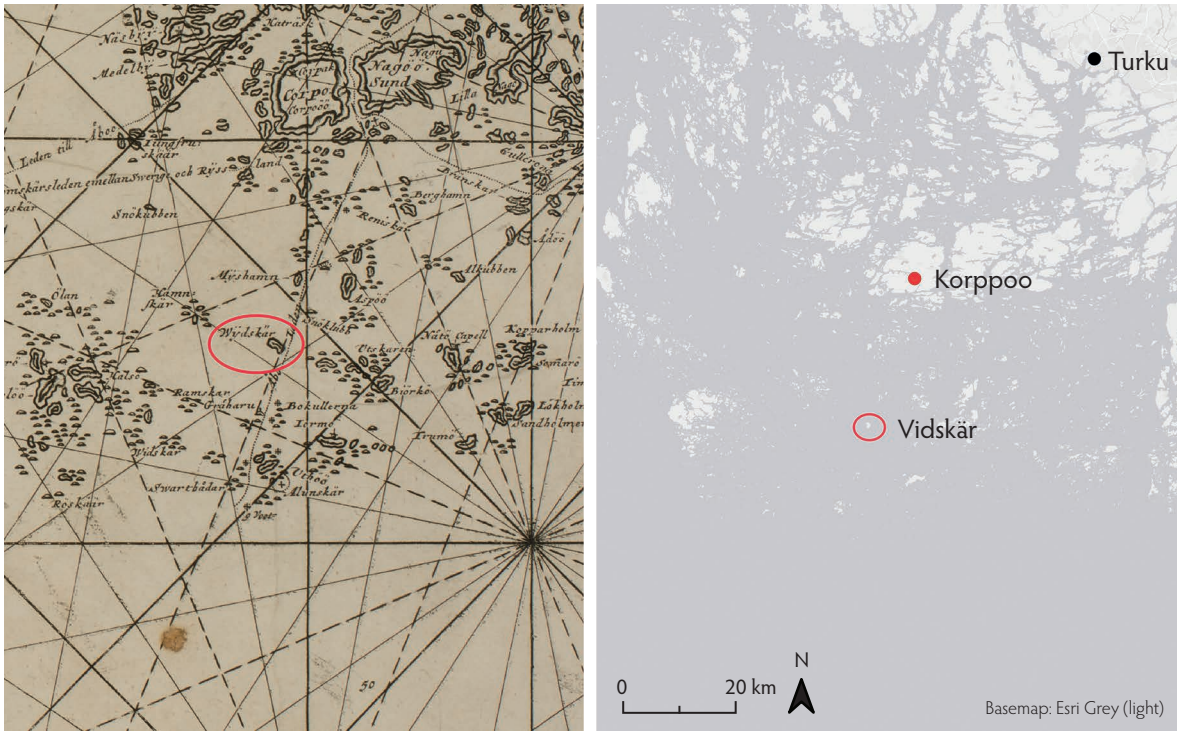

FIGURE 1. A detail from Gedda's map over the Finnish south-western archipelago dated 1695. Vidskär is marked with a red circle and the island of Korppoo is depicted at the top. A modern situation map is set as comparison. Figure: Riikka Tevali.

Unit at the Finnish Heritage Agency was notified of the find and the tripods ended up to the collection of the Finnish Maritime Museum.[3] Several more dives were made to the wreck, partly by archaeologists, who discovered a wreck and other artefacts at the site.[4] One of these items was a large copper alloy jug or flagon, which was lifted from the site in 2007 as a precaution, so it would not be stolen.[5]

The site has only been documented by maritime archaeologists once in 2007 after which it was left to wait further research.[6] However, no further research has been made on the site so far. The items, which were recovered from the site have not been previously published. They remain a unique find in Finland, where medieval and early modern metal artefacts in general can be said to be rare. With this paper, I hope to shed some light to these cooking and serving items as well as honour Georg Haggrén's interest to Finnish maritime archaeology. The Vidskär jug and cooking pots differ from the everyday objects made of pottery, wood and even glass, which were used to cook and serve food and drinks in medieval and early modern Finland.

The Vidskär finds are unique from an archaeological site in Finland. They come neither from an ecclesiastical or settlement environment, but from a shipwreck. Besides offering a description of these objects, this article attempts to connect them to a wider cultural and temporal framework and raises some suggestions towards an interpretation of the shipwreck.

Site description

As stated above, Vidskär has functioned as a landmark to seafarers for centuries. On its northern point stands a sea mark even today, and the remains of a much older one can be found from inland.

The landscape underwater in Vidskär is remarkable. On its northern side an underwater cliff descends gradually to around 90 meters, making it exceptionally deep for this part of the Baltic Sea. The shipwreck find is very difficult, almost impossible to document with a side scan sonar, as depth varies so much and so suddenly at the site. The main part of the shipwreck lies on a narrow ledge under a pile of ballast rocks, but finds are scattered over a large area within 10 to 30 meters depth along the shore. The wreck itself is hard to spot as it mainly consists of a small mound of stones, which surely also explains why the site remained undetected for so long.

The site has been described in a fieldwork report by Stefan Wessman in 2007. The shipwreck consists of a main part, which is a heap of ballast stones measuring c. 10 x 5 meters, with some bricks and limestone mixed in the heap (Fig. 2). In the middle of the ballast heap a potential keelson with a mast step was spotted. The ends of the floors stick out from both sides of the heap. By the other end of the wreck, a third metal cooking pot was found. Around the ballast heap, bits and parts of planking and other structural parts continued from both ends and on the sides giving Wessman the impression that the wreck had fallen apart on the spot. The copper alloy flagon/jug was also situated near the wreck.[7]

Other finds made in 2007 included a quern stone with a wooden peg still in the centre hole, potentially two more tripod cooking pots and some iron items, which had however disintegrated completely.

Dating

It has been difficult to provide an exact dating for the Vidskär shipwreck. Generally speaking, medieval tripod cooking pots tend to be uniformly shaped. They have a globular body with a sharply

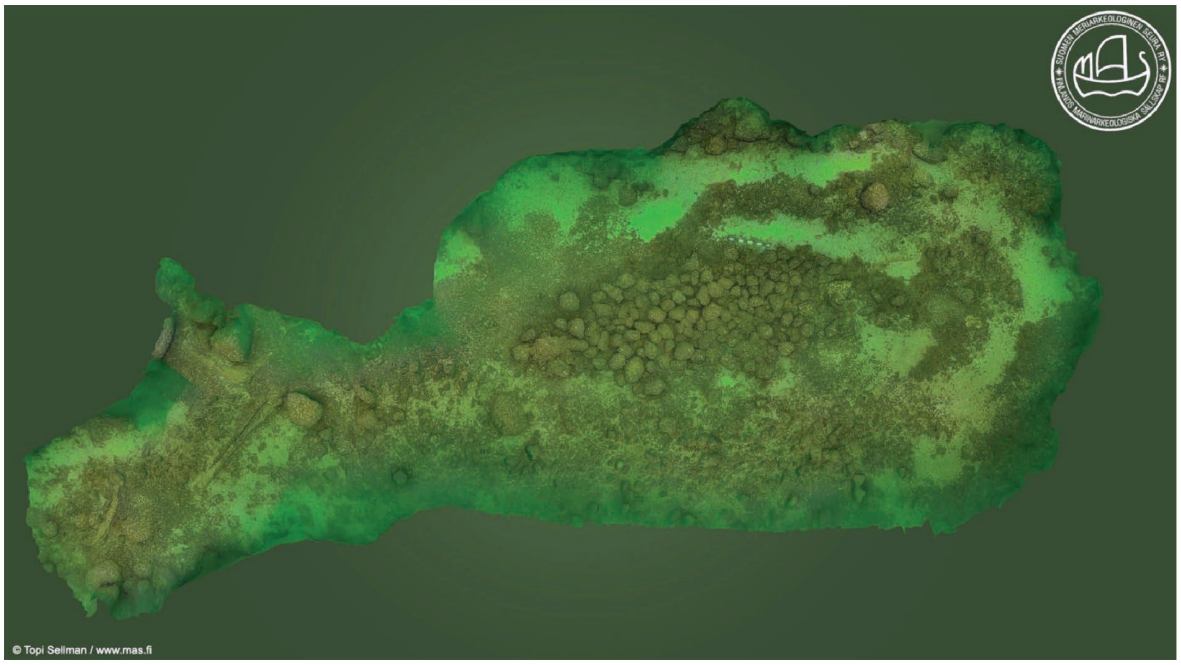

FIGURE 2. An ortophotograph visualizing the Vidskär shipwreck and its environment. The wreck is visible in the photo as an oblong-shaped heap of stones in the middle. Model: Topi Sellman. Courtesy of the Finnish Maritime Archaeological Society.

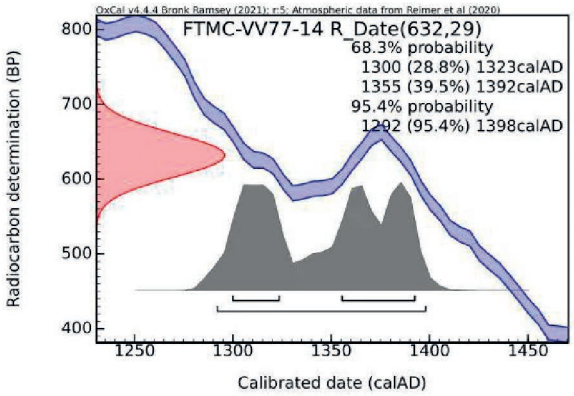

FIGURE 3. The AMS radiocarbon analysis of a wooden sample from a structural part in the shipwreck. The calibrated result is AD 1292–1398, with a possible emphasis on the latter half of the 14th century. Courtesy of the Finnish Maritime Archaeological Society.

tapering narrow neck and a wider rim. The Vidskär tripod pots are distinctly different with round bodies, wide rims and virtually no neck. Similar forms seem to become more common in German examples in the 16th century.[8] As there has been no archaeological excavation of the shipwreck, it is difficult to say anything of the ship's type or build, which would possibly aid in the dating.

Recently, an AMS radiocarbon sample was obtained from a structural part of the wreck by the divers of the Finnish Maritime Archaeological Society (MAS). The analysis provided a dating to the 14th century (Fig. 3). However, there is no record of the type of the constructional element where the sample was taken. During construction, the outer layers of the building wood are typically worked off leaving only the inner part of which the structural part is formed. Furthermore, the part has probably been exposed to currents and abrasion, removing additional layers of the woods surface. In the case of a part of the outer layer of the wood being missing, the dating sample would originate from the inner and therefore older parts of the wood, rather than the outer layers which would date the time of the felling of the tree. In any case, the radiocarbon date provides a relative *terminus post quem* dating of the 14th century.

THE VIDSKÄR FINDS

Of alloys

Copper and tin were used to make bronze objects, but other metals were added to the mix to enhance desired qualities, such as clear ringing in church bells. The various parts of metal alloys to make bronze varied, and shares of lead and other impurities such as zinc or arsenic can also be found. Other copper alloys are also bronze, disregarding the alloy of zinc and nickel, called brass. These considerations and definitions must have been known to the medieval users as well.[9] Often the various parts of metal alloys are not evenly distributed along a vessel, but concentrations of a single part of metal can be higher or lower in certain parts of the vessel than in others. The Vidskär vessels all show clear signs of deterioration, which has been difficult to stop in conservation.[10] This is typically a sign of impurities in the metal. Judging from the uneven and in some place's violent deterioration process of the metal, it is evident that the proportions of metals and impurities also vary throughout the vessels, as well as between the surfaces and the interior. As it is often very hard to know, especially in the medieval and early modern period, what metals are present in the object and in what proportion, it has here been deemed best to use the term copper alloy when describing the metal from which Vidskär vessels are made of.

The cooking pots

The Vidskär tripod cooking pots have a round body, rather than globular. The cooking pots are 25.4 cm and 27.5 cm tall. The former has a rim diameter of 29 cm, and its feet are 11 cm long. It holds roughly 6 litres of liquid. The latter's rim diameter is 32.5 cm with feet the same length and can hold roughly 9 litres. This larger pot also has a maker's mark inside the rim opposite from one of the handles. Both cooking pots are of similar type and have clearly been made in the same workshop, possibly by the same caster. It is probable that the smaller one also had a maker's mark, but it has vanished due to poor preservation of the rim. Both pots have a narrow outward turning rim with two sharp-angled handles situated on opposite sides, which connect to the rim and to just above the middle of the body. The tripod feet are long, straight and project outward from the underside, where the bottom starts to turn towards the sides (Fig. 4). The feet are triangular in cross-section. In the middle of the round bodies, three decorative casting seams surround the body, the two uppermost circling both sides of the lower end of a handle. A casting plug is visible on both bottoms.

The forms are distinctly different from medieval globular cooking pots, where also the feet typically end in animal paws or spiky ends. The flatness of the Vidskär feet ends suggest that the pots have stood on an even surface, such as on a larger fireplace constructed of bricks.

Similarly shaped round and wide-rimmed tripod cooking pots seem to be rare in existing literature, typical shapes are more globular with a narrower rim. Similar shapes seem to date towards the 16th century and their find locations from Europe concentrate to northern Germany and the Danish peninsula.[11] In the medieval period, maker's marks typically were casted to the outside of the cooking pots, so here again the Vidskär pots differ from the medieval examples.

The maker's mark

The maker's mark on one of the Vidskär copper-alloy tripods is found just on the inside of the rim, opposite to a handle. It consists of a broad V-shape, inside which is a cross-sectional line un-

FIGURE 4. The two copper alloy cooking pots lifted from the Vidskär shipwreck are stored in the collections of the Finnish Maritime Museum. Photo: Riikka Tevali.

FIGURE 5. The maker's mark in one of the Vidskär cooking pots is situated on the inside of the rim opposite a handle. Photo: Riikka Tevali.

der the apex and a cross (Fig. 5). Unfortunately, I have not been able to find any corresponding marks from existing literature.[12]

A typical foundry in the medieval and early modern period produced both church bells and cooking pots on the European mainland. Foundries were established near monasteries and churches to supply them and the surrounding region, but also near larger market-towns in northern Europe, especially in the German Hanseatic towns, such as Lübeck, Stralsund, Rostock, Hamburg, Wismar, Greifswald and Stettin. These foundries were required to work according to specific rules, one of which stated that the master needed to 'sign' the pots with the mark of the city and his own mark. However, the metal pots found in archaeological contexts near or in these towns rarely bear town marks, so it has been thought that the pots bearing town marks were specially made for export.[13] The mark in the Vidskär pot is not a town mark but a maker's mark, considering that there is only one motif on the pot. Would this then suggest that the cooking pot was not acquired from a merchant (i.e. in Finland/Sweden), but directly from the manufacturer (i.e. in Germany/Denmark)? As tempting as it is to make assumptions, it is not enough to base arguments of the cooking pots (and hence the ships) origin on a single mark on a pot, but it provides a clue which needs to be supported or contradicted by further evidence. Furthermore, outside the Hanseatic towns the practice of town and maker's marks did not apply to all foundries. For example, in Denmark and Sweden cauldrons seem to only have the maker's mark.[14] It should also be noted that similar marks occur in a wide variety of place and time whereas it is extremely rare that a metal pot would have been marked with a foundry mark and a year, so that dating and identifying provenance based on markings on a pot is by no means conclusive or unproblematic.[15]

The flagon

The Vidskär jug or flagon[16] is made of copper alloy resembling bronze and is 35.5 cm tall with a rim diameter of 18.3 cm and bottom diameter of 27 cm (Fig. 6). It has had a lid, which is now missing, but the hinge attaching the lid to the handle is still attached. It is difficult to calculate how much liquid the flagon could have contained as a part of the bottom is missing and the middle of the body is bulbous compared to the narrow neck, but it must have been several litres. There is a decorative element of four narrow double lines circling the body, which are now nearly invisible due to surface corrosion. It's not been possible to weigh the jug due to its fragile condition but judging from lifting it I estimate it to be around 3 kg. Due to the weight, there is probably lead mixed in with the copper alloy. From the weight, one also directly thinks it is much too cumbersome to be meant for everyday use – however, it might also be possible to draw the conclusion that in a ship out to sea the weight would only have been advantageous as heavy objects are not as susceptible to move about or roll on tabletops.

Copper alloy jugs or flagons with a lid were fairly common in the medieval period but became more so in the 16th century. A similar jug with decorative handle is stored in museum collections in Lübeck, Germany.[17] The heavy flagon was probably used to store liquids, likely wine, and from it the drink was transferred to a smaller container. Based on a survey of Dutch and German literature, as well as some find databases from the UK, archaeological finds of such flagons are rare. This author is only aware of the one example from Lübeck mentioned above. However, several examples of similar flagons have been discovered from the shipwreck of the English Mary Rose, Henry VIII's flagship, which sank in 1545[18]. The difference here is that these were mainly made of tin.

MEDIEVAL AND EARLY MODERN BRONZE VESSELS: users, makers and trade

Notably, the most typical finds in medieval and early modern archaeological excavations of settlement sites are items connected with cooking and consuming of food and drink.[19] Sherds of pottery and glass vessels dominate, while metals are an anomaly in this regard from Finnish sites, as the ones that have been preserved are typically from, for example, ecclesiastical surroundings.[20] Metal jugs and pots are also sometimes found in connection with hoards as in the find from an old well in Raseborg castle.[21] Their context is therefore different than the everyday items used by people inhabiting the medieval and early modern settlement sites. Metal items tend not to survive from everyday domestic surroundings, as it is usually thought that they have been smelted to make new objects after becoming broken or past their use life. This makes it difficult to estimate how many metal items were in circulation over time. Metal items also do not survive well in Finnish archaeological sites, as we have plenty of acid sulphate soils where metals corrode. Copper and its alloys survive better than iron, but typically only smaller sherds of metal cooking pots are found. Some exceptional finds are copper alloy jugs, which include, besides the jug from Raseborg, also a medieval tall jug from Muolaa[22], a 17th century flagon from Åland[23] and a 14th century tin jug found already in 1895 from Illinsaari in Lapland[24]. Their rarity in ar-

FIGURE 6. The copper alloy flagon from the Vidskär shipwreck. Due to its weight and condition, the object had to be photographed lying on its side. Photo: Riikka Tevali.

chaeological excavations has also probably contributed to their interpretation as being a rarity in households. However, some finds do indicate that copper alloy and later iron pots were a part of the medieval and early modern kitchens in all social spheres.[25] The contemporary pictorial evidence also confirms the use of copper alloy or iron cooking pots in medieval and early modern northern Europe.[26] They were more expensive than their ceramic counterparts, but even so their use permeated the society from the 12th century onwards.[27]

The manufacture of metal cooking pots was not restricted to the European mainland. Foundries have also been discovered and partially excavated in Scandinavia, where cauldrons were made alongside with other equipment.[28] Typically, craftsmen produced a wide range of products in the early stages of development, but towards the end of the medieval period and in the early modern period, the workers had specialized.[29]

Metal vessels in shipwrecks

Documentary evidence of trade and cargo ship's inventories from the late medieval or early modern period are non-existent, which is why researching and excavating the oldest archaeological finds is so important.[30] A large study has concluded that copper kettles or copper alloy (bronze) tripod cooking pots are a typical find from Dutch medieval and early modern shipwrecks, where a typical number of finds is one or two per ship. In the 14th century the cooking pots tend to be smaller with content from 0.3 to 1 litre, but the sizes grow gradually towards the 18th century. Sometimes the number of pottery cooking pots in the medieval ships can be up to 5 to 7 pots in various sizes.[31]

The use of metal cauldrons or tripod pots was fairly common in the medieval and increasingly so in the early modern society in northern Europe. Recognizable copper alloy tripod cooking pot finds are made from settlement sites, but the most intact finds come from wrecks. So far, examples are known from the late 13th century Egelskär wreck[32], as well as the 16th century Metskär and Esselholm wrecks[33]. Several cooking pots have been discovered from the medieval cogs excavated in Tallinn in recent years.[34] They are also a frequent find from Dutch wrecks.[35] It would in fact seem that metal cauldrons, kettles or tripod cooking pots are found from most medieval or early modern shipwrecks that are so far known. They do not seem to be a rarity.

The same is the case with pottery cooking ware, and it is difficult to ascertain if there was a difference between their intended use. A possibility might be the different social classes on board, crew, passengers or soldiers who were offered different kinds of food (for example pottage compared with roasted meat). An initial thought is that metal cauldrons were used to cook food for the higher social classes, from which the food was transferred to serving dishes and served to a table. However, it would seem that for example in the Netherlands, serving dishes were not a part of ship equipment in the medieval period, when crews of coastal ships ate directly from metal cauldrons with their own spoons.[36] One could also easily eat out of ceramic cooking ware, which was intended to be lifted to the table and those around the table helped themselves with their own spoons. Hence, the use of serving dishes does not seem to be depended on the material of the cooking pot, but possibly was due to a change in the social customs surrounding the different food(s) cooked or the consumption of food in ships, where space dedicated to cooking and consumption of food was also limited. The change in customs might present itself in some of the cooking equipment. Towards the 16th century, pottery cooking pots were often fitted with a pouring lip and the tripod legs were organised so that two legs were on its both sides while a handle and final leg was placed behind the pouring lip. This facilitated pouring from the vessel as it was tipped from the handle and leaned on the two legs so that there was no need to lift the entire cooking pot to transfer food to serving dish.

So far, remains of potentially five metal cooking pots have been discovered from the Vidskär wreck, in different sizes (three of them have not been lifted from the site, so their exact size is not known). Based on the only fieldwork report, the wreck and its objects have been scattered over a wide area, so it can be said that there are objects belonging to the ship's galley as well, which we have yet not found. However, the two big copper alloy tripod cauldrons, which were lifted from the site, were meant to cook for a large crew. They were not designed to be moved around, but food was either eaten from them or ladled to smaller cups. Their general appearance gives reason to date them towards the 16th century, rather than earlier and they do not seem to resemble any north German examples that can be found from the literature. There is much that we do not know of medieval and early modern shipping related to foodways on board. For example, who owned the cooking equipment on board? Was it the responsibility of the owner(s) of the ship to provide also basic equipment and sustenance for the crew or were there individuals who made their living as ship cooks, who also provided their own equipment? Purely from a personal perspective, the first option seems more plausible, but so far there are more questions than answers regarding the foodways on board the early sailing ships in the Baltic Sea.

Flagons have not been found from trade or cargo shipwrecks i.e. as trade objects. Jugs related to drinking are an abundant find, but they are always pottery jugs or tankards. One is therefore tempted to speculate that the person on board the Vidskär ship to whom the flagon belonged, was not a member of peasantry or even a merchant. For example, from the late 16th century, there is a stoneware tankard (Schnelle) from the so-called Metskär wreck, which was manufactured in the pottery of the Siegburg master potter Christian Knütgen with a date 1574.[37] Another example is a medieval wooden tankard from the shipwreck Grifun or Gribshunden, a flagship of the king of Denmark, which was lost in June 1495.[38] These both come from distinctly royal or noble frameworks, as the Siegburg Schnelle was also adorned with coats of arms of Denmark and the county Jülich-Greve-Berg possibly celebrating some joint occasion.[39] The same can be said of the above mentioned tin flagon finds from Henry VIII's ship Mary Rose.

CONCLUSION

In this article, the two copper alloy tripod cooking pots and a large flagon from the Vidskär shipwreck are discussed. An attempt is made to set them into their social context by discussing their possible origin and use in a medieval or early modern ship. A difficulty here has been the fact that the Vidskär shipwreck is still largely unresearched and -documented, so there is no clear image of the find. However, the ship was at least a medium-sized sailing vessel, and the wreck is situated at an old and well-known sailing route between Stockholm and Turku. There were at least three, but probably one or two more cauldrons of various sizes, and possibly material, on board, of which the lifted items in the collections of the Maritime Museum in Kotka are the largest. The flagon is a single find from the vicinity of the remains of the ship. The rest of the finds are scattered to a wide area in an underwater slope, and it is likely that not all finds are known. Copper alloy cooking pots are a relatively common find from medieval and early modern shipwrecks in the Baltic and North Sea regions. Their use does not seem to be solely restricted to the higher strata of society, but their appearance in shipwrecks probably also highlights that shipping was a relatively well-to-do activity (while sailors themselves were not necessarily prosperous). In other words, metal vessels were considered useful specifically in ships. In contrast, the counterparts for the copper alloy flagon seem to originate from distinctly noble contexts. It has not been possible to pinpoint a specific date for the find so far, but in general terms a dating to the late 15th or 16th century is suggested.

The Vidskär shipwreck has not yet surrendered its secrets, but it is one of the most important archaeological sites in Finland for the research of medieval and early modern society.

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NOTES

1 Ehrensvärd & Zilliacus 1997: 31.
2 Månsson 1677.
3 SMM62003: 1, 2.
4 Paanasalo 2003.
5 SMM82007: 1a–b; Wessman 2007.
6 Wessman 2007.
7 The description of the shipwreck is based on the archaeological report by Stefan Wessman (2007).
8 Drescher 1982: 161.
9 Rehren 1997.
10 Liisa Näsänen pers. comm. 5.12.2023.
11 Drescher 1969: 291, 301, Abb. 8 nr 14.
12 Anund et al. 1992; Drescher 1969; 1982; Engeström 1974; Vellev 1984.
13 Vellev 1984.
14 Anund et al. 1992: 241–2; Vellev 1984.
15 Bergold et al. 2007; Drescher 1969: 288.
16 SMM82007: 1a–b.
17 Drescher 1969: 305, Tafel 28, Fig. 10.
18 Weinstein 2011: 170–3.
19 For example, Heinonen 2021; Ros 2012.
20 For example, Holand 2013; Immonen 2009.
21 Terävä et al. 2024.
22 H34077.
23 H3424: 2.
24 Ikäheimo 2014.
25 Heinonen 2021: 183, 188; Rasmussen et al. 2020: 17–8; Terävä et al. 2023: 200.
26 Auler & Hupka 2017: 30; Drescher 1982.
27 Roesdahl & Verhaeghe 2011: 196.
28 Anund 1997: 22–3.
29 For example, Bergold et al. 2007; Ros 2012.
30 Vlierman 2021 II: 802.
31 Vlierman 2021 II: 805.
32 Tevali 2023.
33 Tevali 2024.
34 Russow 2023:11.
35 Vlierman 2021 II: 805. A search in 'The Memory Database', Netherlands online heritage collections with the searchword 'grape'provides 15 metal cooking pots originating from shipwrecks https://geheugen.delpher.nl/en.
36 Vlierman 2021 II: 805.
37 Tevali 2024.
38 Foley 2023: 135–6.
39 Tevali 2024.

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Abbreviations

H = (Kansallismuseo), Finnish Heritage Agency, historical collections

SMM = (Suomen merimuseo), The Maritime Museum of Finland, collections.

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Tom Wennberg & Tânia Casimiro

EXPLORING THE IMPORTANCE OF PORTUGUESE TIN-GLAZED WARES IN EARLY MODERN GOTHENBURG

An archaeological inquiry

ABSTRACT

This paper aims to investigate the prevalence of Portuguese tin-glazed wares within the archaeological excavations of early modern Gothenburg dated 1630–1700. Since 2015, a conspicuous abundance of Portuguese tin-glazed ceramics has been discerned within the archaeological assemblages of the city, a phenomenon not replicated in other urban centres across Sweden. This study elucidates this material manifestation's typological, chronological, and contextual dimensions, discussing the complex socio-economic, cultural, and symbolic implications inherent in its presence.

The research considers the economic ramifications of the influx of Portuguese tin-glazed wares, considering their role in trade networks, consumption patterns, and market dynamics during the early modern period. Furthermore, it examines the social dimensions by exploring how these artefacts reflect and potentially influence social stratification, identity construction, and domestic practices within Gothenburg society. Also, it proposes plausible explanations for the emergence and sustenance of the Portuguese connection evident in the archaeological record of the city, thereby contributing to a deeper comprehension of transnational exchanges and cultural entanglements in the early modern European context.

Keywords: Portuguese ceramics, trade connections, wealthy, consumption, diplomatic relations

INTRODUCTION

Margareta Huitfeldt was a Gothenburg citizen who lived between 1604 and 1683. When she died, her will provided for the larger part of her estate to be donated to Gothenburg's gymnasium which Queen Kristina of Sweden had originally founded in 1647.[1] Among her belongings there was a Portuguese jar with the coat of arms of the city of Gdansk (Fig. 1). Margareta was just one of the many wealthy inhabitants in Gothenburg who possessed Portuguese Faience, a confirmation that has been obtained through the discovery of many of these objects in the archaeological excavations of the city.

The trade of Portuguese faience into Northern Europe is already widely known and it seems to have used the pre-established trade routes for other commodities. Although salt was the most

FIGURE 1 (left). A large complete jug of Portuguese faience from a museum collection. It has an impressive height of 55 cm and the grand coat of arms of Gdànsk with the year 1640 as the main decoration. It has a certain provenance to the prominent and affluent Gothenburg burgess Margareta Huitfeldt. Photo: Kulturen in Lund, KM27767.
FIGURE 2 (right). Map of Europe with the locations mentioned in the text. Map: the authors.

important commodity sent to northern Europe from Portugal, based on information retrieved from different countries' port books, other products such as wine, olive oil, sugar, and several types of fruit were also included in this trading scheme.[2] Pottery was among the minor products involved in this economic relationship. However, it has been found in many different cities in Northern Europe. On the other axis of this trade, the products imported from northern Europe into Portugal were essentially wood, iron, pitch, and tar. From Gothenburg leather and hides, iron bars, timber, pitch and tar, grains, herring, oxen, and hazelnuts were traded out; some may have reached Portugal.[3]

This paper explores the prevalence of Portuguese tin-glazed wares uncovered on archaeological excavations in early modern Gothenburg, dating from 1630 to 1700. These ceramics have been identified in the city's archaeological assemblages, a phenomenon not observed in other Swedish urban centres. The study investigates the typological, chronological, and contextual aspects of these artefacts, addressing the socio-economic, cultural, and symbolic implications. This first approach examines the economic dimensions of this influx, focusing on the role of Portuguese tin-glazed wares within trade networks, consumption practices, and market dynamics during the early modern period. It also considers the social significance of these ceramics, analysing how they may have reflected or shaped social hierarchies, identity formation, and domestic practices in Gothenburg.

Portuguese ceramics are often found in coastal northern European cities, although in different amounts. The ones where higher amounts have been found are London, Bristol, and Plymouth (United Kingdom), Amsterdam (Low Countries), and Hamburg (Germany),[4] but also in three places in Denmark for example (Fig. 2).[5] These cities have documented direct relations with Portugal, thus the high amounts are not unexpected. The Low Countries are one of the oldest known trade destinations of Portuguese ceramics, probably the result of Portuguese immigrants or their descendants living in the country.[6] In Germany, until recently Portuguese Faience was misinterpreted as

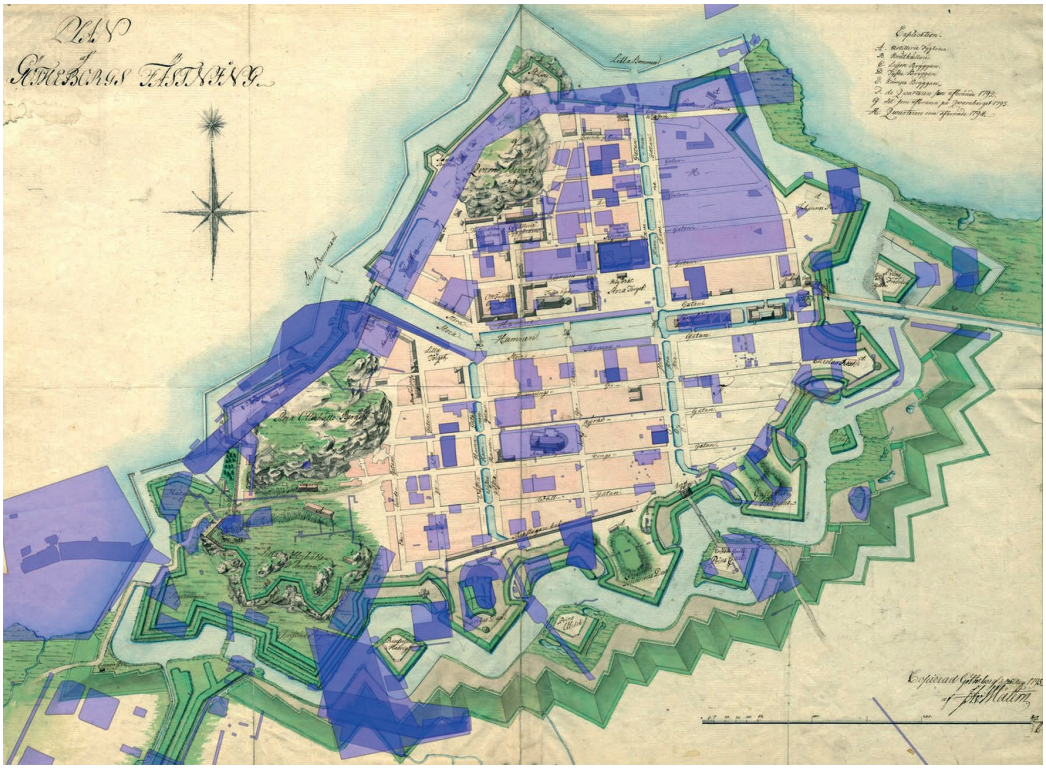

FIGURE 3. Map of Gothenburg from 1795 with excavated areas in blue superimposed. Figure: War Archive SFP Göteborg 472a.

Hamburg faience, an error motivated by the presence of German, namely Hamburg, coat of arms on Lisbon products. Many researchers made this misinterpretation, as also seen in Sweden.[7] In Sweden, these were attributed to an unknown Hamburg potter called 'The Pelican Master', in the early 20th century.[8] Further, Eriksson speculates in a short sentence that the large Huitfeldt jug could be of Portuguese origin (Fig 1).

Excavations undertaken in the last two decades have proved that the German cities were some of the most avid consumers of Portuguese ceramics. The quantities are attributed to merchants with Portuguese ancestry who maintained a constant trade with Portugal.[9] The same actions can be found in Plymouth and London with ships originating from these two English cities entering Portuguese ports daily, especially in Lisbon.[10] These are not, however, the only cities where these wares have been found, and many other cities in Northern Europe reveal smaller amounts justified by the infrequent contacts with Portugal, which may indicate that these ceramics were probably not being acquired directly from Lisbon but through secondary contacts via cities such as London, Amsterdam, or Hamburg. This would justify the numbers. Gothenburg, however, had a direct connection with Lisbon as well as intense trade contacts with London, Amsterdam, and Hamburg.[11]

Portuguese ceramics in Gothenburg were misidentified before 2015 until the authors of this paper met and the recognition of their provenance started to unfold. Since this meeting, more Portuguese ceramics have been identified, although more examination is needed. The impossibility of analysing every Portuguese ceramic sherd ever discovered in Gothenburg did not, however, diminish the need to publish an introductory paper. In this sense, the purpose of this paper is not to do an inventory of the Gothenburg finds but to provide a general overview of the shapes and decoration found in the city, opening new paths of discussion.

TIN-GLAZED EARTHENWARE IN GOTHENBURG

Analysis of the Gothenburg collection revealed that Lisbon was the only production centre supplying Gothenburg, despite the existence of two other production areas in 17th-century Portugal.[12] This paper considers all soft-bodied light buff or pinkish fabric earthenware covered with a lead-tin opaque white glaze, generally painted in blue or bichrome, and rarely polychrome, regardless of its shape, produced in Portugal, from the beginning of the 15th century to early 20th century. Although Lisbon was producing faience and tin glazed earthenwares between the 15th to the 20th century, this large chronology will not, however, be considered in this paper, since the Gothenburg imports are confined to the 17th century. This paper will focus on this smaller timeframe.

The oldest archaeological evidence of Lisbon production goes back to the late 15th century.[13] The first forms were an exact copy of the ceramics that were being made in southern Spain with white bowls and white plates. In 1637, one hundred and twenty potters were documented to live in the city, some of them responsible for tin glaze production.[14] This is the time when Gothenburg starts to import large amounts of these wares. Gothenburg acquired pottery for more or less five decades and production was far from being equal during that period. While earlier artefacts tend to present a more Eastern aspect with blue-on-white decorations, around 1660 purple started to outline all the drawings which became more European influenced.

Although we are not able to provide an exact number of how many Portuguese faience objects were consumed in this Swedish city, an analysis of the ceramics excavated during the 20th and 21st centuries and stored in the Museum of Gothenburg revealed the existence of over one thousand unique Portuguese faience objects originating from contexts dating from the 17th century (Fig. 3). These objects were not, however, consumed on their own. Tin glaze ware originating from the Low Countries represents the majority of the tableware in the Gothenburg houses. However, in some contexts, the Portuguese faience could amount to about half of the tin-glaze wares. This was, nevertheless, a rare situation and often Portuguese faience constitute round 1/4 of the total, in the years 1640–1700.[15] It should be noted that tin-glazed earthenware from other South European countries or regions is scarce, almost nonexistent in the Gothenburg material. From a Swedish urban perspective, Gothenburg has a particularly high percentage of tin-glazed earthenwares in the find assemblages. They amounted to 1/4 of the total ceramic material during the 17th century compared to some few percent in neighbouring smaller cities.[16]

GOTHENBURG IN THE 17TH CENTURY: the Lisbon connection

Gothenburg was founded in 1621 as a port of trade as an initiative of the Crown of Sweden. The ambition was to be a part of the global trade and in the early years, the connection to Amsterdam and the Dutch trading houses was strong. In the town privileges from 1621, the burgers were awarded 15 years of tax exemptions. The idea was to attract important trade houses from Amsterdam.[17]

In 1636, when the tax exemptions were over, a lot of the Dutch merchants left Gothenburg. Even so, during the 17th century, the city became an important node in the North Atlantic and Baltic trade networks. A large number of different commodities were traded but the most important bulk goods were oxen, steers, cows, horses, leather, hides, peltry, meat, tallow, tar, iron, tar, and timber.[18] Many goods were not from the city but from surrounding areas since Gothenburg was often used just as a transit port.

The trade networks increased during the century and over 350 ports are identified with direct trade connections to Gothenburg.[19] Many trade routes were complex, and the ships went to multi-

FIGURE 4. A typical cesspit from a 17th-century backyard of a Gothenburg urban lot. Many of the Portuguese faience mentioned in this paper was recovered in this type of feature. Photo: Tom Wennberg.

ple different destinations trading along the way.

This paper studies the connection between Gothenburg and Lisbon during a period when the salt trade was of utmost importance. Salt was needed for food preservation in a climate with relatively short summers, long winters, and long travel distances.[20] It was important to the extent that the Swedish Crown ordered a salt staple to be situated in the port of Gothenburg in 1653.[21] The Swedish Crown even bought ownerships on the part of some cargoes. There were several ports around Europe where salt was traded, but one of the more important ones for Sweden was Lisbon. The written sources from that time mention 16 different types of salt and one of these was Portuguese salt.[22] Portuguese and Spanish salt were considered to be of the highest quality.[23]

In 1641 the Portuguese crown was restored, and the Spanish left the country's administration. In that same year, Portugal sent an ambassador to Sweden named Francisco de Sousa Coutinho, who was received by representatives of the Swedish Crown and a treaty for trade and collaboration was signed in Stockholm on 29th July 1641 between both countries.[24] On his way back Coutinho visited Gothenburg and the leading men of the city conferred with him regarding the trade. In 1643 a Portuguese envoy once again visited Gothenburg. This relation may have been quite important especially because in the Treaty of Osnabruck (1648) the Portuguese king is referred to as an ally of Queen Christina of Sweden.[25] As a consequence of this meeting and in the following years the Queen offered King João IV many presents to settle the agreement. Although later this relationship met some setbacks, the commercial relations between both countries were already well established. In 1663 a Swedish consul was placed in Lisbon which was expanded with a 'conservador' in 1673 to aid the Swedish traders. The importance of this trade network at the time is obvious.[26] This was Sweden's first foreign consulate and there were no old natural trade connections like with the North Atlantic countries, so the consular service was very important for this trade.[27]

Even if Gothenburg was a success for the Swedish crown as a port of trade to the West, it should be noted that the population was fairly moderate from a European perspective. In 1635 there were no more than a couple of thousand people living inside the city walls. Around 1700 Gothenburg had grown to no more than 7000 inhabitants.[28] This should be compared with other cities around the North Sea and the Atlantic at the time. In the early 18th century Hamburg had about 70 000 inhabitants, Lisbon closer to 200 000, Amsterdam just over a quarter of a million and London well over half a million.[29] In this perspective, Gothenburg was nothing but a small urban environment.

THE ARCHAEOLOGY OF GOTHENBURG

Gothenburg has a long tradition of early modern archaeological excavations. In other Swedish cities, the focus is on the medieval layers, but Gothenburg was founded in 1621 on wet meadows and there are no older phases to excavate. The first archeological excavations in Gothenburg were carried out in the 1920s. There were some larger excavations in the 1930s but it was not until 1975 that the first large-scale modern excavations were executed. In the decade that followed, several old buildings were demolished and several large-scale excavations were carried out. Overall, during the 100 years of archaeology, almost 300 small and large excavations have been executed in Gothenburg (Fig. 3).

Even when the archaeological material is abundant, the documentation resulting from archaeological investigations is at very different levels in the different decades. Some of the larger excavations are unfortunately not published which makes an overview hard to assemble. Concerning the find assemblages, the ones that are reported, are often not especially detailed and the presence of Portuguese faience is not mentioned. However, the best contexts from the older excavations are household cesspits, which are fairly easy to date narrowly.

The larger quantity of the Portuguese material found in Gothenburg originate from domestic cesspits. So far, no evidence of these finds has been discovered in landfills, moats, or warehouses. A recent excavation from 2023 offers a specific example.(Fig. 4). An archaeological investigation was made in the former property of Jören Larsson Remsnider, shipowner and trader, and the owner of the lot where the cesspit was located. He owned the lot between 1637 and 1656, at the same timeframe this collection was formed.[30] We are not sure if Jören Larsson inhabited the house at that moment, or if it was rented to someone else, but we can guarantee, based on the material culture, that this was no impoverished household. Among the many finds at least three vessels originating from Portugal were found, with the other tableware produced in the Low Countries. No other South European imports were recovered.

THE TYPES OF PORTUGUESE CERAMICS FOUND IN GOTHENBURG

More than one thousand vessels of Portuguese faience dating from 1630 to 1700 were found on Gothenburg excavations. Plates and bowls are the most frequent types of items, followed by bottles and other small objects such as boxes. Although the quantity and quality of the objects are extraordinary, they do not differ from the major European collections in cities such as Amsterdam or Hamburg, thus a similar economic and social base must have been shared by North European consumers.[31]

One of the major influences of Portuguese faience was Chinese porcelain, and blue and white faience vessels were visually similar to Chinese objects. The desire for exotic Eastern commodities resulted in the majority of the objects found in Gothenburg being decorated with the Wanli Chinese style. It was not until the 18th century that Swedish-led global trade occurred in the East, so instead, they had to rely on secondary trade. These were produced roughly from 1630 to 1660 with some variations during that period. While blue on white objects tend to be earlier, from circa 1650 onwards purple starts to be used as a decorative colour. The ledge is separated into frames with the inner part decorated. The decorations vary with several examples presenting what has been known from Portuguese literature as *aranhões*, inspired by Chinese leaves, signs of good fortune, and flower motifs with Chinese influence such as chrysanthemums and peonies (Fig. 5). The inner bottom of the plates' decoration can vary, and it can have Chinese-inspired landscapes with birds on the ground or flying over the fields,

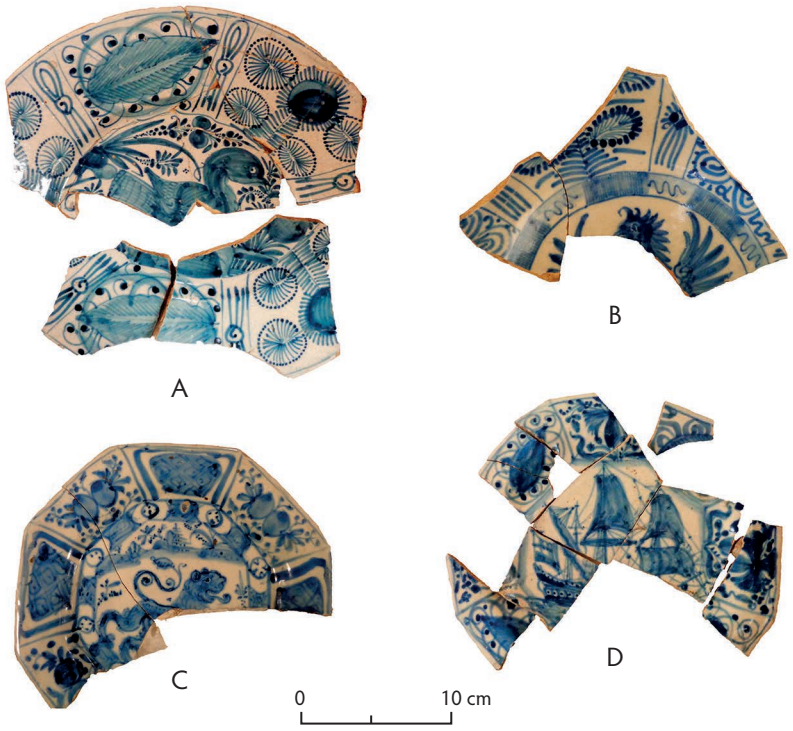

FIGURE 5. Chinese-inspired Portuguese faience (1630–60). Gothenburg archaeological finds Photo: the authors.

rabbits and hares (Fig. 5a), or European motifs such as coats of arms (Fig. 5b), lions (Fig. 5c) or even ships (Fig. 5d). These central decorations may have been related to the demand of Swedish consumers. This decoration was very appreciated in Northern Europe with several examples around the Northern Sea. Although all these motifs had a symbolic meaning in porcelain, Lisbon potters when reproducing them were not always skilled and instead the design was essentially a sign of exotic places.[32]

Other patterns include the so-called spiral and geometric decoration where the ledge presents small spirals inside frames while the decoration in the inner bottom varies between Chinese-inspired landscapes and European motifs such as coats of arms or human figures (Fig. 6). This particular decoration may have had a short life in the city since it started to disappear around 1640 probably not satisfying the consumers who were after other more appealing fashionable decorations.

Between the 1640s and 1660s floral decorations were used on the ledge to decorate the ledge and the inner bottom of plates and bowls. Still inspired by the Chinese patterns they now reveal a more European style since frames disappear from the ledge of plates. Large petals decorate the ledges giving the idea of a large flower. Other plates have leaves and ferns (Fig. 7).

Some of the most interesting objects, in particular the ones which in fact can help us track the consumers of such ceramics, are the ones decorated with armorial designs. However only rarely can we recognise the family or city that is represented there. Only a few have been found in Gothenburg. The most frequent style is

FIGURE 6. Geometrical decoration of Portuguese faience (1620–40). Gothenburg archaeological find. Photo: the authors.

FIGURE 7. Floral examples of Portuguese faience (1630–60). Gothenburg archaeological find. Photo: the authors.

FIGURE 8. Portuguese faience with coats of arms (1630–1700). Gothenburg archaeological find. Photo: the authors.

the coat of arms with the rampant lion, which also occurs in other parts of Europe where Portuguese ceramics have been found.[33] This heraldry design is common to many families, and it was commonly used in several countries (Fig. 8). Although the lion is always represented the same way, the type of drawing and colour changes over time and objects produced after 1660 are blue and purple. The objects that have been found in Gothenburg reveal a high-quality manufacture and delicate decoration indicating that their social base was wealthy consumers since these were expensive objects. The coats of arms seem to represent wealthy members of society and occasionally, we have the opportunity of recognizing one of the families that were represented there. Although Claes Bielkenstierna probably never lived in Gothenburg the city museum owns this plate in the collection (Fig. 9). His coat of arms and initials are represented in this plate which is dated 1641. As mentioned previously, this is an important date. Portugal was under Spanish domination until December 1640. Several Portuguese faience plates with different coats of arms, including the royal Portuguese armorial design, appeared in Portugal and Europe dated 1641. It is possible to believe that these could have been used as a type of propaganda from the new Portuguese crown to send to wealthy European personalities who maintained economic and political relations with the Portuguese crown, passing the message that the Portuguese crown had been restored and securing trading relations.

FIGURE 9. Portuguese faience with the Swedish nobleman Bielkenstierna's coat of arms (1641). Museum of Gothenburg, GM:3621. Photo: Tom Wenneberg.

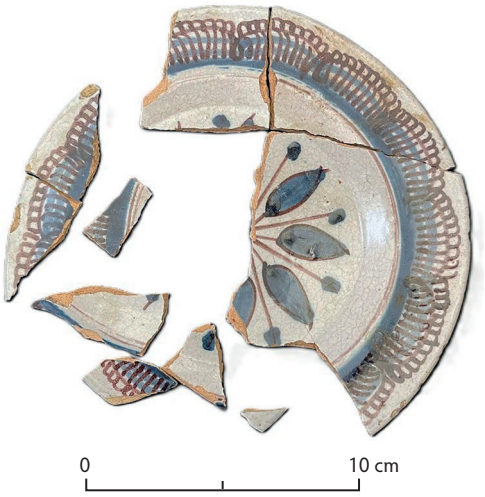

FIGURE 10. Lace decoration in Portuguese faience (1660–1700). Gothenburg archaeological find. Photo: the authors.

The presence of late 17th-century Portuguese faience objects is uncommon in north European archaeological contexts since they tended to disappear after 1660, most likely replaced by the high-quality Dutch Delftware.[34] Gothenburg does not fit into that tendency, and it continued to import Portuguese faience at least until the early 18th century, although the objects now are nothing similar to Chinese productions (Fig. 10).

CONCLUSION

The distinct decoration of Portuguese faience stood out in northern European domestic environments, where local wares were predominantly dark brown or red, with green and yellow lead glazes. Only other tin-glazed wares could compete with the aesthetic appeal of Portuguese faience. In Gothenburg, Portuguese ceramics represent a small portion of the imported household ceramics, with the majority coming from the Low Countries or Germany, especially in the form of stoneware.

It is plausible that some of these Portuguese faience pieces arrived in Gothenburg indirectly, through other cities such as Hamburg, which had well-established trade connections with Gothenburg. The Swedish-controlled city of Stade, close to Hamburg, would have facilitated these trade contacts. This is supported by the presence of two bottles, one bearing the coat of arms of Hamburg and the other with the initials

FIGURE 11. Portuguese faience representing the Hamburg connection (1630–60). Photo: the authors.

HHM, likely referring to the Hamburg Hansen Market (Fig. 11).

A key question arises: why did Gothenburg inhabitants value Portuguese faience so highly? The city's direct trade connection with Lisbon for salt and other goods likely spurred the large consumption of Portuguese ceramics. Additionally, the unique decoration of Portuguese faience, alongside Dutch blue-on-white productions, would have been striking in northern European homes. Despite being a small portion of the ceramics found in Gothenburg, Portuguese faience is easily distinguishable by its size and decoration.

Trade in Gothenburg aligned closely with the broader northern European trade patterns. The peak period of commerce between Lisbon and other European cities occurred between 1600 and 1660, though Gothenburg's involvement started later, around its founding, and continued until the early 1700s (Fig. 12). The major period for Portuguese ceramic trade was between 1640 and 1700, coinciding with the high point of the fish industry, which required salt from Portugal, potentially leading to increased pottery imports. While salt imports continued, pottery imports did not, likely due to protectionist laws promoting the local ceramic industry, culminating in a total ban in 1739, after the last known Portuguese faience types appeared in Gothenburg.[35]

The types of objects found suggest a wealthy group of consumers, similar to other European cities. Gothenburg, along with Hamburg, Amsterdam, Enkhuizen and Hoorn (the two later just north of Amsterdam), has yielded a significant number of such artefacts. This raises questions about the high frequency of Portuguese blue-on-white ceramics in Gothenburg. Were these ceramics a sign of social distinction, or represent membership of a group, different from the more common Dutch wares? Did consumers recognize a difference in the glaze or style, or were these ceramics considered exotic, reflecting a local-specific taste?

Interestingly, despite this focus on tin-glazed ware, there is a notable absence of other types of

FIGURE 12. Chronological evolution of the Gothenburg faience. Photo: the authors.

Portuguese ceramics in Gothenburg. Unlike British, German, or Dutch cities where Portuguese redwares are common, no Portuguese redwares have been found in Gothenburg. This could indicate that Gothenburg had a very specific type of consumption, potentially tied to the absence of a Portuguese migrant community. Scholars such as S. Newstead (2015) and M. Stolk (2022) argue that the presence of Portuguese redware is often linked to Portuguese migrant communities, which seems to support the presence of ordinary quality faience in those places.[36] In contrast, Gothenburg's high-quality Portuguese faience and the lack of ordinary wares suggest that its consumers were wealthy Swedish merchants, rather than Portuguese immigrants.

Nevertheless, this paper is just a preliminary presentation. Future research will focus on broader comparative studies of northern European cities to determine if similar patterns of Portuguese ceramic imports exist. Detailed analyses of trade networks and intermediaries involved in the distribution of Portuguese faience could provide insights into how these goods travelled and were traded. Additionally, studying the social and economic contexts of Gothenburg's consumers may clarify why wealthy merchants preferred Portuguese faience over other South European ceramics.

Tom Wennberg is an archaeologist at the Museum of Gothenburg. He has known Georg for many years. Georg's extensive body of work and knowledge on glass are things he generously shares whenever asked. He serves as a model for all scholars, both in his expertise and as a friend.

Tânia Casimiro is a researcher at the Centre for the Sciences of Place and Memory, University of Stirling. She greatly admires Georg Haggren's work on post-medieval sites. His dedication to historical archaeology inspires her. Every time they meet, he is incredibly kind, and his passion for his work is truly admirable.

NOTES

1 Losman 1984.
2 Almquist 1929: 615; Dalhede 2001: 351 ff; Müller 2008.
3 Dalhede 2001: 333 ff.
4 Baart 1988; Casimiro 2011; Martens 2012.
5 Linaa 2021.
6 Stolk 2022.
7 Bauche 1996; Eriksson 1975; Kjellberg 1933; 1952.
8 Eriksson 1975: 126f; Hüseler 1925: 498, bild 32.
9 Martens 2012.
10 Casimiro 2015.
11 Almquist 1929: 615; Dalhede 2001; Kjellberg 1933.
12 Sebastian 2010.
13 Henriques et al. 2019.
14 Sebastian 2010.
15 Wennberg 2015.
16 Wennberg 2010: 79.
17 Almquist 1929.
18 Dalhede 2001: 276f; Müller 2008.
19 Dalhede 2001: 293.
20 Müller 2008.
21 Dalhede 2001.
22 Dalhede 2001: 351.
23 Almquist 1929: 615; Müller 2008.
24 Almquist 1929: 621f.
25 Lima 1942: 385.
26 Almquist 1929: 622.
27 Müller 2008.
28 Andersson 1996: 125ff.
29 Chandler 1987.
30 Thörnqvist 2023: 12.
31 Martens 2012; Stolk 2022.
32 Casimiro 2024.
33 Casimiro 2011.
34 Casimiro 2011.
35 Kjellberg 1933.
36 Casimiro 2011.

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Mathias Bäck

KERAMIK, GLAS OCH VÄNSKAP FRÅN TRE TIDIGMODERNA STÄDER

Alla som arbetat med historisk arkeologi vet att titeln på denna uppsats associerar till en rapport i den för ämnesområdet grundläggande rapportserien *Medeltidsstaden* (eg. Projektet; Den tidiga urbaniseringens konsekvenser för nutida planering). Denna serie omfattar ett 70-tal rapporter som översiktligt redogör för det arkeologiska källäget för samtliga medeltidsstäder i den västra rikshalvan. Fyra av de sex medeltida städerna i den östra rikshalvan har publicerats i en motsvarande rapportserie för Finland.

En av rapporterna i serien är en materialstudie; *Keramik, kammar och skor från sju medeltida städer*. I denna jämförs de utvalda fyndkategorierna:

”Valet av föremålsgrupper och metoder har gjorts med utgångspunkt från frågeställningar som sammanhänger med den tidiga urbaniseringen i Mellansverige. Som tidigare påpekats finns idag ett arkeologiskt fyndmaterial, som gör det möjligt att genom jämförelser få fram likheter och olikheter städer och grävningsplatser emellan. Detta kan sedan ligga till grund för diskussioner om mer generella förhållanden. Förutom kronologiska skillnader beträffande städernas ålder kan dessa jämförelser bidra till ökade kunskaper om ekonomiska, sociala och funktionella förhållanden i det medeltida samhället.”[1]

Syfte och frågeställningarna i studien är högst relevanta och skiljer sig inte nämnvärt mycket från de problemformuleringar som vi har för de urbana fyndmaterialen idag. Det finns emellertid en omständighet som medför stora begränsningar, för att inte säga kronologiska fällor, i de redovisade kronologierna från de sju städerna. Enligt författarna innebär

”Fyndstudiens omfattning [medför] också att man på relativt goda grunder kan få fram en säkrare relativ kronologi, som kan vara av stor betydelse för tolkningen.”[2]

Denna ambition är naturligtvis riktig och relevant utifrån målsättningarna. En avgörande faktor som påverkar resultatets relevans är dock att materialstudien baseras på undersökningar som gjordes under 1970-talet. Detta innebär att de inte genomfördes med en kontextuell grävmetod.

”För att göra materialet överskådligt och bearbetningsbart har det typologiserats och förts upp i tabeller, där respektive typer relaterats till en tidsaxel - grävningsskikt. Förutsättningen för ett sådant arbetssätt är att föremålen tillvaratagits stratigrafiskt, dvs att samtliga fynd relaterats till bestämda grävningsskikt.”[3]

Här presenteras problemet tydligt av författarna själva. Den stratigrafi som omtalas i citatet ovan är konstruerad och representerar således inte stratigrafiska enheter som har identifierats och tolkats – det vill säga kontexter. Fyndmaterialet som analyseras relaterar därmed till en konstgjord stra-

tigrafi, där varje enskilt ”grävningsskikt” kan omfatta en eller (oftast) flera deponerade – här icke identifierade – historiska kontexter. Kort sagt innefattar varje ”grävningsskikt” material från olika kontexter som representerar olika handlingar. Detta omöjliggör en bedömning av om de undersökta depositionerna motsvarar momentana eller mycket långa tidsförlopp, vilket i sin tur försvårar eller förhindrar en tolkning av det daterade fyndmaterialets kronologiska relevans i sammanhanget. Som exempel kan anföras det yngre rödgodsets representativitet i faser som är daterade till 1200-tal eller tidigt 1300-tal i olika städer. En del av dessa dateringar är orimligt tidiga, vilket sannolikt beror på störningar som inte upptäckts på grund av grävmetoden. Avsaknaden av stratigrafiskt säkerställda kontexter (dvs. tolkade stratigrafiska enheter) gör det också närmast omöjligt att finjustera kronologier och analysera bruket av till exempel keramik på de medeltida konsumtionsplatserna i Sverige, i relation till produktionsplatserna i norra Europa.

Denna artikel är en hyllning till Georg och inte en källkritisk analys av rapporten *Keramik, kammar och skor från sju medeltida städer*. Därför skall vi inte fördjupa oss mer i denna rapport. Jag vill bara understryka att den är skriven med andra förutsättningar och i en annan tid. Då de tillgängliga undersökningarna i samtliga fall var genomförda med icke-kontextuella metoder fanns inget annat material att tillgå. Kontextuell arkeologisk metod kom inte att praktiseras i svensk arkeologi förrän i början av 1990-talet, även om tendenser till metodologisk utveckling fanns något tidigare.[4] Likväl fyller rapporten en viktig funktion, såtillvida att fyndmaterialets betydelse för tolkningen av sociala och kronologiska sammanhang framhålls och är lika aktuella idag som då.

Härvidlag tangeras mitt eget och Georg arbetssätt med de fyndanalyser som han (glas) och jag (keramik) har genomfört parallellt under många år. Dessa fyndanalyser har fokuserat på medeltida och, till skillnad från *Medeltidsstadens* rapporter, tidigmoderna material, även om vi bägge även arbetar med yngre järnålderns materiella kultur.

Jag skall kort nämna tre exempel på undersökningar i Sverige där både jag och Georg har bidragit med fyndanalyser.[5] En av poängerna är att beställaren av våra analyser får kronologiska underlag baserade på separata analyser. Den enkla metoden är att jag och Georg inte diskuterar med varandra innan vi har genomfört våra analyser, inklusive dateringar av de olika materialen. Därmed erhåller den arkeologiske projektledaren oberoende dateringar från två separata material i undersökningen. Det finns emellertid en växelverkan såtillvida att en dialog pågår mellan analytikerna och respektive projektledare under analysens gång. Fyndanalysen kan därmed även i realtid bidra till den stratigrafiska analysen medan rapportarbetet pågår.

De skriftliga källorna för införsel av glas och keramik under tidigmodern tid är sporadiskt bevarade och det är främst tullängder som kan ge oss information om denna införsel.[6] Ett annat källkritiskt problem är att dessa varor, framför allt keramik, sällan definieras eller värderas särskilt högt. Av denna anledning är det arkeologiska källmaterialet centralt i för diskussionen kring utvecklingen och moderniseringen av bords- och dryckeskulturen i Nordeuropa under tidigmodern tid. Dateringen av kulturella förändringar är aldrig bättre än den undersökningsmetod som använts, och därmed den kronologiska upplösning som ett specifikt arkeologiskt material kan erbjuda. Trots minutiöst genomförda kontextuella undersökningsmetoder är det svårt att precisera dateringar av fyndmaterial till mindre än ett eller ett par årtionden. Med tanke på att den materiella kulturen i hela norra Europa, möjligen med viss nyansskillnad vad gäller Storbritannien, uppvisar en stor homogenitet under tidigmodern tid[7] kan vi konstatera att spridningen av produkter från Nordeuropa gick så snabbt - ibland på några få år eller till och med momentant - att det är svårt att fånga detta i det arkeologiska materialet.[8] Faktum är att denna tendens kan observeras redan under medeltiden i urbana kontexter.[9] Kort sagt kan det kronologiska spannet mellan produktion och konsumtion vara oidentifierbart kort ur ett arkeologiskt perspektiv. Detta är intressant och får även konsekvenser för

dateringar av produktionsplatserna, då det finns väl daterat, kontextuellt undersökt material från nordiska, främst urbana, områden.

En annan aspekt av jämförelsen mellan glas och keramik relaterar till sociala sammanhang och kontaktnät. Georg har påvisat att en betydande del av glaskärlen under 1500- och 1600-talet troligen importerades, främst på grund av virkesbrist för hyttorna och att den inhemska produktionen inte kunde täcka behovet.[10] Lübeck förefaller ha varit den stora exporthamnen för glas. Med största sannolikhet kom även keramik, tillsammans med varor som öl och vin, med samma fartyg från Lübeck. Detta reflekteras inte minst i den höga andelen nordtysk keramik i tidigmoderna keramikprofiler – alltså den relativa sammansättningen av olika godstyper – från svenska städer.

Intressant i sammanhanget är att keramiken från flertalet kvarter i till exempel Falun domineras av tysk keramik, men att det finns stadsgårdar där nederländsk keramik är mera framträdande.[11] Detta speglar nog snarast hushållens härkomst i dessa fall. Extra intressant är också det faktum att *christalleglas* och annat mer exklusivt glas förefaller ha exporterats till Norden direkt från Rotterdam, och inte enbart via Lübeck.[12] Samma fartyg fraktade bland annat öl och vin, men också majolika och fajanser, dock ej i sådana mängder att det kan betraktas som regelrätt export – åtminstone inte till Östskandinavien och Finland. I detta sammanhang bör dock påpekas att betydligt större mängder majolika/fajans, samt under 1700-talet porslin, återfinns främst i Göteborg men även i de västsvenska städerna, i förhållande till den svenska östkusten.[13]

Från kvarteret Posten i Falun har man för första gången identifierat rödgodskeramik specificerad till produktionen i Delft.[14] Till detta kommer att merparten av den majolika och fajans som påträffas i tidigmoderna miljöer i Norden före 1700-talet härrör från nederländska verkstäder. Det är sannolikt ingen slump att venetianskt glas började tillverkas i städer som Amsterdam och Antwerpen redan under andra hälften av 1500-talet. Vid samma tid introducerade nämligen inflyttade italienska keramiker majolikatillverkningen i Nederländerna. Produktionen av majolika och fajans kom redan från slutet av 1500-talet att utgöra en omfattande verksamhet i Nederländerna. Keramiken har förmodligen exporterats till vissa områden redan i detta skede, men ännu finns varken tillräckliga mängder eller större enskilda samlingar (som till exempel vrakfynd) som tyder på en regelrätt export till Sverige eller Finland under 1500- och 1600-talen. Som redan nämnts finns troligen en flera orsaker till att keramik som producerats i Nordeuropa påträffas i olika sociala kontexter i Norden. Förutom personliga relationer och allianskapande, samt nordvästeuropéer i diaspora, finns också exempel på genremåleri som visar hur svenska soldater plundrade hem och krogar på allsköns föremål under trettioåriga kriget – däribland keramik.[15]

Till skillnad från glaset är det således svårt att tolka den samtida keramiken som importerad i större omfattning. Min uppfattning är att keramiken i huvudsak nådde de svenska städerna på i princip samma sätt som under medeltiden – det vill säga genom personliga kontakter.[16] Möjligen ser vi under tidigmodern tid, i städer som Falun, Kalmar och Norrköping, exempel på beställningar av keramik från den tyska och nederländska diasporan i Norden. Glasfynden från kvarteren Posten 10 och Västra Falun 11 korrelerar mycket väl med bilden av Falun som en stad där den materiella kulturen var tydligt präglad av den förhållandevis stora mängden tyska och nederländska invånare.[17] En konsekvens av detta skulle vara att vi på goda grunder kan anta att det på tomter där det finns påtagligt mycket keramik från dessa områden också bott människor från Tyskland och Nederländerna. Detta är ingen särskilt djärv tes, då vi från skriftliga källor vet att det fanns mängder av tyskar och nederländare i de svenska städerna under 1600-talet.

Studier av tullängder visar att mycket stora mängder glas ibland infördes till Sverige och Finland redan under senare delen av 1500-talet.[18] Motsvarande uppgifter om keramik är däremot sparsmakade, för att inte säga svårfunna. Det bör dock påpekas att någon systematisk genomgång av tulläng-

der inte gjorts av författaren. Vi vet från (ofta) något senare boupptecknin gar att keramik vanligen inte ens tas upp i längderna, eftersom dess värde inte torde ha varit särskilt högt. Enstaka typer av stengods, som de så kallade bartmannkrusen, kan möjligen betraktas som importvaror. Detta framgår av fynd från skeppslaster, lastade med större mängder av just denna keramiktyp, vilka förlist i Östersjöns kustområden.

Precis som Georg har jag noterat att kärltyper som tidigare betraktades som exklusiva, med tiden och genom fler arkeologiska undersökningar av olika sociala miljöer, inte längre kan ses som så unika som de en gång uppfattades. Nederländsk majolika och fajans från 1500- och 1600-talet betraktades tidigare som exklusiva fynd när de påträffades. Med tiden har man dock kunnat konstatera att de förekommer i flertalet material från tidigmoderna städer och även, om än i mindre mängd, på landsbygden. Ibland rör det sig om enstaka kärl, men inte sällan hittas flera. Det är snarare så att de samtida tyska stengodskärlen sannolikt har varit färre, eller åtminstone inte fler, i de flesta stadsgårdar under 1500-och 1600-talet. Den enda riktigt exklusiva typen av keramik i Östersjöområdet före 1700-talet är porslin. Fynd av kinesiskt porslin i 1600-talskontexter är förvinnande få i Östskandinavien. Denna vara var uppenbart förbehållen de allra högsta sociala skikten och kungligheter. Under denna period är kinesiskt porslin till och med ovanligare än de flesta mer exklusiva glaskärlen, möjligen med undantag för äkta venetianskt glas av de mest elaborerade typerna.

En sista aspekt av glaskonsumtionen skall kort nämnas i detta sammanhang. Det rör sig om de varor som konsumerades i glaskärlen – öl, vin, brännvin. Starköl importerades till Norden från ett flertal nordtyska hansestäder.[19] Det finns naturligtvis flera förklaringar till den omfattande ölimporten under 1500- och 1600-talet. Förutom virkesbrist och stor efterfrågan är ett intressant exempel det faktum att till och med kung Johan III vid ett tillfälle uppmanade kalmarborna att förbättra sin ölproduktion. Kalmar var nämligen känt för att tillverka dåligt öl, vilket berodde på att vattnet som användes vid tillverkningen var för salt.[20]

Även stora mängder vin importerades till Sverige och Finland under tidigmodern tid. Glaskärlen ger en mer nyanserad bild av dryckeskonsumtionen än vad keramiken gör, eftersom de tydligare kan kopplas till moderniteten, vars drivkraft oftast emanerade från de högre stånden i samhället. Öl är väl den dryck som tydligast kan associeras med både glas och keramikkärl, i första hand till passglas och så kallade ”*humpen*” (sejdlar). Samtidigt så skall vi nog inte utesluta att man druckit annat än öl i stengodskrus – vem har inte druckit vin ur en mugg? Passglas är den kärltyp som oftast påträffas vid arkeologiska undersökningar som berör perioden 1550–1675. Samma undersökningar där passglas påträffas genererar oftast även enstaka ölkärl av stengods. Passglas uppvisar också en spridning med större spänn-

FIGUR 1. Osias Beert 1608. Oliver på metallfat, jordgubbar och körsbär i kinesiska porslinsskålar och inte minst tre exklusiva bägare med en röd, en vit och en gul dryck. Rödvin, brännvin och vitt vin? Bild: Christoph Schmidt, Staatliche Museen zu Berlin, Gemäldegalerie.

FIGUR 2. Grattis på födelsedagen käre vän. Sebastian Stoskopff 1644. Musée des Beaux-Arts de Strasbourg. Bild: Wikimedia commons.

vidd av olika sociala miljöer än till exempel glas á la façon de Venice. Ytterligare en dryck som kan nämnas tillsammans med öl är enbärsdricka eller enbärsöl, vars produktion kan beläggas arkeologisk så tidigt som 1660- eller 1670-talet i Kalmar.[21] Det är rimligt att anta att någon form av alkoholhaltig enbärsdryck var tämligen vanlig som ett komplement till öl i vissa delar av landet. Frågan är då vilket slags kärl som skulle användas för intagning av en sådan dryck – traditionella öl- eller vinkärl?

Avslutningsvis vill jag betona den metodologiska aspekten av det ovan förda resonemangen. Egentligen är arbetssättet inget annat än en klassisk fyndkombinationsmetod, om än i ett ovanligare tidssammanhang. Den avgörande skillnaden, och den viktigaste faktorn för att metoden skall generera ny kunskap, är att den arkeologiska undersökning varifrån analysmaterialet kommer måste vara genomförd med kontextuell grävmetod.

Ett roligt exempel på min och Georgs kontinuerliga dialog kan hämtas från den dag jag avslutade skrivandet av denna artikel. Jag hade just svarat på en fråga om datering av ett stengodskärl från Turku/Åbo som Georg hade skickat en bild på (vilket jag preliminärt daterade till cirka 1350–1470). Georgs svar på detta får bli sista ordet i denna artikel:

”Hej,

Dateringen stämmer väl med den glasskärva som dök upp när jag besökte gropen i dag: ”böhmisk” klubbägare ca 1375–1450 (–1475). :)”.[22]

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NOTER

1 Broberg & Hasselmo 1981: 79.
2 Broberg & Hasselmo 1981: 8.
3 Broberg & Hasselmo 1981: 10.
4 Anund 1995.
5 Bäck 2016; manus 1 & 2; Bäck & Roslund 2017; Haggrén 2016a; 2016b; 2017; manus 1.
6 Haggrén 2011.
7 Jfr. Haggrén 2011: 137.
8 Bäck & Bergold i tryck.
9 Bäck manus 1.
10 Haggrén 2011: 134.
11 Bäck manus 2.
12 Haggrén 2011: 136.
13 Bergold & Bäck 2009.
14 Bäck manus 2.

15 Bäck & Bergold i tryck.
16 Bäck 2016: 132–3.
17 Bäck manus 2 & 3; Haggrén manus 1 & 2.
18 Haggrén 2011: 125, 134–6.
19 Bäck, Heimdahl & Vretemark 2016: 312; Haggrén 2011: 137.
20 Bäck, Heimdahl & Vretemark 2016: 309.
21 Bäck, Heimdahl & Vretemark 2016: 313.
22 Haggrén 12.8.2024.

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Hanna Dahlström & Stuart Whatley

GEORG HAGGRÉN AND THE COPENHAGEN GLASS

INTRODUCTION

Between 2009 and 2018, the Museum of Copenhagen embarked on its largest ever archaeological project, the Metro Cityring. In particular, excavations in city moat and the Renaissance harbour provided an opportunity to explore archaeological remains and finds material from deep moat backfills and land reclamation from the late medieval period and the Renaissance. From these excavations, a wide range of information was gained about the development of Copenhagen from a small medieval town into a Renaissance metropolis.

Before these excavations, little was known about the history of glass in Copenhagen, in particular when glass artefacts were first used in the city, how widespread the use of glass was in different periods and the provenance of many glass types. This knowledge is now obtained from the collaborations between the Museum of Copenhagen and Georg Haggrén. Georg analysed the glass and wrote reports from the three large Cityring excavations, and later, together with us, an article based on his analyses for the Corning Museum of Glass. In this short text, we would like to highlight the most important results of Georg's work with the Copenhagen glass, and in the bigger picture how this has contributed to our knowledge of historical Copenhagen.

GEORG'S WORK WITHIN THE METRO CITYRING PROJECT IN COPENHAGEN

In the years between 2009 and 2016, the central part of Copenhagen was very much a construction site due to the development of a new metro line, the Cityring. The preparations included large-scale archaeological excavations, foremost of three sites in the city centre: Kongens Nytorv (King's New Square), Rådhuspladsen (Town Hall Square) and Gammel Strand (Old Harbour). The three sites were placed at the borders of medieval Copenhagen, and in their different capacities producing large and varied find materials, mainly from the post-medieval period and especially from the 17th to 18th centuries. During this period, Copenhagen went through intense population growth, but the city was only partly able to grow in size. The fortifications, originally dating from the 13th and 14th centuries, were rebuilt, strengthened and moved outwards, allowing for new areas to be incorporated into the city walls, but to an extent, the town was contracted within its firm borders. Towards the wa-

FIGURE 1. Map of central Copenhagen with the three sites marked. Graphics: Per Jørgensen. Adapted by Fredrik Grehn, Sydsvensk Arkeologi.

terfront, massive landfills deposited from the 12th to the 19th centuries, enabled the city's harbour area to expand, making room for the increased and globalized trade activity.

Two of the three excavation sites, Kongens Nytorv and Rådhuspladsen, were placed at the former city gates Østerport (Eastern gate) and Vesterport (Western gate). In the gate areas, several phases of moats, ramparts and other structures related to the fortifications were excavated. The moats were a rich treasure trove for finds from the 17th century. In the mid-17th century, the fortifications were completely rebuilt, and the medieval moats were backfilled. In this process, it appears the moats functioned as waste containers, where the city's inhabitants discarded their household rubbish, waste from small scale industries and craft activities, building materials and more. A similar situation was seen at Gammel Strand. The continuous land reclamation, dating from the late medieval period to modern times, featured repeated reconstruction of the harbour front resulting in massive depositions of waste from the city's households amongst other urban activities. Together, the three sites produced massive quantities of finds, spanning bulk find categories such as ceramics, glass, CBM, leather, textiles and animal bones and special finds of metal and various organic materials.

It is here, among the plethora of archaeological finds that Georg Haggrén joins the Metro Cityring story. Georg, being one of the most prominent and well-connected glass specialists in Europe, naturally knew about the large excavation projects in Copenhagen. In 2014, he contacted the Museum of Copenhagen, wanting to register and use the glass material for his research on glass production and glass consumption in the Nordic countries during the medieval and post-medieval period. His request was very welcome since the museum was in the process of appointing various experts to undertake the post-excavation work to make the most out of the rich finds material already in the report phase. Georg was invited to Copenhagen and the museum to undertake the specialist registration on all glass from the three sites and to write the finds reports, in addition to his research. His work commenced in 2014, when he studied the glass material from Rådhuspladsen and Kongens Nytorv, and continued in 2015 with the Gammel Strand material. In 2016, Georg finished the report on Gammel Strand. During his stays in Copenhagen, he was a much-appreciated guest, and contributed both socially and professionally to the archaeology work environment, for instance giving a lecture on European glass production for the museum's archaeologists.

KONGENS NYTORV GLASS

The excavations at Kongens Nytorv (KGN) in 2010–2012 produced a relatively large assemblage of glass finds with 1700 shards. Just under a third of these (about 500 shards) were table glass. Approximately 275 of the shards were bottle glass and ca. 600 of the shards were of window glass. There were beads, a linen smoother, a shard of laboratory glass and a perfume / small phial bottle. The remaining shards were undefined.

The earliest glass finds at Kongens Nytorv consisted of a few shards of medieval glass from Bohemia (prunted beakers) and West Germany (*Krautstrunk* glasses) and perhaps a carafe. However, the majority of the table glass was from the late 1500s and the early 1600s. These comprised *Humpen* and *Pass* glass (beer glass) and a variety of *Römer* glass, filigree glass, opaque glass, bossed beakers and *façon de Venice* in small quantities. From the late 1600s and early 1700s deposits, these vessels started to decrease in number, to be replaced by pearl goblets from Norway and northern Germany.

The significance of this assemblage was its components dating from the 1400s until the 1800s showing slow change over time in the typological form and use of glass. The remains also highlight fashion, social interactions and trade.

RÅDHUSPLADSEN GLASS

The 2011–2012 excavations at Rådhuspladsen (RHP) comprised 4180 shards. The assemblage can be broken down into 1450 shards of table glass, 1900 shards of window glass and 585 shards of bottle glass with the remainder undiagnostic. Alongside these types, there were three linen smoothers, half a dozen beads, a couple of pearls and a button made of glass.

Georg found that from 1620–1650 the assemblage consisted of high-quality glass, which changed post-1650 to plain table glass suggesting a change in the surrounding population or location of dump material. The high-quality types consisted of Bohemian, *façon de Venice*, green glass goblets, filigree, and *Römer* wine glass types. Of particular interest was the presence of comet glass, rarely viewed in Scandinavian deposits. *Pass* glass and *Humpen* types represented the beer-drinking vessels. Whilst *façon de Venice* types were plentiful (the highest single quantity found in Copenhagen at that time), the discovery of a Venetian-style bowl revealed someone with the ability to acquire a high-status Mediterranean vessel.

FIGURE 2. Part of the excavation area at Rådhuspladsen, with the Town Hall in the background. Photo: Museum of Copenhagen.

The bottle glass assemblage consisted of bottles from Norway and Holstein with eight-bearing glass seals, a significant aspect of this particular assemblage. These comprised seals from the glasshouses of Bossee (about 1665–70), Depenau (about 1670) and Schönhorst (1676–95). There were seals of Prince William III, who became the Prince of Orange in 1672. The designs represent William on the seal of the House of Orange-Nassau (before becoming king of England) and as a knight on horseback. The window glass dates from the 1600s, with a few shards painted.

In addition, there was bottle glass from the late 16th and 17th centuries, and pear-shaped and green cylindrical glass forms dating from the late 1700s and early 1800s. The window glass was mainly transparent, but there were fragments of painted glass from an ecclesiastic building and a shard from a painted circular pane.

Whilst Kongens Nytorv contained evidence of the chronological adoption of glass in Copenhagen, Rådhuspladsen showed something very different. The importance of the glass finds from Rådhuspladsen lies in their exclusivity for a few generations in the seventeenth century, set between 1620 and 1690. In particular, the table glass was the most exclusive in the early 1600s representing a transformation in the importance of glass in social settings.

GAMMEL STRAND GLASS

The glass assemblage from Gammel Strand (2010, 2012 and 2014) exhibited a fusion between the results from Kongens Nytorv and Rådhuspladsen, and the largest collection of glass from the Metro Cityring excavations. For the report, Georg analysed 6429 prioritised shards. The glass assemblage included artefacts dating from the 1400s to the late 1800s; however, the majority ranged between 1550 and 1825. Table glass was rare in the medieval period (4.5%) before becoming common between 1550 and 1650 (54%). Post 1650 there was a steady decline until the 1800s. In comparison, whilst bottle glass was rare in medieval deposits, it was found to have steadily increased from the 1500s with the development of square bottles for wine and distilled spirits. With the importation of Norwegian round bottles, bottle glass finally became the dominant type between the years 1750–1825, with many types being popular.

The glass findings reveal that, although small in number, there was an adoption of glass drinking ware in the medieval period, as viewed in the moats around the eastern and western gate moat deposits. The

FIGURE 3. Gammel Strand main excavation looking east. Photo: Museum of Copenhagen.

FIGURE 4. Photo of a *Rippenbecher* vessel from Gammel Strand dating from the late fourteenth century. Photo: Georg Haggrén.

glass finds suggest that the surrounding population of the harbour changed in the late 1500s and 1600s and a new status of wealthier inhabitants inhabited the zone. Many types of drinking vessels were found to represent consumption and greater choices from luxurious types to cheaper models. However, the more prosperous Copenhageners appear to have moved away from Gammel Strand in the 1700s, and the glass instead represents rubbish from the local taverns. Tableware was now restricted to cheaper and less decorative tumblers and *Humpen*.

Together with other finds assemblages, the glass have helped to characterise the social and economic transformation of the area of Gammel Strand, including the people who used the area, knowledge of which was earlier only obtained from historical sources.

CONFERENCES AND PUBLICATION

The new information obtained from the Metro Cityring excavations led to widespread public outreach and research, both within the Museum of Copenhagen and by external specialists and researchers. Georg´s work with the glass material is an important part of this body of research. The culmination of the many lectures he has given on the topic, was a paper at the first Nordic Utility Glass Conference on 10–11 March 2016 at Næstved Museum, part of Museum Southeast Denmark. An article titled 'Medieval and Early Modern Utility Glass in Denmark' was written based on the conference paper. Georg generously asked both of us to participate in writing the article. The article provided an overview of, and discussed, imported and domestic glass from Gammel Strand and Rådhuspladsen. It was published in 2020 in the Journal of Glass Studies, of the Corning Museum of Glass, USA.

THE IMPACT OF THE COPENHAGEN GLASS RESEARCH

Before the Metro Cityring excavations, the amount of glass found in archaeological contexts in Copenhagen was very small, and knowledge of the use of table glass in historical periods was therefore very limited. Georg Haggrén's research has not only provided an overview of the glass used by Copenhageners from the 1400s to the 1820s, but has also presented knowledge about how different types of glass were used by different social groups in the capital through the centuries.

Through his research it can be seen how the import and use of glass in Copenhagen changed with the city's transformation from a medieval merchant's town to a global trading centre, and contribut-

ed to the knowledge of how this affected the urban population. In the late 16th or early 17th century, table glass was widely used by the wealthy residents of the city. The variety of different glasses show that this segment of the population by then had adopted a western European drinking culture. By the late 18th century, the use of table glass had spread to the wider population of Copenhagen, showing the development of a general consumer culture led by the urban centres. Georg's research has also shed light on the changing commercial and resource networks of which Copenhagen was a part, and how this affected the types of glass used in the city.

The research on Copenhagen table glass is important, not only for Copenhagen itself, but also on an international level. It provides an example of how a European table culture spread in urban contexts to more people in society, but also, and maybe more uncommonly, it presents examples of the humbler table glass and bottles, used by many people. This type of material has often not made it into the museum collections, and the material from Copenhagen is therefore a valuable contribution to the international glass research.

For Copenhagen, Georg's work on the glass has, together with research made on, among other subjects; porcelain (by Rikke Søndergaard Kristensen), leather shoes (by Vivi Lena Andersen), textiles (by Charlotte Rimstad), and ceramics (by Stuart Whatley), vastly improved and nuanced our knowledge of the development of a consumer culture among Copenhagen's citizens in the medieval and early post-medieval period.

MORE GLASS IN COPENHAGEN

Georg will be involved in the analysis of the glass assemblage from the Amaliegade excavations undertaken by the Museum of Copenhagen over the next few years (2023–26). The excavations are located in Frederikstaden, Copenhagen, and take place at the former southeastern corner of the palace gardens of Sophie Amalienborg, which was in use from 1669 to 1789, in two distinct phases (1669–89, 1690s to 1789). The site is special as it consists of c. 3–4 metres of rubbish, manure and earth from the city creating anaerobic conditions. From this excavation, evidence of trade, cooking, fashion, military equipment, production of goods, diet and disease are found among leather, wood, ceramic, clay pipe, textile, leather and glass finds.

The first 6 months of the excavation produced a 17th and 18th century glass assemblage that is larger in quantity than what was found in the Metro Cityring excavations, and probably in any excavation undertaken in the whole of Denmark. Because of its dating, it is a natural successor to the assemblages from Kongens Nytorv and Rådhuspladsen and provides greater knowledge and variety of the late 17th and 18th centuries.

FIGURE 5. Dragon-style winged goblet. Façon de Venise or Venetian glass from Amaliegade. Photo: Museum of Copenhagen.

CONTINUED NORDIC COLLABORATION

Our (the authors') collaboration with Georg has continued after the Metro Cityring. We have both finished PhD studies based on the results of the Cityring project and moved on to new roles. Since Georg is always open to new ideas and collaborations, our paths continue to cross. In 2022, he was invited to join, together with Chris McLees from NIKU, Norway to the steering group of the newly formed Nordic network '*Nordic Urban Archaeology*', initiated by Joakim Kjellberg, Upplandsmuseet/Medeltidsmuseet in Stockholm; Kirstine Haase, Odense City Museum, and Hanna Dahlström. The network focuses on gathering urban archaeologists from the Nordic countries to share knowledge and discuss common interests and problems, and held its first conference (NUA2023) in Copenhagen City Hall in May 2023. The conference was a success, gathering 150 archaeologists from all over the Nordic countries and beyond. The steering group is currently editing a conference proceedings volume and are working together with the next local organising committee, to set the programme for the next conference, NUA2025, which will be organised by NIKU in Norway and held in Oslo.

Another forum where we, the authors, have all collaborated during the years is the Annual Meeting for European Archaeologists, the EAA conferences. In 2023, Georg took the initiative to co-organise a session for EAA in Belfast called '*All these finds - Challenges and Possibilities on Large Urban Archaeological Excavations*'. We were both co-organisers of this session, drawing on our joint experiences from the Metro Cityring project. For the 2024 EAA conference in Rome, Georg is once again collaborating with one of us (Stuart Whatley) on Session 1057 '*The Mediterranean in Scandinavia – imports and trade during the Middle Ages and Early Modern period, c. 1000–1800*'. We are confident that there will be more joint projects await in the future.

FIGURE 6. Georg together with Chris McLees (NIKU Trondheim), Hanna Dahlström, Kirstine Haase (Odens City Museum), and Joakim Kjellberg (Medeltidsmuseet/Upplandsmuseet,) at the NUA conference in Copenhagen, in May 2023. Photo: Joakim Kjellberg.

Dr. **Stuart Whatley**, Finds Coordinator and Archaeologist at the Museum of Copenhagen, Denmark, and **Hanna Dahlström**, Ph.D. and Director of Sydsvensk Archaeology, Sweden, have worked with Professor Georg Haggren over a period of 12 years in various archaeological projects in Denmark. We have among other things co-authored an article and co-organised conferences and conference sessions relating to urban archaeology.

Joakim Kjellberg

VENETIAN ENAMELED GLASS BEAKERS IN SWEDEN
Recent finds and new understandings

ABSTRACT

Enameled glass beakers of the Aldrevandin type are usually interpreted as highly exclusive and luxury artefacts signifying the presence of the highest elites of Medieval society. During the last decade new finds of enameled glass beakers have been uncovered in several excavations with 13th to 15th century deposits in Sweden. As pointed out by Georg Haggrén, who first published most of these finds, this challenges the previous interpretation of the role these beakers played in the Baltic area. This paper will summarize and investigate the new finds from medieval Sweden in relation to the previous research framework in Europe.

Keywords: Aldrevandin, enameled beakers, medieval glass, material culture, urban consumption

In the last decade, finds of enameled glass drinking vessels belonging to the group often referred to as Aldrevandin beakers, have appeared in artefact assemblages from several excavations in Sweden. The most recent finds, discussed in this paper, come from Stockholm, Östra Aros / Uppsala, Old Uppsala, Til and Enköping in the province of Uppland in central eastern Sweden as well as from Kalmar in southeast Sweden.

The research history of enamelled beakers dates back more than a century, involving scholars of various nationalities and from various disciplines. This of course includes several papers and special reports by Georg Haggrén throughout his career. In his capacity as an expert of medieval and later glass vessels, many of the shards from previous excavations, alongside most of these new finds, have first been described and published by Haggrén.

This paper will focus on the geographical, chronological and social contexts of the new finds. These complement and partially challenge the previous narrative of this highly exclusive category of glass vessels, predominantly present in high status places such as monasteries and castles. The subject of this paper has previously been presented, in collaboration with Georg Haggrén, in the session 'The Mediterranean in Scandinavia' at the Annual meeting of the European Association of Archaeologists in Rome 2024.

THE RESEARCH, PRODUCTION AND EXPORT OF ENAMELLED BEAKERS

High quality enamelled beakers from the 13th and 14th centuries of the Aldrevandin group, named after the famous, well-preserved beaker at The British Museum bearing the Latin inscription '*Magister Aldrevandin me fecit*' (Master Aldrevandin made me). This beaker is among the most iconic artefacts of the medieval period. The shards of the Aldrevandin group are easily recognisable due to their high-quality, clear or blue glass with a colourful characteristic decor of multi-coloured enamel, sometimes incorporating gold.

The research history of enamelled glass beakers dates back more than 100 years, the first publications appearing in the 1920s.[1] The art historian Carl Johan Lamm first published the Swedish finds alongside the international material beginning in 1929. He presumed, along with most of his European colleagues of the time, that the place of production of the enamelled beakers where in the Middle East, especially Syria and likely Damascus. He postulated that the beakers were made for export to the European markets. In older literature glass of this type is therefore often referred to as Syrio-Frankish. During the 1970s, archival sources revealed several workshops and glass painters working in the large glass industry of Venice during late 13th and up until the mid-14th centuries, thus changing previous interpretations of production.[2]

In modern research, the main corpus of knowledge was published in the exhibition catalogue of *Phoenix aus sand und asche* by Erwin Baumgartner and Ingeborg Kreuger in 1988. Since then, the number of new finds has appeared in excavations throughout Europe, mostly published in individual reports and special studies, as well as in a few regional summaries.[3] The state of research of the European finds has subsequently been updated in a paper by Kreuger, published 2018 in Journal of Glass Studies.[4] This study forms the baseline for this paper.

Physical properties of the investigated vessels show only minor variations in the techniques and in the raw materials of production.[5] Although most of the raw materials could have been imported there is a shared view among most scholars today that Venice is the most probable centre of production, possibly including some other minor north Italian workshops, utilising and adapting the techniques of the middle eastern industry. The production includes vessels made in both clear and blue glass and the motifs and illustrations on the vessels vary widely.[6] For the study presented in this

FIGURE 1. Four examples of the variation in motifs and colouring on enamelled vessels from the so called Aldrevandin group. To the left: a representative for the iconographic group portraying Mary from Sevgin, a vernacular beaker with a lover's scene from Fritzlar, a combination of the Animalistic and Heraldic designs on the same vessel from London and finally a blue glass beaker featuring a Geometric pattern from Lübeck. (After Kreuger 2018: 140, 145, 155; Baumgartner & Kreuger 1988: 109).

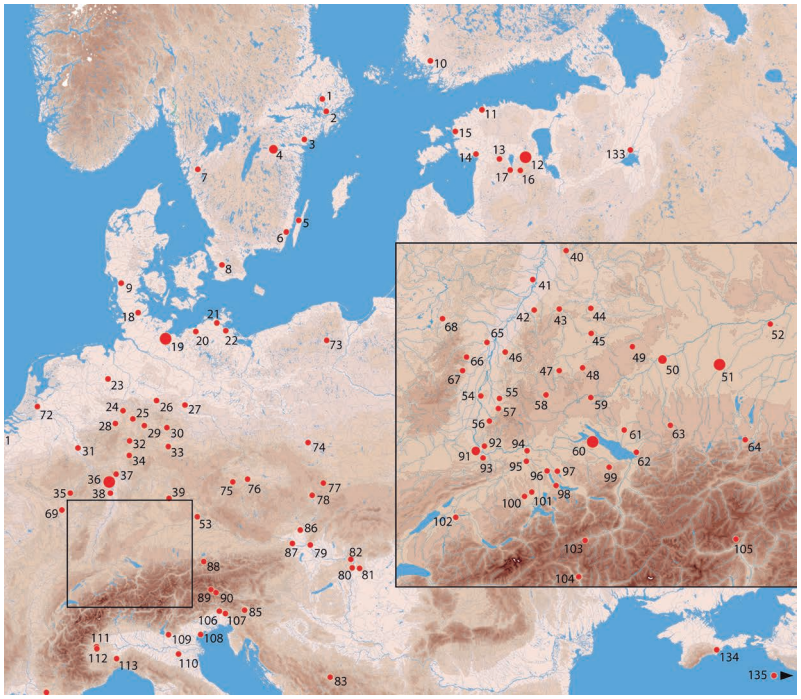

FIGURE 2. Extract of central and northern Europe from a map in Kreuger 2018 showing the distribution of finds of venetian enamelled beakers (after Kreuger 2018:130).

paper they have been further grouped into 1) Iconographic with religious motifs, 2) Vernacular with e.g. love scenes and proverbs, 3) Animalistic with fable animals, 4) Heraldic and Geometric designs (Fig. 1). Sometimes these designs are combined in one vessel, for instance with a heraldic shield and a fable animal as in the beaker from Foster Lane in London.[7]

Up until the 1980s the enamelled beakers of the Aldrevandin group were considered highly exclusive objects. Especially as many of the early finds came from exclusive and monumental sites such as monasteries, churches, castles and palaces. This is partly and likely due to these highly exclusive and monumental sites being targets for early archaeological interest and excavations in most countries. Development of excavation techniques and especially large-scale urban archaeological projects have produced finds of enamelled medieval glass vessels in many European towns. There are now examples from towns, castles and convents all over Europe, predominantly from Germany and the countries around the Baltic (see Fig. 2). It is hard to find any comparable workshop-produced goods distributed as far and wide across Europe.[8] Due to the vast distribution, Kreuger has pointed to the fact that vessels of this type cannot have been as exclusive and costly as earlier perceived. However, the vessels were in high demand and appreciated among wealthy nobles, the merchant classes and clergy around Europe.[9] Regardless of their popularity, enamelled glass vessels were to be a short-lived fashion. The general production, with some potential earlier examples, is between 1275 and 1350, coinciding with the written evidence of the venetian production.[10]

In her most recent paper Kreuger have produced a map of all finds in Europe up until 2018. As seen from the metrics there are few find sites in southern Europe, with many of the vessels found throughout central Europe north of the alps, predominantly Germany (Fig. 2).

If we focus on the Nordic countries and the Baltic region, a rather different and interesting picture emerges. According to Kreuger, at least 14 vessels have been found in the city of Lübeck, making it the most probable trading hub for the Aldrevandin beakers that reached further north and that is well represented in the main trading ports of the Baltic. It is especially well represented in the Estonian coast towns and in the region of Uppland in Sweden. In fact, if we consider its medieval borders, Sweden has the largest number of finds with a total of 21 Aldrevandin beakers (No

SWEDEN*		ESTONIA		DENMARK**	
Old Uppsala	1	Tallin/Reval (2)	2	Ribe (1)	1
Östra Aros/Uppsala	1	Tartu/Dorpat (10)	10	Lund (2)	2
Sigtuna	2	Viljandi/Fellin (3)	3	Schleswig (1)	1
Stockholm	5	Pärnu/Neu-Pernau (1)	1		
Nyköping	2	Haapsalu/Hapsal (1)	1		
Vreta	6	Burg Otepää (1)	1		
Old Lödöse	3	Burg Pikasilla (1)	1		
Turku	1				
Borgholm	2				
Halltorp	1				
Kalmar	1				
SUM	21		19		4

TABLE 1. Table of the minimum number of vessels, not shards, found in the Nordic countries and in the Baltic area, grouped by their medieval borders (after Kreuger 2018: 130).* – Including Finland. ** – Including Scania in Sweden and excluding north Germany.

of vessels, not shards), in all of Europe, excluding Germany. It is closely followed by Estonia with a total number of 19 vessels, although there will likely be more publications on recent finds shortly.[11] In medieval Denmark, including Scania and its other previous holdings in Sweden and excluding the north German towns, there are only three vessels accounted for. No vessels have been found in Norway.[12] (Table 1)

OLD AND NEW FINDS IN SWEDEN

Adding to the previous 21 finds in Kreuger's summary of medieval Sweden, there are seven new finds from Old Uppsala, Östra Aros / Uppsala, Enköping, Stockholm, Til and Kalmar, bringing the new total to 28 (Table 2). All of these finds have been recovered through modern, contextual excavations. Five of the finds are from urban excavations in towns, and two are from rural sites. The contexts of the finds prior to 2018 are from a monastery (Vreta), a church (Halltorp), a castle (Borgholm) while 12 come from urban contexts (Sigtuna, Nyköping, Stockholm, Gamla Lödöse in present day Sweden and Turku now in present day Finland). However, one of the vessels from Stockholm might be associated with the ecclesiastical institution of the Holy spirit at Helgeandsholmen.[13] (Fig. 3)

A find from Old Uppsala, approximately 5 km from central and modern Uppsala, comes from a house interpreted as part of the archiepiscopal manor adjacent to the cathedral. The site was excavated as a part of a research project in 2015. The find consists of a single shard of double sided enamelled clear glass (see Fig. 4). The building was demolished before 1288.[14]

Finds from the town of Östra Aros, renamed Uppsala in the 14th century, come from a watching brief in the west outskirts of the built-up area of the medieval town. The shards were found in layers dated to 1380–1450 and connected to a timber building of considerable proportions.[15] The shards are of clear glass. The motif is likely a lion, or possibly a bird, and most closely resembles the beaker from Erfurt.[16]

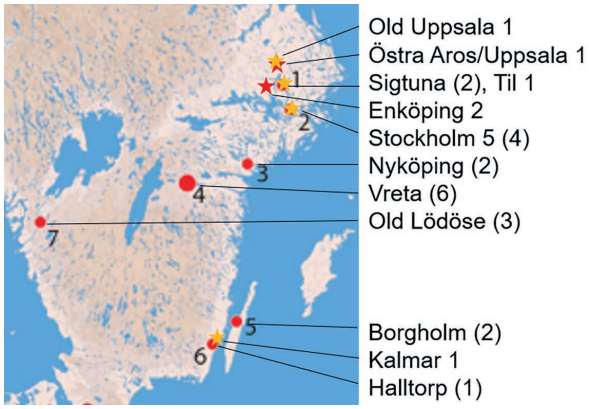

FIGURE 3. Map of Sweden with old and new finds of enamelled glass vessels marked in relation to find place (after Kreuger 2018). Red dots represent finds covered by Kreuger, red stars places with new finds, yellow stars new finds in previously listed places. Number in brackets are the previous number of vessels, numbers without brackets are the new total number of vessels from respective places.

From the Traktören quarter in Enköping, excavated in 2017–18, there are five shards representing at least two vessels, one of clear glass and one of blue glass. What is very convenient with the Enköping finds is the close dating of the deposition. Out of the five shards only one is redeposited in a later context while the others date between 1310 and 1406.[17]

From Stockholm there are new finds from the large-scale excavations in the Slussen area on Södermalm, just south of the main medieval town on the island of Stadsholmen.[18] The shards are connected to a high-status brick and timber framed building on Södermalmstorg dating to the 14th century. These shards are from a blue vessel with a geometric design, very similar to a beaker from Lübeck (Fig. 4 and 1).

A find of a single shard comes from the rural farmstead and manor of Til just outside the town of Sigtuna in Uppland. The small shard features yellow, green, red and blue enamel and is produced in 1250–1350. The shard is associated with the main building of the phase, a large timbered house, and in use between 1300–75.[19]

The most recent finds of enamelled glass in Sweden come from the important trading town of Kalmar in the southeastern part of the country. Here, a recent major watching brief throughout the medieval town is yet to be fully published but some finds have been featured in short presentations online.[20] One find has been listed in this paper (Table 2), but accordingly to the project manager Magnus Stibeus there are more finds waiting to be published.[21]

A FAST FASHION TREND OF THE MIDDLE AGES?

The new finds support the Kreuger`s previously mentioned conclusion that finds of venetian enamelled glass vessels are not limited to the most prominent places of nobility and clergy. What is clear is that, as Haggrén pointed out as early as 2016, enamelled glass can be found in most large-scale excavations

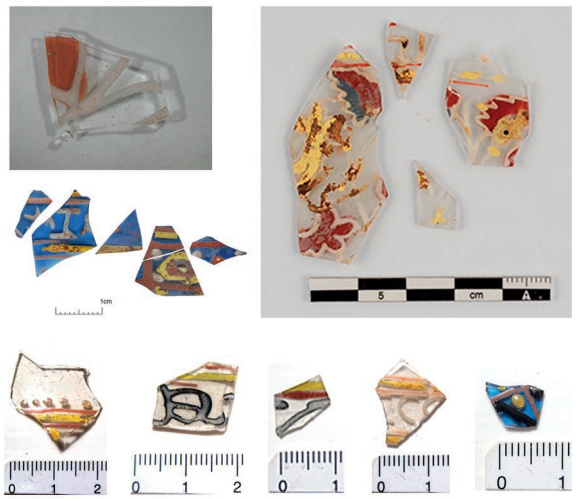

FIGURE 4. Some most recent shards from Sweden. Above, the shard from Old Uppsala (Ljungkvist, Frölund and Kjellberg 2024:96). To the right the shards from Östra Aros / Uppsala (Stenström 2022). Middle left the shards from Södermalmstorg in Stockholm and the Slussen project (from Haggrén 2020). Bottom row, five shards from at least two different vessels from the Traktören block in Enköping (after Bäck et al. forthcoming).

PLACE	CONTEXT	PRODUCTION	DEPOSITION	DESIGN
Old Uppsala	ecclasiastical	1250–1350	before 1288	clear, unknown
Östra Aros / Uppsala	urban	1250–1350	c. 1350	clear, animalistic
Enköping 1	urban	1250–1350	1310–1400	clear, unknown
Enköping 2	urban	1275–1350	1400–1406	blue, geometric
Stockholm	urban	1275–1350	1350–1390	blue, geometric
Til	rural	1250–1350	1300–1375	clear, unknown
Kalmar 1	urban?	1250–1350	1380–1400?	clear, unknown

TABLE 2. Table of context, production, deposition and design of the new finds in Sweden (various sources online and forthcoming archaeological reports).

of urban settlements covering the period late 13th to mid-15th century.[22] This is of course dependent on the excavation being undertaken with modern contextual practices, with the close study and careful excavation of the cultural deposits.

Based on the material presented by Kreuger in 2018, and from the new examples presented in this paper, it is possible to propose some new hypotheses about venetian enamelled glass vessels in Sweden:

It was a highly fashionable, obtainable and desirable product, distributed in contemporary society. It was not a product reserved for only the highest elite of medieval society, but used by presumably affluent noble classes, clergy and merchants alike.

The vessels were most likely distributed through the medieval trading towns and merchant networks, connected to the continent through the Hanseatic dominated trade in Lübeck on the southern Baltic shore.

Based on the production and deposition patterns, it was a short-lived fashion. Enamelled vessels fell out of urban, ecclesiastical and noble demand already during the 15th century, probably as early as in the late 14th century.

Based on the limited possibilities to discern the complete motifs on the vessels (and from readily available sources when drafting this paper) it is likely that the number of vessels with iconographic and vernacular motifs from Sweden is very low. So far only geometric and animalistic and possibly also heraldic designs, have been accounted for in the towns. Also noted is that the occurrence of text on the vessels is rare in the Swedish material.

Enamelled glass vessels are a type of material culture that occurs mainly in urban contexts, possibly and to me presumably, a highly conspicuous materiality featured by the merchant classes in their urban material repertoire. They can therefore be considered to be expressing 'urbaness' more than most other objects.[23]

With this I conclude this exposé and there will hopefully be many more shards of enamelled vessels appearing throughout the Nordic countries and the Baltic area in coming years, further contributing to this discussion. I am sure that those shards will be noticed in future works by our esteemed colleague and foremost expert on medieval glass, Georg Haggrén.

Joakim Kjellberg is a medieval archaeologist and have been working as a field archaeologist in various Swedish museums and institutions, specialising in urban archaeology and material culture studies. Since defending his thesis on medieval Uppsala, to which Georg gave much appreciated advice, he is now turning his attention to the city of Stockholm as research leader at Medeltidsmuseet. Joakim and Georg met for the first time at Medieval Europe Research Congress in Paris 2006. Since then, there have been many greatly appreciated adventures and lively discussions together, both in excursions and over glass sherds in museum archives as well as at conferences, including the EAA in Rome that resulted in this paper.

NOTES

1 Baumgartner & Kreuger 1988: 128.
2 Baumgartner & Krueger 1988; Haggrén 2016; Lamm 1929–1930; 1941.
3 E.g. Haggrén 2002; Haggrén 2016; Henriksson 2001; Henriksson 2006.
4 Kreuger 2018.
5 Haggrén 2016.
6 Baumgartner & Kreuger 1988; Kreuger 2018.
7 Baumgartner & Kreuger 1988: 152–3, see figure 1.
8 Haggrén 2016.
9 Krueger 2002: 117.
10 Baumgartner & Kreuger 1988; Haggren 2016.
11 Arvi Haak, pers. comm. 2024.
12 Kreuger 2018: 130.
13 Kjellberg forthcoming.
14 Frölund et al. 2024.
15 Stenström 2022: 74.
16 Ingeborg Kreuger, pers. comm.; Kreuger 2018:151.
17 Bäck et al. forthcoming.
18 Haggrén 2020: 67.
19 Seiler & Beronius-Jörpeland 2020: 43–7, 184.
20 Arkeologerna blogg.
21 Magnus Stibeus, pers. comm. 2024.
22 Haggrén 2016: 32.
23 Kjellberg 2021; Kjellberg forthcoming.

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Natascha Mehler

BARTMANN JUGS FROM THE GULF OF FINLAND AND THEIR ROLE IN DATING SHIPWRECKS

ABSTRACT

Bartmann jugs and other vessels made of Rhenish stoneware play a special role in the study of trade networks in the late Middle Ages and early modern period. With this in mind, this article presents Bartmann jugs from two shipwrecks in the Gulf of Finland, the Esselholm and Metskär wrecks. There are two jugs from the Esselholm wreck that date from around 1550 to around 1600. Another jug from the Metskär wreck dates from c. 1550 to c. 1610. It is also being discussed what role the dating of the jugs plays in the dating of the sinking of the ships.

Keywords: Bartmann, stoneware, ceramics, shipwreck, trade, German

Bartmann jugs, stoneware containers with distinctive male-bearded-face masks and applied medallions, were produced in the early modern period in huge quantities, predominantly at Frechen near Cologne, Germany, but also at a few other sites in the vicinity. Most were specifically made for export, mainly to England or the Netherlands,[1] from where most of the jugs were then transported on ships to colonies of those countries. A find distribution map shows that Bartmann vessels can indeed be categorised as global objects.[2] The map also clearly shows that the characteristic jugs predominantly appear in maritime find contexts: under water and on land in trading ports, harbour towns or colonial fortifications. Shipwrecks in which such vessels have been found are of particular importance for the dating and interpretation of the global consumption of Bartmann jugs.[3] In archaeology, shipwrecks are generally regarded as time capsules because they represent a specific moment in time – the sinking of a ship – with all its consequences, including the preservation of finds. If the date of the ship's sinking is known from written sources, this date provides a *terminus ante quem* for the production of the objects that have been preserved in it.

The oldest Rhenish stoneware jugs with applied Bartmann decoration date to the second quarter of the 16th century and were produced in Cologne.[4] From that point on through the 18th century, the number of vessels produced increased rapidly. It is particularly shipwrecks of the Dutch East India Company (Vereenigde Oostindisch Compagnie, VOC) from which we know numerous, very well-preserved Bartmann jugs. One example is the wreck of the *Batavia* (sunk off Australia in 1629).[5]

FIGURE 1. The two Rhenish Bartmann jugs and one undecorated stoneware jug from the Esselholm wreck. The face mask of jug no. H78050-18 (left) shows a beard with a straight end and the face mask of jug no. H78050-17 (right) shows a beard with a rounded end that merges into the tip of the acanthus leaves on the body of the vessel. Photo: Riikka Tevali.

There are also shipwrecks in the Baltic that have Bartmann vessels on board. In the wreck of the *Kronan*, sunk off Öland in 1676, around 70 jugs were found.[6]

This article deals with Bartmann jugs from two shipwrecks in the Gulf of Finland, the Esselholm wreck and the Metskär wreck. The jugs with the bearded face masks are re-evaluated and contextualized with Siegburg stoneware vessels with which they were found together. Finally, I will discuss what these Rhenish stoneware vessels can contribute to the question of when each ship sank.

THE BARTMANN JUGS FROM THE ESSELHOLM WRECK

The Esselholm wreck lies near the island of Hässelholmen in the archipelago of Snappertuna, county Raseborg, Finland. It sank approx. 10 km south of a medieval royal castle and a 16th-century manor. The date of the ship's sinking is not known. The circumstances of the discovery, the ship's construction and the interpretation of the wreck were recently re-evaluated by Riikka Tevali (2024). I will concentrate here on two nearly identical Bartmann jugs (find nos. H78050-18 and H78050-17) (Fig. 1) that were found in the wreck and interpreted as part of the cargo due to their location in the bow area of the ship.[7]

As noted above, the jugs are very similar in terms of shape and decoration. Their bodies are very bulbous and lack a foot ring. The round bodies bear three small portrait medallions, each of which is surrounded by four acanthus leaves arranged in a star shape. The backsides of the jugs are undecorated. All the medallions show the right-facing shoulder portrait of a beardless person with a helmet-like headdress and a blouse with a folded collar. While the body decoration of both vessels is very similar, the face masks show slight differences. The nose and eyes are similarly designed on both masks, but on the face mask of jug no. H78050-18 (Fig. 1, left), however, the beard is straight at

the bottom and the beard mask is applied over a shoulder ring, which it covers. In jug no. H78050-17 (Fig. 1, right) the beard has a round shape and runs into the acanthus leaf of the central decoration. The tip of this leaf overlaps the lower end of the beard and was therefore applied after the beard mask was put on the neck of the jug. Both jugs are so similar in shape, glaze and decoration that they very probably come from the same workshop. The handles and rims of the jugs show no signs that they once had pewter lids.

Both Bartmann jugs were produced in Frechen near Cologne, from where very similar vessels and decorative fragments have been found in the excavated workshop waste from Rossmarstraße 22–24.[8] Typochronologically, the two Bartmann jugs from the Esselholm wreck date to the period from c. 1550 to c. 1600. Comparative finds of vessels with very similar decorative structure and execution of the overlays are available, for example from Cologne, Frechen or Amsterdam.[9]

The Bartmann jugs are accompanied by a third slightly smaller Rhenish stoneware jug, which is identical in shape and ware but has no applied decoration (find no. H78050-19). Also found in the wreck was a decorated funnel-necked beaker with a wavy foot made of Siegburg stoneware (find no. SMM2097:1).[10]

THE BARTMANN JUG FROM THE METSKÄR WRECK

The Metskär wreck is located in the Hiittinen archipelago off the south coast of Finland.[11] As with the Esselholm wreck, there is no written record of when the Metskär ship sank. The finds recovered from the wreck include tripod cooking vessels made of ceramic and metal, wooden vessels and a Rhenish stoneware tankard from Siegburg, which has been attributed to the workshop of master Christian Knütgen. The tankard shows the coat of arms of the county of Jülich-Kleve-Berg and that of Denmark and bears the date 1574.[12] As there is no other basis for dating the wreck, this tankard or its date was previously regarded as the *terminus post quem* for the sinking of the ship. The Siegburg tankard was found in the stern of the ship, as was the Bartmann jug (find no. H71105-1) (Fig. 2). All other artefacts were found in the bow of the ship.

In this case, too, the Bartmann jug is very bulbous and lacks a foot ring. A central band with the inscription 'ARM VNT FRVM IST MIN RICHTVI' (Germ. *arm und fromm ist mein Reichtum*, Engl. to be poor and pious is my wealth) runs around the belly. Small round medallions and acanthus leaves are arranged alternately above and below the banner. The reverse of the jug is not decorated.

FIGURE 2. Rhenish Bartmann jug from the Metskär wreck. Photo: Taru Laakkonen, Finnish Maritime Museum.

The medallions are all the same and show a person facing to the right with short, curly hair and a high collar. Here, too, the bearded face mask is applied over a shoulder ring. Single small acanthus leaves are attached to the left and right of the bearded face mask below the shoulder ring. The facial features are roughly executed, with the beard ending straight at the bottom. The handle and rim show no signs that a pewter lid was once present here.

This arrangement of the décor (central banner with alternating small medallions and acanthus leaves) is frequently found on Bartmann vessels from the period c. 1550 to 1575 from Cologne and Frechen. The same motto is also frequently documented.[13] A vessel dated to 1609 attests to the use of the decoration until the early 17th century.[14]

EARLY BARTMANN JUGS IN THE BALTIC

Riikka Tevali recently revised the previous interpretation that the two ships were Dutch trade ships and instead convincingly argues that they once belonged to the Swedish nobility.[15] The question thus is: How do the Bartmann jugs from the two wrecks fit in with this interpretation? How widespread and available were Rhenish stonewares and Bartmann jugs and Dutch lead-glazed earthenware in Sweden? When both ships sank, the Finnish archipelago in the Gulf of Finland was part of the Swedish Empire. Thanks to increasing excavations and research, it can be stated that Rhenish stoneware and Dutch lead-glazed earthenware were widespread in the 16th century and part of everyday material culture. Rhenish stoneware was shipped in enormous quantities across the Rhine River to the Netherlands and traded from there to many countries and regions,[16] including the Baltic.

Indeed, in southern Finland Bartmann jugs from the late 16th century have been found not only in towns but also in rural settlements such as Lillas in Mårtensby.[17] In the late 16th century, present-day Sweden and Finland were connected not only geopolitically but also through the network of the Hanseatic League. The role of Hanseatic merchants and ships in the international trade in Rhenish stoneware has often been emphasised.[18] In recent years, there have been more and more finds of Rhenish (but also Lower Saxon and Saxon) stoneware vessels from late medieval and early modern shipwrecks in the Finnish archipelagos and also in settlement contexts in Finland.[19] It is becoming increasingly clear that there were transshipment centres for German stonewares in the eastern Baltic,[20] notably Lübeck, but also Rostock, Stockholm and Gdansk further east.[21] There are numerous Bartmann jugs from Stockholm, including some that are very similar to the three jugs from the two mentioned wrecks.[22] Transshipment places such as Stockholm could well have provided the ships with Rhenish stonewares.

Tallinn, situated at the southern end of the Gulf of Finland, was an important Hanseatic trading post. Rhenish stoneware has also been found in Haapsalu.[23] From Pärnu, on the Gulf of Riga, there is a Cologne Bartmann jug with banner decoration, which is very similar to the jug from the Metskär wreck.[24] Fragments of a Bartmann jug from Vilnius have the same banner as the Bartmann jug from that wreck. Here, however, the small medallion shows a person wearing a helmet.[25] The distribution of Bartmann jugs on both sides of the Gulf of Finland clearly shows that decorated Rhenish stoneware adorned tables here as well in the late 16th century. Georg Haggrén has described such a display of extraordinary vessels with the concept of conspicuous consumption.[26]

As already mentioned, there are no written sources on the sinkings of the ships and there is little dating material available. The Rhenish stonewares play an important role with regard to the question of sinking, because in contrast to the many lead-glazed earthenwares, which can only be roughly dated, the Bartmann vessels and the two pieces from Siegburg can be dated more precisely. The lead-

FIGURE 3. Rhenish Bartmann jug from the Scheurrak SO1 wreck, a Dutch merchant vessel that sunk off the Dutch island of Texel in December 1593. Image kindly provided by the Rijksdienst voor het Cultureel Erfgoed, inv. no. SO1-11003.

glazed earthenwares were presented in detail in 1978 and the Netherlands was suggested as the region of manufacture.[27] Based on the find location within the wreck and quantity, these are probably cargo rather than vessels used for food production on board. This is also supported by the fact that they show no traces of use such as soot.[28]

Typochronologically, the Bartmann jugs from both wrecks date to the period c. 1550 to 1600. Longer periods up to c. 1609 are documented for the use of the decoration, as mentioned above. In addition to the two Bartmann jugs from the Esselholm wreck, there is a very nice comparative find from the wreck Scheurrak SO1, which sank in 1593 in the Wadden Sea off the Dutch island of Texel (Fig. 3). This is a Dutch merchant ship that contained a cargo of Baltic wheat and apparently sank on its return voyage from the Baltic.[29]

The two vessels from Siegburg are also important for the question of the dating of the sinkings of the ships. The Metskär wreck contained the Siegburg tankard dated 1574. The Esselholm wreck contained a funnel-necked beaker with applied medallions showing a floral motif that were very common in the 16th century. The medallion decoration on the beaker from the Metskär wreck belongs to the type of stylised floral motifs.[30] Interestingly, funnel-necked beakers with very similar floral designs to those of the beaker from the Esselholm wreck are known from the workshop of master potter Anno Knütgen, who operated in Siegburg and in Westerwald.[31] The Siegburg tankard from the Metskär wreck was produced in the workshop of the Siegburg master potter Christian Knütgen (signed CK 1574), a close relative of Anno. For the funnel-neck beaker discovered in the Metskär wreck a date of around 1580 to 1590 has been suggested.[32] Based on comparative vessels from Siegburg and surrounding places I would like to revise the dating of the funnel beaker and suggest the period c. 1570 to 1600 instead.[33]

Finally, it should be noted that caution is required when dating the deposition of the Rhenish stoneware vessels. Richly decorated stoneware in particular, which was more expensive than lead-glazed earthenware cookware, often had a long lifespan. The decorated vessels adorned the table and were well looked after. Stoneware is also more stable and durable than earthenware.[34] A number of shipwrecks have been investigated that have decorated Rhenish stoneware vessels as part of the ship's inventory and that sometimes typochronologically can be dated much earlier than that. The *Sea Venture* for example, which sank off Bermuda in 1609, contained two Bartmann jugs that typologically date to the last decades of the 16th century. The already mentioned VOC ship *Batavia*, which sunk off Australia in 1629, contained several much older Bartmann jugs.[35] I readily agree with Riikka Tevali's interpretation that the two wrecks sank at the end of the 16th century.[36] However, it is

also possible that the Bartmann vessels and the Siegburg funnel beaker date to around 1600, or that the vessels are old pieces that were valued and that the two ships hence sank in the early 17th century.

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NOTES

1 Göbels 1971.
2 Keller 2023.
3 Gaimster 1997a: 359.
4 Gaimster 1997a: 199, 204; Unger 2007.
5 Green 1989.
6 Einarsson 1997.
7 Edgren 1978: 75; Tevali 2024: table 2 and fig. 9.
8 The find complex at Frechen, Rossmarstraße 22–24 is currently being investigated by Christoph Keller, Amt für Bodendenkmalpflege im Rheinland.
9 Ostkamp & Snip 2023: 596 catalogue no. C237; Unger 2007: catalogue no. 53.
10 Tevali 2024: table 2, fig. 10.
11 See Tevali 2024.
12 Edgren 1978; Tevali 2024: table 1 and fig. 5a.
13 Ostkamp & Snip 2023: 464–7, 590; Unger 2007: 141–52.
14 Ostkamp & Snip 2023: 501.
15 Tevali 2024.
16 E.g. Göbels 1971: 284–317.
17 Heinonen 2021: 132.
18 E.g. Gaimster 1997a; 2014; Mehler 2009.
19 Haggrén 2008; Tevali 2019.
20 Gaimster 1999; 2014: 66.
21 Tevali 2019: 77.
22 E.g. Johansson 2006: 80–1.
23 Russow 2006: 162–3.
24 Russow 2006: 177.
25 Urbonaitė-Ubė 2018: 196 and fig. 4.
26 Haggrén 2008: 88; Tevali 2019.
27 Edgren 1978: 83.
28 Edgren 1978: 90.
29 Manders 1998.
30 A vessel with an identical floral decoration is published in Pfeiffer 2023: cat. no. 338; Pfeiffer 2023: 42 no. 4, 187.
31 Ruppel 1991.
32 Tevali 2024, based on a recommendation by Georg Haggrén.
33 Grimm 2019; I would like to thank Gerald Volker Grimm, who also shares this assessment.
34 Gaimster 1997b: 121.
35 Gaimster 1997b; Green 1989.
36 Tevali 2024.

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Linda Qviström & John Ljungkvist

TIDIGMEDELTIDA GLASMÅLNINGSFRAGMENT OCH ETT EXKLUSIVT GLASKÄRL

Återupptäckta fynd från Gamla Uppsala kyrka

ABSTRACT

In 1926, several fragments of medieval glass were found in the church of Gamla Uppsala in Sweden. While some of these are well known and have previously been identified as part of a late 13th or early 14th century stained-glass window documented in 1710, a recent survey has led to new discoveries. Some of the glass is clearly damaged by fire, which suggests that it likely dates to a period prior to c. 1204, when the church was a large Romanesque cathedral, and Gamla Uppsala was the seat of the first Swedish archbishop. Another interesting find is fragments of an exclusive, as-yet unidentified, glass vessel with gold foil inlays.

Nyckelord: Gamla Uppsala, domkyrka, medeltid, glasmålningar, glaskärl

INLEDNING

Antalet kända medeltida glasmålningar från det svenska fastlandet är begränsat, vilket bidrar till att de befintliga exemplen ofta återkommer i litteraturen. Ett välkänt fynd gjordes 1926, i omgrävda jordmassor utanför absiden vid Gamla Uppsala kyrka. Motivet på den bemålade glasskärvan föreställde en kungakrona, och fragmentet kunde identifieras som en del av en glasmålning som har återgivits på bild av Johan Peringskiöld 1710 (Fig. 1).[1]

Glasmålningen var då den avbildades placerad i korets norrfönster. Huvudmotivet är kyrkans båda skyddshelgon, S:t Lars och S:t Erik. Något olika dateringar har föreslagits. Carl R. av Ugglas tidfäster den avbildade glasmålningen till mitten av 1200-talet medan Ingeborg Wilcke-Lindqvist och Ann Catherine Bonnier anger en datering till perioden från mitten av 1200-talets fram till början av 1300-talet, respektive runt sekelskiftet 1300.[2] Aron Andersson anger i en kommenterar om glasmålningen att denna är höggotisk, men när han beskriver rutan med kungakronan daterar han den till 1300-talet.[3]

Det var även tidigare känt att fler fragment av medeltida glasmålningar hittades vid utgrävningar i kyrkan samma år.[4] Undersökningen 1926 gjordes i samband med en restaurering av kyrkan och omfattade större delen av kyrkorummet. I stort sett var det bara murade gravkammare i golvet

FIGUR 1. Glasmålning återgiven av Johan Peringskiöld 1710. Den uppges då ha funnits i korets norrfönster.

som undantogs. Sune Lindqvist, som ledde arbetet, var främst intresserad av de spår som var äldre än stenkyrkan. Han antog att stolphålen som hittades var rester efter det tempel som omtalats av Adam av Bremen på 1070-talet, en tolkning som senare har tillbakavisats.[5]

Materialet från 1926 års undersökning kom aldrig att publiceras i sin helhet. Först sextio år efter undersökningen gjordes en sammanställning av Else Nordahl, men inte heller vid detta tillfälle gjordes någon systematisk genomgång av hela fyndmaterialet.[6]

Under våren 2024 företogs därför en välbehövlig registrering och uppordning av fynden.[7] I samband med detta gjordes flera intressanta upptäcker, varav ett par som rör glasfynden presenteras här. Dels visade sig glasmålningsfragmenten tillhöra flera generationer av glasmålningar – varav den äldsta möjligen kan dateras till senare delen av 1100-talet – dels fanns det bland fynden fragment av ett exklusivt glaskärl med guldfoliedekor som inte tidigare uppmärksammats.

TVÅ DOMKYRKOR OCH ETT KUNGAHELGON

Kyrkan där fynden hittades uppfördes efter att ett ärkestift inrättats i Sverige 1164, i (Gamla) Uppsala.[8] Den stora romanska domkyrkan drabbades dock redan under 1200-talet av en brand. Spåren efter denna är tydliga i det arkeologiska materialet. Distinkta brandlager har dokumenterats och bland fynden finns gott om bränt och sintrat material. Eftersom branden omnämns 1245 har det ibland antagits att den drabbade kyrkan under de närmast föregående åren.[9] Vid de tillfällen då eldsvådan omtalas anges den dock ha ägt rum för länge sedan. Det är därför mer troligt att formuleringarna hänvisar till en brand som indirekt omnämns år 1204.[10]

År 1258 utfärdade påven ett tillstånd som medgav en flytt av ärkesätet fem kilometer söderut, till Östra Aros. Ett villkor som ställdes var att namnet – Uppsala – inte skulle ändras. Platsen dit ärkesätet flyttade fick därmed byta namn. Östra Aros blev Uppsala, vilket ledde till att Gamla Uppsala fick sin nuvarande beteckning. En framförd delförklaring till valet av ny plats för domkyrkan är kopplingen till kulten kring helgonkungen Erik. Enligt legenden, som författades mellan 1270- och 1290-talen, dödades Erik Jedvardsson 1160 efter att ha firat mässa i Trefaldighetskyrkan i Östra Aros. Kyrkan låg, enligt samma legend, på ”berget” där domkyrkan senare byggdes.[11] Troligen användes legenden och Erikskulten aktivt i processen kring flytten av ärkesätet, och inte minst i samband med finansieringen av den nya domkyrkan.[12]

Det första säkra belägget för att Erik betraktades som helgon är från 1198, då han tas upp i Vallentunakalendariet. Lite mer än ett halvt sekel senare, 1256, nämner påven i ett brev att firandet samlade stora skaror besökare i Gamla Uppsala.[13]

På 1270-talet inleddes domkyrkobygget i nya Uppsala och relikerna flyttades troligen dit 1273, efter att först ha skrinlagts.[14] Kyrkan i Gamla Uppsala övergick därmed från att vara domkyrka till att bli sockenkyrka. Byggnadens storlek kom stegvis att reduceras. Runt år 1300 fanns troligen fortfarande de båda korsarmarna kvar.[15] Idag är det i huvudsak den tidigare domkyrkans korparti som återstår, med en absid som murades om på 1860-talet (Fig. 2).

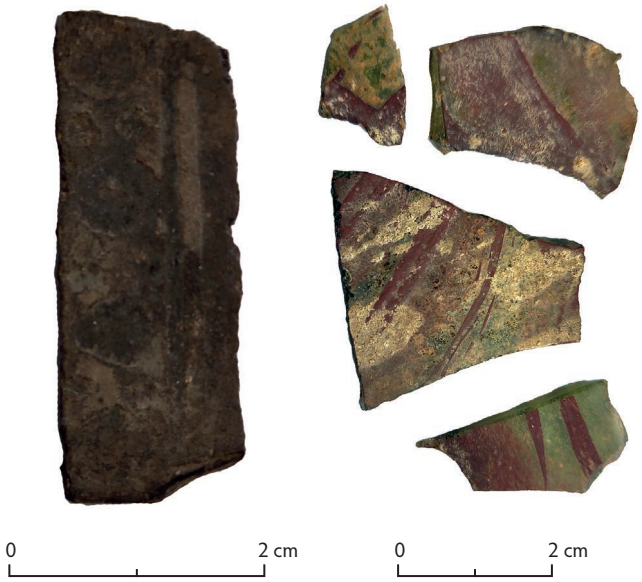
Även om kyrkan minskade i storlek kom både den och platsen också fortsättningsvis att ha en viktig betydelse inom S:t Erikskulten. Redan före flytten hade relikerna varje år burits mellan det gamla och nya Uppsala på helgonets dödsdag, den 18 maj. År 1302 beordrade ärkebiskopen en undersökning i Gamla Uppsala med syftet att lokalisera S:t Eriks ursprungliga grav. Den återfunna helgongraven markerades i kyrkan och blev i sig ett besöksmål för vallfarare. Troligen innebar det ett uppsving av kulten för Gamla Uppsalas del.[16]

GLASMÅLNINGSFRAGMENTEN OCH DEN AVBILDADE GLASMÅLNINGEN

Då glasmålningen i Gamla Uppsala omtalas av Peringskiöld anges den alltså ha varit placerad i korets norrfönster. Koret motsvarade vid denna tid den tidigare domkyrkans absid. På de avbildningar som finns av kyrkan från senare delen av 1600-talet och 1700-talets början är denna del av absiden dessvärre inte synlig.[17] På sydfasaden syns tre rundbågiga fönster av olika storlek i långhuset, som motsvarar domkyrkotidens kor, och ytterligare ett i det tidigare centraltornet. Absiden avbildas med rundbågiga fönster i öster och söder. Med tanke på Peringskiölds beskrivning får vi anta att ett motsvarande fönster fanns åt norr, men vilken form detta haft är oklart. Om formen var densamma som de båda andra absidfönstrens, upptog den avbildade glasmålningen inte hela fönstret.

Av bilden framgår att glasmålningen hade lagats på några ställen och att delar av kantbitarna bytts ut. Kanten till vänster om S:t Erik varierar dessutom i bredd. Längst ned finns en bredare bård med rester av ett textband. Över detta syns kantbitar med så kallat pärlstavsmönster. Mellan de båda helgonen avbildas ett smalt, enfärgat fält. Det framgår inte av bilden om det rört sig om en mycket långsmal glasruta eller om det exempelvis var fråga om en mittpost av metall. Ändringarna, olikheten i kantbårdens bredd och utförande samt sammansättningen av glasmålningens olika delar, gör det troligt att den har flyttats och anpassats till sin nya placering. Helgonen har troligen tidigare varit placerade i varsitt fält, kanske till och med i olika fönster, och omgivits av bår-

FIGUR 2. Gamla Uppsala kyrka. Det som återstår av 1100-talets domkyrka idag är i huvudsak korpartiet. Absiden murades om på 1860-talet. Bild: Linda Qviström.



FIGUR 3. Glasmålningsfragment påträffade vid 1926 års undersökning i kyrkan. Till vänster en del av en 1,4 cm bred bårdruta, bemålad med svart svartlodsfärg. Glaset är 3 mm tjockt. UMF7200:27:03. Där glasets färg kan avgöras finns exempel på bärnstensfärgat/orange glas och i flera fall ljust/avfärgat glas. Enstaka fragment färgat, grönt glas förekommer också, liksom blått och rödaktigt/rosa samt rött överfångsglas. Till höger fragment med rödbrun bemålning. Mycket av glaset i den senare kategorin är, liksom fragmentet med kungakronan, av relativt ljust glas, gul- eller gröntonat. Tjockleken är runt 3 mm. Del av UMF7200:015:01. Bild: Linda Qviström.

der på båda sidor. Själva figurmotiven tycks, av avbildningen att döma, ha varit intakta då glasmålningen avbildades. Vilka delar av bårderna som hör samman med den ursprungliga placeringen är mer oklart. Förutom det fragmentariska textbandet syns två sorters bårdmönster på bilden. Det ena utgörs som redan nämnts av en pärlstavsbård – prickar med dubbla punkter mellan – medan det andra mönstret består av romber och ”S”.

Avbildningen av blyspröjsen flyter delvis samman med övriga delar av motivet, men det tycks finnas en skillnad mellan formen på rutorna med pärlstavsbård till höger om S:t Erik respektive till vänster om S:t Lars. Vid S:t Lars tycks bården rymmas inom smala, separata rutor medan samma bård vid S:t Erik syns i kanten av något bredare rutor. Den förstnämnda varianten är den som delar återfunnits av vid 1926 års undersökningar i kyrkan. Här är bemålningen svart, till skillnad från figurmotivet som av den bevarade kronan att döma tycks ha varit målat med rödaktig svartlodsfärg. Sådan färg antas ha börjat användas under slutet av 1200-talet.[18] Med tanke på skillnaden kan det möjligen vara en bård från en äldre glasmålning som återanvänts här. Även övergången till att placera bårddekoren i kanten av en bredare ruta är ett drag som tyder på kronologiska skillnader mellan glasmålningens olika delar.[19] Bland de övriga glasmålningsfragmenten finns både sådana med så väl svart och rödbrun svartlodsbemålning (Fig. 3).

Att de konsthistoriska dateringarna skiljer sig något kan delvis bero på att dateringen har gjorts av motiven och fynden som helhet, utan att det uppmärksammats att det kan röra sig om två olika generationer av glasmålningar. Det är intressant att notera att Aron Anderssons båda dateringar skiljer sig något åt. När han skriver om det enskilda fyndet – kungakronan – blir dateringen 1300-tal, medan glasmålningen som helhet karaktäriseras som ”höggotik”.

Det tycks med andra ord vara två generationer av glasmålningar som finns representerade i den avbildade glasmålningen och bland de påträffade fragmenten. Bland fynden finns dock även spår av en ännu tidigare generation glasmålningar. En mindre mängd glasmålningsfragment är nämligen tydligt eldpåverkade, vilket visar att de hör till tiden före branden (Fig. 4). Om det stämmer att eldsvådan ägde rum strax före 1204, bör dessa brända fragment komma från glasmålningar som funnits i 1100-talets kyrka, något som inte har uppmärksammats tidigare.

Av de obrända glasmålningsfragmenten kan det äldsta höra till de reparationsarbeten som ägde rum efter branden. Dessa har även spårats i det arkeologiska materialet.[20] Nästa generation glasmålningar, som de avbildade figurmotiven tillhör, skulle med tanke på dateringarna som föreslagits

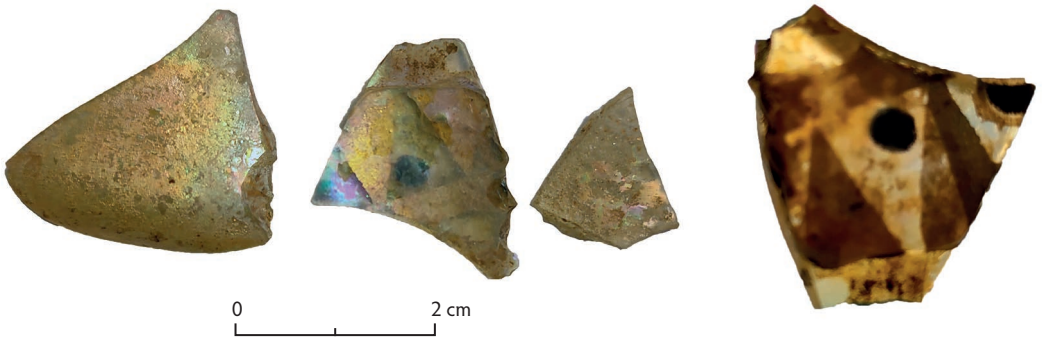
FIGUR 4. Brandskadade glasmålningsfragment med passning, funna vid 1926 års undersökning (UMF7200:076:01). Fragmenten hör till en bandformad, ca 3 cm bred och minst 7 cm lång ruta. Det finns dessvärre inga närmare uppgifter om fyndplats. Troligen hör glaset till tiden före den brand som drabbat kyrkan, sannolikt strax före 1204. Bild: Linda Qviström.

kunna höra till byggnadens sista tid som domkyrka. S:t Erik tillkom som kyrkans skyddshelgon efter 1200-talets mitt, troligen i samband med skrinläggningen av relikerna.[21] Det är dock även tänkbart att de hör till den nylansering av S:t Erikskulten som inleddes 1302, när den ursprungliga graven lokaliserades.[22] Vid 1300-talets början införskaffades också en helgonskulptur till kyrkan, troligen föreställande S:t Erik. Skulpturen antas vara tillverkad i anslutning till domkyrkohyttan i Uppsala.[23]

Om den nya glasmålningen hör samman med nylanseringen av Erikskulten i början av 1300-talet – initierad av ärkebiskopen – pekar det på att den också införskaffades från domkyrkohyttan i Uppsala, något som Aron Andersson föreslagit.[24]

EN EXKLUSIV GLASSKÅL

Huvuddelen av glaset från 1926 års undersökning utgörs alltså av fönster- eller planglas. Det finns dock även ett fåtal kärlfragment, och bland dem några som troligen hört till en exklusiv skål i klart glas. Dess huvudsakliga dekor består av guldfolie i form av horisontellt pålagda band som ramar in trianglar. Mellan trianglarna sitter blå prickar av emalj. Godstjockleken är mindre än två millimeter och dessutom utförd i överfångsteknik, dvs. ornamentiken är fixerad med ett mycket tunt, yttre lager glas (Fig. 5). I svenskt fyndmaterial återfinns denna teknik främst bland de välkända guldfoliepärlorna från 1000-talet. Kärlet har sannolikt haft en stor vidd. Möjligen har det varit fråga om en vid skål eller ett fat, men även en cylindrisk bägare är ett tänkbart alternativ.



FIGUR 5. Fragment av ett kärl, troligen en vid glasskål, i klart glas med guldfolie mellan två skikt samt blå emaljdekor. Tjockleken är ca 2 mm. UMF7200:07:01. Även de övriga två fragmenten som ingår fyndposten kan komma från samma kärl, liksom ytterligare ett fragment, registrerat som UMF7200:93:02. Bild: Linda Qviström.

På grund av de bristfälliga stratigrafiska uppgifterna från undersökningen är det svårt att få vägledning om glasets datering och var paralleller ska sökas. I nuläget pekar spåren mot bysantinska kärl i spannet 1000–1200-talet.[25] Ornamentiken har intressant nog vissa likheter med en flaska från 1100-talet, funnen i Novgorod.[26] Med detta sagt bör det betonas att besläktad ornamentik även återfinns både på tidigare glasföremål[27] och på betydligt senare kärl. Bland dessa finns en möjlig parallell i en exklusiv, venetiansk *tazza*-skål från runt 1500.[28]

GAMLA FYND – NYA FRÅGOR

Den nya genomgången av fynd har sammanfattningsvis väckt och återuppväckt en rad frågor som vi i skrivande stund börjat formulera men ännu inte hunnit försöka besvara. Fynden ligger som bekant på en högintressant plats. Den utgör en del av järnålderns centrala gård, som har ett ursprung i romersk järnålder. Det är troligen läget för vikingatidens svårdefinierade kungsgård och därefter platsen för det medeltida Sveriges första ärkebiskopssäte. Kyrkans historia har diskuterats åtskilliga gånger, men fortfarande är lite är känt om dess inredning, såväl före som efter den stora branden.

Fynden återuppväcker också frågor kring relationen mellan det gamla och nya Uppsala. Förhoppningsvis fler och mer detaljerade analyser av glasfragmenten leda till fortsatta diskussioner om detta spännande material.

Linda Qviström, FD, forskare vid Uppsala universitet och Upplandsmuseet. Georg har jag träffat i flera olika sammanhang, på konferenser och i samband med olika arkeologiska projekt – men framför allt var Georg granskare vid mitt slutseminarium och ett stort stöd under avhandlingsarbetet.

John Ljungkvist, Docent, forskare vid Uppsala Universitet. Genom åren har Georg och jag vid flera tillfällen diskuterat glas och andra material från såväl medeltid som järnålder. Det har alltid varit givande och mycket trevliga möten.

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1 Peringskiöld 1710: 202.
2 SHM, inv. nr 18188; Bonnier 1987: 106–7; 1991: 104–5; Wilcke-Lindqvist 1937: 11.
3 Andersson 1964: 140, 136.
4 Nordahl 1996: 63–5.
5 Jfr. Bonnier 1991; Göthberg et al. 2010; Nordahl 1996.
6 Nordahl 1996; se även Göthberg 2008 och Göthberg et al. 2010.
7 Carlson et al. *manus*.
8 Göthberg et al. 2010: 23.
9 T.ex. Bonnier 1991: 101; Nordahl 1996: 9.
10 Göthberg et al. 2010: 23; Söderlind 1952: 255; jfr. Nordahl 1996.
11 Bengtsson & Lovén 2012; Lovén 2004.
12 Lovén 2004; 2010.
13 Bengtsson & Lovén 2012: 37; Lovén 2004.
14 Bengtsson 2010: 134–5.
15 Göthberg et al. 2010: 53–6.
16 Bengtsson 2010: 135–6; Lovén 2004.
17 Jfr. Göthberg et al. 2010: fig. 11–13.
18 Andersson 1964: 42–4.
19 Jfr. Qviström 2019: 316.
20 Göthberg et al. 2010.
21 Bengtsson 2010: 134–5; Göthberg et al. 2010: 57; Wilcke-Lindqvist 1949: 11.
22 Lovén 2004: 10.
23 Bonnier 1991: 105; 1992: 103; Göthberg et al. 2010: 63.
24 Andersson 1964: 140.
25 Parani 2005: 165, fig. 18.
26 Shelkovnikov 1966: 103, fig. 16, 17.
27 Tekniken med guldfoliedekoration mellan två glasskikt återfinns exempelvis på glasplattor eller medaljonger, troligen romerska, daterade till 300-tal, se Whitehouse 2010: 96–7.
28 Whitehouse 2010: 76.

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SHM = Statens historiska museer (Stockholm)

UMF = Uppsala universitetsmuseum (Uppsala)

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Juha Ruohonen

LASIA 1500- JA 1600-LUKUJEN SAVOSTA
Löytöjä Juvan Partalan kartanon pihapiiristä

KATSAUS PARTALAN KARTANON VANHEMPAAN HISTORIAAN

Partalan kartano sijaitsee Etelä-Savossa, vuonna 1442 perustetun Juvan pitäjänseurakunnan ytimessä, noin kilometri vanhan kirkon paikasta ja hautausmaasta itään olevalla Männynmäen harjanteella. Sen keskeistä sijaintia sekä pitäjän keskuksessa että vanhan valtatien, Hämeen linnaa ja Olavinlinnaa yhdistäneen Suuren Savontien, varrella voidaan pitää tärkeänä syynä siihen, että Partala toimi keskiajalla ja uuden ajan alussa nimismiehen tilana sekä lyhyen aikaa myös lato- eli kuninkaankartanona.

Partasten suku, josta Partala on saanut nimensä, on isännöinyt tilaa todennäköisesti ainakin jo 1400-luvulla. Juvan seurakunnan perustamisasiakirjassa[1] yhtenä pitäjää edustaneena miehenä mainitaan nimismies Juho Partanen, jota Partalan toimiessa myöhemminkin 1500- ja 1600-luvulla nimismiehentilana voidaan pitää juuri tämän tilan Partasena.

Kuningas Kustaa Vaasan määräämät katselmusmiehet totesivat vuonna 1555 tilan olevan hyvä kuninkaankartanoksi sen maiden, kalavesien ja takamaiden vuoksi. Jo seuraavana keväänä 1556 Partala lunastettiin kuninkaan ja kruunun omistukseen.[2] Toisin kuin tätä edeltävältä ja seuraavalta ajanjaksolta, Partalan kuninkaankartanokaudelta on systemaattisen kirjanpidon ansiosta olemassa edustavat asiakirjakokonaisuudet. Kausi jäi kuitenkin lyhyeksi, sillä kuninkaankartano ehti ennen lopettamistaan toimia vain muutamien vuosien ajan. Lakkauttamisen jälkeen 1561 kartanon maat palautettiin takaisin entisille omistajilleen ja Partala palautui takaisin nimismiehentaloksi.[3] Tila muuttui jälleen ratsutilaksi, mutta entiseen kukoistukseensa se ei enää noussut, vaan esimerkiksi tilan verotusarvo laski 1600-luvun aikana, vuoteen 1664 mennessä, puoleen entisestä. Alamäki jatkui 1600-luvun lopussa katovuosien tuloksena, jolloin tila oli myös muutamia vuosia hoitamattomana. Tänä aikana myös sen rakennuskanta pääsi huonoon kuntoon. Muutamien omistajanvaihdosten jälkeen tila siirtyi vuonna 1704 Poppiusten pappis- ja virkamiessuvun omistukseen, jotka hallitsivat tilaa vuoteen 1890 asti.[4]

Kartanon historiallisia vaiheita on käsitelty monissa eri yhteyksissä, yksityiskohtaisesti esimerkiksi Liisa Poppiuksen laatimassa *Juvan historiassa* (1957) sekä Kirsi Vertaisen ja allekirjoittaneen vuonna 2019 tekemässä kirjassa *Juvan Partala*. Viimeksi mainitussa teoksessa on esitelty myös alueella vuodesta 2015 lähtien tehtyjä arkeologisia tutkimuksia ja niiden yhteydessä talletettuja löytöjä.

Vaikka vanhimmat Partalasta tehdyt arkeologiset löydöt ajoittuvat jo ristiretkiaikaan, ei tilan alueelta kerättyä arkeologista aineistoa ole vielä tähän päivään mennessä käyty kokonaisuutena yk-

sityiskohtaisesti läpi. Tässä artikkelissa keskitytään kartanon alueelta löytyneisiin vanhimpiin lasilöytöihin vuoden 2017 kaivauslöytöjen valossa.[5]

VUODEN 2017 KAIVAUSTUTKIMUKSET

Partalan kartanon aluetta on sisämaassa sijaitsevaksi historiallisen ajan kohteeksi prospektoitu tähän mennessä suhteellisen runsaasti, mutta alueella on tehty vasta yksi varsinainen arkeologinen kaivaustutkimus. Heinäkuun 2017 aikana toteutetuissa kaivauksissa tutkimuspaikaksi valittiin alue heti Partalan päärakennuksen viereiseltä pellolta. Parinkymmenen metrin etäisyydeltä nykyisin museona toimivan rakennuksen nurkasta luoteeseen oli kaksi vuotta aiemmin saatu kyntökerroksen alle ulottuneesta koepistosta esiin kiveystä ja hirsien jäännöksiä. Kaivaustutkimuksilla haluttiin selvittää rakenteen tarkempaa luonnetta ja sen ajoitusta. Pienemmät tutkimusalueet avattiin kartanon pihapiiriin: kaksi kapeaa koeojaa rinteeseen rakennuksen taakse sekä yksi koekuoppa etupihalle päärakennuksen oven läheisyyteen (Kuva 1).

Pellolta löytyneen kiveyksen kohdalle avattiin reilun 20 m² kokoinen taso- ja yksikkökaivausalue, jonka sekoittuneet pintakerrokset poistettiin pääosin lapioilla, kyntökerroksen pohjaosa ja tarkemmin tutkittavat alueet lastoilla. Peltokerroksen rajalta paljastuivat ensimmäiset rakenteet. Alueen poikki rinteen suunnan mukaisesti kulki alaspäin kapeneva, noin 70–90 cm leveä yhtenäinen kiveys, johon rajoittui muodoltaan lähes neliömäinen, noin 2,3 x 2 m oleva sekoittuneen maan alue, jonka luoteisosaan liittyi vajaan neliömetrin kokoinen uloke. Tämän ympärillä maa oli koskematonta vaaleanruskeaa hietaa.

Syvemmälle kerroksittain kaivettaessa neliömäisen rakenteen reunoilta tuli esille heikosti säilyneitä hirsien jäännöksiä (Kuva 2). Noin metrin syvyyteen ulottuva kuopparakenne oli jossain historian vaiheessa täyttynyt – tai pikemminkin täytetty – hiekalla ja muulla aineksella, kuten tiilillä ja kivillä. Etenkin rakenteen pohjakerroksista löytyi runsaasti esineiden kappaleita, esimerkiksi erilaista keramiikkaa, rahoja ja seuraavassa tarkemmin tarkasteltavia lasinsirpaleita. Löytöjen kautta voidaan

KUVA 1. Vuoden 2017 tutkimusalueet Juvan Partalassa. Numerolla 1 on merkitty pellolle avattu tasokaivausalue, numerolla 2 puutarhaan sijoitettu koeoja ja numerolla 3 koekuoppa talon edustalle. Kartta: Piirtänyt Jasse Tiilikkala, muokannut Juha Ruohonen.

KUVA 2. Pellolle avattu alue toisessa kaivaustasossa. Neliömäisen anomalian reunoilla erottuu jäännöksiä hirsistä. Alueen poikki kulkeva pitkänomainen kiveys liittyy nuorempaan salaojaan. Kuvattu luoteeseen. Kuva: Juha Ruohonen.

esimerkiksi pohtia tämän kellarirakenteeksi tulkitun säilytyskuopan tarkan ajoituksen ja käytön lisäksi sen funktiota historiallisen ajalle ajoittuvan vauraan savolaisen maatilan – tai kartanokokonaisuuden – yhteydessä.

PARTALAN VANHIN LASIAINEISTO

Vuoden 2017 tutkimusten aikana kontekstiltaan vanhempaa lasimateriaalia saatiin esille ainoastaan kellarirakenteen yhteydestä. Aineisto on talletettu Turun yliopiston arkeologian oppiaineen kokoelmiin päänumerolla TYA 952. Yksittäisten löytöjen osalta tekstissä viitataan tämän löytökokonaisuuden alanumeroihin. On huomioitava, että osa aineistosta koostuu hyvinkin pienistä seulalöydöistä. Toisaalta tässä tarkasteltava lasiaineisto on säilynyt erinomaisessa kunnossa. Yhdessäkään aineiston lasissa, oli kyseessä sitten astialasi tai tasolasi, ei ole esimerkiksi kemiallisesta reaktiosta johtuvaa irisoitumista tai muuta syöpymistä.

Löytynyttä lasiaineistoa on käsitelty aiemmin *Juvan Partala* -kirjassa tämän kirjoittajan laatimien muutamien tietolaatikoiden verran.[6] Laseihin syvällisemmin perehtymätönkin tutkija pystyi kirjaa varten tunnistamaan sirpaleista ikkunalasin lisäksi selkeimpien lasiastioiden kappaleet, mutta aineiston yksityiskohtaisempaa tarkastelua ei teoksessa tehty. Kuten kirjassa esimerkiksi on todettu, *”[muiden astialasien kuin passglasien] tunnistaminen pienten sirpaleiden joukosta on haastavaa”*.[7] Aineiston tarkemmassa tunnistamisessa auttoikin Turun yliopiston arkeologian oppiaineen professori Georg Haggrén 16.3.2023 ja 25.6.2024, josta esitän hänelle suuret kiitokset.

Tasolasi

Tasolasin kappaleita kaivausalueelta rakenteen sisältä löytyi 132 kappaletta, kokonaispainoltaan yhteensä 80,8 g. Aineistossa tavataan 1–2 mm paksuisen ikkunalasin sirpaleita lähinnä vaaleanvihreän ja vihreän, yksittäistapauksissa jopa hieman kellertävään vivahtavissa sävyissä. Tämä lasimateriaali on ominaisuuksiltaan hyvin tasalaatuista ja se vaikuttaisi muodostavan myös ajallisen kokonaisuuden. Mukana on tosin yksi kirkkaan värittömän tasolasin kappale, mutta se löytyi aivan kivetyn salaojakaivannon reunalta, jonka kaivamisen mukana se lienee kuoppaan päätynyt – ja on siis muuta aineistoa selvästi nuorempi.[8]

Kaikki tasolasin kappaleet ovat todennäköisesti alkuperältään ikkunalasia. Alkuperäisten lasiruutujen kokoa ei voida määrittää, sillä kaikki löytyneet kappaleet ovat fragmentteja. Suurimpien

KUVA 3. Kuvassa yksi kookkaimmista Partalasta talteen saaduista lasiruudun sirpaleista (:143) heti löydyttyään. Kappaleen yhtä reunaa on muokattu nyrhimällä. Kuvaan liitetty ote Partalan kartanon ja voutikunnan tilikirjasta 1561, jossa mainitaan kartanoon hankittu markan maksanut ikkunalasi: *"dessä ltm är geffued för ett fönsthr glas... pnr 1 mark"* (KA 6316: 24v). Kuva: Juha Ruohonen.

säilyneiden kappaleiden koot ovat 58 x 37 mm ja 54 x 44 mm, mutta enemmistö aineistosta muodostuu selvästi näitä pienemmistä sirpaleista (Kuva 3).[9]

Ainoastaan yhdessä ikkunalasin kappaleessa on pyöristynyt, muuta lasia tosin vain hieman paksumpi reuna.[10] Kyse on lieriöpuhallusmenetelmällä valmistetun lasilevyn reunasta. Pyöreä reuna syntyi puhaltamalla syntyneen pullomaisen lieriön päitä avatessa.[11] Pieniä ilmakuplia tasolasin kappaleissa esiintyy jonkin verran, joissakin sirpaleissa on myös heikosti erottuvaa aaltomaista pintaa tai kulumisen jälkiä. Lisäksi yhdessä sirpaleessa on lasiin ilmeisesti valmistusvaiheessa, lasin ollessa vielä osittain sula, syntynyt pitkänomainen uurre.[12]

Paloja, joissa reuna on muotoiltu nyrhimällä eli retusoimalla, löytyy aineistosta runsaasti. Tasolasin sisältävästä kokonaisaineistosta kaikkiaan 25 kappaleessa (18,9 %), havaittiin nyrhittyä reunaa. Lisäksi aineistossa on yksi ainoastaan pieneltä osin nyrhitty reunakappale.[13]

Vain yhdessä tasolasin kappaleessa havaittiin todennäköisiä jälkiä lasiveitsen käytöstä.[14] Tällaisia saattaa olla aineistossa lisääkin, mutta toisin kuin reunassa selvästi erottuvat nyrhinnän jäljet, on veitsen käyttöä pienistä sirpaleista haastava todeta.

Aineistossa ei ole yhtään ehjää ikkunaruutua. Pisin retusoimalla muokattu suora reuna on pituudeltaan 41 mm.[15] Koska ikkunaruudut tehtiin kiinnittämisen helpottamiseksi yleensä säännölliseen muotoon, ruutujen muoto voidaan saada selville etenkin kappaleista, joissa on säilynyt kaksi viimeisteltyä reunaa vierekkäin.[16] Pienistä sirpaleista kulmia on kuitenkin paikoitellen haastavaa mitata, joten nyrhityissä kappaleissa kulmien suuruus hieman vaihtelee. Jos oletetaan, että Partalan lasi-ikkunoiden ruudut ovat olleet muodoltaan säännöllisiä tai suhteellisen säännöllisiä monikulmioita, neliön tai suorakulman muotoon nyrhittyjä lasiruutuja edustavat 90 asteen kulmaan muotoillut tasolasien palaset. Näitä on aineistossa ainakin kolme.[17] Säännöllisessä kuusikulmiossa eli heksagonissa kaikki sivut ovat yhtä pitkiä sekä jokainen sisäkulma on 120 astetta. Tällainen tavataan yhdessä kookkaassa tasolasin kappaleessa.[18] Kolmessa tasolasilöydössä reunoihin muodostuu puolestaan noin 75 asteen kulma.[19] Näiden osalta kyse ei voi olla säännöllisestä monikulmiosta, vaan lasiruudut ovat todennäköisesti olleet rombin eli vinoneliön muotoon tehtyjä. Koska vinoneliöistä koottujen ikkunoiden reunaruudut ovat olleet lähinnä kolmiomaisia tai epäsäännöllisestä kohdasta katkaistuja vinoneliöitä, periaatteessa hyvin suuri osa edellä mainituista muista sirpaleista on saattanut kuulua myös sellaisiin.

Kaikki tasolasiaineistossa esiintyvät muotoillut reunat ovat suoria. Kaarevien tai pyöreiden lasiruutujen katkelmat puuttuvat kokonaan. Epäsäännöllisiä, koristeleikattuja paloja ei löydöissä myös-

kään ole. Yhdessäkään lasissa ei myöskään tavattu maalaus- tai kaiverrusjälkiä. Niin sanottua kabinettilasia, eli ikkunan keskellä olleeseen lasimaalaukseen tai maalaamalla tehtyyn kirjoitukseen kuulunutta tasolasia, ei aineistossa havaittu.[20]

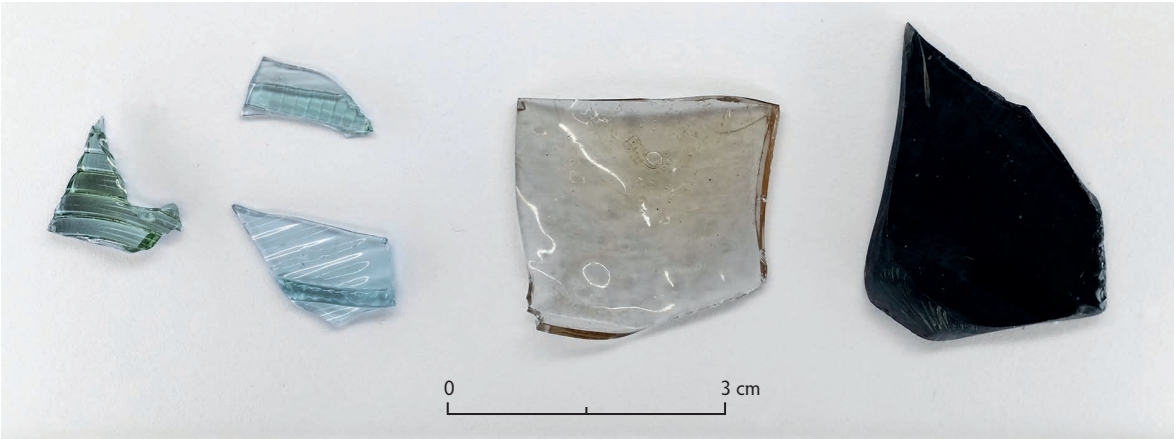
Useista lasiruuduista kootut ikkunakokonaisuudet ovat Partalassa todennäköisesti olleet neliömäisiä tai suorakaiteen muotoisia. Esimerkiksi Helsingin kuninkaankartanossa lasi-ikkunat, joiden ohella siellä oli käytössä myös pergamenttisia ikkunaruutuja, – olivat 1550-luvulla suorakaiteisia. Niiden korkeus oli noin 60 cm ja leveys noin 90 cm. Sen sijaan yksittäisten lasiruutujen koko oli pieni. Haggrénin mukaan 1500- ja 1600-lukujen ikkunoissa pieniä ruutuja saattoikin olla 12, 16, 20 tai vielä useampia.[21]

Pienet ikkunaruudut kiinnitettiin toisiinsa keskiajalta aina 1700-luvulle asti lyijystä valmistetuilla kehikoilla, lyijynauhoilla eli -puitteilla. Tutkitusta kellarikuopasta ei kuitenkaan löytynyt lasiruutujen kiinnittämiseen tarvittavia puitteita. Tällaisten katkelmia on koko Partalan alueelta tähän mennessä löytynyt ainoastaan yksi.[22] Prospektoinnin yhteydessä pellolta kyntökerroksesta löytyneelle puitteelle ei ole mahdollista saada tarkempaa kontekstia. Esineryhmän puuttuminen kaivausaineistosta voidaan selittää lyijyn ottamisella talteen heti puitteiden jäätyä käyttämättömiksi. Metalli on voitu käyttää helposti uudelleen, esimerkiksi valamalla siitä uusia puitteita tai kuulia.

Astialasi

Tasolasin lisäksi Partalan kellarikuopasta löytyi suhteellisen runsaasti myös astioiden sirpaleita (Kuva 4). Tunnistettuja astialasin kappaleita kaivausalueelta saatiin talteen yhteensä 33 kappaletta, painoltaan 20,1 g. Reilu viidennes kaivausalueen koko lasiaineistosta koostui siis erilaisista astioista. Löytyneet sirpaleet ovat kooltaan kuitenkin hyvin pieniä, sillä varhaisimmat lasiesineet olivat varsin ohuita, ja lasi yleisestikin ottaen on varsin hauras materiaali. Vaikka pulloihin ja juomalaseihin kuuluvia sirpaleita on ikkunalasia huomattavasti vähemmän, muodostuu aineistosta kuitenkin tasolasia selvästi monipuolisempi ja ajoitukseltaan selkeämpi kokonaiskuva. Aineistosta on tunnistettavia sekä pulloihin kuuluneita sirpaleita että erilaisten juoma-astioiden palasia.

Löytöjen joukossa on ainakin yksi sirpale remmarista eli *römer*-tyyppisestä lasipikarista.[23] Pala kuuluu pikarin kartiomaiseen jalkaosaan. Värisävyltään vihertävän sirpaleen koko on noin 14 x



KUVA 4. Partalasta löytyneiden lasiesineiden sirpaleita. Vasemmalta remmarin jalkaosaa (:85), optisella viistokuvioinnilla ja lasinauhoilla koristeltuja *passglas*ien kappaleita (:89, 87), pala kellertävästä pullosta (:94) sekä matkalipaspullon kylkipala (:139). Kuva: Juha Ruohonen.

13,5 x 2 mm. Jalkalevy on muotoiltu lasilangasta kiertämällä ja on sisältä ontto. Pikarin varsi- tai maljaosasta ei löytynyt sirpaleita tai koristeita, kuten helposti tunnistettavia lasisia kukkakuvioita tai vadelmanyppyjä.

Eniten astialasiaineistosta on tunnistettavissa *passglas*eihin kuuluvia kylkipaloja.[24] Astioiden lasinauhakoristellut kappaleet ovat helposti tunnistettavia. Lasilangan väri vaihtelee, mutta se on useimmiten vihertävää tai sinertävää, eli samanväristä tai -sävyistä varsinaisten astioiden kanssa. Joissakin sirpaleissa on myös optista viistokoristelua. Aineistossa on Haggrénin mukaan sirpaleita ainakin neljästä eri *passglasi*sta.[25]

Ainoa kirkasta ja väritöntä lasia oleva lasilöytö tavattiin aivan kaivausalueen itäreunasta.[26] Löytö on 2 mm paksu ja kooltaan 16 x 11 mm olevaa sirpale. Kyse on Haggrénin mukaan todennäköisesti 1700- tai 1800-luvuille, mutta mahdollisesti jo 1600-luvulle ajoittuvan viinilasin sirpaleesta. Fragmentti löytyi aivan kaivausalueen reunaseinämän tuntumasta, joten on olemassa pieni mahdollisuus siitä, että se olisi tutkimusten aikana pudonnut peltokerroksesta varsinaiselle kaivausalueelle.

Monet kellarikuopasta löytyneistä lasiastioiden sirpaleista ovat peräisin erilaisista lasisista säilytysastioista, pulloista. Suurin osa pulloaineistosta on eri astioiden pieniä kylkipaloja, eikä yhdessäkään sirpaleessa ole esimerkiksi sinettejä tai leimoja, jotka paljastaisivat pullojen tarkan alkuperän.

Kaivausalueelta saatiin talteen kellertäviä sirpaleita ainakin kahdesta pienestä lääke- tai viinapullosta.[27] Yhden kappaleen pinnassa on ohuita naarmuja, jotka ovat syntyneet todennäköisesti käytön yhteydessä. Osassa on puolestaan optista koristelua, kun taas osassa on karheaa pintaa osoituksena valmistustekniikasta. Mukana on myös Haggrénin 16.3.2023 tunnistama, muotissa tehdyn pullon pohjasirpale.[28] Pullojen lasiaines on hyvin ohutta, ja massan sisällä esiintyy hyvin runsaasti pieniä ilmakuplia.

Lisäksi löytyi sirpaleita ainakin kahdesta muusta, eri kellertävän sävyisestä pienestä pullosta.[29] Tarkempaa tunnistamista haittaa se, että osa sirpaleista on hyvin pieniä, läpimitaltaan alle puolen cm kokoisia. Lisäksi aineistossa on yksi sirpale vihertävästä pullosta.[30] Aineistossa on myös palasia, joiden voidaan muodon perusteella olettaa olevan peräisin astioista, mutta joiden tarkka tunnistaminen on sirpaleiden hyvin pienen koon takia mahdotonta.[31]

Aineistossa on myös kolme tummanvihreää sileää ja tasaista lasinpalaa, jotka kaivausten jälkeisessä alustavassa luetteloinnissa tulkittiin tasolasin kappaleiksi.[32] Kappaleet ovat tosin melko paksuja, noin 3 mm, joten valoa heikosti läpäisevän värisävyn lisäksi ne erottuivat selvästi edellä esitetyn ikkunalasin joukosta. Kun aineistoa tarkasteltiin yksityiskohtaisemmin, osassa oli säilynyt myös kulmikkuutta osoittavan reunan taitetta. Tätä löytökokonaisuutta tarkastellessaan Haggrén heti tunnisti mainittujen sirpaleiden olevan peräisin isohkosta nelikulmaisesta pullosta, niin kutsutusta matkalipaspullosta.[33] Nämä Partalan lasifragmentit ovat todennäköisesti yhdestä ja samasta pullosta, sillä ne ovat värisävyltään ja koostumukseltaan hyvin samankaltaisia, ja ne löytyivät myös melko läheltä toisiaan.

LASIAINEISTO KOKONAISUUTENA

Kellarin sisältämää tutkimuksellista kokonaisuutta voidaan pitää niin sanottuna suljettuna löytönä. Kun rakenteen läpi myöhemmin kaivettuun salaojaan kulkeutuneet löydöt jätetään huomioimatta, voidaan tässä artikkelissa tarkasteltujen lasilöytöjen suhteen puhua myös, rahalöytöjen yhteydessä käytetystä terminologiasta lainattuna, kertymälöydöstä. Pieneen säilytystilaan on todennäköisesti vuosien ja vuosikymmenien aikana kertynyt sekä ympäristöstä kerättyä ja rakennuksen lattioilta lakaistua jäteainesta että kellariin unohtunutta tai siellä rikkoutunutta esineistöä.

Tässä artikkelissa on yksityiskohtaisesti tarkasteltu ainoastaan rakenteesta löytyneitä lasilöytöjä. Näiden määrää, suhteutettuna kellarin kokonaislöytömäärään, on kuitenkin pidettävä huomattavana. Kokoelmiin talletetuista löydöistä, joita on kaikkiaan 365 kappaletta, ikkunalasin osuus on peräti 36,2 % ja astialasin osuus 9. Lasilöytöjen määrä kokonaisaineistosta on siis yli kolmanneksen kaikista löydöistä. Määrää selittää etenkin lasin hyvä säilyneisyys ja pientenkin sirpaleiden ottaminen kaivauksilla talteen. On myös selvää, ettei rikkoutunutta lasia ole aikanaan voitu käyttää uudelleen kuin vain isoimpien ikkunan palojen osalta. Vaikka löytöjä on määrällisesti paljon, on esimerkiksi löytyneen tasolasiaineiston yhteispaino vain 80,8 g ja astialasin 20,1 g. Keskimäärin yksi ikkunalasin tai astialasin sirpale painaa siis vain noin 0,6 g.

Edellä esitetystä lasilöytöaineistosta on ikkunalasin osuus tasan 80 % ja astialasin osuus jää siis viidennekseen. Vaikka pulloihin ja juomalaseihin kuuluvia sirpaleita on määrällisesti selvästi tasolasia vähemmän, muodostuu niistä melko geneeristä ikkunalasia selkeästi monipuolisempi kokonaisuus.

LÖYTÖJEN AJOITUS JA KONTEKSTIN TULKINTA

Miten Partalasta löytynyt lasikokonaisuus ajoittuu? Kellari on hyvin todennäköisesti tehty 1550-luvulla, kun Partalan rakennuskantaa uudistettiin kuninkaankartanoa varten. Rakenteen ajallista sijoittumista kyseiseen aikakauteen tukee ensinnäkin sen reunahirrestä, uloimmista lustoista, teetetty radiohiiliajoitus, jonka kalibroitu todennäköisin tulos yhden sigman tarkkuudella osuu vuosiin 1510–90.[34]

Rakenteen sijoittumista kuninkaankartanoaikaan tukee osaltaan myös varsinainen kaivausaineisto. Vanhimpina rakennuksiin liittyvinä löytöinä voidaan pitää muutamia ruukku- eli pottikaakeleiden kappaleita.[35] Ruukkukaakeliuunien käyttö alkaa Suomessa 1400-luvulla, vaikkakin ensimmäiset niistä kertovat asiakirjalähteet ovat vasta 1540-luvulta. Partalan ruukkukaakelilöytöjä voidaan pitää tutkimuksellisesti hyvin merkittävinä, sillä kaakeleita on aiemmin löytynyt hyvin niukasti, lähinnä vain Turun kaupungista sekä muutamien keskeisten linnojen ja kartanoiden alueelta. Yksi kaakeliuuni tiedetään lähetetyn Porin kuninkaankartanoon 1560-luvulla.[36] Onkin todennäköistä, että kaakeliuuni olisi myös Partalaan rakennettu 1500-luvun puolivälin tuntumassa kuninkaankartanon myötä. Kaakelien kappaleet ovat todennäköisesti päätyneet kellariin vasta uunin poistuttua käytöstä, mahdollisesti 1600-luvun kuluessa. Vaikka ehjiä kaakeleita ei kaivauksissa löytynytkään, saattaa olla, että kellarissa on jätteenä sinne joutuneiden sirpaleiden lisäksi ollut myös varakaakeleita.

Rahalöytöjen perusteella kellari on ollut käytössä jonkin aikaa 1600-luvun puoliväliä pidemmälle. Kaivauksissa rakenteesta löytyi esimerkiksi kaksi ¼ äyrin kuparirahaa, joista vanhempi oli lyöty kuningatar Kristiinan hallitsijakautena vuosien 1633 ja 1644 välillä ja nuorempi Kaarle X Kustaan aikana 1654–60.[37] Kellarista löytyi myös todennäköisesti yhden kokonaisen kukkaron koko sisältö, kaikkiaan 11 kappaletta kuningatar Kristiinan ja kuningas Kaarle XI:n valtakausilla lyötyjä yhden ja kahden äyrin hopearahoja. Näistä vanhin tunnistettu raha on vuodelta 1633 ja nuorin 1667.[38] Samaan aikaikkunaan sopivat paikalta löytyneet kolme kuparista tipparahaa, joista ensimmäiset kaksi löytyivät rakenteen kohdalle vuonna 2015 tehdystä koekuopasta ja kolmas varsinaisissa kaivauksissa vuonna 2017. Kuparisia tipparahoja lyötiin tiettävästi vain tsaari Aleksei Mihailovitšin hallitsijakauden aikana vuosina 1655–63.[39]

Kellarin muu aineisto, kuten tiilenkappaleet, hevosenkengät, tuluspiin sekä metalliesineiden fragmentit, on edellä mainittuja löytöryhmiä hankalammin ajoitettavissa. Saviastioiden kappa-

leista voidaan mainita karjalaisen keramiikan reunapalan lisäksi sirpale varhaista hollantilaista majolikaa.[40]

Löytöjen laadun ja yleisen kontekstin perusteella on selvää, että rakenteesta löytynyt ikkunalasi liittyy 1700-lukua vanhempiin rakennuksiin. Asiakirjamaininnan perusteella ainakin yksi lasi-ikkuna hankittiin Partalaan jo vuonna 1560 sen kustantaessa yhden markan.[41] Muut kuninkaankartanon ikkuna-aukot olisivat Poppiuksen mukaan päällystetty talon itse valmistamilla vasikannahka- ja lampaannahkapergamenteilla. Läpinäkyvyydeltään tällaiset luonnonkalvot eivät luonnollisestikaan vastanneet lasia, mutta ne päästivät jonkin verran valoa sisään, toisin kuin umpinaiset räppänät ja luukut. Lasia on pidetty kalliina tuontitavarana, mutta nahkojen suhteen sisämaassa oltiin omavaraisia. Esimerkiksi vuonna 1557 Partalassa valmistettiin tilikirjan mukaan pergamenttia kolmesta lampaanvuodasta.[42] Ei kuitenkaan ole tiedossa, käytettiinkö pergamentti asiakirjoihin vai ikkunoiden peitoksi, tai esimerkiksi valaisemisessa käytettyjen lyhtyjen päällystämiseen.

Pääosa Partalasta löytyneiden lasiruutujen reunoista on muotoiltu nyrhimällä, mikä ajoittaa ne 1500- ja 1600-luvuille. Ainakin yksi suoraksi leikatun ruudun reuna osoittaa kuitenkin myös jo lasiveitsen käyttöä. Lasiveitsen käyttö yleistyi 1600-luvun kuluessa, ja esimerkiksi 1640-luvun alussa hylätystä Helsingin Vanhastakaupungista on nyrhittyjen ikkunaruutujen lisäksi löytynyt jo muutamia timantilla leikattujen ikkunaruutujen palasia.[43]

Osa nyt löytyneestä tasolasistosta voi olla peräisin jo kuninkaankartanoajalta, kun taas osa on todennäköisesti päätynyt Partalaan vasta 1600-luvulla. Ikkunalasi on kuitenkin saattanut olla asiakirjalähteiden kertomaa yleisempää jo 1500-luvulla, sillä todennäköisesti kaikki hankitut lasit eivät näy Partalaa käsittelevissä asiakirjalähteissä. Esimerkiksi toiseen eteläsavolaiseen kuninkaankartanoon, Visulahden Sairilaan, hankittiin jo vuonna 1562 peräti 12 lasi-ikkunaa.[44]

Toisin kuin ikkunalasi, astialasi ei Partalasta säilyneissä kirjallisissa lähteissä näy mitenkään. Korkeat, oluen juontiin käytetyt *passglas*it ajoitetaan Suomessa perinteisesti aikakauteen 1500-luvun puolivälistä seuraavan vuosisadan loppupuolelle asti. Vaikka remmarit voivat ajoittua jo 1500-luvulle, kierretystä lasilangasta tehdyn jalan perusteella viinilasin sirpale ajoittuu mahdollisesti vasta 1600-luvun puolelle.[45]

Matkalipaspullojen käyttö yleistyy 1500-luvun loppupuolella niiden käytön jatkuessa aina 1800-luvulle asti. Pulloja käytettiin etenkin paloviinan ja viinin säilytyksessä. Kulmikkaan muotonsa ansiosta tällaisia pulloja oli helppo pakata matkalippaaseen niitä varten tehtyihin lokeroihin. Pullon muoto ja pakkaustapa auttoi niitä säilymään ehjinä pitkiäkin kuljetusmatkoja.[46]

Rakenne, josta lasilöydöt saatiin esille, voidaan tulkita osittain maan sisään kaivetuksi varastotilaksi, kellariksi tai säilytyshuoneeksi. Kyse on ollut rakennuksen alapuolelle, sen lattiakerroksen alle tehdystä pienestä, reunoistaan todennäköisesti hirsisalvotusta ja maapohjaisesta rakenteesta. Koska rakenne on pinta-alaltaan suhteellisen vaatimaton, on sitä voitu hyödyntää esimerkiksi tuvan lattiassa olevan luukun kautta. Tikkaat tai jonkinlaiset porrasaskelmat ovat voineet olla rakenteen pohjoislaidalla kaivauksissa havaitun ulokkeen kohdalla. Aiemmin esitettyä tulkintamahdollisuutta huussikuopasta eli latriinista voidaan pitää vanhentuneena.[47]

Rakenteesta löytyneet esineet ja niiden fragmentit ajoittuvat noin sadan vuoden ajalle. Tietyt esinetyypit ovat peräisin jo 1500-luvulta, johon myös rakenteen hirrestä tehty radiohiiliajoitus osoittaa. Eräät lasiesineet, kuten myös rahojen ajoitukset ja liitupiippulöydöt, tukevat ajatusta siitä, että kellarirakenne olisi ollut käytössä pitkälle 1600-luvulle asti. Nuorimpien 1660-luvulle ajoittuvien rahojen perusteella kellari olisi hylätty pian tämän jälkeen, ehkä vuosisadan viimeisen kolmanneksen aikana. On luultavaa, että myös rakenteen päällä ollut rakennus on tuolloin purettu ja kuoppa täytetty. Alue on lopulta otettu viljelykäyttöön ja rakenteen läpi johdettiin myöhempinä vuosisatoina kivitäytteinen salaoja (Kuva 5).[48]

KUVA 5. Pellolle avattu kaivausalue pohjaan kaivettuna. Rakenteen poikki syvemmälle kaivetun salaojakaivannon täyttö aloitettu kuvan yläosassa. Kuvattu pohjoiseen. Kuva: Juha Ruohonen.

REININVIINTÄ SYVÄLLÄ SAVOSSA

Tässä tarkasteltu lasiaineisto antaa välähdyksen, vaikkakin sirpaleisen sellaisen, Juvan Partalan 1500-luvun lopun ja 1600-luvun alkupuolen elämästä. Löydöt kertovat etenkin kartanon esineellisestä kulttuurista, mutta myös alueella sijainneista rakennuksista. Löytöjen myötä paljastuvat myös kartanon tiiviit yhteydet rannikolle, muualle valtakuntaan ja myös kauemmas Keski-Eurooppaan.

Vaikka Ruotsissa lasia onkin valmistettu keskiajalla jo jonkin verran, ei sitä Haggrénin mukaan olisi riittänyt Suomeen tuotavaksi. Hän onkin pitänyt melko varmana, että suurin osa 1500- ja 1600-luvulla käytetystä ikkunalasista tuotiin maahamme Pohjois-Saksasta.[49] Näin on todennäköisesti ollut varhaisimman ikkunalasin suhteen myös Partalassa.

Myös kaikki 1500- ja 1600-luvun yhteyksistä löytyneet lasiesineet ovat tuontia muualta, sillä omaa tuotantoa ei Suomessa vielä tuohon aikaan ollut. Partalaan *passglas*it ja remmarit tulivat, kuten Helsingin Vanhaankaupunkiinkin, kaupankäynnin välityksellä todennäköisesti joko Saksasta tai Hollannista.[50] Vaikka *passglas*it kehitettiin alkujaan olutpikareiksi, historiallisten asiakirjalähteiden perusteella esimerkiksi Ruotsin hovissa tällaisia laseja tiedetään käytetyn 1500-luvulla viinin juomiseen ja Suomessa lasiin saatettiin kaataa myös paloviinaa.[51] *Passglas*it ovat olleet suhteellisen yleisiä Suomen maaseudullakin, mutta remmarit ovat tällaisessa kontekstissa huomattavasti harvinaisempia. Remmareita on pidetty lähinnä reininviinin nauttimiseen tarkoitettuina viinipikareina.[52]

Mihin rakennukseen kaivausalueelta löytyneet ikkunalasit ovat kuuluneet? Selvää on, ettei kyse ole paikalleen hajonneiden ikkunaruutujen palasista, vaan kellariin lähinnä jätteenä kertyneistä sirpaleista. Löytöjen luonteesta johtuen on kuitenkin todennäköistä, että ne ovat liittyneet läheisyydessä, todennäköisesti kellaritilan päällä, olleeseen rakennukseen.

Voidaan olettaa, että keskiajalta lähtien Partalan tila on muodostanut erikokoisten ja -ikäisten tupien, aittojen, karjasuojien ja varastorakennusten ryhmittymän sijoittuen harjun laelle todennäköisesti rakennuskannan nykyisenkin tavan mukaisesti pitkittäin luoteesta kaakkoon. Tilan päärakennus on luultavasti sijainnut pihapiirissä sen edullisimmalla paikalla, nykyisen rakennuksen kohdalla tai sen tuntumassa. Kellarista tehdyt löydöt viittaavatkin aitan tai muun talousrakennuksen sijaan juuri paikalla sijainneeseen asuinrakennukseen.

Sijainnin perusteella kyse voi olla tilan päärakennuksesta tai paremmalle väelle tarkoitetusta tuvasta. Asiakirjalähteistä tiedetään, että kuninkaankartanokaudella Partalan rakennuskanta uudistui ja monipuolistui huomattavasti. Esimerkiksi vuonna 1557 Partalassa oli työn alla lähes kymmenen metriä pitkä porvari- tai linnatupa.[53] Lasi-ikkuna pysyi myös kirkkaana, sillä tupaan oli muurattu uloslämpiävä uuni, jollaista voidaan pitää harvinaisuutena 1500-luvun savolaistalossa. Tähän vaiheeseen voitaneen liittää kellarista löytyneet ruukkukaakelien fragmentit. Vaikka Partalan kartanon myöhemmästä, 1600-luvun rakennuskannasta ei ole säilynyt yksityiskohtaisia tietoja, on todennäköistä, että ainakin osa kuninkaankartanovaiheen rakennuksista olisi jätetty paikoilleen tilanpitoa jatkavan nimismiehentilan tarpeita ajatellen. Korkea ikä saattaa olla yksi syy rakennuksen hylkäämiseen joskus 1660-luvun jälkeen. Noin satavuotiaan talon hylkääminen voidaan yhdistää viimeistään 1600-luvun lopulle, jolloin asiakirjalähteiden mukaan koko tilan rakennuskanta oli hoitamattomana päässyt huonoon kuntoon.[54] Rakennus ei kuitenkaan ole palanut, sillä yksikään löytö ei ollut sulanut tai vaikuttanut palaneelta.

Arkeologisen aineiston tulkinnassa korostuu Partalan status sekä vauraana ratsutilana että mallitilana, kuninkaankartanona. Hallinnollisina keskuksina kuninkaankartanoiden rakentamista ohjattiin ylhäältä päin, jolloin niissä näkyi tietty yhdenmukaisuus maantieteellisestä alueesta riippumatta. Esimerkiksi lasi-ikkunoiden yleistyminen ja kaakeliuunien muuraaminen voidaan ainakin sisämaassa nähdä kuninkaankartanoverkoston muodostamiseen liittyvän rakentamiskulttuuriin heijastumina. Esitetyt innovaatiot ja muut uutuudet, kuten lasiesineiden käyttö, saatettiin pienellä viiveellä ottaa laajempaan käyttöön myös muissa kartanoissa ja varakkaimmissa talonpoikaistaloissa. Toki esimerkiksi lasi-ikkunoiden yleistymiseen vaikuttivat myös muut tekijät, kuten 1600-luvulla tuotannon lisääntymiseen liittyvä saatavuuden paraneminen ja hintojen lasku. Voidaan ainakin olettaa, että lasiset juoma-astiat olisivat 1500-luvulla ja vielä 1600-luvullakin olleet lähinnä vain korkeiden viranhaltijoiden ja varakkaiden isäntien saatavilla olevia ylellisiä tuontitavaroita. Nuoremmat, 1600-luvulle ajoittuvat lasiesinetyypit – kuten myös lasi-ikkunat – kertovat kuitenkin, että Partala oli vauras ainakin jonkin aikaa kuninkaankartanokautta myöhemminkin. Partalan aineisto myös todistaa yksiselitteisesti, vaikkakin löytömäärät ovat toistaiseksi pieniä, että myös sisämaassa käytettiin ulkomailta asti tuotuja ylellisyystuotteita, kuten haurasta lasitavaraa. Uuden ajan alun lasilöytöjä on kaupunkien ja linnojen lisäksi tehty viime vuosikymmeninä runsaasti myös maaseutukohteilta, mutta tarkastelu on yleensä keskittynyt Etelä-Suomen rannikolle ja Hämeeseen. Juvan Partala on savolaisena kohteena tästä selvästi poikkeus, joskin tilanne kuvastanee pitkälti ainoastaan tutkimuksellisesta tilannetta.

LOPUKSI

Tässä tarkastellut löydöt antavat monipuolisen kuvan Juvan Partalan kartanoalueen materiaalisesta kulttuurista 1500- ja 1600-luvuilla. Kellarirakenteen sisältämät esinelöydöt heijastavat vauraan savolaisen maatilan arkea ja osoittavat sen kytkeytyneen jo varhain aikansa merkittäviin kauppareitteihin ja kulttuurivirtauksiin. Erityisesti kaivauksissa löydetyt lasinkappaleet, kuten ikkunalasin ja astialasin fragmentit, tarjoavat tärkeää tietoa tilan arkipäivästä ja elintasosta, mutta avaavat myös kysymyksiä materiaalien alkuperästä. Remmarin, *passglas*ien ja erilaisten pullojen sirpaleet kuvastavat kartanon yhteyksiä eurooppalaiseen pöytä- ja juomakulttuuriin. Puuttuvat lyijypuitteet viittaavat kierrätykseen, jälleenkäytön kulttuuriin, jossa arvokkaita materiaaleja hyödynnettiin uudelleen.

Kellarirakenteessa pienet ja hauraat lasinkappaleet ovat sinne päädyttyään säilyneet suhteellisen hyvin. Myös päärakennusta ympäröivillä pelloilla on useana vuotena tehty pintapoimintaa, mutta vanhemman astialasin tunnistaminen aineiston seasta on haastavaa. Pintapoiminta-aineistossa korostuu nuorempi vihreäsävyinen ja paksu pullolasi sekä kirkas ikkunalasi, vaikka seassa on varmasti myös vanhempaa lasimateriaalia. Talteen poimittu aineisto kertookin tutkimusmenetelmän haasteista, jossa pienemmät ja ilman suljettua kontekstia olevat lasinsirpaleet jäävät pitkälti vaille huomiota. Sekoittuneiden pintakerrosten löytöaineisto muodostuisi varmasti myös erilaiseksi, jos maata seulottaisiin esimerkiksi otantana.

Vuoden 2017 tutkimusten yhteydessä Partalan alueelle avatuista muista kaivausalueista ei tavoitettu viime vuosisatoja vanhemmaksi ajoittuvia lasilöytöjä. Esimerkiksi nykyisen päärakennuksen lounaispuolelle rinteeseen, kartanon myöhemmälle puutarha-alueelle, kaivetuista koeojista ei löytynyt lainkaan 1800-lukua vanhempia esineitä. Partalan päärakennuksen pihalle kaivetusta kahden neliömetrin kokoisesta koekuopasta paljastui puolestaan todennäköisesti piha-alueen tasaamiseksi tuotujen paksujen täyttömaakerrosten alta vanha peltokerros sekä yksi kookas rautakuonan kappale. Vaikka keskeiset rakennukset ovat vuosisatoja aiemmin olleet Männynmäen harjanteen laella hyvin pitkälti samoilla paikoilla kuin myöhemminkin, nyt tutkittu kellari löytyi nykyiseltä peltoalueelta. Rakenteita on peltokerrosten alla säilynyt varmasti myös enemmän.

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LÄHTEET JA KIRJALLISUUS

Lyhenteet

DF = Diplomatarium Fennicum

KA = Kansallisarkisto

TYA = Turun yliopiston arkeologian oppiaineen arkisto

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► Georg excavating a test pit with Jussi Kinnunen at Kokemäki Linnaluoto in 2024. Photo: Tanja Ratilainen.

▲ Georg and his camera in Raseborg. Photo: Elina Terävä 2017.

► Georg going crazy with Tuuli Heinonen in Vyborg. Photo: Elina Terävä 2018.

◄ Final fieldschool of Hangö Sommaruni at Raseborg castle in 2022. In the front row: Tia Niemelä (leff) and Maija Holappa. At the back row: Tanja Ranta (right), Elina Terävä, Georg, Elisabeth Ahonen, and three students. Photo: Maija Holappa.

◄ Georg on a dinner with Aleksandr Saksa in Vyborg in 2018. Photo: Elina Terävä.