

Notes and News

Eighteenth-century Copenhagen viewed from a refuse dump

By LENE HØST-MADSEN

SUMMARY: The excavation of a town refuse dump in Copenhagen has recovered a remarkably rich and varied assemblage of artefacts including ceramics, glass, animal bones, feathers, textiles, gloves, woollen socks, silk stockings and shoes. They were deposited c. 1750–65, but include many objects dating from the early years of the 18th century. Because the deposits were waterlogged, various unusual types of organic evidence were preserved. This paper gives an introduction to the site and its material, and outlines some of its research potential.

In 2003 the Museum of Copenhagen conducted an excavation at a site on Esplanaden 50 in Copenhagen, just to the south of the Little Mermaid and the fortification known as Kastellet, and to the north of the Royal Palace Amalienborg (Fig. 1). It was carried out because the A. P. Møller-Maersk Group wanted to enlarge their headquarters, threatening buried archaeological deposits over an area of about 10,000m², an unusually large potential area for a city excavation in Denmark.

When the museum was informed of the proposed development it searched for information that could justify an excavation. There had been Mesolithic occupation in the vicinity,¹ but no later activity until the 17th century. In the Middle Ages the site lay under water, outside the town. In the 17th century the town fortifications were enlarged, enclosing this area. Contemporary maps show that it was filled up during the 17th and early 18th centuries (Fig. 2).² Extensive building activity in the area in the 1970s, including the building of the Maersk headquarters, had yielded a rich collection of artefacts dating from the late 17th to the middle of the 18th century. Among them were faience plates with the monogram of the Danish king Frederik IV (1699–1730), combs, textiles and vessel glass.³ These had been brought to the Museum of Copenhagen, but since they were of

relatively recent date and were found before the museum employed an archaeologist, they were never properly processed. The organic pieces were thrown away along with most of the ceramics and no excavation report was produced. Only the exceptional pieces now survive in the museum's collections.

The museum decided that these finds justified an archaeological investigation. In co-operation with the Maersk Company, four trial trenches, each c. 3m deep, were dug by machine to examine the potential of the area (Fig. 3). It was evident that the former sea bottom had originally been c. 1m below sea level; directly over it was a 2–3m thick waterlogged layer of undisturbed and very well preserved refuse. Selected areas of the sides of the trenches were dug out in horizontal sections, and the exact positions of all the finds were recorded to see how rich the layers were and whether there were time differences between the deposits. Samples were collected for macrofossil analysis.

There were no prehistoric finds. The artefacts dated primarily from the first half of the 18th century; they were very rich, varied and well preserved. The material is so recent that the museum collections dating from this period consist primarily of artefacts from the higher levels of

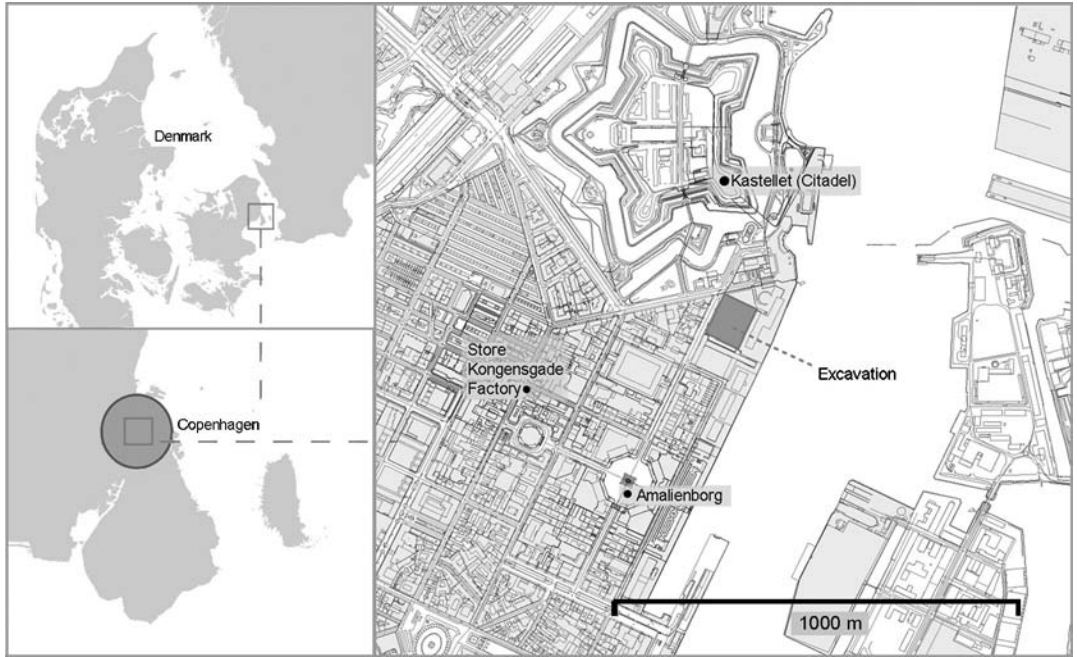


FIG. 1

Map showing the location of the site, the military fortification Kastellet, the faience factory Store Kongensgade and the Royal Castle Amalienborg.

society and objects that were considered of high value in the contemporary society; everyday items were not considered interesting.⁴ For example, the trial trenches recovered seven intact everyday shoes and 53 fragments. In the Danish National Museum's collections there is only one everyday 18th-century woman's shoe.

It was therefore decided to conduct a large-scale investigation. Since the layers of refuse were c. 2–3m thick and the area was 1ha in size, the deposits amounted to at least 20,000m³ of refuse. It was impossible to examine the whole site; instead, two areas were selected for thorough excavation. Various methods were employed. At first a big mechanical excavator was used to dig horizontally in thin layers to establish differences in the layers and in the distribution of finds. However, it was soon evident that the dumping of refuse had not been horizontal but vertical: the rubbish had probably been tipped from the edge of dry ground where it would have been possible to stand safely, working steadily outward into the water. This method of landfill has been used until recent times in Denmark (Fig. 4). It will naturally give different kinds of concentrations of finds over an area. In this instance there were concentrations of horn cores, glass bottles, ceramics, porcelain

and so on, but it was not possible to separate the individual loads of refuse from one another. It was therefore decided to go on digging horizontally and record all finds by area and level.

Approximately 10% of the area was excavated. In one area the refuse was dug by hand, but this method was very laborious. In another area the soil was excavated by machine and then sorted by hand. A much larger sample could be recovered in this way, but it was apparent that there was bias in the recovery of different materials by individual excavators and the smaller items were often lost. To document the loss, the soil from one area was wet-sieved. This gave quite a large sample of seeds, fish bones, hair and feathers, indicating the range of evidence being lost by other methods of excavation.

The excavation yielded an enormous amount of varied material, especially ceramics, glass, animal bones, textiles and even feathers. It has all undergone preliminary processing. The ceramic assemblage comprises several thousand sherds, with a great variety of wares and vessel forms. The common coarse kitchen wares account for most of the assemblage, but there are many interesting types of higher-quality ceramics, including faience from the Danish Store Kongensgade factory

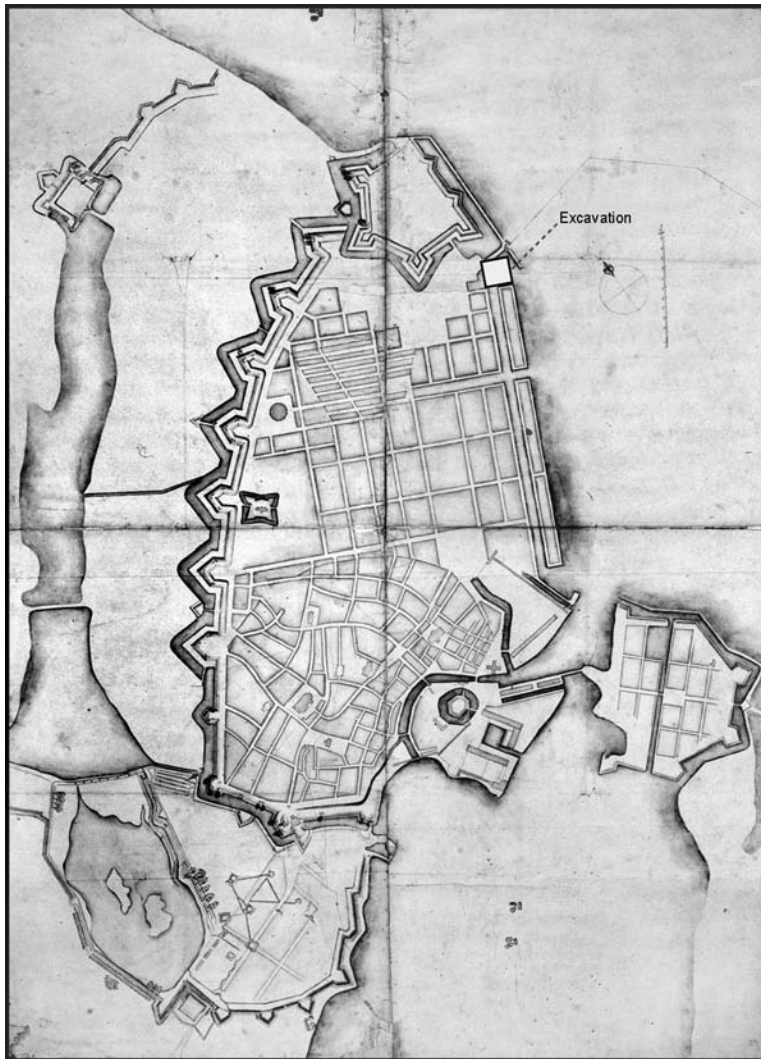


FIG. 2
Map of Copenhagen of 1658
(© The Royal Library,
Department of Maps, Prints
and Photographs, Lorenzen
V, map XXIII).

(1723–72; Fig. 5) and imported faience, primarily from the Netherlands. German stoneware is also represented, as well as quite a lot of Chinese porcelain, reflecting the new 18th-century habits of drinking tea and coffee (Fig. 6). The ceramics should yield important information about trading connections.

The metal finds are not large in number — only about 500 items — but there is an interesting series of copper alloy objects, including buckles, scissors, pins, buttons and plates. Among the sheet metal, one badge from the hat of a grenadier in the army of the Danish king Frederik IV (1699–1730) ought to be mentioned here (Fig. 7). Before this excavation, no fragments of Danish uniform were

known earlier than the middle of the 18th century. Parts of at least two different grenadier hats from King Frederik IV's army have now been identified, and more components of uniforms may turn up when the material is examined properly. There is also an assemblage of iron objects; most are related either to building activity (in the form of nails, hinges and keys [Fig. 8], locks and so on) or to kitchenware (in the form of knives [Fig. 9], forks, pans and other vessels).

The material also contains thousands of dress parts including:

- coarse knitted woollen socks;
- fine silk stockings;



FIG. 3

Trial trench during excavation. Photo: Vivi Lena Andersen, © Museum of Copenhagen.



FIG. 4

Landfill in 1930 at Kongens Enghave, south of Copenhagen. It is possible that the same method of tipping was used in the 18th century. © Museum of Copenhagen archive.



FIG. 5

Decorated faience plates from the Store Kongensgade Factory. The initials FL refer to King Frederik V and Queen Louise (married 1743–51), F5J to Frederik's second marriage, to Queen Juliane Marie (married 1752–66). The other plates were produced in the same period. Photo: Henning Nielsen, © Museum of Copenhagen.



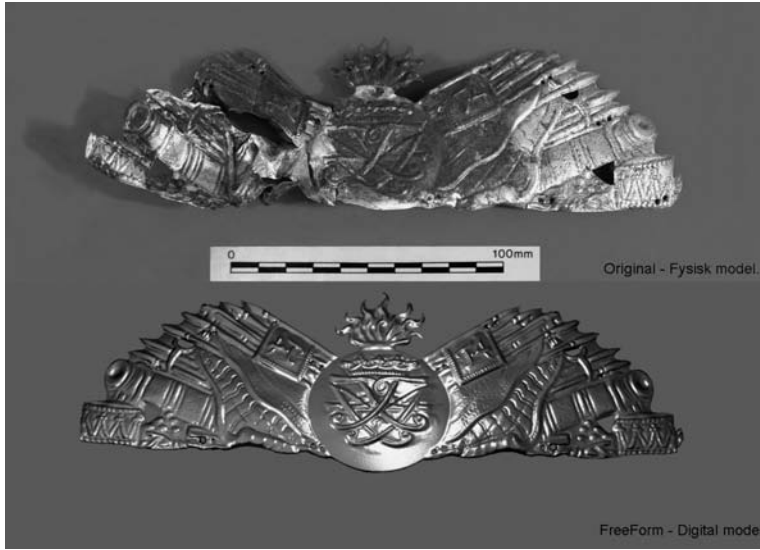


FIG. 7

A copper-alloy plate from the hat of a grenadier soldier as excavated (above) and after 3D-reconstruction. Photo: © Museum of Copenhagen.



FIG. 8

Iron key with attached textile. Photo: Soeren Kjems, © Museum of Copenhagen.

- gloves (Fig. 10) and shoes made of leather and textile;
- a man's pair of coarse woven trousers;
- hats made of felt (Fig. 11) or leather and even one made by knitting;
- wigs made with human hair (Fig. 12).

Study of this material should expand our understanding of the dress codes of rich and poor in 18th-century Copenhagen.⁵

Because the preservation conditions were extremely good, seeds, plant remains and faeces, animal as well as human, were plentiful. When considered with the many animal bones found at the site, these should throw new light on the town's

nutrition. Bay leaves, pea pods, peach stones, hazel nuts, oyster shells, eggshells, and bones of red deer, chicken and lamb, indicate that the diet was both rich and varied for at least some of the town's inhabitants.

Some of the items show signs of secondary use and recycling. The human hair from the wigs had apparently been cut off before the rest was thrown away; this was probably done because the hair could be used for new wigs. A child's sock was made of different knitted pieces (Fig. 13) that probably came from the better parts of other worn-out socks. Parts of the brims of two of the hats have been cut away. Many of the European ceramic vessels show signs of repair, but so far no signs of such repairs have been noted on the Chinese porcelain. This might be because the porcelain's primary value was visual; in other words, there was no status value in serving tea in mended cups.

This short report indicates only a small part of the potential of this assemblage; other categories of find include clay pipes, combs (Fig. 14), wooden objects (Fig. 15), a book (Fig. 16), glass and bottles. The material seems to have been dumped in the period *c.* 1750–65 — a coin of 1762, among other things, indicates that some of it was deposited as late as the 1760s. The overall picture seems to be that the refuse was dumped over a relatively short period of time — perhaps no more than 10–15 years. Had the date-range been wider, greater differences in dating evidence should have been apparent between the different strata and from one area to another. However, many individual items



FIG. 9

Kitchen knives with handles of wood and bone. Photo: Jesper Langkilde, © Museum of Copenhagen.



FIG. 10

Knitted glove. Photo: © Koege Conservation Centre.



FIG. 11

Felt hat before conservation. Photo: Vivi Lena Andersen, © Museum of Copenhagen.

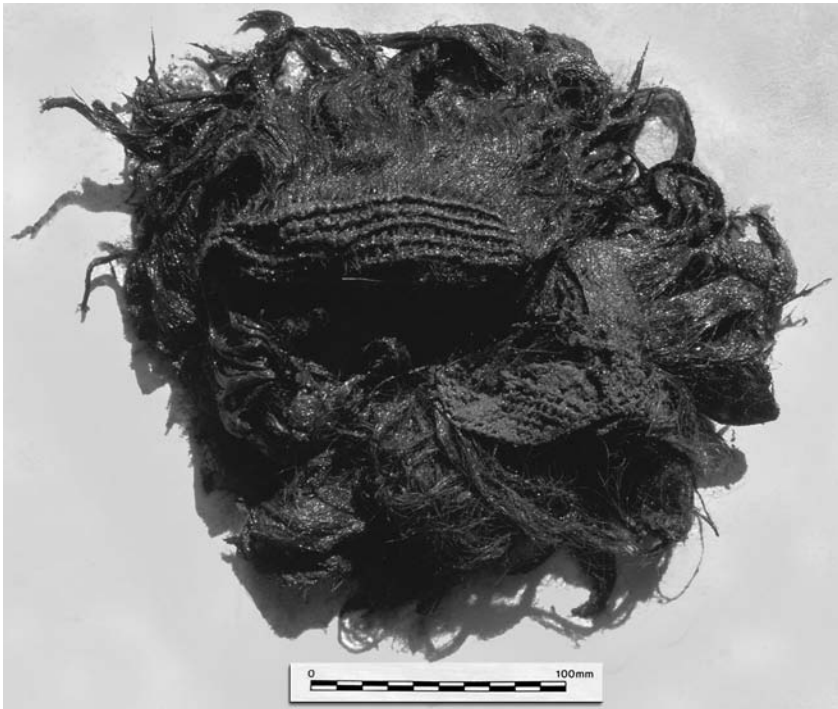


FIG. 12

Wig made from human hair, before conservation. Photo: Vivi Lena Andersen, © Museum of Copenhagen.

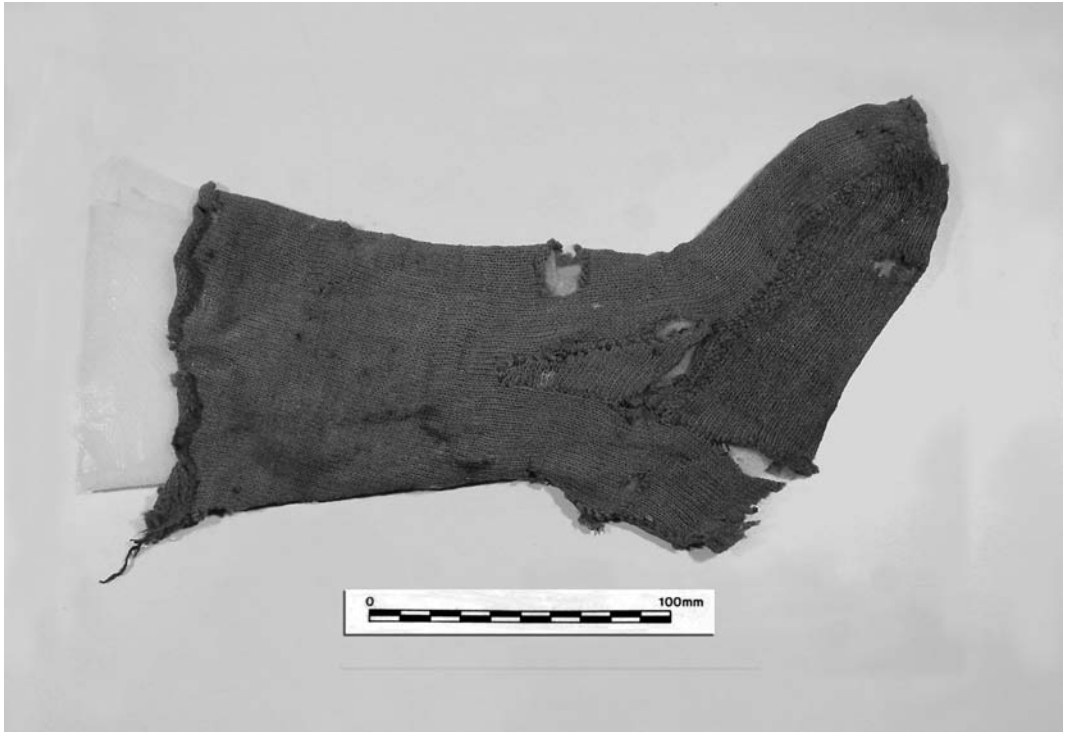


FIG. 13

A child's sock made of different knitted pieces. Photo: © Koege Conservation Centre.

can be dated to the early years of the 18th century. Since these older items were often found with the mid 18th-century material, they must have been old when discarded.

Much valuable information has already been gained by studying the specific areas and layers from which the artefacts come, but much needs to be done if the potential of this approach is to be fully realized. One major question is where the refuse comes from. Most of it seems to have been brought directly to the dump, since concentrations of different types of waste were seen in specific areas, indicating that most of the deposits were undisturbed. Broadly, the material can be placed in three categories:

- *Household debris*: food waste, ceramics, dress parts and refuse from latrines.
- *Production waste*, such as cow skulls from horn processing and butchering, wasters from the nearby faience factory of Store Kongensgade, wigs that have been cut about before being thrown away (indicating wig-making) and tailoring refuse in the form of pieces of textile and leather.

- *Military refuse*: uniform parts, canon balls, etc.

The fairly large quantities of valuable items, such as porcelain and faience, could indicate that part of the refuse came from the nearby Amalienborg Royal Palace or from the big new town houses built in New Copenhagen in the mid-18th century. The factory refuse from the nearby Store Kongensgade factory had travelled only about 200m. The parts of military uniforms could originate from the military fortification of Kastellet, just north of the site. Collectively, these finds could indicate that the waste comes primarily from areas close to the refuse dump.

In Denmark, there has been no tradition of archaeological excavation and research in the period that dates from after the Reformation of 1536. In part, this has arisen from a widespread assumption that written sources and museum collections supply all the required information from the era. This means that new methods have had to be invented during the excavation and the subsequent processing of finds. The excavation has already shown that there is great potential in

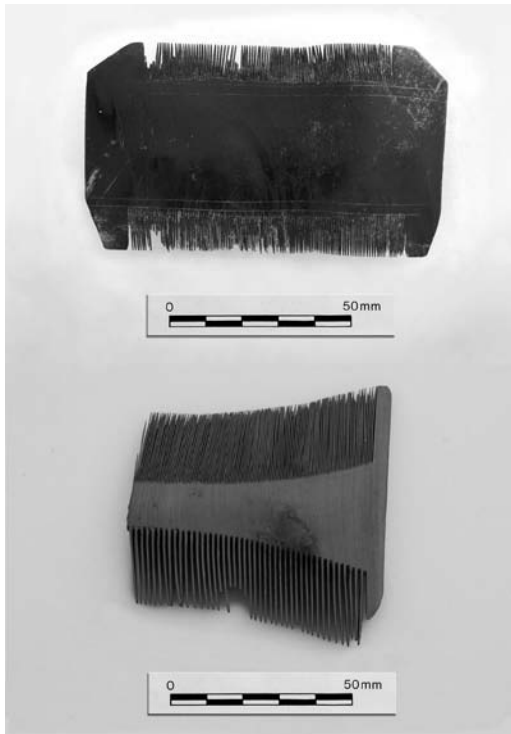


FIG. 14

Combs made of (a) horn and (b) wood. Photos: Soeren Kjems, © Museum of Copenhagen.



FIG. 15

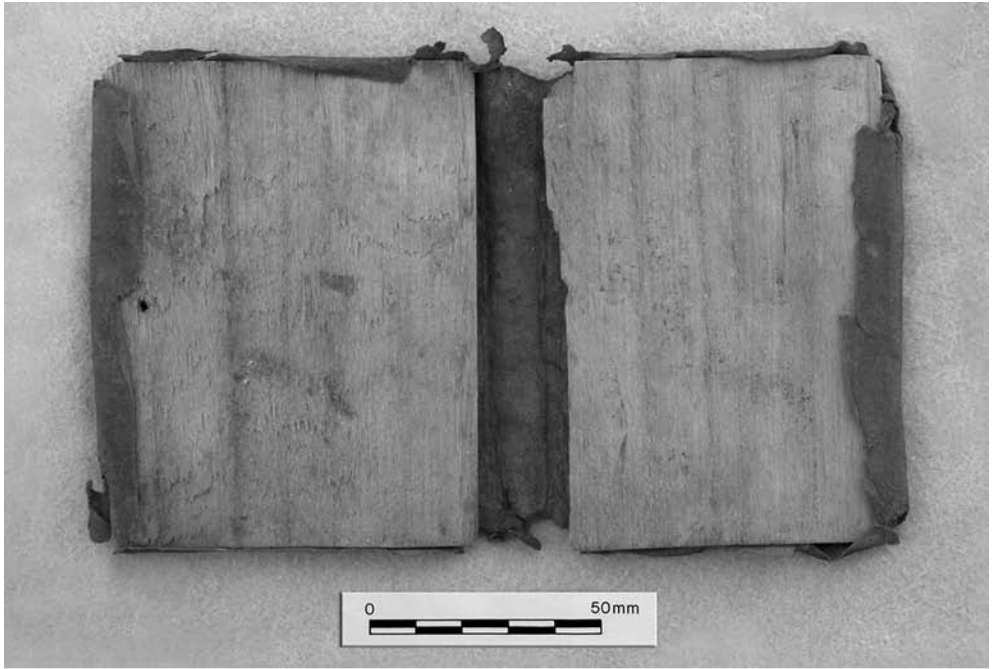
Male figure made of wood. Photo: Jesper Langkilde, © Museum of Copenhagen.

historical archaeology in Copenhagen, but it has also raised new questions and problems. Conservation is a major concern. The large and important groups of ceramics, glass and metal objects can survive with limited conservation, but the organic items have to be preserved to survive. All the organic material is, at present, kept in water, but this can only be done for a limited period. It might be argued that it is not necessary to preserve it all. However, if the relationships between the different types of item are to be explored, it is crucial that all the material should be preserved. In the author's opinion this does not mean that all finds of refuse should be preserved in the future; it is, however, very important to research thoroughly a well-defined sample to cast light on the future potential of this type of evidence. Another important issue is that the museum's collections consist primarily of high-value items; however, it may be the low value items in this sample that could yield the most important information. In studying this collection it will also be crucial to make comparisons with similar material from other refuse dumps, with the

written historical material, and with modern information about the disposal of refuse.⁶

ACKNOWLEDGMENTS

I wish to thank Bi Skaarup, head of the Archaeological Department of the Museum of Copenhagen, for her active interest and support. An absolutely fantastic crew of young enthusiastic archaeologists worked through the excavation and the processing of finds: Vivi Lena Andersen, Rikke Kristensen, Camilla Haarby Hansen, Susanne Mueller Jensen, Jesper Langkilde, Stine Wozniak and Soeren Kjems. The author also wishes to thank Karsten Skjold Petersen of the Royal Danish Arsenal Museum for helping with the interpretation of the military uniform parts, Inge Enghoff of the Zoological Museum, University of Copenhagen, for the preliminary analysis of the animal bones, Annine Moltzen of the NOK company for the preliminary analysis of the plant remains, Ulla Houkjaer of the Danish Museum of Decorative Art for her help with the preliminary analysis of the ceramics, and



(a)



(b)

FIG. 16

Cover of a small book consisting of wooden boards covered with leather, shown (a) open and (b) closed.

Photo: Jesper Langkilde, © Museum of Copenhagen.

Bjoern Westerbeeck Dahl of Copenhagen City Hall Library for help with the historical sources. Finally, Simon Bothfeldt and his co-workers at the Conservation Centre in Koege deserve a special acknowledgement for their time-consuming and difficult work on organic materials.

NOTES

- ¹ Andersen 1985, 42–47; Rosenkjær 1893.
- ² Lorenzen 1940, maps XVIII–XXI.
- ³ Ahlefeldt-Lauervig 1971; Wodstrup 1976, 216–21.
- ⁴ Christiansen 2004; Pedersen 2004, 13–22.
- ⁵ Andersen 1977; Lorenzen 1971, 361–87.
- ⁶ Schiffer 1972, 156; Mikkelsen 1991, 49–92; Ratje & Murphy 1992; Pedersen 2004, 13–22.

BIBLIOGRAPHY

PUBLISHED SOURCES

- Ahlefeldt-Lauervig, J. 1971, 'Københavnske jordfund 1970', *Historiske meddelelser om København 1971*, Copenhagen: Hendriksens eftf, 130–35.
- Andersen, E. 1977, *Danske dragter—moden i 1700-årene*, Copenhagen: Nationalmuseet.
- Andersen, K., 1985, 'Frihavnen—Den første Kongemoseplads', *Nationalmuseets Arbejdsmark 1985*, Copenhagen: Nationalmuseet, 42–47.

- Christiansen P. 2004, 'Hvorfor folkekultur — Dansk Folkemindesamling 100 år', *Siden Saxo*. no. 2, 25–29.
- Lorenzen, E. 1971, 'Modetøj og gangklæder', in Stensberg (ed.) 1971, 361–87.
- Lorenzen, V. 1940, *Haandtegnede Kort 1660–1757*, Copenhagen: Henrik Koppels Forlag.
- Pedersen, R. 2004, 'Studying the materiality of culture. Reflections on some fundamental issues', *Ethnologia Scandinavica* 34, 13–22.
- Ratje, W. & Murphy, C. 1992, *Rubbish. The Archaeology of Garbage*, New York: Harper Collins.
- Rosenkjær, H. N. 1893, 'Fra Frihavnen', *Naturen og mennesket* 9.
- Schiffer, M. 1972, 'Archaeological context and systemic context', *American Antiquity* 37.2, 156–65.
- Stensberg A. (ed.) 1971, *Dagligliv i Danmark i det Syttende og Attende århundrede*, Copenhagen: Arnold Busk.
- Wodstrup, J. 1976, 'Københavnske jordfund', *Historiske meddelelser om København 1976*, Copenhagen: Hendriksens eftf.

UNPUBLISHED SOURCE

- Mikkelsen, A. 1991, 'Skarn, Skrald og Affald. Træk af affaldets kulturhistorie 1840–1990', University of Copenhagen, PhD thesis.

Copenhagen City Museum, Absalonsgade 3, 1658 Copenhagen V, Denmark [lhm.kbm@kff.kk.dk]

The Kenneth J. Barton collection of vernacular pottery

By DAVID DAWSON

SUMMARY: Kenneth Barton's large collection of everyday post-medieval European ceramics has recently been donated to Somerset County Museums. The Note describes the character of the collection, the intentions behind its formation, its potential for research, and access to the collection.

Whilst reference collections of vernacular pottery peculiar to a particular region are relatively commonplace, it is rare to find a good reference collection in which the vernacular wares of a wide swathe of western Europe and the Mediterranean

can be compared. To archaeologists, modern potters and anyone interested in traditions of making pottery over the past 300 years, the Barton collection is an invaluable resource. The experience of taking a Saintonge *pégau* into one's own hands, to