

Kokenhus project

Carita Tulkki, Kirsi Majantie, Kari Uotila

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Introduction

The scientific objective of research in the Kokenhus project is to study the medieval and early modern town from three aspects that touch upon each other, all telling about every-day life in its different forms. One topic of research also tells about the early stages of industry through studying the domestic – local – production of redware vessels. At the same time, it sheds light on the use of every-day vessels and their significance on the threshold of the modern times. The second topic of research is related to every-day life in stone houses and how comfortable it was to live in them, which is studied through the production and use of tile-stoves. Furthermore, this theme gives a wider illustration of, for instance, the arrival of innovations to Finland and the early stages of Finnish industrial history.

One subject in the Kokenhus project is medieval and early modern stone houses in towns and their significance for the townscape. By looking at the stone-built houses one can study the living conditions of the wealthiest people, the status value of building in stone, as well as the social divisions and the changes in different town parts throughout the centuries. The second objective is to develop the methods of virtual archaeology in fieldwork, reporting and actual analysis, as well as in a new kind of visualization of the research site. Through this visualization the project has close connections with the museum field, because the new research results will be used in, for example, the extensive and international exhibition of stove tiles and red earthenware, which will be organized by Aboa Vetus museum that opens in 2004.

Red earthenware production in the medieval and early modern town of Turku

(Carita Tulkki)

In the 1970s an excavation was carried out close to the medieval cathedral of Turku, during which archaeologists found to their surprise the foundations of a large stone building and a waste dump of unglazed red earthenware. The stone foundation was a surprise, because there are no literary mentions of a building in the area and it does not appear in any of the old maps. At first the wall was interpreted as a part of the churchyard wall but after further investigation it was identified as a cellar and a part of a larger building which was situated inside the wall. The purpose of this building is still unknown (Brusila/Lepokorpi 1981).

More than 2000 sherds of younger red earthenware were discovered at the excavation, but only 28 sherds of stoneware. Seventy-two percent of all the redware found in the cellar is unglazed (Tulkki 2001, 2; 59). Younger red earthenware is in general very commonly found in the medieval and early modern cultural layers in Finland, but hardly any unglazed or unfinished pottery has been discovered or documented before or even after this excavation. That is why most of the red earthenware has been interpreted as being imported goods. However, in my opinion this unglazed redware pottery is of local production and most probably it was also made close to the place where it was found.

All the pottery was found in a black cultural layer which was situated just above the stone and

wooden floor of the cellar and under a thick mixed destruction layer (TMM, *Arkeologia* 21:1, 2). The black layer was only about 20 centimeters thick and it must have accumulated in the cellar in a very short time. The waste could have been thrown into the cellar from the potter's yard for example after the building was destroyed. The Turku Cathedral and the cellar were situated on the edge of the medieval and early modern town and beside a river. This area would have been a perfect place for a potter's kiln. Not too close to the houses which could have been damaged, if the kiln caught fire, but close enough to the town center and the market place, where the vessels could have been sold (Tulkki 2001, 141). There is no knowledge of where the potters got their clay from in Turku, but it could have come from the riverbanks which were also close to the area.

No remains of kilns of any kind have been found in the town area. When the cellar was excavated some kind of tile construction was also found just outside the masonry wall, but it was too damaged to identify (Brusila/Lepokorpi 1981, 24). All the evidence of potters who worked locally comes from written sources which are not medieval. The first and actually also the last mentions of the potters who worked in Finland are from the 16th century. Altogether four potters are known by name. A German called Hans worked in the Turku Castle and the Häme Castle in the 1540s and the 1550s. Abraham von Wittenberg also worked in Turku during the years 1550–1560 and Henrik Krüll in the 1560s. The latest reference is to Michel Kramer who came to the Turku Castle in 1580 from Stargard in Pomerania (Pihlman 1995, 203). The potters were not just making one particular article, but they were mentioned to manufacture both stove tiles and vessels from red earthenware (Hyvönen 1983, 25). This was very common of the potters working in, for example, the other parts of Sweden (see e. g. Elfwendahl 1999).

In my opinion, the pottery found in the cellar in the vicinity of the Turku Cathedral was made after the 1550s or 1560s. On the basis of the shapes and types of the vessels and other finds which are very scarce, the pottery was made close to the end of the 16th century or at the beginning of the 17th century (Tulkki 2001, 139–140). The potter could have been German, but at the beginning of the 17th century the potter may already have been a local who

had learned the techniques required in making these products from a German potter or from his assistants.

At this time, some unglazed pottery could still have been in use. Some containers may quite possibly have been unglazed if they were meant for dry ingredients, but vessels meant for cooking, serving and storing for example liquids were probably always glazed on the interior surface. Glazed vessels were more hygienic because they were easier to keep clean, they did not absorb liquids and they looked better than unglazed vessels (Lindahl 1986, 34). The only problem was that the glaze contained lead and it could have caused some health problems for both the potters and the consumers (Lindahl 1986, 33), but people were probably not very aware of this. Thus, on the basis of this I believe that all the unglazed fragments of cooking pots, dishes, bowls, jugs and jars that were discovered in the cellar were unfinished and had broken during manufacture.

Pottery was meant to be fired twice even though red earthenware did not necessarily need two firings. It was possible to apply the glaze on the vessel when its surface was dry and then burn it only once (Lindqvist 1981, 32). However, in this case the unglazed redware pottery must have been fired after throwing because otherwise it would not have lasted in the damp soil for such a long time in such a good condition. The colour of the fabric is mostly bright brick red and the fragments seem very "clean". There is a small amount of soot on the exterior surface of some of the unglazed sherds, but in my opinion it has resulted from the firing not, from usage (Tulkki 2001, 68; 137).

Thus, most of the pottery broke after the first firing and before applying the glaze. However, there are also vessels that seem to have broken during the second firing because on some of the fragments there are small splashes and stains of glaze, even burned glaze, and on a couple of sherds it has run on the broken surface (Tulkki 2001, 136–137). The potter has not succeeded very well with the glaze: it only covers some parts of the interior surface of the vessels. The exterior surface is completely unglazed which is very typical of the younger red earthenware vessels, but the interior surface is usually quite evenly coated with glaze. There are, of course, some exceptions; drinking jugs and mugs sometimes have glaze on the exte-

rior surface too. These partly glazed fragments come mostly from cooking pots such as tripod pipkins and from ordinary storage jars. The colour of the glaze varies from different kinds of browns and greens to clear.

Some of the finer tableware has broken after it had already been decorated with white clay patterns. There are sherds from two different kinds of dishes that have the so-called bolus decoration. On one of the larger fragments there is a spiral motif which is not very carefully executed, and on the other some simple floral patterns. One base fragment has sgraffito decoration; the interior surface has been coated with white clay and the decoration has been engraved through the slip. None of these unglazed but decorated fragments match with the fragments of glazed dishes and bowls (Tulkki 2001, 70–71; 80). They might have been made by different potters, or the potter used many different kinds of motifs and styles of decoration.

There are also some other differences between the unglazed and glazed redware pottery besides the decorations mentioned above. These vessels have, for example, different kinds of rim types and handles but, for instance, the pipkins are all very similar and there are no big variations between vessel types (Tulkki 2001, 139). The unglazed pottery is of local production because there would not have been any sense in importing half-finished, breakable and relatively cheap merchandise to distant places. The glazed vessels are more problematic; they could certainly originate from, for example, Germany, or they could be a product of a German potter's kiln in Turku. Without chemical or petrographic analysis, it is almost impossible to say where these two almost identical red earthenware types originate from.

The introduction of a new heating technology, the smokeless ceramic tile-stove, and the earliest evidence of its local production in Finland

(Kirsi Majantie)

The smokeless ceramic tile-stove was introduced to Finland during the final years of the medieval period (Majantie 2001, 124). Its adoption was in connection with the continuing influence of the Hanseatic merchants who

traded with, and settled in, urban centres around the Baltic region – including Finland (Gaimster 2001, 52; 61). The recruitments of German craftsmen to work in the royal castles of Finland, especially under the rule of Gustavus Vasa, also made it easier for the new ideas and fashions to become adopted (Gardberg 1959, 186). In fact, building materials and objects may well have arrived in Finland through the travels and acquisitions of the nobility themselves. Smokeless stoves made various profound improvements on interiors. The disappearance of smoke from the living spaces of domestic environments brought more comfort and light to everyday life, and the decorations on stove-tiles enriched the visual dimensions of the interiors (Gaimster 2001, 61).

The earliest archaeological evidence of stove-tiles in Scandinavia is from the 14th century. These tiles were hollow vessel-shaped types with round rims (Liebgott 1972, 5–6). The earliest relief decorated panel-tiles date to the second half of the 15th century and were found in Stockholm Castle in Sweden (Gaimster 2002, 59). According to present archaeological evidence, the introduction of stove-tiles to Finland was slightly later – dating to the turn of the 16th century. One of the earliest examples are the relief decorated half-cylinder tiles found at recent excavations from one of the medieval town quarters of Turku. Their decoration consists of symbolic biblical scenes and they most certainly date to the pre-Reformation period. Other early evidence of the use of tile-stoves in Finland has come from three royal castles (Turku, Häme, Kastelholm), a bishop's castle (Kuusisto), two manors (Laukko in Vesilahti, Suitia in Siuntio) and the medieval and early modern town of Turku. Some of these stove-tiles are vessel-shaped types and some are relief decorated panel-tiles with Renaissance-style decoration. The vessel-shaped tiles from Kuusisto castle and Laukko manor might date to the end of the 15th century or early 16th century, but since the same shape remained in use for a long time, their dating is difficult without exact contextual information. There is evidence for the use of vessel-shaped tiles in Finland at least until the beginning of the 17th century. The most common group of panel-tiles found in Finland was decorated with portrait busts of the leading secular supporters of the Lutheran Reformation (Majantie 2001, 75–76; 102–

103, 124–131). These Protestant princes of the Schmalkaldic League were widespread and popular motifs in stove-tiles for the duration of the League's political influence (c. 1530–1547). Their use acted as propaganda and an expression of support on behalf of the Reformation (Gaimster 2000, 145–148).

The first written documents mentioning tile-stoves in Finland date from 1543–46. These documents, surviving from Turku and Häme castles, list the different craftsmen working in them. One of the names mentioned is a German potter called Hans (Pottmakare). According to the records, Hans made both vessels and stove-tiles, but nothing is known about the style or decoration of these tiles. The next German potter whose name has survived in documents is Abraham von Wittenberg. He worked in Turku Castle during the years 1560–1563. Most of the stove-tiles found in this castle are rectangular relief decorated panel-tiles. The most common motifs in them are the portrait busts of Johann Friedrich, Elector of Saxony, and a female consort of either him or some other Protestant prince. In addition some hollow vessel-shaped tiles with square rims have been found (Gardberg 1959, 164–165; 291–294). Hans was the most probable maker of the vessel-shaped tiles found in Turku Castle. The time of him working there coincides also with the popularity of abovementioned panel-tiles moulded with portrait busts. There is, however, no other means to date those panel-tiles found in the castle but iconographic ones. It is then easy to turn to Abraham von Wittenberg as the most likely person to have produced these tiles, since his name suggests that he came from the same town, Wittenberg, as where Johann Friedrich had his area of dominance. Since the stove-tile moulds were often in circulation for long periods of time after they were manufactured, it is possible that Abraham brought these moulds with him from his hometown in the 1560s. Even though the manufacturing date of the moulds was most likely the same time when the Schmalkaldic League was politically active (c. 1530–1547) and when Johann Friedrich was still Elector (1532–1547), it is possible that the moulds came into use in Finland some twenty years later (Majantie 2001, 78–85).

This later dating of the stove tiles is also supported by other archaeological finds from the early modern town of Turku, since the same portrait busts appear in many other panel-tiles

found from Turku. The most informative of them are the finds excavated from a stone cellar near the medieval cathedral of Turku (see Tulkki in the same article). The pottery found in the cellar has been dated to the end of the 16th century or the beginning of the 17th century and interpreted as the work of a local potter (Tulkki 2001, 139–140). In addition, some of the stove-tile sherds show signs of local production. It seems that the second firing of the tiles, when the lead-glazing was applied on their surface, did not succeed and the glazing turned out patchy, thin and in some cases bubbly. There are also a few examples where the glazing had run on the broken surfaces of the tiles, suggesting that the tiles had broken during firing. All these examples point to the conclusion that these tiles were made locally and thrown away after unsuccessful manufacture (Majantie 2001, 98–102). In addition to relief decorated panel-tiles also sherds of unglazed vessel-shaped tiles with square rims and curved flat surfaced (not relief decorated) panel-tiles were found from the same cellar. These last mentioned flat panel-tiles date most likely to the end of the 16th century or the beginning of the 17th century and they reflect the transition from Renaissance-style to Baroque (Majantie 2001, 75–76; 101). Since all these stove-tiles and pottery were found from the same cultural layer, which had accumulated in the cellar during a relatively short time (see Tulkki in the same article), it seems likely that all the different forms of stove-tiles were manufactured at the same time – according to the youngest forms in the turn of the 17th century. This proves further, that the same moulds which were used in Turku Castle in the 1560s were still in use in the town centre some forty years later.

Since some of the decorative motifs in stove-tiles are exactly the same in the castle as in the town, it is most likely that the same moulds were used in the manufacturing of the stove-tiles in both places. Even though the master himself might have left Finland after finishing his work in the castle, his apprentices could have stayed here and continued the production of stove-tiles with the same moulds. There is also further evidence of the use of the same moulds in Finland. The recent excavations at Suitia manor, some hundred kilometres east from Turku, have also produced panel-tiles with the same moulded portrait busts found in

Turku (Majantie 2001, 90–92; Niukkanen 1998, 61).

Although the motifs on these relief decorated panel-tiles were closely connected to the Reformation propaganda of the leaders of the Schmalkaldic League, they were also one of the first examples of the arrival of the new Renaissance-style fashion to Finland. It is difficult to estimate the reasons for their introduction or the reactions they provoked in people who saw them. It is also very difficult to estimate to which extent people even recognised the portraits depicted on the stove-tiles and understood the Reformation propaganda they

displayed. In Turku Castle this recognition was more likely, but was the situation the same when these tiles were used some forty years later in the homes of the wealthy urban population? Social emulation, a desire to emulate those of a higher social rank, was often behind the distribution of luxury ceramic vessels and decorated stove-tiles from castles to town communities (Gaimster 2001, 52). This emulation and need to display wealth might have attracted people to obtain these relief decorated stove-tiles in their homes without a more profound attitude towards the meaning of their decorations.

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Address

Kari Uotila/Carita Tulkki/Kirsi Majantie
University of Turku, Department of Cultural Studies/Archaeology
Henrikinkatu 2, FIN-20014 Turku