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Knife makers and knife handle production in 17th and 18th century Amsterdam

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Knife makers and knife handle production in 17th and 18th century Amsterdam

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Abstract:
Amsterdam became a centre of trade and craft from the end of the 16th century onwards. Many of the craft activities in the 17th and 18th centuries remain largely unknown. By using an interdisciplinary approach more information can be obtained about these crafts and their craftsmen. Knife making was not a large-scale industry, but was still an important craft within the city. Although individual differences existed, most knife makers or haft makers belonged to the middle-class. A large proportion of the blades were imported. An essential part of this craft was the manufacture of knife handles. These were made of organic materials, such as wood, ivory, bone, horn, antler and tortoiseshell. A shift in the use of raw materials is visible, which was caused by increasing trading activities.

Résumé :
Amsterdam est devenu un centre de commerce et d'artisanat à partir de la fin du XVIe siècle. Beaucoup d'activités artisanales aux XVIIe et XVIIIe siècles demeurent largement inconnues. En utilisant une approche interdisciplinaire, on peut obtenir plus d'informations sur ces métiers et leurs artisans. La fabrication de couteaux n'était pas une industrie à grande échelle, mais un métier important dans la ville. Bien que des différences existaient, la plupart des fabricants de couteaux appartenaient à la classe moyenne. Au moins une grande partie des lames ont été importées. Une partie essentielle de ce métier était liée à la fabrication des manches de couteau. Ceux-ci étaient faits de matériaux organiques, tels que le bois, l'ivoire, l'os, la corne, le bois et l'écaille de tortue. Un changement dans l'utilisation des matières premières est visible, ce qui semble avoir été causé par l'augmentation des activités de négociation.

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INTRODUCTION

Amsterdam became an important trading city from the end of the 16th century onwards, but it also became a centre of specialised crafts. Many crafts and craftsmen inhabited the city centre, but much about these crafts is still unknown[2]. In this article the knife makers and their products are discussed by using archaeological and historical sources.

Research on knives comprises many publications about museum objects and collector's items. A more complete picture can be drawn when different sources are combined. Archaeological sources can give us some insight about aspects of craft and daily life. Archaeological finds inform us about the type of objects which were produced and about the raw materials used. Identification of the raw material of the handles is often not a focus of research, but can supply important information about craft and importation. In combination with the historical sources it can provide strong evidence for craft activities in the 17th and 18th centuries. Historical sources confirm the existence of the craft in Amsterdam and allow us insight into the crafters, their social or economic status and raw material use. Unfortunately no systematic survey of historical documents on knife makers is available and the huge quantities of documents, for example in the notarial archives, are not fully indexed as yet. This means that only a case study of two knife makers is fully discussed here.

The aim is not to provide a complete history of knife making in the capital, but to undertake a first attempt to integrate the archaeological and historical sources in order to outline the organisation of this craft and its craftsmen in 17th and 18th century Amsterdam. An essential part of this craft was the manufacture of the knife handles. These were made of organic materials, such as wood, ivory, bone, horn and tortoiseshell. A shift in the use of raw materials is visible, which was caused by increasing trading activities

(2) Poelwijk 2003.
(3) Cowgill *et al.* 1987, p. 8-15 ; Moore 1995 (réd. 2006), p. 8.
(4) Cowgill *et al.* 1987, p. 9 ; Baart *et al.* 1977, p. 325-326.
(5) Moore 1995 (réd. 2006), p. 6-8.
(6) Cowgill *et al.* 1987; Moore 1995 (réd. 2006) ; Baart *et al.* 1977.

KNIVES IN DAILY LIFEE

While it was customary in the medieval period to bring your own knife to the table, this changed during the late and post-medieval period. In the middle ages a knife was an important personal possession that was usually placed between or hung on the belt, for the less wealthy suspended on a cord or thong, for more affluent people in a sometimes richly decorated leather scabbard. When invited to dinner, one was expected to bring ones own knife to the table and/or to share knives with other guests . This was about to change towards the end of the medieval period and in the post-medieval period changes developed even more rapidly.

HAFTING METHODS

A knife consists of two parts, the blade and the haft or handle. In the late medieval period the blades were made of a combination of iron and the stronger steel for a part of the cutting edge[3]. Knives can be divided into two categories, based on the attachment method of the handle to the knife. The tang is an extension of the blade to which the handle was fixed. In the medieval period a round, so called whittle tang was used: a method where a natural or artificial longitudinal hole through or throughout the handle was produced in order to attach the handle to the elongated tang of the blade[4]. Moore also distinguished the 'through tang', where the tang protrudes beyond the end of the knife handle[5]. In the 13th and 14th century, however, a new attachment method was developed, the scale tang, a flat tang where on both sides scale plates were attached with metal nails to form a handle[6] (fig. 1).

Fig. 1 – Bone plate handle, late 13th century (find nr. NDK-1123-2). Photograph: Anneke Dekker, UvA. Collection: Monumenten & Archeologie, Amsterdam.

SPECIALISATION

Another change that probably occurred during the 14th century can be observed in archaeological finds. Fewer leather scabbards have been excavated from this period onwards, which probably relates to the increasing specialisation of knives, for example the development of table knives and specialised knives, such as carving knives designed especially for the carving of meat or bread at the table. Because scabbards became less common, the knife handles probably became more decorative for display purposes[7]. Another possible explanation of the decrease in leather scabbards could be that other, more perishable, materials were used, such as textiles. Knife cases of different materials were not uncommon in the 17th and 18th centuries. However, it was some centuries before table knives became a common implement. Forks only occur regularly at the table in combination with the knife and spoon at the end of the 17th century. Providing cutlery for guests was often still only reserved for the richer households[8]. Knives therefore developed throughout the centuries from a utensil always carried between the belt or in a leather sheath to a luxury item, displayed on tables together with forks and spoons.

Different specialised knives were not only used at the table, but also in various crafts. The size and shape of the blade indicates the function of the knife, but sometimes also the handle provides a hint of the purpose of a knife. Shape, size, hafting method and raw material give clues to their uses. Antler for example is strongly associated with hunting, hunting knives and hunting banquets[9]. Knives for specific social groups can sometimes be recognised. In Amsterdam for example a 17th and 18th century elephant ivory knife handle has been found with a Hebrew inscription at the top end[10] (fig. 2). This probably meant "*kosher*". This inscription

Fig. 2 – Ivory knife handle with Hebrew inscription, 17th-18th century (find nr. WLO-275-10). Photograph: Anneke Dekker, UvA. Collection: Monumenten & Archeologie, Amsterdam.

was not common in the daily household, but the knife was probably used in an institution or selling place[11].

In the post-medieval period, changes can be observed in the shape and material of the blades; the complete cutting edge was in the 16th century usually made of steel and the shapes of the blades were not only influenced by their function, but were also subject to fashion[12]. The knife handles also underwent several alterations caused by changing fashions and the availability of raw materials and craftsmanship. The increasing trade and craft activities in Amsterdam from the end of the 16th century onwards played an important role in the development of these kinds of products.

RAW MATERIAL OF THE KNIFE HANDLES

LThe handles of late medieval knives were mainly made of organic materials such as bone, antler, wood, root wood and probably horn[13]. But metals were also used. In the 15th century engraved copper handle plates were in fashion. A combination of wood and copper existed until the 16th century[14]. From the end of the 16th century and 17th century cast metal handles of tin, copper and silver came into fashion[15]. In the 17th and 18th century craftsmen experimented with other materials such as ceramics, glass and precious stones. The bulk of the knife handles however were still made of organic materials, but a shift in the choice of these materials can be observed as well.

During the late 16th century Amsterdam became an important trade centre. Because of these increasing trade activities, Amsterdam and its crafts flourished. The craftsmen gained access to different exotic raw materials, such as boxwood, tortoiseshell and ivory. Knife handles could now be made of different kind of materials. The immense amount of imports

(7) Cowgill *et al.* 1987, pl. XIII, p. 51.
(8) Moore 1995 (réd. 2006), p. 3, p. 19-20.
(9) Rijkelijkhuizen 2004.
(10) Findnr. WLO-275-10.
(11) Rijkelijkhuizen 2004; pers. comm. Joods Historisch Museum.
(12) Moore 1995(réd. 2006), p. 10-19.
(13) Moore 1995 (réd. 2006), p. 6 ; Baart *et al.* 1977, p. 325-337.
(14) Baart *et al.* 1977, p. 330-331.
(15) Baart *et al.* 1977, p. 333-334.

of certain raw materials also caused a drop in prices and made the objects of these materials available to a larger public. This shift is visible in the archaeological assemblages.

Wood

Wood was commonly used for the manufacture of knife handles for centuries. The use of other types of wood also increased from the end of the 16th century onwards. Unfortunately we don't have exact numbers for the excavated wooden knife handles and the wood species that have been used for them. Two excavations which were a part of the North-South Line archaeological project produced a large number of knife handles, for which the wood species have been documented. The research was organised by the office for monuments and Archaeology of the city of Amsterdam and the identification of wood species was undertaken by Hannie Ploegmakers of the North-South Line Archaeology team. These excavations, which were integrated into the construction project of the new underground railway through the city centre of Amsterdam, the North-South Line, resulted in over half a million archaeological finds[16]. The two main excavations at Damrak and Rokin were situated in the former riverbed of the Amstel. The river Amstel ran through the densely populated historical centre of Amsterdam and the finds from the riverbed reflect the activities that took place in this area. Hundreds of thousands of finds were related to refuse which was deliberately thrown into the river and to objects which were lost or accidently fell into the water.

Among the Damrak finds the main wood was boxwood (*Buxus sp.*), which was also used for the manufacture of combs. Other wood species that were identified were birch (*Betula sp.*), willow (*Salix sp.*), elm (*Ulmus sp.*), ebony (*Diospyros ebenum*), pine (*Picea sp.*), guaiacum and several tropical and exotic species. The Rokin knife handle finds comprised various wood species, but boxwood declined in comparison to the Damrak and guaiacum was used most often. The handles from Damrak are probably dated from the end of the 15th century to the 17th and 18th centuries **(fig. 3)**. The handles from Rokin are dated somewhat later, probably to the 17th and 18th centuries.

It is not possible to determine with any certainty whether ivory or wood was the most common material, because

Fig. 3 – Decorated wooden knife handle with engraved date: 'anno 160', found at the Damrak excavations (find.nr. NZD1.00052MTL016). Photograph: Harold Strak. Collection: Monumenten & Archeologie, Amsterdam.*

of the different conservation properties in the soil. At the Damrak and Rokin sites, where the conditions seem to be favourable for both ivory and wood because of the humid soil conditions of the former riverbed, the majority of the knife handles were made of wood, which indicates that it was one of the most important raw materials, followed by ivory and bone. However no definite conclusions about the ratio between the use of wood and ivory for knife handles can be drawn, as this is only a small number of finds.

Ivory

Ivory objects are usually interpreted as a luxury items. This surely accounts for the medieval period and for most museum objects, but a shift is visible in the archaeological assemblages in general, particularly if we look at the knife handles. All objects made of skeletal materials from Amsterdam have been researched and the numbers of the knife handles made of antler, bone, horn and ivory are displayed in table 1[17] **(fig. 4)**. Around 50% of these knives are made of elephant ivory, against 35.6% of the knives that are made of bone. These numbers clearly indicate the huge amount of ivory that was imported to the Dutch Republic, where it was manufactured into different types of small objects, such as knife handles.

(16) Gawronski & Kranendonk 2008.
(17) Rijkelijkhuizen 2004 ; 2012.

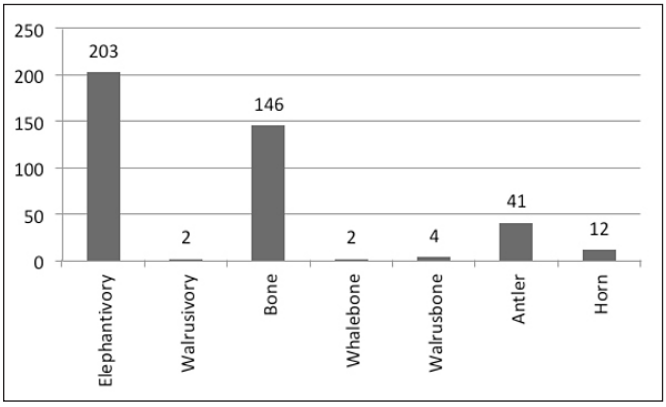

Fig. 4 – Numbers of knife handles made from animal tissues from Amsterdam. (Twelve folding knives are not included in this table. For folding knives, bone, ivory, antler and horn were used.)

The use of elephant ivory for objects of daily use increases at the end of the 16th century. From this period onwards, the Dutch Republic imported immense amounts of elephant's teeth[18]. These teeth were mainly imported from West-Africa, but could originate from a larger area[19]. As a result, the craftsmen in Amsterdam gained direct access to this material and it was available through auctions in their own city. Everyday objects such as lice combs and knife handles were made of this material and ivory objects made their way into the households of the middle class[20]. Elephant ivory is easily to carve; it can be turned on a lathe and polished. Elephant's teeth are solid for around one half to two thirds of their length. The solid part was used for the handles and a drilled hole was necessary to fix the tang into the handle. Ivory was not used for scale tang knives. Elephant ivory was utilised for both simple undecorated knives and for high quality knives. Ivory of species other than the elephant were only sparsely used. Only a few objects made of walrus ivory have been excavated thus far, of which two are knife handles. Hippopotamus ivory was reserved for the manufacture of false teeth[21].

(18) Den Heijer 1997 ; Rijkelijkhuizen 2009.

(19) Rijkelijkhuizen *et al.* 2015.

(20) Rijkelijkhuizen 2009.

(21) Rijkelijkhuizen 2004 ; Rijkelijkhuizen & De Raat 2015.

(22) Moore 1995 (réd. 2006), p. 21 ; 1999.

The Dutch Republic not only imported a huge amount of elephant ivory, but also exported this material to Asia and other European countries. Much about this export trade is still unknown, but it is probable that finished ivory items were also exported. Moore suggests that during the reign of William and Mary Dutch knives with ivory knife handles were exported to England. He also points to the importation of knives with ivory hafts from Dieppe, for example[22].

Bone

Of all of the excavated knife handles made of skeletal materials from Amsterdam, 35.6 % were made of bone. Of these 146 bone handles, only 46 are scale tang handles. Bone was a common raw material for small everyday artefacts, such as homemade toys, tools, personal items and also knife handles. It is a strong material and was readily available. The most suitable bones, cattle metacarpals and metatarsals, were obtainable from the butcher as these bones were primarily waste and not part of the food chain. These specific bones are the most suitable, because of their thick compact bone tissue and their long and straight shape. The metatarsal bones, in particular, have a round marrow cavity which makes them, when both epiphyses are removed, a naturally-shaped tube. This shape was used for the manufacture of both longitudinal cases and larger objects where the marrow cavity was closed at one or both ends with a bone disc. Knife handles, for example, could have been made of the solid bone structure, or compact bone, but the greatest thickness that could be achieved would be around one centimetre only. A longitudinal hole was drilled to insert the tang. When a complete diaphysis of the metatarsal bone was used, the marrow cavity forms a natural hole and needed to be closed at one end with a bone disc or end cap. The result however is that a larger and thicker knife handle could be made. At the other end the tang could be inserted in the marrow cavity. Fillers such as wooden wedges and/or resin were used to fix the tang into the bone handle.

Bones of marine mammals were used occasionally. Two knives from Amsterdam are made of whalebone and four of the walrus *baculum* (penis bone). Whale hunting provided

large bones, particularly ribs and vertebrae, but whales were mainly hunted for their oil, their bones forming rubbing posts for cattle, or large signs or doorsteps. The walrus *baculum* is a very solid material, but not often used, probably caused by the decline in the Dutch walrus hunt and the focus on whale hunting instead[23].

Antler

Antler has similar properties to bone, but is more versatile. Therefore antler was most often used for objects where strength and versatility were necessary, such as tools. Antler was also used for the manufacture of knife handles, but a decline in the use of antler in general is visible from the end of the medieval period onwards. Due to the scarcity of antler, bone was more often utilised. Only 41 knife handles were made of antler, which shows the scarcity of this material. Of these 41 handles, 34 were for scale tang knives.

It is clear that at the site of the excavations at Damrak antler working had taken place. Sixty-nine pieces of sawn antler were found at this location. Almost all of the pieces could be identified as elk antler (*Alces alces*). Although elk inhabited the Netherlands until the Middle Ages, at the time Amsterdam was founded elk had become extinct in this area. Thus, the antler must have been imported from Scandinavia, Russia or Canada. There were no elk bones discovered at the site, which means that the antler was imported as a primary trading good or perhaps together with other materials such as hides. The elk antler was probably imported because of a shortage of local antler. Elk was already extinct in this period and red deer were declining in number. The antler of elk is especially suitable for object manufacture due to its great size. This trade in elk antler is thus far largely unknown and more research needs to be done in order to obtain greater insight into this particular trade.

It is however possible to determine some of the finished objects that were made from the elk antler that was found at the Damrak excavations. Waste fragments of several sizes have been found, including an almost complete antler, several large-sized pieces and small rectangular or flat pieces. Besides these waste fragments, a few semi-finished products were present. These are flat rectangular pieces made from the antler which has been cut with a saw (fig. 5).

Fig. 5 – Elk antler blanks for scale tanged knives, found at the Damrak excavations (find.nr. NZD1.00095FAU025). Photograph: Harold Strak. Collection: Monumenten & Archeologie, Amsterdam.

A closer look at the finished objects made of antler, which have been found in the post-medieval period, shows that the majority of the finds are knife handles. The knife handles which were made of antler are usually scale tang plate knife handles and the rectangular flat waste pieces were probably semi-fabricates of such plates.

However, in comparison to ivory or bone, only few antler knife handles have been found and antler objects are scarce in this time period. At Damrak only five knife handles were made of antler. It is difficult to identify the species of these knife handles, because only a small part of the antler is visible. The low number of antler knife handles could indicate that antler wasn't exploited on a large scale and/or that the finished knife handles were exported. It is known that finished knife handles were exported from Holland to other countries,

(23) Rijkelijkhuizen 2009.

but thus far not many antler waste fragments have been described or published. The identification of different species of antler is not common in archaeological research and can be problematic[24]. New finds and historical research are needed to reveal the scale of this trade and craft.

From other excavations in Amsterdam three sawn waste pieces of elk antler have been identified[25]. One of these is dated between 1725 and 1775[26] (WLO-36). A fourth elk antler find was a waste piece from button making[27].

Keratinous materials

Keratinous materials were also used for the manufacture of small items. These materials have the advantage of being thermoplastic and their shape can be modified with heat. But only a small number of knife handles from Amsterdam are made of keratinous materials; twelve are made of horn and not a single tortoiseshell handle has been recovered. However, it is probable that more handles have been originally made of horn, but this material decays much faster in the soil. Cattle horn has both a solid tip and a large hollow part which can be opened and flattened. The solid tip was used the make whittle tanged knives and the hollow part could be flattened and made into scales for the scale tang knives. Cattle horn is readily available and can be obtained in the region, but it is also known that water buffalo horn was imported in the post medieval period[28].

Tortoiseshell was imported from the Caribbean region in small amounts and therefore remained an exotic and expensive raw material. The greatest thickness is only a few millimetres and therefore tortoiseshell was used as veneer for cabinets. Book covers and small boxes could have been made from a layer of tortoiseshell only. For the manufacture of knife handles of this material a wooden base was necessary which was 'veneered' with tortoiseshell. Another possibility is the manufacture of tortoiseshell scales for scale tang handles. No excavated tortoiseshell handles are known, but we know they existed from historical sources and examples from museum or private collections. Reasons for this are that tortoiseshell was expensive and rare material and that tortoiseshell plate handles perish quickly in the soil. By virtue of their exclusiveness the knives were probably not readily discarded[29].

(24) Rijkelijkhuizen 2008.
(25) Findnrs. Olof-38 ; MZ3-1151 ; WLO-36.
(26) Findnr. WLO-36.
(27) Findnr. MZ5-563 ; Rijkelijkhuizen 2004.
(28) Rijkelijkhuizen 2013.
(29) Rijkelijkhuizen 2010.

DECORATION OF THE KNIFE HANDLES

The excavated knives from Amsterdam are dated from the 13th century onwards, but most of the knives are dated to the 17th and 18th centuries. Table knives are by far the most numerous kind of knives from post medieval contexts. Both whittle tang and scale tang knives occur. Knife handles can be classified into certain types by the method of fastening the blade, shape, size and decoration. The majority of the knife handles are plain round, oval, square or angular handles without any decoration. Knife handles can have various shapes, sizes and decoration. Decoration can be completely absent or very simple, but in other cases knife handles were elaborately decorated. Various methods existed to decorate knife handles of animal and natural materials.

SHAPED/THREE-DIMENSIONAL DECORATION

The handle is shaped from a simple profile or facetted to complete figurative images, such as zoomorphic or anthropomorphic images. Figurative designs are a commonly used type of decoration. One example is a horse hoof at the end of a knife handle **(fig. 6)** or other cutlery items. Horse hoof handles are mentioned in historical sources and have been found in excavations as well. Ivory horse hoof

Fig. 6 – Ivory horse hoof handle, found at the Damrak excavations (find.nr. NZD1.00241MTL001). Photograph: Harold Strak. Collection: Monumenten & Archeologie, Amsterdam.

handles specifically occur in Amsterdam in the 17th and 18th century and were manufactured in Amsterdam, and possibly elsewhere[30].

ENGRAVED OR CARVED DECORATION

The decoration is engraved or carved and this could be, for example, lines, dot-and-circles or a geometrical design. Dot-and-circles were especially popular between the end of the 13th century and the 15th-16th centuries. Large round knife handles with an engraved decoration that covers the complete surface of the handle are made of several materials, especially wood and bone. The decoration which was popular in the 18th century usually consists of straight and zig-zag lines[31] (fig. 7).

Fig. 7 – Bone knife handle with engraved decoration from the Damrak excavations (find nr. NZD1-00078FAU058). Photograph: Harold Strak. Collection: Monumenten & Archeologie, Amsterdam.

PAINTED DECORATION

Black and red paint in particular were popular and usually a pattern was painted instead of colouring the complete knife handle. In other cases texts are painted on the several sides of the angular knife handles. Four of these knife handles have been found in Amsterdam on which a small rhyme or saying was painted on a large bone handle (fig. 8). Two of these texts read (translated): 'An honest man is better than riches', and 'on slippery ice and women you shall not lean nor build'. The other two handles are not complete[32].

Fig. 8 – Bone knife handle with painted rhyme, 18th century (find nr. RO9-17). Photograph: Anneke Dekker, UvA. Collection: Monumenten & Archeologie, Amsterdam.

INLAY/APPLICATIONS

Inlay was not commonly used as decoration for ordinary knife handles, because it was an expensive method of decoration. Different materials were used as inlay, some more expensive than others. The inlay could exist of glass, amber, metal thread, mother-of-pearl or precious stones. Bases for the inlay were usually made of metal, which were attached to the knife handle.

COMBINATION OF RAW MATERIALS

The use of various materials, usually a combination of metal and organic raw materials on one knife handle, was not uncommon. A combination of materials was used on three (undated) knife handles from Amsterdam. In these knife handles rings of metal, bone and other probably organic tissues were used alternately[33]. The organic materials have perished, leaving only the metal and bone bands in place. Metal parts could also be added for decoration, for example a metal cap with a small ball on top of a knife handle, which often features in 17th century paintings.

(30) Rijkelijkhuizen 2004 ; 2012.
(31) Baart *et al.* 1977.
(32) Rijkelijkhuizen 2004 ; 2012.
(33) Rijkelijkhuizen 2004 ; findnrs. ML4-136, MH2-648, MZ8-429.

KNIFE MAKERS PRODUCTION STAGES

The production of knife handles and knives in Amsterdam is difficult to grasp. Research has been undertaken on the famous English and German knife production, but not much is known about the Dutch knife makers and their organisation. When we look at the English and German knife production different stages in the manufacture of a knife are recognisable: the forging of the blade, which needs to be done by a smith, a "*forger*"; the making of a handle, done by a "*hafter*"; the assembling of the blades and the handles and selling of the end product, this person was often referred as a "*cutler*"; the grinding of the knife, done by a "*grinder*".

These stages are however not always strictly separated. Some of the stages can be combined in one person and the terms are not always used consistently. The term "hafter" for example was also used in the production of razors and scissors[34]. In Sheffield, cutlery refers to 'that which cuts', meaning knives, scissors and shears. In general, a larger industry has a higher degree of specialisation. But the intensity of specialisation can also depend on region, tradition and time period. In Solingen for example a second forger could be involved in the process, as well as a hardener and a finisher[35].

HISTORICAL SOURCES

The archaeological evidence indicates the products made by the knife makers which were used by the citizens. Together with knives from museum and private collections we get a more complete view of the knife handles which were made. If we want to take a closer look at the knife maker, we must look into the historical sources. For archaeological sources, problems in interpretation occur, because of preservation conditions in the soil and choices of people in the past whether to discard certain items. But for historical sources we have similar problems, because not everything was documented, not all documents were preserved and from the immense archives from Amsterdam only a small part is indexed, which means that we only have case-studies.

Inventories

From the end of the 17th and beginning of the 18th century two inventories of inheritance are known. The first is the inventory of the shop of Pieter Meijerink, which made after his death in 1691[36]. Pieter Meijerink was a German by origin, coming from Wülfrath, Nordrhein-Westfalen. After the death of his first wife, Anna Hendricks in 1689, who left him with two children, he remarried in the same year to Immetje Sicx. In the notices of marriage Pieter Meijerink is described as '*haft* maker' and he was situated at the Raamsteeg, near the Appelmarkt[37]. The cost of his funeral was 15 guilders[38], a considerable amount, which means that business went well. Pieter and Anna produced two daughters before he died in 1691. The inventory made by the notary in 1691 gives a good impression of his shop. In this document, his profession is described as "knife maker".

In his shop he sold knives with handles made of different materials, such as bone, horn, tortoiseshell, ivory, wood, agate, sealskin and 'walrus'(ivory). Sometimes a remark was made about the handle, such as a 'smooth' (undecorated) handle, tortoiseshell hafts mounted with silver, (ivory) knives with inlay or green bone hafts. Ivory horse feet hafts with inlay are especially mentioned and were very costly. He sold table knives and forks, but also other kinds of knives and implements, such as butchers' knives and different kinds of scissors. Remarkable is the distinction that is made between man's knives, women's knives, boy's knives and children's knives. It is not certain whether "English" or "French" knives refer to a type of knife or to imported knives from these countries.

The inventory describes both (finished) knives as hafts and blades, which implies that he assembled the knives. The blades are sometimes specified as "men's blades" or "women's blades", or as fine blades or table blades, but also seem to refer to the place of manufacture such as "Viaanse",

(34) Lloyd 1913, p. 53.
(35) Symmonds 2002, p. 7.
(36) Stadsarchief Amsterdam, Notarial archives, inv.nr. 4711, 127.
(37) Stadarchief Amsterdam, DTB 518, 14.
(38) Stadsarchief Amsterdam DTB 1069, 226-227.

"Solinger" or "Goudse" blades[39]. Pieter Meijerink probably imported the blades from different places. There is no proof in this document that Pieter Meijerink made the blades himself. The tools in his shop were estimated as a total to the amount of 18 guilders but unfortunately were not specified. That he did manufacture at least some of the hafts is proven by the raw materials that were documented. Unworked bones, elephant ivory, walrus ivory and sealskin were present in his shop.

It is noticeable that he also sold items related to knives, such as leather scabbards and knife cases made of sealskin, shagreen and paper. Especially mentioned are scabbards from Schoonhoven. However, other small items were also sold, such as ivory lice combs, wooden, tortoiseshell and horn combs, tortoiseshell boxes, (metal) tobacco boxes, powder horns, small mirrors, belts and buckles and canes. After the death of Pieter Meijerink in 1691, Immetje Sicx remarried a knife maker, Albertus Hombeeq, in 1695[40].

A second known inventory is from Menso Sadelaer and dates to the year of his death in 1708[41]. His shop was situated in the St. Jansstraat and the cost of his funeral was 8 guilders[42]. The inventory of his shop shows a similar picture to the activities of Pieter Meijerink. He sold (finished) knives, blades, hafts and cases for knives. The hafts were primarily made of ivory, but also of bone, walrus, tortoiseshell, agate, wood, antler and horn. But he also sold other small items such as needle cases, knitting cases, ivory syringes, wooden enema-syringes, scissors, ivory boxes, ivory, wooden, tortoiseshell and horn combs, (horn) tobacco- and snuff boxes, buttons, canes and many more.

In his shop the raw materials to manufacture the handles were present as well; a large amount of large and small elephant teeth, pieces of the hollow part of the elephant teeth as well as the sawn off tips, tortoiseshell, sealskin, walrus 'cranes' (*baculum*), 'seahorse' teeth (in this case walrus ivory), antler and ox horn were present in the shop.

(39) For a short notice on knife making in Gouda, see Geselschap 1970.
(40) Stadsarchief Amsterdam, DTB 525, 63.
(41) Stadsarchief Amsterdam, Notarial Archives, inv.nr.7479, 653.
(42) Stadsarchief Amsterdam, DTB 1048, 44v-45.
(43) Oldewelt 1945.

Knife maker or haft maker

Both Pieter Meijerink and Menso Sadelaer seem to manufacture knife handles, assemble knives and sell finished knives and other small items. It is uncertain whether they also purchased and resold finished knives and whether they made (a portion of) the other items themselves.

As we look at other craftsmen in this period then we can see that the profession of knife maker and haft maker both occur and are used interchangeably. In the year 1742 one knife maker and nineteen knife shops were present in the city according to the tax list of this year ('*kohier*')[43]. The knife maker Eldert Loots was described as a haft maker in the marriage notices. According to the historical records the location of the shop changed over time. One of the knife shop holders in the tax records of 1742 (*kohier*) is decribed in two other historical documents, the marriage notices and the orphans'court (*weeskamer*), as a *haft* maker. And three of the knife shop holders are described in the marriage notices as knife makers.

Another profession is 'knife pedlar' (in Dutch '*messekramer*'), but it is unknown whether they only sold knives or assembled the knives as well. The description however implies a travelling salesman of knives and perhaps other small items.

The guilde

Most craftsmen were organised in guilds. New members had to provide proof of citizenship, pay for their membership and pass a proficiency test. The smith's guild or St. Eloy guild already existed in the 15th century **(fig. 9)** and united smiths and in the first instance also carpenters. During the 16th and 17th century more professions joined this guild, for example coppersmiths, weapon smiths, anchor smiths, lock makers and the knife makers. From 1615 onwards all grinders had to become a member and take the knife makers test (introduction inventory of the archive of the guilds). Members of the guild could take on apprentices.

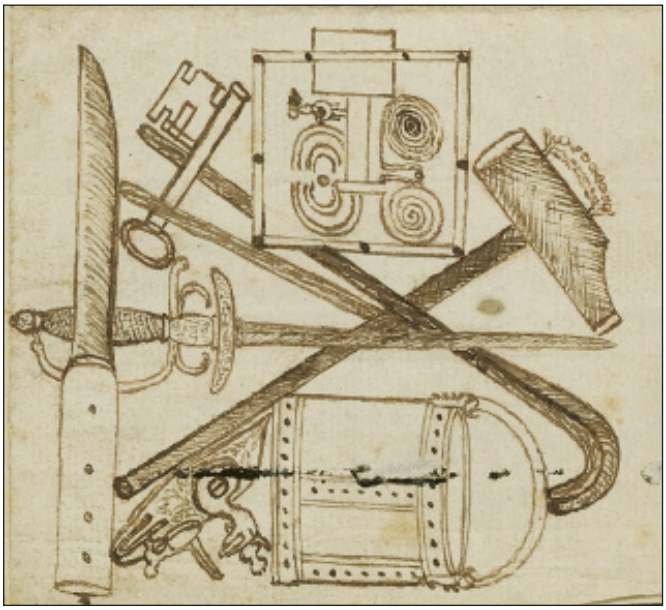

Fig. 9 – Drawing of the emblem of the smithsguild or St. Eloyguild, undated. Stadsarchief Amsterdam, Archives of the guild, inv.nr. 1468.

Lists of new members of the St. Eloy guild, who passed the test, begin in the year 1729[44]. A complete list of members is only available for the year 1776 and from 1780 onwards [45]. Between 1730 and 1794 62 new members took the knife makers test. Three of them were registered as (chirurgical) instrument maker and knife maker at their funeral records. This implies that they also forged the instruments and knives themselves. Taking a knife makers test of the guild implies that the knife makers who took the test could make the knife or at least the blade themselves. How many of the registered knife makers did make the blades themselves, perhaps in another location than in their shop, remains unknown.

Knife maker Gerrit Ameshoff for example bought in 1744 a house and premises at the Zeedijk, which he rented in the period before that and where his shop was established[46]. However he also owned, together with several other persons, property at other locations. It is not known whether activities took place there, or if this was an investment only. It is probable that these premises were let. At his place at the Zeedijk, he also let rooms. After his death in 1770, his son Gerrit, who took the knife makers test in 1754, worked in the shop as a master knife maker. He died in 1772 and his brother became a master knife maker at this location after taking the test in 1775 as 'master's son'.

Blade imports

It is however probably the knife makers registered in the guild who also imported blades from Solingen for example, just as Pieter Meijerink and Menso Sadelaer did in an earlier period. There is no evidence that they made the blades themselves. It is not known if these particular knife makers were members of the guild, because the list of members of the guild does not reach that far back. This is however probable, because knife makers were members of the guild at least in the 17th and 18th centuries. And, in contrast, when we do have information about members of the guild with the profession of knife maker, we do not have inventories of their shops to gain more information about the exact activities of their profession. It is uncertain if and to what extent they imported the blades.

Another document from the notary archives dated in the year 1741 suggests the importation of blades in large amounts[47]. Master knife- and *haft maker* Pieter Hagellocher bought a large amount of blades and knives, including Portuguese and Spanish blades from the merchant Jan van de Kloot; this was documented, because he failed to deliver the knives and blades.

In S' Hertogenbosch the workshop of a 16th century knife maker was excavated, who probably did manufacture his own blades and hafts. The hafts were made of horn and wood only[48]. Examples of other knife makers' workshops however were not excavated or documented, and for this reason we don't have any comparisons with other Dutch cities.

Gold- and silversmiths and ivory workers

Other professions could be involved in knife making as well. Workers of precious metals were responsible for the elaborate handles in these metals. These were not made by the knife makers discussed here. Ivory carvers or sculptors perhaps

(44) Stadsarchief Amsterdam, Archives of the guild, inv.nr. 1444.
(45) Stadsarchief Amsterdam, Archives of the guild, inv.nr. 1445.
(46) Oldewelt 1945.
(47) Stadsarchief Amsterdam, Notarial archives, inv.nr. 8309, 147.
(48) Rijkelijkhuizen 2010; Van Genabeek 2012.

also manufactured elaborate handles. Of different carvers it is known that they also used ivory for the manufacture of, for example, small statues, such as Jan Baptist Xavery and Rombout Verhulst. Design drawings of elaborate handles were made by artists such as Aegidius Sadeler who made a copy of Cherubino Alberti after the design of Francesco Salviati[49].

Social status

The knife makers from Amsterdam seemed to have belonged to the middle class, although differences in income between the knife makers occur. A tax list of the year 1742 ('*kohier*') documented the income of the 'knife shops', they earned between 600 and 2,000 guilders a month[50]. In the funerary records, the costs of the burial of many knife makers and their wives were 15 guilders, a considerable amount which indicates the wealth of the knife makers. The inventories of both Pieter Meijerink and Menso Sadelaer furthermore show a considerable amount of items and raw materials in their shops. Other personal belongings add up to a reasonable amount of possessions. Some of the knife makers also had shared properties elsewhere in town, such as the above-mentioned knife maker Ameshoff.

Many knife makers, as other craftsmen in the city, originated from other regions, such as France or Germany. They could make a good living as a knife maker in Amsterdam. Knife- or haft making was not a large organised industry, but the knife makers probably were acquainted with each other and in some cases family ties are evident, such as the two sons of Ameshoff who both became a knife maker. In the case of Pieter Meijerink, another knifemaker married his widow and probably took over the complete inventory. It is possible that in some cases the widow managed the shop for some years.

(49) Collection Rijksmuseum.

(50) Oldewelt 1945.

CONCLUSION

LKnife making in Amsterdam was not a large scale industry as at certain production centres in England and Germany, but knife making took place within the city. A large number of knife makers can be identified throughout the post-medieval period, but they are not so easy to define. It is not a homogeneous group, but a few careful conclusions can be drawn with the information we have thus far.

In the 17th and first half of the 18th century the terms 'knife maker' and '*haft maker*' are used interchangeably and refer to craftsmen who made the hafts, assembled the knives and sold the end product. Although to receive membership of the guild it was obligatory to take a knife makers-test, there is not much evidence that the knife makers made (all) the blades themselves. Two examples of knife makers in the late 16th and early 17th century suggest that these specific individuals did not make the blades themselves, but imported the blades from Solingen or Gouda. Another source indicates the importation of blades from Spain or Portugal. The importation of blades was probably important. More research into the local production and importing of the blades is however necessary.

The hafts were made locally of different organic materials, such as wood, ivory, bone, horn and tortoiseshell. A change in the use of raw materials is visible, which is connected to the European and later global expansion of the Dutch trade which started at the end of the 16th century. Other wood species could be imported, as well as water buffalo horn and tortoiseshell. Elephant ivory however became, together with wood, one of the most important raw materials for the manufacture of both common and highly decorated knives. Not all knife makers used the same raw materials and they seem to have a preference for certain materials. Elaborate designs could also have been made by an (ivory) carver. Fashionable elaborate designs in ivory could have been exported to other European countries.

There is evidence for the (small-scale) import of elk antler to Amsterdam probably between the end of the 16th and the 18th century. Waste fragments of elk antler were excavated, which proves that this material was used for the manufacture of objects in Amsterdam. It was probably used for the manufacture of scale tang knives. The raw material of the scale tang knives could be identified as antler, but not to species level as a result of the intensive process of manufacture. It is possible that some of these handles were made of elk antler, but more research is necessary. It is not known if a knife maker was established at Damrak or, for example, a craftsman who made blanks to sell to knife makers.

From the mid-18th century onwards the term 'haft maker' seems to be less frequently used and the term knife maker dominates in the sources. It is not known if this implies a change in manufacturing method or other changes.

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