

THE BEADS OF ROMAN AND POST-MEDIEVAL ANTWERPEN, BELGIUM

Karlis Karklins and Tony Oost

Excavations conducted at several sites in Antwerpen, a principal city and seaport on the Schelde River in northern Belgium, have uncovered a small but significant collection of glass beads. These range from a decorated specimen of the Roman period to tubular square- and star-sectioned beads of the 16th-17th centuries. The Post-Medieval specimens, found in the cesspits of merchants' homes, give us an idea of what Antwerpen was exporting during the early part of this period.

INTRODUCTION

Much is known about the sources of specific types and styles of European glass beads of the 19th and 20th centuries. Unfortunately, this does not hold true for earlier times. While the data base for Dutch beads is relatively sound (Baart 1988; Karklins 1974, 1983, 1985a), this is not the case for other countries. For various reasons, European archaeologists have generally been reluctant to study beads, especially those of the Post-Medieval period. Without comparative data from other contemporary bead-producing centers, it is impossible to state categorically which beads were made in which countries at a specific time. In an attempt to increase the existing data base for Europe, Karklins visited the Archaeology Department of the Kunsthistorische Musea, Antwerpen, in October of 1984 to examine the glass beads recovered from three sites in the old part of the city: Stadsparking, Kaasstraat and Waterkerende Muur. The excavation of these sites, all of a rescue nature intended to salvage the archaeological deposits prior to building construction, was conducted by the Archaeology Department of the City of Antwerpen. At the Kaasstraat site, assistance was provided by members of the Antwerpse Vereniging

voor Bodem- en Grotonderzoek, the local archaeological society.

The beads are classified using the system developed by Kenneth and Martha Kidd (1970) as expanded by Karklins (1985b). An asterisk (*) denotes varieties not recorded by the Kidds. A sequential letter is appended to their codes for ease of reference. Where possible, correlations are also made with the system devised for 16th-century Spanish trade beads by Marvin T. Smith and Mary Elizabeth Good (1982). While the Munsell values identified for the beads in the two systems do not always match exactly, the beads are, nonetheless, visually identical.

Colors are identified using common color names supplemented by Munsell color codes (Munsell Color 1976). Diaphaneity is described utilizing the terms opaque (op.), translucent (tsl.) and transparent (tsp.). Opaque beads are impenetrable to light except on the thinnest edges. Specimens that are translucent transmit light but diffuse it so that an object (such as a pin in the perforation) viewed through them is indistinct. A pin in the perforation of a transparent bead is clearly visible.

In the bead descriptions that follow, Pl. = color plate, R. = row in color plate and # = position in row.

BEADS OF THE STADSPARKING SITE

Now an underground parking garage, the Stadsparking site (A.Sp.) is situated in the area enclosed by the town hall, the Butchers' Hall and the Schelde (Fig. 1). The area is just outside the wall and ditch of the "Steen," the 10th-century castle around which grew present-day Antwerpen. The excavations

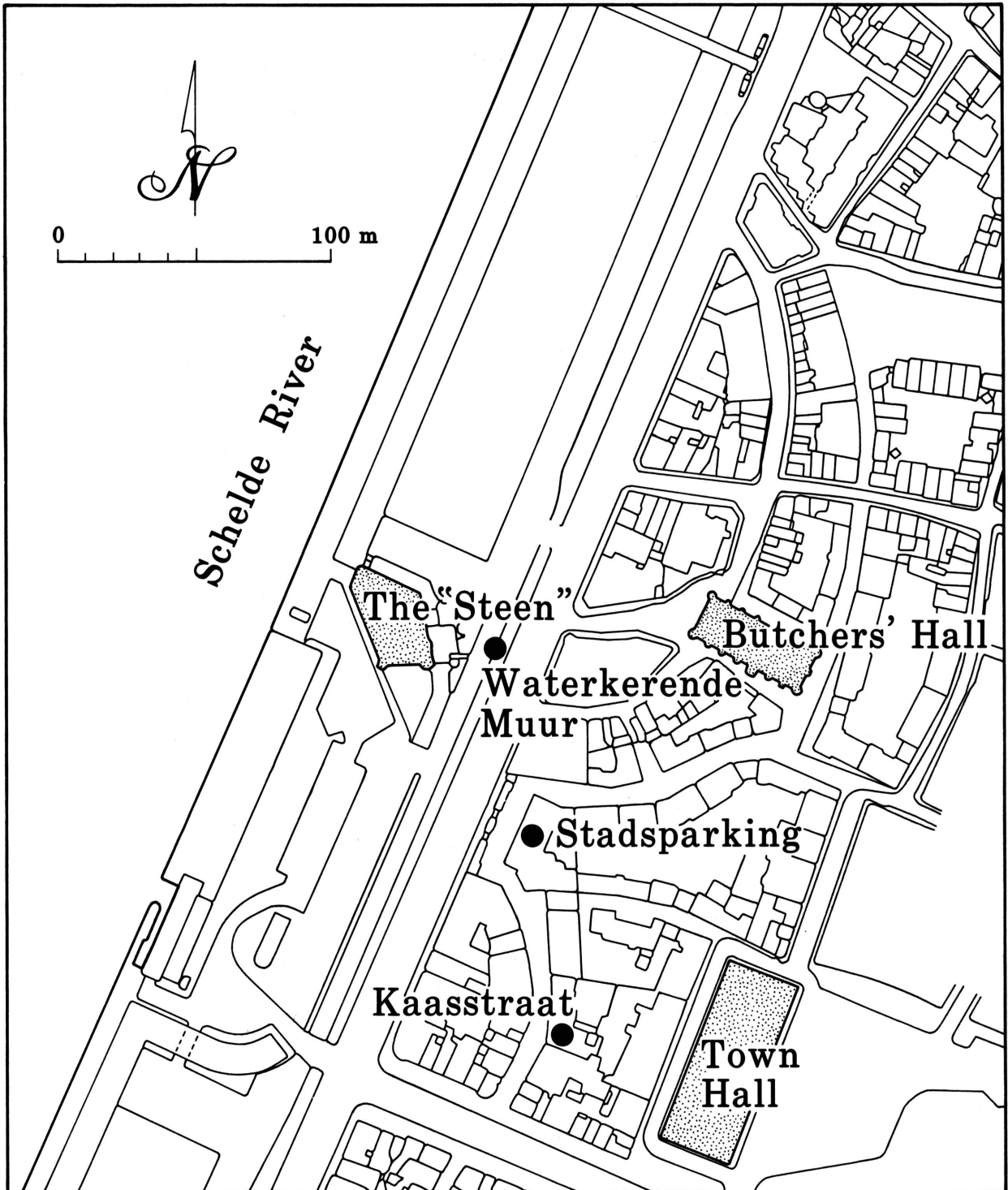


Figure 1. Map of the heart of old Antwerpen showing the locations of the three bead-producing sites (drawing by D. Kappler).

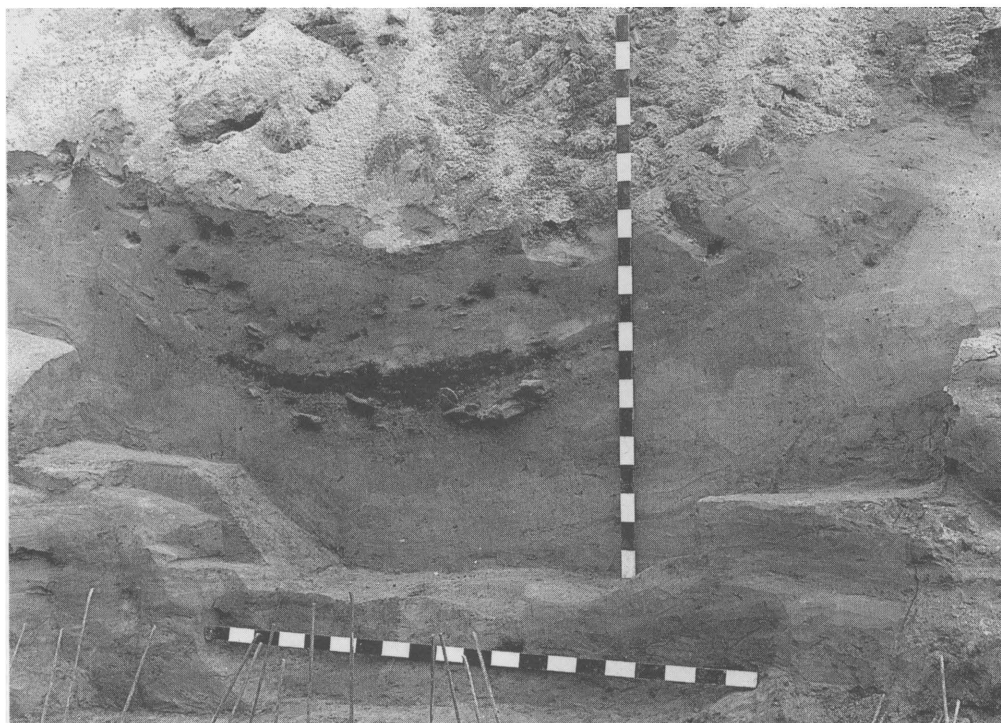


Figure 2. Profile of the Roman trash pit at the Stadsparking site. The bead was found beneath the black charcoal layer. Scale bars are one meter long (© Archaeology Department, City of Antwerpen).

conducted here in the mid-1970s were, by far, the most extensive to be undertaken in the city.

Although the site produced only a single glass bead, it was a very important find as it came from a trash pit (Fig. 2) dating to the Roman period (ca. A.D. 150-ca. 250). The pit, which also contained ceramics, roof tiles, fragmentary glass vessels and animal bones, was a sealed context so the bead is securely dated. It is, so far, the only Roman bead to be excavated in Antwerpen.

The bead was formed by winding a gather of glass onto a metal mandrel until the desired size and shape were achieved. A thread of contrastingly colored glass was then trailed over its surface.

WIIId*(a). Barrel-shaped; tsl.-op. burgundy (10.0RP 4/6) body decorated with a meandering thread of op. light gold (2.5Y 7/8) glass (the glass was wet when the colors were determined); 1 specimen (Fig. 3). The glass is decomposing so accurate measurements could not be obtained.

Diameter: ca. 11.7 mm

Length: ca. 9.5 mm



Figure 3. The Roman bead from the Stadsparking site (2:1) (© Archaeology Department, City of Antwerpen).

BEADS OF THE KAASSTRAAT SITE

Archaeological research was carried out at No. 13 Kaasstraat (A.Ka.2) in 1981 prior to construction of the new Ethnography Museum (Anonymous 1989). Fourteen varieties of glass beads were uncovered in a cesspit (Fig. 4) associated with the oldest part of the house. Accompanying artifacts included ceramics, glass and other objects dating to the late 16th and early 17th centuries (Denissen 1984: 30-3). They indicate a rich household with objects obtained from many parts of the world.

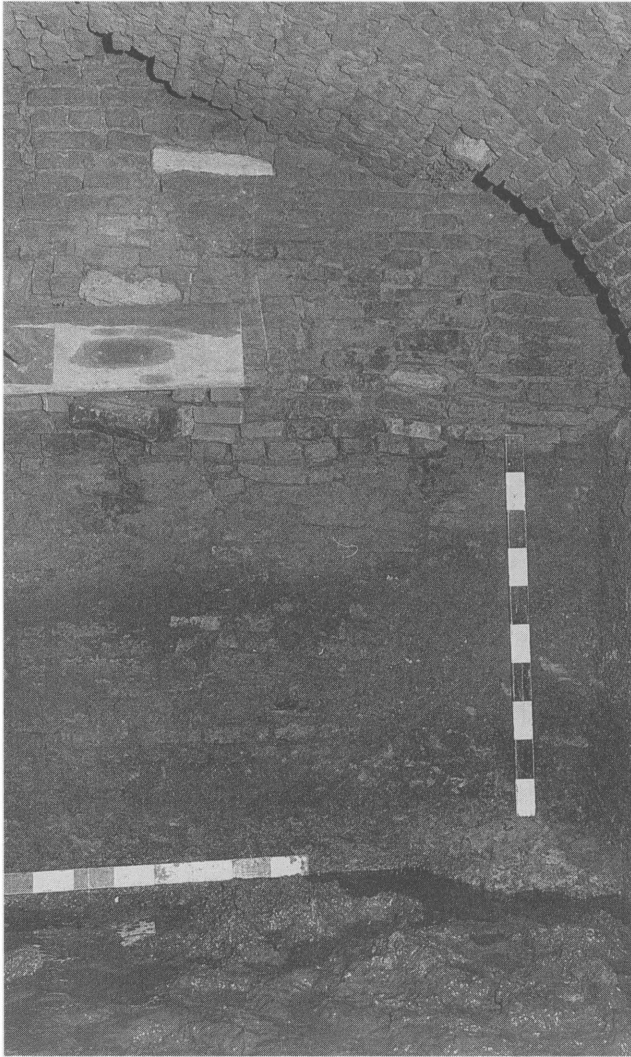


Figure 4. Interior of the vaulted brick cesspit at the Kaasstraat site. Trash was thrown into it via a shaft whose opening is visible in the upper right. Scale bars are one meter long (© Archaeology Department, City of Antwerpen).

The house was owned by various persons from 1577 to 1787, but only one of the actual owners is known to have lived here; Jan Bode, a merchant of spices, dried fruit and sugar, and one of the wealthiest men living on the Kaasstraat, occupied the house in 1582-84. It is likely that either he or one of his successors — druggists and grocers like him — used the beads for trading purposes abroad. Bode is known to have obtained goods from Venice.

The 60 Kaasstraat beads are all of drawn manufacture. They were produced by drawing a hollow gather of glass into a long tube which was then

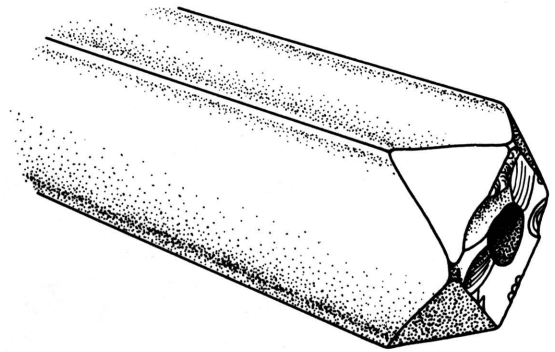


Figure 5. Bead variety Ic*(a) showing the distinctive corner grinding of the tubular Kaasstraat beads (drawing by D. Kappler).

subsequently broken into bead lengths. In most cases, the gather was apparently thrust into a metal mold to give it a square or star-shaped cross section prior to the drawing process. A bulb of percussion on either end of the Ic1 bead reveals that the tube was sectioned by placing it on a sharp edge and then striking it with a sharp blade. Only one of the beads (variety IIa6) was subsequently heat-rounded. The ends of the tubular beads were not fire polished to round them. However, the end treatment of the 22 intact specimens suggests that all of them probably had their sharp corners ground off originally (Fig. 5).

Fourteen Kidd varieties are represented, eight of which have correlatives among the Spanish trade beads recorded by Smith and Good (1982):

Ic1. Long tubular, square cross section; op. Indian red (10R 4/8); 1 complete specimen (Pl. VIA, R.1, #1). The bead has uneven (undulating) sides and a small, off-center perforation. The ends are formed by relatively flat breaks. One end exhibits ground edges.

Diameter: 11.3 mm

Length: 24.9 mm

Ic*(a). Long tubular, square cross section; tsp. bright navy blue (7.5PB 2/7); 21 specimens (2 complete; 19 incomplete) (Pl. VIA, R.1, #2). The sides are uneven; the corners are ground. Smith and Good variety CII.SC.T1.Va.

Diameter: 4.8- 7.0 mm

Length: 47.5-56.4 mm (intact specimens)

IIa6. Oblate; op. black (N 1/0); 1 complete specimen (Pl. VIA, R.1, #3). Similar to Smith and Good variety CI.SB.T1.Vf.

Diameter: 7.9 mm

Length: 6.0 mm

IIIc*(a). Long tubular, square cross section; tsp. bright blue (5.0B 5/7) exterior; op. white (N 9/0) middle layer; tsp. light gray (N 7/0) core; 6 incomplete specimens (Pl. VIA, R.1, #4). The corners have been ground off. Smith and Good variety no. CII.SC.T2.Vb.

Diameter: 4.9-5.8 mm

Length: 28.6 mm (existing maximum)

IIIc1. Long tubular, square cross section; tsp. bright blue (5.0B 5/7) exterior; op. white (N 9/0) middle layer; tsp. bright blue core; 5 specimens (1 complete; 4 incomplete) (Pl. VIA, R.2, #1). Ground corners.

Diameter: 4.4-6.4 mm

Length: 37.0 mm (intact specimen)

IIIc3. Long tubular, square cross section; tsp. bright navy blue (7.5PB 2/7) exterior; op. white (N 9/0) middle layer; tsp. light gray (N 7/0) core (several cores have a violet tint); 5 specimens (2 complete; 3 incomplete) (Pl. VIA, R.2, #2). Ground corners. A long version of Smith and Good variety no. CII.SC.T2.Vf.

Diameter: 5.5- 6.8 mm

Length: 36.5-54.3 mm (intact specimens)

IIIc*(b). Long tubular, square cross section; tsp. bright navy (7.5.PB 2/7) exterior; op. white (N 9/0) middle layer; tsp. bright blue (5.0B 5/7) core; 6 specimens (2 complete; 4 incomplete) (Pl. VIA, R.2, #3). Ground corners. A long version of Smith and Good variety no. CII.SC.T2.Vg.

Diameter: 5.3- 7.6 mm

Length: 30.2-37.0 mm (intact specimens)

IIIc'*(a). Long tubular (twisted), square cross section; tsp. bright blue (5.0B 5/7) exterior; op. white (N 9/0) middle layer; op. black (N 1/0) core; 1 incomplete specimen (Pl. VIA, R.3, #1). Both ends broken; no ground corners. Smith and Good variety no. CIII.SA.T2.Va.

Diameter: 6.6 mm

Length: 15.2 mm (existing maximum)

IIIc'*(b). Long tubular (twisted), square cross section; tsp. bright blue (5.0B 5/7) exterior; op. white (N 9/0) middle layer; tsp. light gray (N 7/0) core; 5 in-

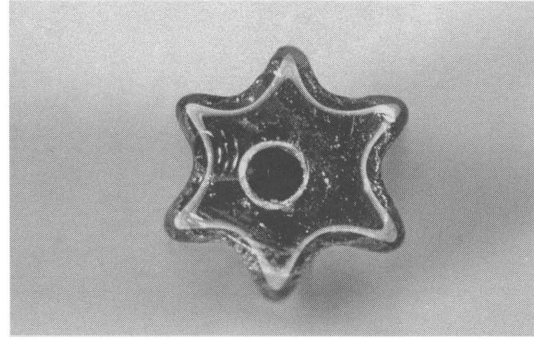


Figure 6. End view of star-sectioned bead variety IIIe*(c)(photo by K. Karklins).

complete specimens (Pl. VIA, R.3, #2). Ground corners. Smith and Good variety no. CIII.SC.T2.Vc.

Diameter: 6.1-7.1 mm

Length: 29.0 mm (existing maximum)

IIIe'*(c). Long tubular (twisted), square cross section; tsp. bright blue (5.0B 5/7) exterior; op. white (N 9/0); tsp. light gray (N 7/0); tsp. bright blue core; 1 incomplete specimen (Pl. VIA, R.3, #3). Corners ground off one end.

Diameter: 6.2 mm

Length: 23.0 mm (existing maximum)

IIIe'*(4). Long tubular (twisted), square cross section; tsp. bright blue (5.0B 5/7) exterior; op. white (N 9/0) middle layer; op. bright navy blue (7.5PB 2/7) core; 1 incomplete specimen (Pl. VIA, R.3, #4). The corners have been ground off one end. Smith and Good variety no. CIII.SC.T2.Va.

Diameter: 5.2 mm

Length: 13.0 mm (existing maximum)

IIIe*(a). Long tubular, star-shaped cross section (6 rays); op. Indian red (10.0R 4/8) exterior; op. black (N 1/0) core; 5 incomplete specimens (Pl. VIA, R.4, #1-2). The corners of the rays have been ground off one end of three beads.

Diameter: 6.4-12.8 mm

Length: 50.7 mm (existing maximum)

IIIe*(b). Long tubular, star-shaped cross section (6 rays); op. black (N 1/0) exterior; op. Indian red (10.0R 4/8) core; 1 complete specimen (Pl. VIA, R.4, #3). The corners of the rays have been ground off.

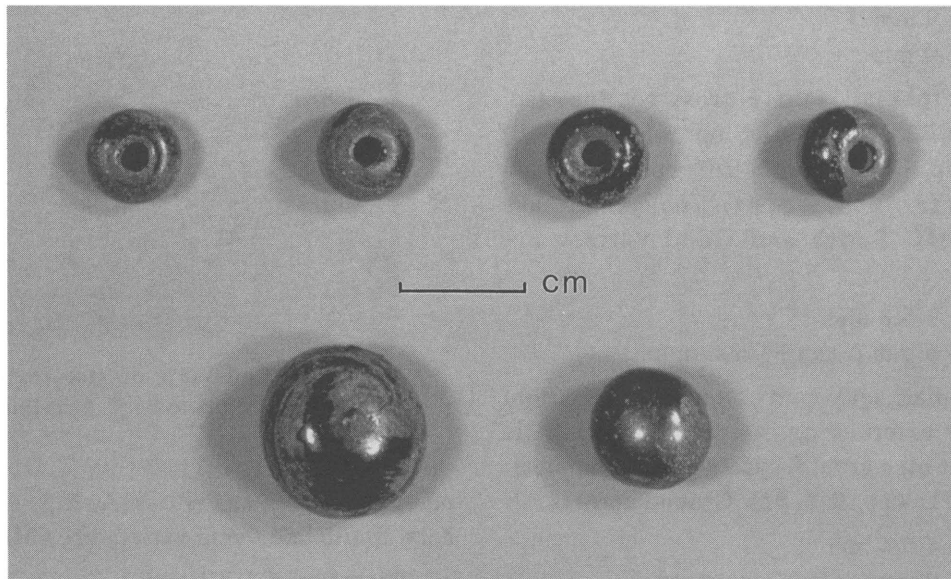


Figure 7. Waterkerende Muur site: top, oblate black beads (IIa6); bottom, black glass buttons (photo by K. Karklins).

Diameter: 7.1 mm
Length: 50.5 mm

IIIe*(c). Long tubular, star-shaped cross section (6 rays); thin op. black (N 1/0) exterior; thin op. Indian red (10.0R 4/8); thick op. black; thin op. Indian red core; 1 complete specimen (Fig. 6). The corners of the rays have been ground down.

Diameter: 14.8 mm
Length: 54.3 mm

BEADS OF THE WATERKERENDE MUUR SITE

Another cesspit was found during the construction of the *Waterkerende Muur* (W.K.M.), a seven-kilometer-long concrete wall designed to protect the inner town against flooding. The pit contained several glass beads and buttons, along with glass and ceramic objects attributable to the late 16th and early 17th centuries. Nothing is known about the inhabitants of the associated house, but it is situated in the same merchant's sector of Antwerpen as the previous site and the artifacts suggest a wealthy occupant.

The beads are all of drawn manufacture. The buttons were produced by winding a gather of viscous glass onto a metal shank. The latter have all since disintegrated.

IIa6. Oblate; op. black (N 1/0); 6 specimens (Fig. 7, top). Similar to Smith and Good variety CI.SB.T1.Vf.

Diameter: 7.9-8.0 mm
Length: 4.5-6.3 mm

Buttons. Oblate to globular; op. black (N 1/0); 2 specimens (Fig. 7, bottom).

Diameter: 9.8-13.9 mm
Height: 8.5- 9.1 mm

DISCUSSION AND CONCLUSION

The Roman bead and associated artifacts from the Stadspark site are important finds for Antwerpen as these objects are the first to document a Roman occupation of this city.

The Kaasstraat site collection is dominated by square-sectioned tubular beads with ground corners, commonly referred to as Nueva Cadiz Plain (types Ic and IIIc) and Twisted (type IIIc') (Fairbanks 1968), although researchers now only apply these terms to specimens from Spanish contact sites (M.T. Smith 1993: pers. comm.). The beads have a wide distribution, being found at sites in many parts of the world, but especially North and South America. In Venezuela, Peru and the southeastern United States, they are attributed to the early to mid-16th century

(Deagan 1987: 163; Mitchem 1988; Smith and Good 1982). However, Fairbanks (1968: 8) originally felt that they were also attributable to the late 16th and possibly early 17th centuries as well, and this is certainly more in keeping with the date assigned to the Kaasstraat cesspit. It is also more in keeping with their chronological position in the American Northeast where they appear in contexts from ca. 1600 to possibly as late as 1710 (Kent 1983; Kenyon and Kenyon 1983; Pratt 1961; Rumrill 1991). It remains to be determined whether the beads from the later contexts are simply at the tail end of a stylistic continuum, or represent a resurgence of the production of earlier varieties at a later date and possibly in another country or countries as postulated by M.T. Smith (1993: pers. comm.). However, given that seven of the nine square-sectioned beads in the Kaasstraat collection have correlatives among the 16th-century Spanish trade beads recorded by Smith and Good, the former seems the likeliest. The star-sectioned beads have no known correlatives elsewhere and are presently unique to Antwerpen.

Where the Kaasstraat beads were manufactured remains a bit of a mystery. While Antwerpen is known to have had a successful glass industry from 1558 to 1625 (El Dekmal-Denissen 1989: 121-33), there is no documentary evidence for the production of glass beads (Hudig 1923). Neither is there any archaeological evidence for their production. All the recovered beads are finished products and do not include wasters from beadmaking. Thus, while there is the possibility that some of the beads did originate in Antwerpen, it is equally possible that they were obtained from Venice, a city that at least one of the site's occupants is known to have dealt with. Most of the Kaasstraat beads are broken specimens, suggesting that they represent discarded merchandise considered unsuitable for sale.

The black beads and buttons recovered from the Waterkerende Muur site also have a broad distribution. Both in the city of Amsterdam and Novoya Zemlya in the Russian Arctic, globular to oblate black-glass buttons appear in late 16th-century contexts (Baart and others 1974: 28). In the American Northeast they are found at archaeological sites dating from the late 16th to the late 17th century (Pratt 1961; Rumrill 1991), and are attributed to the Dutch (Bradley 1987: 158).

Pea-sized black beads (IIa6) appear at about the same time in Amsterdam and continue on until the second quarter of the 18th century (Karklins: personal observation). In New York state and eastern Pennsylvania, these beads appear around 1570 and continue in use until at least 1745 (Kent 1983; Pratt 1961; Wray 1983). These time ranges are certainly in keeping with the late 16th – early 17th-century date postulated for the Waterkerende Muur cesspit.

As for the Kaasstraat beads, it is uncertain where the Waterkerende Muur buttons and beads originated. Without comparative archaeological and chemical data, it is presently impossible to state whether the objects originated locally or were produced elsewhere, possibly Amsterdam.

Considering their contexts and distribution, it is probable that the beads and glass buttons recovered from the Kaasstraat and Waterkerende Muur sites represent merchandise intended for shipment to various trading centers around the world rather than for local consumption. Although relatively few, the recovered specimens give us a good idea of what set sail from the busy port of Antwerpen in the late 16th and early 17th centuries.

REFERENCES CITED

- Anonymous**
1989 *Achter de gevels van het Etnografisch Museum. Archivalisch, bouwhistorisch en archeologisch onderzoek.* Antwerpen.
- Baart, Jan M.**
1988 Glass Bead Sites in Amsterdam. *Historical Archaeology* 22(1):67-75.
- Baart, Jan M. and others**
1974 Knopen aan het Hollandse kostuum uit de zestiende- en zeventiende eeuw. *Antiek* 9(1):18-48.
- Bradley, James W.**
1987 *Evolution of the Onondaga Iroquois: Accommodating Change, 1500-1655.* Syracuse University Press, Syracuse.
- Deagan, Kathleen**
1987 *Artifacts of the Spanish Colonies of Florida and the Caribbean, 1500-1800. Volume 1: Ceramics, Glassware, and Beads.* Smithsonian Institution Press, Washington.

Denissen, Sabine

- 1984 De opgravingen Kaasstraat 13, Afvalput 2 te Antwerpen. III: Het glas. *Bulletin van de Antwerpse Vereniging voor Bodem- en Grotonderzoek* 1:30-33.

El Dekmal-Denissen, Sabine

- 1989 De glasmanufacturen in Antwerpen. In *Het glas in België van de oorsprong tot heden*, edited by L. Engen, pp. 121-133. Mercatorfonds, Antwerpen.

Fairbanks, Charles H.

- 1968 Early Spanish Colonial Beads. *Conference on Historic Site Archaeology Papers, 1967* 2(1):3-21.

Hudig, Ferrand

- 1923 *Das Glas*. Vienna.

Karklins, Karlis

- 1974 Seventeenth Century Dutch Beads. *Historical Archaeology* 8:64-82.
- 1983 Dutch Trade Beads in North America. In "Proceedings of the 1982 Glass Trade Bead Conference," edited by Charles F. Hayes III. *Rochester Museum and Science Center, Research Records* 16:111-126.
- 1985a Early Amsterdam Trade Beads. *Ornament* 9(2):36-41.
- 1985b Guide to the Description and Classification of Glass Beads. In *Glass Beads*, 2nd ed., pp. 85-118. Parks Canada, Studies in Archaeology, Architecture and History, Ottawa.

Kent, Barry C.

- 1983 The Susquehanna Bead Sequence. In "Proceedings of the 1982 Glass Trade Bead Conference," edited by Charles F. Hayes III. *Rochester Museum and Science Center, Research Records* 16:75-81.

Kenyon, Ian T. and Thomas Kenyon

- 1983 Comments on 17th Century Glass Trade Beads from Ontario. In "Proceedings of the 1982 Glass Trade Bead Conference," edited by Charles F. Hayes III. *Rochester Museum and Science Center, Research Records* 16:59-74.

Kidd, Kenneth E. and Martha A. Kidd

- 1970 A Classification System for Glass Beads for the Use of Field Archaeologists. *Canadian Historic Sites: Occasional Papers in Archaeology and History* 1:45-89.

Mitchem, Jeffrey M. and Jonathan M. Leader

- 1988 Early Sixteenth Century Beads from the Tatham Mound, Citrus County, Florida: Data and Interpretations. *Florida Anthropologist* 41(1):42-60.

Munsell Color

- 1976 *Munsell Book of Color, Glossy Finish Collection*. Macbeth Division, Kollmorgen Corporation, Baltimore.

Pratt, Peter P.

- 1961 *Oneida Iroquois Glass Trade Bead Sequence, 1585-1745*. Fort Stanwix Museum, Rome, New York.

Rumrill, Donald A.

- 1991 The Mohawk Glass Trade Bead Chronology: ca. 1560-1785. *Beads* 3:5-45.

Smith, Marvin T. and Mary Elizabeth Good

- 1982 *Early Sixteenth Century Glass Beads in the Spanish Colonial Trade*. Cottonlandia Museum Publications, Greenwood, Mississippi.

Wray, Charles F.

- 1983 Seneca Glass Trade Beads c.A.D. 1550-1820. In "Proceedings of the 1982 Glass Trade Bead Conference," edited by Charles F. Hayes III. *Rochester Museum and Science Center, Research Records* 16:41-49.

Karlís Karklins
Parks Canada
1600 Liverpool Court
Ottawa, Ontario K1A 0H3
Canada

Tony Oost
Museum Vleeshuis
Vleeshouwersstraat, 38-40
B-2000 Antwerpen
Belgium