# Roman Figure-Engraved Glass in The Metropolitan Museum of Art

## **BEAUDOIN CARON**

Centre d'études classiques, Université de Montréal

HE FIGURE-ENGRAVED GLASSES described in this catalogue were acquired between 1881 and 1959. Three of them (cat. nos. 1, 6, 13) came from the Jules Charvet collection,<sup>1</sup> purchased and presented to the Metropolitan Museum in 1881 by the then trustee H. G. Marquand. Six others (cat. nos. 4, 5, 7, 9, 14) were part of the Julien Gréau collection, purchased by J. Pierpont Morgan and later lent to the Museum in 1910 and then bequeathed to it in 1917.<sup>2</sup> This gave the Metropolitan the largest holding of ancient glass in the United States at the time.

Many pieces in the Gréau collection, including engraved ones, were sold in 1928.3 This sale, or "deaccessioning" in museum parlance, very controversial at the time,<sup>4</sup> was meant to "dispose of surplus material." It also unfortunately deprived the Museum of many engraved fragments which, in the light of later discoveries, would be quite interesting today.<sup>5</sup> It is difficult to know what exactly were the criteria of which to keep and which to sell; the state of preservation of the vases more than the interest of the iconography seems to have been the guiding principle.

The other glasses (cat. nos. 2, 3, 8, 10, 11) were acquired from dealers, directly or through agents; one was discovered during the Museum's excavations in Egypt (cat. no. 12).

Of all these, only one (cat. no. 8) comes from a known findspot, and a poorly documented one at that, a grave in Sicily. The other objects discovered with it are now lost; some were not even inventoried.6 It will therefore be important to find comparanda so as to gather more information on the dating and the probable origin of each glass.

Molded and polished glass decorated with lathe-cut grooves appeared in the third century B.C.;7 glass adorned with engraved figures is attested only much later, from the first century A.D. onward, first in the

© The Metropolitan Museum of Art 1997 METROPOLITAN MUSEUM JOURNAL 32

The notes for this article begin on page 46.

eastern provinces of the Roman world.<sup>8</sup> This production-which must be distinguished from relief-cut glass, that is, glassware adorned with carving in relief, such as cameo glass-is at first modest. The origin of this craft is probably a belated application of the already ancient art of the gem cutter.9 The oldest known figure-engraved vases, dating from the first to the early second century A.D., are generally molded and polished<sup>10</sup> and then figure-engraved. The ornamentation of these early pieces is usually simple.

It is pertinent to mention here vases of obsidian, engraved and then inlaid with glass. Obsidian (a natural volcanic glass) had been used for tools and jewelry since Paleolithic times, and it was always the object of a brisk trade. But glass-inlaid obsidian vases in shapes reminiscent of early engraved glass-skyphoi, shallow bowls, and plates (Figure 1)<sup>11</sup>—appeared only between the first century B.C. and the first century A.D. Indeed, the oldest figure-engraved glass we know of (Figure 2)<sup>12</sup> is a translucent green handled bowl with inlaid engraving; it would therefore seem that the early engraved-glass industry was at first a derivative or an imitation of costlier obsidian vases;<sup>13</sup> but this fact should not be stretched too far, since none of the other early engraved glasses I know of were inlaid and green-colored. The obsidian industry could be of Egyptian origin, just as the early engraved glasses were.14

Production of engraved glass apparently increased in the third and fourth centuries A.D.; most of it seems by then concentrated in the western provinces, especially the Rhine area, Great Britain, and Italy. It is possible to classify most of these finds by "workshops." A workshop, in this context and throughout this study, is a group of vases of contemporaneous shape and exhibiting the same engraving techniques and a similar composition of the design.<sup>15</sup> The simplicity of the tools used by the engravers allowed them to travel from one center to another in search of patrons, which explains in part the wide distribution of several workshops.

19



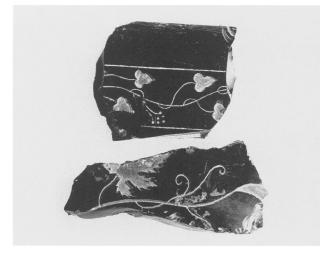


Figure 1. Obsidian fragments. Roman, ca. 1st century B.C. H. 7 cm (.2359), H. 5.5 cm (.2360). The Metropolitan Museum of Art, Gift of J. Pierpont Morgan, 1917, 17.194.2359, 2360

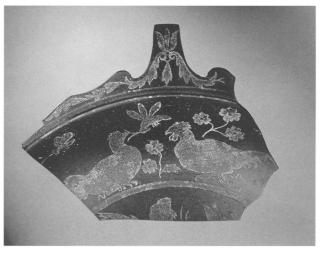


Figure 2. Figure-engraved glass fragment, early 1st century A.D. L. 12 cm. Corning Museum of Glass, 66.1.227 (photo: Corning Museum of Glass)

The method used by the engravers was probably, as we have seen, akin to the craft of the gem cutter. R. J. Charleston has gathered what little data there is pertaining to this question;<sup>16</sup> he pointed out that no engraving tool has ever been discovered (or identified as such) so far. These tools were probably lathes powered by means of a bow to which an assortment of bronze wheels and points could be fitted. They were very likely used in conjunction with an abrasive, such as sand mixed with water. Depending on the width and diameter of the wheel and the pressure applied to the glass, the artist could trace a mere abrasion on the surface of the vase or leave a relatively deep cut in a certain shape. It is possible that superficial detail may have been added by hand. The one capital archaeological document is the representation of a lathe on a gem cutter's headstone (Figure 3).17 Nothing of importance can be added to Charleston's conclusions.

This is a technically simple method, but it demands great patience and skill. The finest pieces probably took weeks to finish, and one understands the despair of the artisan who lost a vase trying to do too much.<sup>18</sup>

The mention of glassware is common enough in ancient literature, but its description is often vague and misleading. It is usually difficult (if not impossible) to know with certainty whether one deals with lathe-cut, figure-engraved, mold-blown, or cameo glass, or even cut rock crystal or obsidian for that matter.<sup>19</sup> Here is a quick overview of the texts that may or may not have a connection to engraved glass.

An excerpt of Pliny the Elder (A.D. 23-79),<sup>20</sup> "Some are wheel-made, others wrought as silver vases," prob-

ably applies to molded and lathe-polished vases, still popular in Pliny's time; our catalogue number 1 would be a good example of this kind of ware. And the vases destroyed by the overeager engraver mentioned earlier are possibly, in Martial's mind, relief-cut or cameo vases. When he emphasizes elsewhere the low mercantile value<sup>21</sup> of wrought glasses, these are certainly mold-blown vases, which were by then mass produced. A poem of the Greek Anthology describing a "wrought crystal" likely refers to an engraved glass, according to Trowbridge;<sup>22</sup> but in this particular case her solution would be anachronistic because the poem is probably too early.23 A papyrus of early Christian date<sup>24</sup> mentions the use of goat's blood to soften crystal and glass; but the purpose of this operation is not known, nor whether the glass was then engraved.

The "glass that has been mined" mentioned by the novelist Achilles Tatius<sup>25</sup> could have been engraved,

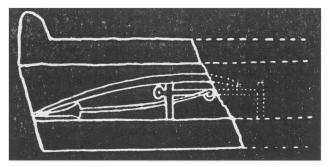


Figure 3. Close-up detail of a funerary stele (photo from *Journal of Glass Studies* [1964])

but the expression used to describe it is more reminiscent of openwork cage-cups, which were quite literally excavated in a very thick blank.

Dom Leclercq<sup>26</sup> believed that two passages in Tertullian (ca. 160–ca. 240) described glass cups engraved with the figure of Christ; but Tertullian never actually mentioned what these vases were made of; they might have been of clay, metal, or wood, for all we know. Besides, if the use of glass objects in the liturgy is known from the third century onward, it is never said that such objects are engraved or in any way adorned; the use of glass patens during the pontificate of Zephyrinus (199-217), for instance, is alluded to in the Liber pontificalis,<sup>27</sup> and Jerome (ca. 347-420)<sup>28</sup> praises the simplicity of the use of the glass chalice. But, again, nothing in these texts (or their contexts) allows one to see in them ornate, expensive objects. The only exception I know of is a "chalice of crystal of admirable beauty" mentioned by Gregory of Tours (ca. 538-ca. 594),29 and then it was quite possibly made of rock crystal. Finally, the following statement in Quintilian (ca. 35-ca. 95), "The art of engraving includes wood, ivory, marble, glass, precious stones,"30 very likely applies to sculpture in relief. There is not much to draw from it.

As far as I know, there are only four passages in classical literature describing what is almost certainly engraved glass. The first appears in the *Digest*:<sup>31</sup> "If you gave a vase to be cut, and if it breaks because of the engraver's carelessness, the latter is responsible; but if it breaks not because of carelessness but because of defective workmanship, he is not responsible."

The legislator uses the word *diatretum*, "engraved," hence *diatretarius*, which means "engraver," of intaglio, relief, or open-work glass; the same law expounded here probably applied to every kind of wrought glass. One can always argue that natural rock crystal (or obsidian) rather than glass is meant here, but it is hardly possible to argue that obsidian or rock crystal can have "defective workmanship" (*rimas vitiosas*), whereas artificial glass can.

This text (which is included in a legal code because the case certainly reappeared in court a number of times) is interesting. We can see that, in this case, the customer could himself supply the glass to be engraved. On the other hand, the engraver could commission the *vitriarius* (glassmaker) to supply him with a number of unadorned glasses, of a convenient shape and thickness. Be that as it may, we understand here that the glassblower is independent of the engraver. There probably was not too close a collaboration between engraver and glassblower.<sup>32</sup>

Claudian (ca. 365-408) three times<sup>33</sup> mentions glass

globes upon which stars and constellations are pictured. These are not natural rock crystal globes filled with water, as Trowbridge rightly noticed;<sup>34</sup> it was technically much easier for the glassworkers to "fire-close" a small aperture in the wall of a glass globe after filling it with water.<sup>35</sup> As far as I know, no object of this kind has yet been discovered, but colorless, glassy-looking globes symbolizing the universe do appear in Roman art.<sup>36</sup>

Much importance has been given to the literary sources describing Alexandria as an important glassworks center.<sup>37</sup> It was, at a given point in time, but most of these references are anterior to the apogee of the figure-engraved glass industry in the third and fourth centuries. Engravers certainly did work in Alexandria, but there is no evidence that it remained a major center of this particular trade in late antiquity.

The subjects on engraved glass are indifferently pagan or Christian. Many of these are repetitive and betray the influence of sketchbooks that patrons might

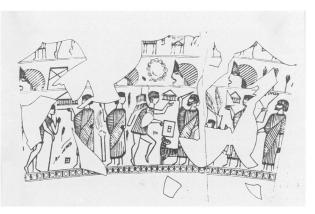


Figure 4. Bottle. Algiers, Musée des Antiquités nationales (drawing from *Libyca* [1959])

have consulted before commissioning an engraved vase. The accompanying inscriptions show that they were sometimes meant as gifts. They were sometimes commissioned by very wealthy patrons, or by some imperial administration, in order to commemorate an important celebration, such as the *vicennalia* (twenty years of rule) of an emperor or the nomination to office of a high-ranking civil servant. Some of the finest pieces were obviously distributed as gifts (*missoria*) by the grantees of these offices, often members of the highest families of the empire, during such a celebration. In these cases, the influence of official and monumental art (ivory diptychs, silverware, mosaics, sarcophagi) is sometimes visible in the composition.

As we saw earlier, according to the surviving literature, very poor Christian communities used glass vases, most probably unadorned, because they could hardly afford the service of a diatretarius.38 But was engraved glass ever used by some communities, as several archaeologists have suggested?39 As far as I know, only one such glass has been found within the ruins of a church, a tall bottle (Figure 4), which could hardly have been used in the liturgy and was already broken when interred in the grave, as its fragmentary state shows. Besides, it is difficult to explain why any liturgical vase would end up in a grave. So while engravedglass vases with Christian motifs were indeed commissioned by Christian patrons, there is no compelling reason to suppose that the same vases were used for the liturgy.

## CATALOGUE

Editor's note: All dates, unless specified, are A.D.; all vases are described from the outside; all dimensions are given in centimeters. H.=height, L.=length, W.=width, Diam.=diameter

**Cat. no. 1** (Figures 5–7). Dept. of Greek and Roman Art, 81.10.237. Ex coll. Charvet; gift of H. G. Marquand. Cast and polished, colorless, hexagonal bowl with a hexagonal base and long, wide, flat handles, pierced near the rim; two joined fragments; part of wall and rim missing; rim chipped in places. Purchased in Italy. L. 14.3; W. 8.1; H. 2.7.

Twin buds at the end of a single stem on the flat handles and a vine scroll on the rim. On the interior of the center of the vase, a lozenge with buds at the angles and a cross inscribed within a circle in its center. The engraving, except for the inner lozenge, is clean, wide, and shallow.

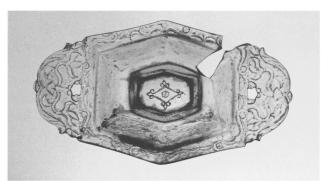
DATE: ca. 100-150.

BIBLIOGRAPHY: Froehner, Collection Charvet, p. 95 n. 1 and fig. on p. 107.

Cast and polished glass vases of this shape,<sup>40</sup> usually unadorned, have been found in Germany and Gaul,<sup>41</sup> northern Italy,<sup>42</sup> the Iberian Peninsula,<sup>43</sup> and Mauretania Tingitana.<sup>44</sup> But the best parallel remains a small fragment of unknown origin in the Toledo Museum of Art.<sup>45</sup> They obviously imitate metallic models, a large number of which still exist.<sup>46</sup> The exact origin of the shape is uncertain. Alarcão<sup>47</sup> believed that Cologne could have been a center of fabrication, and that is a possibility; but this Germanic production itself could







Figures 5, 6. Bowl (cat. no. 1), ca. 100–150. L. 14.3 cm, H. 2.7 cm. The Metropolitan Museum of Art, Gift of Henry G. Marquand, 1881, 81.10.237

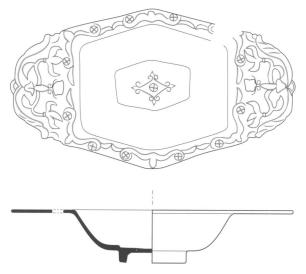


Figure 7. Drawing of cat. no. 1 (Elizabeth Wahle)

also originate from Italy. The method of manufacture makes them early pieces.

**Cat. no. 2** (Figures 8–12). Dept. of Greek and Roman Art, 59.11.14. Ex coll. R. W. Smith; Fletcher Fund, 1959. Free-blown colorless beaker, rounded rim; twelve joined fragments; part of the body missing. H. 10.8; Diam. 9.9.



Figures 8–11. Beaker (cat. no. 2), early 2nd-4th century. H. 10.8 cm, Diam. 9.9 cm. The Metropolitan Museum of Art, Fletcher Fund, 1959, 59.11.14



Figure 12. Drawing of cat. no. 2 (Elizabeth Wahle) In the middle of the body, a quadriga is pictured very schematically on a lathe-cut ground line underlined by hatching; the chariot is depicted as a simple obtuse angle perched on a wheel with uneven spokes. The charioteer also is sketchily rendered, kneeling on the chariot and holding the reins with one hand and (apparently) a whip with the other, outstretched hand. His head is a simple, squarish silhouette. The horses are better executed; the first one is rendered in threequarter view, its forelegs extended forward. A plume is visible between its ears. The three other horses are identical protomes sketched one in front of the other. Six crude hind legs are pictured underneath the first horse.

Behind the quadriga stands a small, latticed, triplegabled structure (a spina?) with a palm next to it; in front of the quadriga remain the upper parts of two squarish figures between palm branches. The first one holds in his outstretched hand an unidentified object. Their features are barely visible. Widely spaced hatching appears on the lower part of the body. Under the rim, between two lathe-cut fillets, an inscription reads:

ΕΥΤΥΧΙ ΕΙΕΙ ΗC ΑΡΕΘΟΥCΙΜΟC NILOC ΠΥΡΙΠΝΟΥC

## (EUTUKI... EIEI...ES ARETHOUSIMOS NILOS PURIPNOUS)

This would be the name of the charioteer, followed by the names of the four horses. I do not know why the third letter of the second word is not on the same line as the others. The motive is merely abraded.

DATE: The shape of the vase and the shape of the letters place it between the early second and the fourth century.<sup>48</sup>

BIBLIOGRAPHY: R. W. Smith, MMAB 8, 1 (1949) p. 56; idem, Glass from the Ancient World (Corning, 1957) p. 175, no. 354; idem, "Recent Important Acquisitions," JGS 2 (1960) p. 138, no. 6; K. Shelton in K. Weitzman, ed., The Age of Spirituality (New York, 1979) pp. 99–100, no. 90.

The findspot is unknown and the provenance uncertain; the Greek inscription is not in itself a safe indication of eastern workmanship.

The transcription of the inscription was apparently problematic for some and read differently. Smith and Shelton saw APE $\Theta$ OY(C) and CIMOC as two separate names. R. Zahn<sup>49</sup> reconstituted EYTYXI[ $\delta\eta$ s] (or EYTYXI[ $\eta$ s]) N(E)IAOC IIYPIIINOYC APH(i) $\Theta$ YC. EYTYXI[ $\delta\eta$ s] is the likelier supposition, because of the available space on the glass. Christine Alexander<sup>50</sup> read APE $\Theta$ OYCIOC. She apparently believed that the *mu* was crossed off. **Cat. no. 3** (Figures 13, 14). Dept. of Greek and Roman Art, 26.60.96. Fletcher Fund. Body of bowl, slightly greenish glass, free-blown fragment.  $8.3 \times 3.7$ ; reconstructed Diam. ca. 9.

A deer pictured (on the bottom of the vase?) in profile to the right is inscribed in a circle. This circle is itself inscribed in a larger one, the space between the two being filled by a row of rosettes. Another quadruped inscribed in a circle is also visible. In the field, to the right, three stars within circles are placed around a lozenge with palm motives.

The engraving of the rump, back, and neck of the animal is quite clean, wide, and shallow. The legs, head, and antlers are cut with a finer wheel, and the hooves with an even finer one. The circles are rendered by a succession of short, cut lines. The front part



Figure 13. Bowl (cat. no. 3), probably 4th century. 8.3 x 3.7 cm. The Metropolitan Museum of Art, Fletcher Fund, 1926, 26.60.96

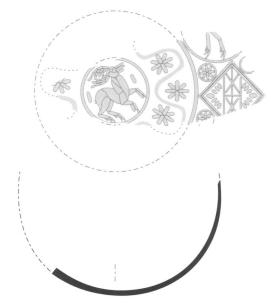


Figure 14. Drawing of cat. no. 3 (Elizabeth Wahle)

of the animal is artfully represented in three quarters, while the back and the head are seen in profile; this gives the deer a graceful twisting movement.

DATE: probably fourth century, from the shape of the vases listed in the comparanda.

UNPUBLISHED.

This fragment belongs to a group of vases that are probably of Roman origin. Harden<sup>51</sup> sees here the production of one workshop; as far as I know, twelve vases belong to the same "workshop."

### COMPARANDA:

1. Bowl, rim fragment, findspot unknown. Reconstructed Diam. 22. Louvre (formerly Campana collection); apparently missing. Maenad and satyr. R. Mowat, "Exemples de gravure antique sur verre," *Revue archéologique* 44 (1882) p. 286.

2. Fragment, findspot unknown. L. 3.6. Museo Sacro Vaticano, no. 311. Adam and Eve. Fremersdorf, *Antikes Glas*, p. 90, no. 841, pl. 54.

3. Bowl, rim fragment, findspot unknown. H. 4.8; L. 6.8. Museo Sacro Vaticano, no. 295. Putti. Fremersdorf, *Antikes Glas*, p. 86, no. 824, pls. 46, 57.

4. Bowl, rim fragment, findspot unknown. H. 5.5; L. 5. Museo Sacro Vaticano, no. 293. Animals. Fremersdorf, *Antikes Glas*, p. 86, no. 822, pls. 45, 57.

5. Bowl, fragment, findspot unknown. H. 3.2; L. 6.2. Museo Sacro Vaticano, no. 294. Animals. Fremersdorf, *Antikes Glas*, p. 86, no. 823, pl. 45.

6. Bowl, rim fragment, three joined fragments, findspot unknown. Diam. 28. Museo Nazionale Romano, no. 62578, formerly Kircher Museum. Fishing scene. Harden, *Glass of the Caesars*, pp. 214–215, no. 119; G. De Tommaso, "Vetri incisi dalle collezioni del Museo nazionale romano di Roma," *KJVFG* 22 (1989) p. 100, fig. 1.

7. Plate, fragment, found in Rome. 8.8 x 3.5. Museo Sacro Vaticano, no. 296. Fishing scene. Fremersdorf, *Antikes Glas*, p. 86, no. 825, pls. 45, 57.

8. Bowl, rim fragment, three nonjoined fragments, findspot unknown. 6 x 4.5. Whereabouts unknown. Pegasus and Bellerophon. O. Wulff, "Kaiser-Friedrich-Museum Neuerwerbungen der alt christlichen Sammlung seit 1912," *Amtliche Berichten aus den Königl. Kunstsammlungen* 35, 2 (1913) p. 34, fig. 14.

9. Fragment, findspot unknown. 5.7 x 4.4. Museo Nazionale Romano, no. 380803. Fishing scene and rectangles. De Tommaso, "Vetri incisi," p. 100, fig. 2.

10. Fragment, findspot unknown. 7.5 x 5.2. Museo Nazionale Romano, no. 380804. Mythological scene. De Tommaso, "Vetri incisi," p. 101, fig. 3.

11. Fragment, found in Rome. 4.2 x 5. Whereabouts unknown. Fishermen and chariots. L. Sagui, "Produzione vetrarie a Roma tra tardo-antico e alto medievo," in L. Paroli, P. Delgu, eds., *La Storia economica di Roma nell'alto medievo alla*  luce dei recente scavi archeologici (Florence 1995) p. 124, figs. 8, 65.

12. Another unpublished fragment is in the Toledo Museum of Art, no. 80.1189.

**Cat. no. 4** (Figures 15–20). Dept. of Greek and Roman Art, 17.194.318. Ex colls. Disch, Gréau; gift of J. Pierpont Morgan. Colorless free-blown glass bowl, three joined fragments; a fragment of the body is missing. Found in Cologne. H. 6; Diam. 9.5.

Four circles at right angles to each other on the body; within each of these, a bust facing front with the head to the left. The engraving of the medallions, each with two concentric circles, must have been done with a lathe, since there is no variation in the groove. The engraver must have first traced two opposing medallions, then the two others, because they intersect in places. The groove under the lip was then traced, also with a lathe, overlapping the medallions at one point. On the bottom, an abraded rosette with eight petals and a dot in each of the spandrels.

For the busts themselves the engraver used a wider wheel, because the tunic and the face are simply abraded. The nose, the eyes, the mouth, and the hair are rendered by narrow incisions, made with a fine wheel. In the spandrels, abraded edicules and stars appear. Within the concentric circles of each medallion are forty or so abraded tongues.

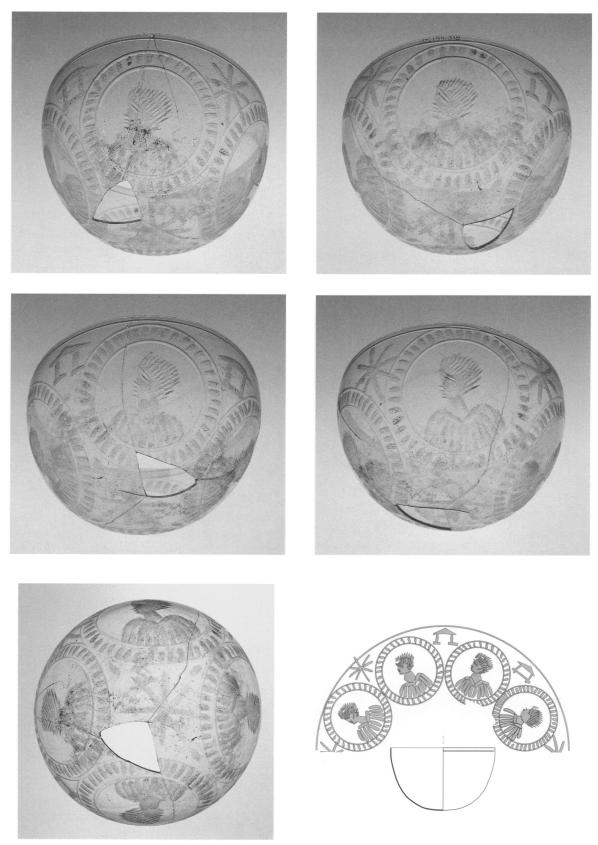
DATE: fourth century, from the context of comparandum no. 1.

BIBLIOGRAPHY: R. Garrucci, Storia dell'arte cristiana 3 (Prato, 1876) p. 111, pl. 168, 4; BJ (1881) no. 1364, pl. 5; Froehner, Collection Gréau, pl. 184. 4, no. 1084; Richter, "The Room of Ancient Glass," p. 23, fig. 29; G. Eisen, Glass (New York, 1927) p. 549, pl. 136a; W. Haberey, "Ein Mädchengrab römischer Zeit aus der Josefstrasse in Bonn," BJ 161 (1961) p. 336, pl. 66; idem, "Die Delphinschale im Museum Leiden," KJVFG 9 (1967–68) p. 32, no. 10; Fremersdorf, Schliff, p. 182, pl. 255.

This vase belongs to a group well represented in the Rhineland. Three out of the four known vases come from Cologne or the area.

## COMPARANDA:

1. Bowl, found near Cologne. H. 6.1; Diam. 9.1. Bonn, Rheinisches Landesmuseum, no. 59.0235. Busts in medallions. W. Haberey, "Römische Grabkammer bei Rondorf, Ldkr. Köln," *BJ* 161 (1961) p. 335, pl. 66.2; idem, "Delphinschale," p. 32, no. 9; Fremersdorf, *Schliff*, pp. 176– 177, pls. 240, 241; B. Follmann-Schulz, *Die römischen Gläser im Rheinisches Landesmuseum* (Bonn, 1992) pp, 69–70, no. 38.



Figures 15–19. Bowl (cat. no. 4), 4th century. H. 6 cm, Diam. 9.5 cm. The Metropolitan Museum of Art, Gift of J. Pierpont Morgan, 1917, 17.194.318

Figure 20. Drawing of cat. no. 4 (Elizabeth Wahle)

2. Bowl, rim and body fragment, found in Cologne. Antiquarium of Berlin, no. 2141, destroyed in 1945. Busts and figures standing in medallions. Fremersdorf, *Schliff*, p. 179, pl. 246.

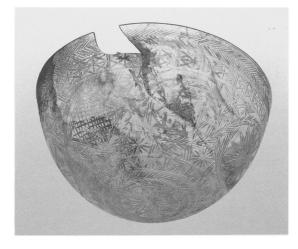
3. Rim fragment, findspot unknown. Diam. 19. Museo Nazionale Romano, no. 380802. Head in a medallion. De Tommaso, "Vetri incisi," p. 104, fig. 7.

**Cat. no. 5** (Figures 21-26). Dept. of Greek and Roman Art, 17.194.319. Ex coll. Gréau; gift of J. Pierpont Morgan. Colorless hemispherical free-blown bowl with polished rim, two joined fragments; partly covered with incrustation; a fragment of the rim is missing. H. 4.6; Diam. 11.2.

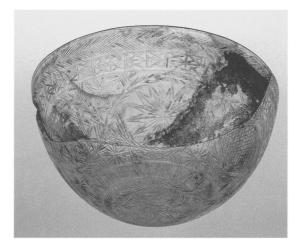
On the bottom, a rosette with twelve petals is framed within a herringbone pattern and a broken line. In the middle of the body, two garlands intersect to form six medallions. Within them, one sees two latticed lozenges, two rosettes with eight petals, one with thirteen petals,

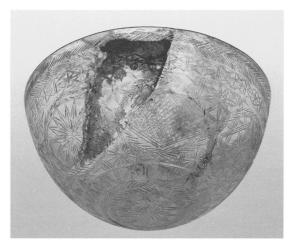


Figures 21–25. Bowl (cat. no. 5), probably 4th century. H. 4.6, Diam. 11.2 cm. The Metropolitan Museum of Art, Gift of J. Pierpont Morgan, 1917, 17.194.319









and one with sixteen. Stars or rosettes dot the spandrels formed by the medallions. On the upper part of the body, two parallel registers of superimposed Xs and herringbone pattern. The engraving is clean, deep, and narrow. The line separating the different motifs was traced with a lathe.

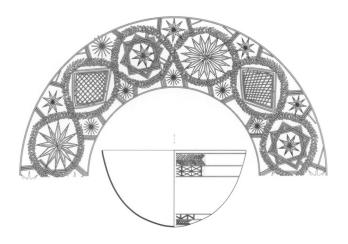


Figure 26. Drawing of cat. no. 5 (Elizabeth Wahle)

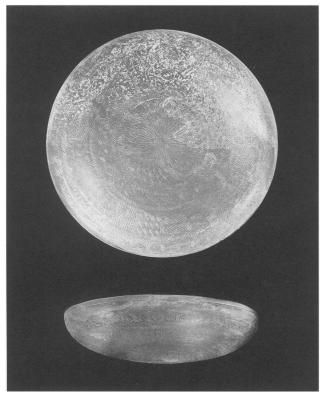


Figure 27. Bowl found in northern France. H. 5 cm, Diam. 21.5 cm. Musée d'Évreux, inv. 5996 (photo: Musée d'Évreux)

DATE: probably fourth century, by the style of the heads of comparandum no. 1.

BIBLIOGRAPHY: Froehner, *Collection Gréau*, pl. 184.3, no. 1083; Richter, "Room of Ancient Glass," p. 23, fig. 29; Eisen, *Glass*, p. 553, pl. 136.

This vase, though it does not feature human or animal figures, is reminiscent of a bowl now in Corning, formerly in the Sangiorgi collection (comparandum no. 1).

### COMPARANDA:

1. Bowl, found in Rome. H. 6; Diam. 10. Corning Museum of Glass, no. 66.1.33, ex coll. Sangiorgi. Line of heads and geometrical motifs. G. Sangiorgi, *Collezioni di vetri antichi dalle origini al V. sec. d.C.* (Rome, 1914) pp. 43-44, no. 143, pl. 28.

2. Bowl, found in northern France. H. 5; Diam. 21.5. Musée d'Évreux, no. 5996. Geometrical motifs. G. Sennequier, "Verrerie d'époque romaine retrouvée en Haute-Normandie" (doctoral diss., Université de Tours, March 1993) pl. 15, no. 16 (Figure 27).

**Cat. no. 6** (Figures 28–33). Dept. of Greek and Roman Art, 81.10.240. Ex coll. Charvet; gift of H.G. Marquand. Colorless free-blown hemispherical bowl with polished rim; complete, incrustation in places. Found in Mainz. H. 5.4; Diam. 8.9.

The lip is underlined by three parallel grooves. On the body, four columns alternate with four figures, facing front with the head to the left. They wear long tunics and hold a bunch of grapes in each hand. The columns are simply rendered by three long vertical lines between two short ones, which represent the base and capital. The engraving of the columns, clothes, and limbs is crude, merely abraded with a wide wheel. The hair, eyes, nose, and mouth, as well as the vine branch, are traced with a finer wheel. On the bottom is an abraded rosette with eight petals.

#### DATE: fourth century.

BIBLIOGRAPHY: Froehner, *Collection Charvet*, p. 94; Fremersdorf, *Schliff*, p. 182, pl. 254; Haberey, "Delphinschale," p. 32, no. 8.

I know of thirteen comparable objects; the vase comparandum no. 8 was found in a grave with a coin of Anastasius I (491-518), but the style of engraving, especially the treatment of the head, and the shape of the vase preclude a late date. By the sixth century, it was already an heirloom.<sup>52</sup> Its findspot, like those of most of the comparanda, indicates that it was made in Germany.

## COMPARANDA:

1. Bowl, found in Brumath-Stephansfeld (near Strasbourg).











Figures 28–32. Bowl (cat. no. 6), fourth century. H. 5.4 cm, Diam. 8.9 cm. The Metropolitan Museum of Art, Gift of Henry G. Marquand, 1881, 81.10.240

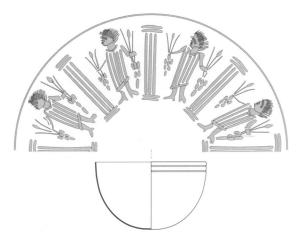


Figure 33. Drawing of cat. no. 6 (Elizabeth Wahle)

H. 7; Diam. 11.7. Strasbourg, Museé, no. 1472. Satyrs and maenads. Fremersdorf, Schliff, p. 183, pls. 256, 257; Haberey, "Delphinschale," p. 32, no. 6, pl. 7.3; Gallien in der Spätantike, von Kaiser Konstantin zu Franken König Childerich (Mainz, 1980) p. 249, no. A 157; V. Arveiller-Dulong, Le Verre d'époque romaine, Musée de Strasbourg (Paris, 1985) pp. 108-110, no. 207.

2. Beaker, found in Cologne. H. 10.2; Diam. 9.2. Bonn, Rheinisches Landesmuseum, no. 1702. Four winged figures. E. aus'm Weerth, "Römische Gläser," *BJ* 74 (1882) pl. 6.6; Fremersdorf, *Schliff*, p. 174, pl. 234; A. Pelletier, "Verre à décor bacchique trouvé à Vienne," *Gallia* 25 (1967) p. 172, figs. 5, 6; B. Follmann-Schulz, *Die Römischen Gläser aus Landesmuseum Bonn, Beihefte der BJ* 46 (1988) p. 87, no. 302, pl. 38.

3. Beaker, found in Cologne. H. 11; Diam. 11.6. Berlin, Antiken Museum, destroyed in 1945. Maenads and satyrs. A. Kisa, *Die antiken Glaeser der Frau Maria vom Rath geboren Stein zu Koeln* (Bonn, 1899) p. 138, no. 187, pl. 19.169; idem, *Das Glas im Altertume* (Leipzig, 1908) p. 593, fig. 258; Fremersdorf, *Schliff*, p. 184, pl. 259.

4. Bowl, rim fragment, found in Trier. Diam. 11.2. Trier, Landesmuseum, no. 98,83. Men between columns. Goethert-Polaschek, *Katalog*, p. 56, no. 205.

5. Bowl, found in Cologne. H. 5.1; Diam. 9.7. Cologne, Römisch-Germanisches Museum, no. N 337. Maenads. W. Binsfeld, "Neuere Funde aus dem vierten Jahrhundert in Köln," *KJVFG* 6 (1962–63) p. 96, pl. 10.2; Haberey, "Delphinschale," p. 32, no. 7, pl. 7.4; Fremersdorf, *Schliff*, p. 180, pl. 252; Harden, *Glass of the Caesars*, p. 236, no. 133.

6. Bowl, rim fragment, found in Cologne. Cologne, Römisch-Germanisches Museum, no. 658. Maenad(?). Binsfeld, "Neuere Funde," p. 96, fig. 4; J. Pelletier, "Vienne," p. 170, fig. 2.

7. Bowl, found in Krefeld-Gellep. H. 8; Diam. 13.3. Landschaftmuseum des Niederrhein. Maenads. R. Pirling, "Ein fränkisches Fürstengrab aus Krefeld-Gellep," Germania 42 (1964) pp. 188ff.; Fremersdorf, Schliff, p. 183, pl. 258, fig. 45; Haberey, "Delphinschale," p. 31, no. 4, pls. 7.1, 7.6; R. Pirling, Das Römisch-fränkisches Gräberfeld von Krefeld-Gellep: 1966–1974 (Stuttgart, 1989) p. 66, pl. 49.

8. Bowl, found in Bonn. H. 6. Bonn, Rheinisches Landesmuseum, no. 72.0315,02. Men between columns. *Gallien*, p. 148, no. 216g; B. Follmann-Schulz, *Römische Gläser*, p. 104, no. 385, pl. 44.

9. Bowl, four joined fragments, found in the catacombs of San Callisto. H. 5.8. Museo Sacro Vaticano, no. 156. Men between columns. Fremersdorf, *Vatikan*, p. 89, no. 836, pls. 48, 49.

10. Bowl, found in Cologne. H. 7; Diam. 11.5. Cologne, Römisch-Germanisches Museum, no. N 336. Men between columns. Binsfeld, "Neuere Funde," p. 97, pl. 10.3; O. Doppelfeld, *Römisches und fränkisches Glas in Köln* (Cologne, 1966) pl. 161; Haberey, "Delphinschale," p. 31, no. 3, pl. 6; Fremersdorf, *Schliff*, p. 179, pl. 247.

11. Fragmentary bowl, found in Andenach. H. 7; Diam.

12.3. Bonn, Rheinisches Landesmuseum, no. 9900. Figures standing in front of a bridge. *BJ* 100 (1896) p. 203, fig. 26; J. Villette, "Une Coupe chrétienne en verre gravé à Carthage," *Fondation Piot, Monuments et Mémoires* 46 (1952) p. 149, pl. 16.13; Fremersdorf, *Schliff*, p. 179, pls. 248, 249; Haberey, "Delphinschale," p. 31, no 2.

12. Bowl, findspot unknown. H. 5; Diam. 10. Leiden, Rijksmuseum van Oudheden, no. 1931/2.44. Two dolphins and three winged figures. W. Braat, *Glas uit de Oudheid* (Leiden, 1962) no. 189, fig. 28; idem, "The Glass Collection," p. 110, pl. 41; Fremersdorf, *Schliff*, p. 180, pls. 250, 251; Haberey, "Delphinschale," p. 31, fig. 1.

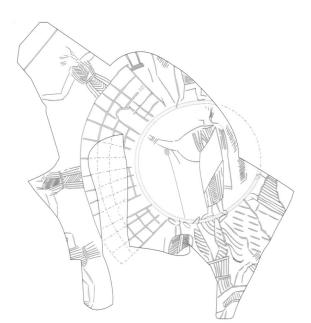
13. Bowl, findspot unknown. H. 6.5; Diam. 10.5. Private collection. Procession. Antiken aus rheinischem Privatbesitz (Cologne, 1973) no. 342, pl. 152; "Recent Important Acquisitions," JGS 15 (1973) p. 189, no. 13, fig. 13; Salomonson and La Baume, Römische Kleinkunst, p. 74, no. 264, pl. 39.2, fig. 2.

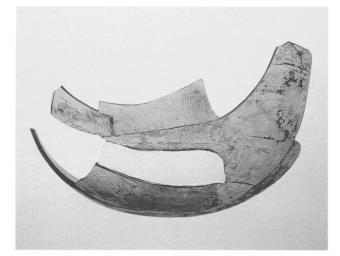
**Cat. no. 7** (Figures 34-37). Dept. of Greek and Roman Art, 17.194.324 and 1992.61. Ex coll. Gréau, gift of J. Pierpont Morgan; and ex coll. Higgins Armory, Worcester, Mass. Greenish free-blown hemispherical bowl with polished lip; six joined fragments; part of the body is missing; what is left is pitted in places. H. 8.76; Diam. 18.6.

At the bottom of the bowl, inscribed in a wide, sketchily abraded circle, stands a man facing left. He is wearing a toga and extends his right arm in front of him. A long staff with a rounded end is still visible under his right arm; it is important to note that he does not hold it. His head and left arm are almost erased because of the deterioration of the glass. The "floating staff" is not a mere walking stick but identifies him, I believe, as Moses or Aaron; the rod turned into a snake (Exodus 4:3, 7:9-12) is pictured here. There is no other interpretation that would explain the importance given to this object, combined with the central position of the figure in the composition and the fact that he is wearing a toga, which seems to identify him as a prophet, as we will see later. We do not have here the scene of the actual metamorphosis of the rod, quite rare in Christian iconography.53

Around the wall of the bowl, some scenes are still discernible. The torsos of three figures wearing short tunics, facing front with their heads turned to the left and their arms outstretched, are emerging from a structure made of five courses of squarish blocks with three openings; the Three Youths in the Furnace are obviously pictured here (Daniel 3:13–25). This scene, very common in Christian iconography, appears almost the same way on contemporaneous Roman sarcophagi (Figure 38).<sup>54</sup> To the right of this structure, a little higher in the field, the base of a column, on top







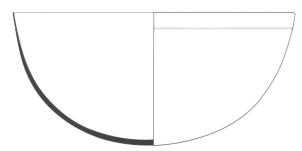
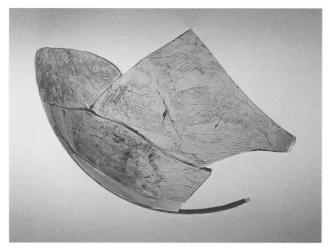


Figure 37. Drawing of cat. no. 7 (Elizabeth Wahle)



Figures 34–36. Bowl (cat. no. 7), 330–380. H. 8.76 cm, Diam. 18.6 cm. The Metropolitan Museum of Art, Gift of J. Pierpont Morgan, 1917, 17.194.324, and Gift of John Woodman Higgins Armory Inc., D/B/A Higgins Armory Museum, 1992, 1992.61



Figure 38. Detail of sarcophagus showing Three Youths in the Furnace. Italian, first third of 4th century. Marble, H. 66 cm. The Metropolitan Museum of Art, Gift of Josef and Marcy Mittlemann, 1991, 1991.366

of which the bust of Nebuchadnezzar was probably pictured, is still visible as are the legs of a figure (a servant of the king?). On the left, the lower part of a man dressed in a pallium (a royal functionary?) is turned toward the furnace and also belongs to this scene.

Behind him, the lower halves of two figures are visible, one on each side of a menhir-shaped rock from which flows a spring depicted as four curved lines; one of the figures wears a short tunic and the other a toga. This scene represents Moses (in a toga) and another Israelite and the miracle of the rock in Horeb (Exodus 17:6–7; Numbers 20:9–11), from which the spring flows as Moses strikes it with his rod. It is one of the more common scenes in early Christian art; the symbol of life-giving water is often expounded in the Scriptures and by the church fathers.<sup>55</sup>

The engraving is clean and narrow. The incisions are never really long (1 cm at most), save for the lathecut groove under the lip. Only the lower part of the legs, the feet, and the face are etched less deeply with a wider wheel. Of the features of the face, the lozengeshaped eye, the mouth, the nose, and the hair rendered with short parallel lines were engraved later.

DATE: 330-380 (see cat. no. 8).

BIBLIOGRAPHY: Froehner, Collection Gréau, pl. 186.1-2.

This glass belongs to a large group of vases, already identified by Fremersdorf (including the next one, cat. no. 8) as originating from Cologne, some of which were found in graves dated by coins to the middle of the fourth century.<sup>56</sup> The main characteristics are the profile of the head, the schematic drawing of the legs, the hieratic aspect of the figures, and the multiplication of fillers in the field: edicules, trees, hatching, volutes, dots. (See Figure 4 and comparandum no. 1.)

After a close study of the vases of the same group, one notices that the figures in togas<sup>57</sup> are almost always to be identified as prophets: Christ, Abraham, Aaron, or Moses (an Old Testament prefiguration of Christ). The shapes of the vases of this group (beakers and bowls) are also typically found in the fourth century. This vase and the following, catalogue number 8, are stylistically close to catalogue number 4 and catalogue number 6.

## COMPARANDA:

1. Fragmentary vase, almost cylindrical (probably a bottle) found in Timgad (Algeria). Preserved H. 23; reconstructed H. 35-40; Diam. 13.5. Algiers, Musée des Antiquités Nationales, no. I.V. 038. Healing of the blind, the sacrifice of Isaac, offering of Cain and Abel. D'Escurac-Doisy, "Verrerie chrétienne de Timgad," pp. 58-79, figs. 4-6; idem, "Verrerie antique et collections du Musée national des antiquités d'Alger," Bulletin d'archéologie algérienne 2 (1966–67) pp. 153– 154, fig. 42 (Figure 4).

2. Bowl, rim and body fragments missing, found in Dorchester, England. Diam. 15.1. Dorset County Museum, no. 1937. 70. Maenads and satyrs. *Journal of Roman Studies* 29 (1939) p. 219, pl. 32; J. Toynbee, *Art in Roman Britain* (London, 1961) fig. 159; Fremersdorf, *Schliff*, p. 177, pls. 242, 243; D. Charlesworth, "Roman Glass Found in the United Kingdom," *Bulletin de l'AIHV*8 (1977–80) p. 37, fig. 11.

3. Bowl, fragment of rim missing, found in northern France. H. 8.2; Diam. 19.1. British Museum, no. GR 86.5-12.3. Maenads and satyr. D. Harden, *Masterpieces of Glass* (London, 1968) p. 75, no. 97; K. Painter, "Six Roman Glasses with Cut Decoration from Amiens," *British Museum Quarterly* 36 (1971-72) p. 47, no. 2, pl. 17a.

4. Bowl, found in northern France. H. 4.7; Diam. 11. British Museum, no. GR 86.5–12.6. Head of Attis. Harden, *Masterpieces*, p. 76, no. 98; Painter, "Six Roman Glasses," p. 43, no. 3, pl. 3.

5. Bottle, a few fragments missing, found in northern France. H. 14.8; Diam. 10.4. British Museum, no. GR 86.5-12.2. Banquet scene. Painter, "Six Roman Glasses," p. 42, no. 1, pl. 1; D. Harden, "Roman and Frankish Glass from France in the British Museum," in Actes du Colloque international d'archéologie, centenaire de l'abbé Cochet (Rouen, 1978) p. 311, no. 18, pls. 3, 4; idem, Glass of the Caesars, p. 235, no. 132; J. Polzer, "A Late-Antique Goddess of the Sea," Jahrbuch für Antike und Christentum 29 (1986) pp. 71-82, pl. 7.

6. Beaker, found in Cologne-Wörringen. H. 20.3. Toledo Museum of Art, no. 30.6. Banquet scene. E. aus'm Weerth, "Römische Gläser," pp. 57ff., pl. 3; Kisa, Glas, p. 559, fig. 248; W. Hayes, "Engraved Glass in the Vatican," American Journal of Archaeology 32 (1928) p. 31, fig. 4; Fremersdorf, Schliff, pp. 175–176, pls. 236–239; Art in Glass, A Guide to the Collection (Toledo, Ohio, 1969) p. 30; D. Grose, "Ancient Glass," Museum News, Toledo Museum of Art 20, 3 (1978) p. 85, fig. 25.

7. Beaker, found in Sepino, Italy. Naples, Museo Nazionale. Bacchic procession. A. Maiuri, "Bicchiere istorato da Sepino con reppresentanza bacchica," *Bollettino d'arte* 10 (1927–28) pp. 504–513; idem, *Le Musée national de Naples* (Novara, 1959) p. 148.

8. Plate, found in Cologne-Braunsfeld. Diam. 27. Cologne, Römisch-Germanisches Museum, no. 1002. Circus scene. M. Ginsburg, Hunting Scenes on Roman Glass in the Rhineland, University of Nebraska 42, 2 (Lincoln, 1941) pp. 9, 13, fig. 2; A. Frazer, "The Cologne Circus Bowl; Basileus Helios and the Cosmic Hippodrome," Essays in Memory of K. Lehmann (New York, 1964) pp. 105–113; Fremersdorf, Schliff, pp. 171– 172, pls. 230, 231; Gallien, p. 83, frontis.; J. Humphrey, Roman Circus (London, 1986) p. 253, fig. 129; Harden, Glass of the Caesars, p. 210, no. 117; Shelton in Age of Spirituality, p. 98, no. 84.

9. Fragment of beaker(?), found in Trier. 5.2 x 4.8. Trier, Landesmuseum, no. 98,91. Man with a toga. Goethert-Polaschek, *Katalog*, p. 73, no. 306.

10. Beaker, two nonjoined fragments, one of which is a rim, findspot unknown. Reconstructed Diam. 10. Trier, Landesmuseum, no. 21 679/80. Healing of the Blind Man or Raising of Lazarus. Goethert-Polaschek, *Katalog*, p. 72, no. 303.

11. Bowl, six nonjoined fragments, found in Trier. Reconstructed Diam. 15. Trier, Landesmuseum, no. 59–82 V–X. Man in toga. Goethert-Polaschek, *Katalog*, p. 27, no. 62.

12. Bowl, four fragments, two of which are joined, found in Trier. Diam. 19. Trier, Landesmuseum, no. 19,187 A–D. Winged figure. Goethert-Polaschek, *Katalog*, p. 26, no. 60.

13. Bowl, fragment of rim, found in Traprain Law, Scotland. Edinburgh, Royal Museum of Scotland, no. GV 173. Head facing to the right. D. Charlesworth, "Roman Glass in Northern Britain," *Archaeologia Aeliana* 37 (1959) p. 46, pl. 1.5.

14. Bowl, rim fragment, found in Chester. Reconstructed Diam. 8.2 (according to the scale). Whereabouts unknown. Maenad. Charlesworth, "Roman Glass in Northern Britain," p. 46, fig. 7.2.

15. Bowl, rim fragment, found in Ostia. Ostia Museum. Head facing to the left. Unpublished.

16. Beaker, found in Cologne. H. 14. Cologne, Stadtmuseum, no. N 326. Soldiers facing left. F. Fremersdorf, "Christliche Leibwächter auf einem geschliffenem kölner Glasbecher des 4. Jahrhundert," *Festschrift R. Egger* I (Klagenfurt, 1952) pp. 66–83; idem, *Schliff*, p. 175, pl. 235, fig. 42b; Harden, *Glass of the Caesars*, p. 234, no. 131; *Gallien*, p. 113, no. 133.

17. Beaker, rim fragment, findspot unknown. H. 4.1. Museo Sacro Vaticano, no. 310. Man facing to the left. Fremersdorf, *Antikes Glas*, p. 89, no. 839, pl. 48.

18. Bowl, rim fragment, findspot unknown. H. 5.8. Museo Sacro Vaticano, no. 306. Procession facing left. Fremersdorf, *Antikes Glas*, p. 89, no. 837, pls. 48, 56.

19. Beaker, fragmentary, findspot unknown. Formerly Higgins Armory, Worcester, Mass. Heads facing left. Froehner, *Collection Gréau*, pl. 183.5, no. 1080.

20. Fragment of plate, findspot unknown. 4.3 x 6.4. Museo Sacro Vaticano, no. 308. Procession facing left with Latin inscription: . . . ABE . . . Fremersdorf, *Antikes Glas*, p. 89, no. 840, pls. 48, 56.

21. Bowl, seven joined fragments, found in Fiesole. H. 3.2; Diam. 12. Fiesole, Museo Civico Archeologico, no. FVM 144.VI F. Maenad and satyr. S. Sarri, *Archeologia urbana a Fiesole, lo scavo di Via Marini* (Florence, 1990) p. 302, no. 25.

22. Bowl, three joined fragments, found in Fiesole. Diam. 15.8. Fiesole, Museo Civico Archeologico, no. FVM 91.VI F. Maenad. Sarri, *Archeologia urbana a Fiesole*, p. 302, no. 26.

23. Bowl, rim fragment, found in Rome. H. 7.9. Museo Sacro Vaticano, no. 309. Heads facing left. Fremersdorf, *Antikes Glas*, p. 89, no. 838, pl. 48.

24. Bowl, found in Cologne. Diam. 14.6. Cologne, Stadtmuseum, no. 26, 975; Hunting scene. F. Fremersdorf, Der römische Gutshof Köln-Mungersdorf, Römisch-germanische Forschungen 6 (Berlin, 1933) p. 102, pl. 57; Painter, "Six Roman Glasses," p. 49, pl. 22.

25. Flat fragment, findspot unknown. H. 5.5; L. 7.5. Museo Sacro Vaticano, no. 317. Christ facing front. R. Garrucci, *Storia dell'arte Cristiana*, Prato 6 (1880) p. 93, pl. 464, no. 3; Fremersdorf, *Antikes Glas*, p. 92, no. 850, pls. 55, 56.

26. Plate, found in Rodenkirchen. H. 4.2; Diam. 23.8–24.5. Bonn, Rheinisches Landesmuseum, no. 42,76a. Apollo and Marsyas. W. Haberey, "Gravierte Glasschale und Mithrassymbole," *BJ* 149 (1949) p. 94, pl. 7; Fremersdorf, *Schliff*, pp. 178–179, pl. 245.

27. Cup, found in Itiri, Sardinia. Diam. 10.8. Museo di Cagliari, no. 10666. Christ facing front. Garrucci, Storia dell' arte, 6, p. 99, pl. 464, no. 5; L. Pani-Ermini and M. Marinone, Museo archeologico nazionale di Cagliari, Catalogo dei materiali paleocristiani e altomedioevali (Rome, 1981) p. 123, no. 204.

28. Bowl, chipped rim, found in the Rhineland. H. 5.5; Diam. 9.1. Private collection. Heads facing left. Antiken aus rheinischem Privatbesitz, pl. 152, no. 342; Salomonson and La Baume, Römische Kleinkunst, p. 74, no. 263, pl. 39.1.

29. Fragment, found in Gorsium (Hungary). 2.2 x 2.7. Museum of Székesfehérvár, no. 75.251.1. Head with a halo facing right. J. Fitz, "Forschungen in Gorsium," *Alba Regia* 13 (1972) p. 259, no. 353, pl. 3, fig. 2.

30. Fragment, found in Gorsium (Hungary). 3.1 x 4.6. Museum of Székesfehérvár, no. 72.81.1. Head facing left. Fitz, "Gorsium," p. 240, no. 3, fig. 21.1; L. Barkóczi, *Pannonische Glasfunde in Ungarn, Studia Archaeologica* 9 (1988) p. 69, no. 58.

31. Bowl, two joined rim fragments, found in Pilismarot (Hungary). L. 6.9. Budapest, National Museum, no. 8.1937. Figure facing right. L. Barkóczi, "Ein spätrömisches Gräberfeld in Pilismarot," *Folia Archaeologica* 12 (1960) pp. 129–130, fig. 34; idem, "Pannonische Glasfunde," p. 67, no. 46.

32. Bowl, two joined rim fragments, found in Gorsium (Hungary). 11.5 x 6.3. Museum of Székesfehérvár, no. 72.83.2. Indistinct motive. Fitz, "Gorsium," p. 240, no. 6.

33. Fragmentary beaker, found in Clunia (Spain). Reconstructed H. 35; reconstructed Diam. 23. Whereabouts unknown. Chrisma. J. de Palol, "Un vidrio tallado, con temas cristianos, de Clunia," *Mélanges Stern* (Paris, 1983) pp. 281–286, pls. 187–189.

34. Fragment, found in Trier. 3.5 x 4.4. Trier, Landesmuseum, no. 19, 262. Winged man, column. Goethert-Polaschek, *Katalog*, p. 60, no. 227.

35. Fragment of bowl, found in Trier. 7.4 x 8.8. Trier, Landesmuseum, no. 98,126. Bust on the bottom, hunting scene around. Goethert-Polaschek, *Katalog*, p. 32, no. 84.

36. Fragment, found in Rome. 4 x 2.5. Whereabouts unknown. Man. L. Sagui, "Verreries de l'antiquité tardive et du Haut Moyen-Âge," *Annales du 12<sup>e</sup> congrès de l'AIHV,1991* (Amsterdam, 1993) p. 190, fig. 4.34.

37. Fragment, found in Rome. 4.5 x 4.2. Whereabouts

unknown. Man. Sagui, "Verreries de l'antiquité tardive," p. 190, fig. 4.35.

38. Bowl, found in Desenzano. H. 32; Diam. 13.2. Desenzano, Antiquarium Villa Romana, inv. 14755. Christ. *Milano, Capitale dell'impero romano, 284–402* (Milan, 1990) p. 401, no. 5d8i.

**Cat. no. 8** (Figures 39-41). Dept. of Medieval Art, 17.190.492. Ex coll. Sarti, bought from the Sangiorgi Gallery, Rome, by J. Pierpont Morgan. Greenish freeblown glass plate, eighteen joined fragments; part of the rim is missing. Found in Zambuca Sabut (Sicily). H. 3.6; Diam. 24.

In a central medallion, one sees on a ground line a standing man with a halo, facing left and wearing a toga. He holds in his outstretched right hand a long rod. To the left, in front of him, a slightly smaller figure stands stiffly facing front, wrapped in a shroud. The Raising of Lazarus is pictured here. In the field appear two rolled manuscripts, usually associated with Christ in early Christian iconography, a long palm, a lozenge, and hatching. Below the ground line is a latticed motif.

The medallion is framed by a vine-and-grape motif between double lines; around the rim is a picket border underlined by a wide fillet. These are reminiscent of the framing motifs of the Toledo Museum of Art beaker.<sup>58</sup>

The engraving is very much akin to that of the preceding glass, and both indeed belong to the same workshop. A laboratory analysis has shown that there are no traces of gilding, as Le Blant assumed;<sup>59</sup> he was probably led to believe so by the iridescence of the glass.

DATE: Found in a "Christian" sarcophagus containing, with our cup, "Several fragments of engraved glass which were destroyed . . ." and coins dated between 350 and 360.

BIBLIOGRAPHY: Le Blant, "Note sur une coupe," pp. 213-214, pl. 4; Bulletin archéologique (1887) pp. 187-188; De Rossi, Bullettino di archeologia cristiana (1888-89) p. 77; J. Pilloy, Études sur d'anciens lieux de sépultures de l'Aisne (Saint-Quentin, 1895) p. 158; DACL III, 2, col. 3008, fig. 3335; A Special Exhibition of Glass from the Museum's Collection (New York, 1936) p. 18, fig. 15; Shelton in Age of Spirituality, p. 444, no. 404.

This vase belongs with the preceding group. The scene is commonplace in early Christian art and is seen for instance on many sarcophagi and catacomb paintings.

**Cat. no. 9** (Figures 42–50). Dept. of Greek and Roman Art, 17.194.328. Ex coll. Gréau; Gift of J. Pierpont

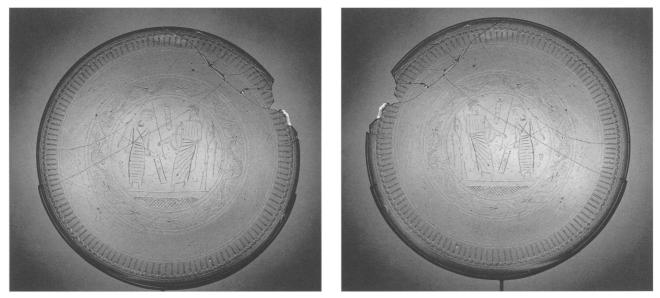
Morgan. Slightly greenish free-blown glass bowl, nine joined fragments; parts of the rim, body, and bottom missing; iridescent and pitted in places. H. 7.7; Diam. 18.

Three grooves underline the rim, and a fourth one sets the ground line for the scenes. On the body, seven people and four animals are divided into two scenes by clumps of trees. The first scene shows a hunter facing right, clad in a pallium, half leaning on a spear and collapsing into the arms of a comrade dressed in a short tunic and leggings. In front of them, a woman runs in their direction with outstretched arms, a long veil flowing from her elbows; behind them, a thick fillet indicates the entrance of a lair into which runs the boar that gored the wounded hunter pursued by a hunting dog. In front of the animal another hunter stands with his left leg raised, as if to avoid the charge of the boar, and thrusts at it with his now-invisible spear. He wears a Phrygian cap and a pallium, and carries a shield in his right hand. Only the back of the boar is visible, etched with a triple line of ovolos and bristly hair. Its lair is partly hidden behind a tree trunk formed by a row of ovolos and wide palm leaves. The 1903 drawing shows him as part of the second scene.

The latter scene, behind the woman, shows another lair, similarly marked by foliage, out of which charges a boar attacked by two dogs. In front of them, a hunter rushes forward facing left, a spear firmly held with both hands. His left shoulder is covered by a pallium. Behind him, two archers take aim at the animal, their hands held up, as if they had just shot at their target. The first archer, a woman, is dressed in a short tunic with a single strap, and the other wears a pallium around his shoulders. The first scene represents the death of Adonis, and the other Meleager and the Hunt for the Calydonian Boar.

The engraving, very wide, deep, and clean, is characteristic of the group to which it belongs. The figures are stiff, the torsos twisted unnaturally (the thorax seen frontally and the abdomen in three-quarter view), the hands large and the fingers very long. The head, seen in profile, shows a long nose, large almondshaped eyes, and hair and beard formed by rows of small ovolos; shown frontally, the cheeks are round, the nose long and narrow, the mouth small, the eyes still almond shaped. The folds of the clothing are wide and stiff.

DATE: Second half of the fourth-early fifth century. BIBLIOGRAPHY: Froehner, Collection Gréau, no. 1092, pls. 187.1, 2; Ginsburg, Hunting Scenes, p. 21, fig. 10, p. 29 n. 47; B. Caron, "A Figure-Engraved Glass Bowl," MMJ 28 (1993) pp. 47-55.



Figures 39, 40. Plate (cat. no. 8), ca. 330–380. H. 3.6 cm, Diam. 24 cm. The Metropolitan Museum of Art, Gift of J. Pierpont Morgan, 1917, 17.190.492

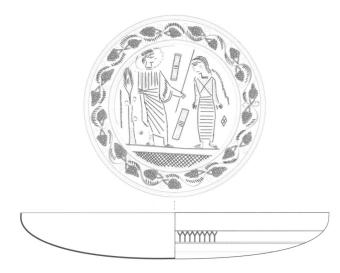


Figure 41. Drawing of cat. no. 8 (Elizabeth Wahle)

This remarkable vase is part of a very large group which was centered essentially in Rome and Northern Italy—Aquileia and Ravenna—and was dubbed the group of the Master of the Cup of Daniel by R. Barovier-Mentasti,<sup>50</sup> who dated it to the middle of the fourth century. I initially agreed with her conclusions, but after closer study of the internal and external criteria of some of the sixty or so vases of this group (at last count, that is), I now believe that the *floruit* of this workshop can be pushed to the second half of the fourth century and the early fifth. This new chronological frame rests on eight particular vases.

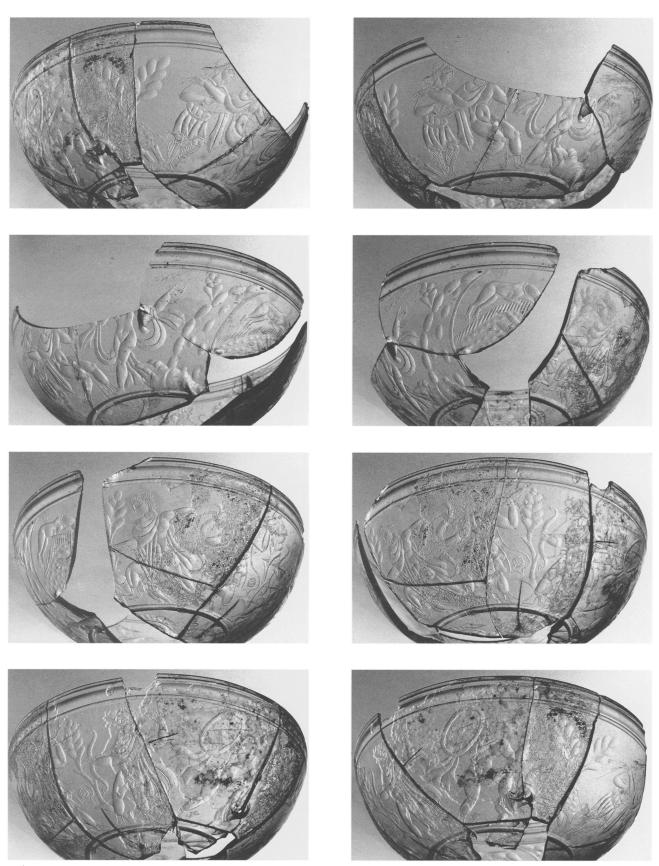
The first is the celebrated fragment of the

Antiquarium Comunale (Figure 51; see comparandum no. 2). Since its discovery, because of its inscription celebrating an emperor's *vicennalia*, it was successively identified with Diocletian,<sup>61</sup> Constantine,<sup>62</sup> Constantius II,<sup>63</sup> and finally Honorius.<sup>64</sup> Thus, despite the inscription, its exact date is still discussed, although, as we will see later, Constantius's era is likely.

The second vase, formerly in the Figdor collection,<sup>65</sup> pictures Cybele and Attis. The worship of these oriental gods enjoyed a short revival in Italy during the rule of Eugenius (A.D. 392–394);<sup>66</sup> this object could be a relic of this revival.

A small fragment in the Campo Santo in Rome (Figure 52; see comparandum no. 6)<sup>67</sup> features a palm tree and a halo near the rim; the palm tree is identical to the one pictured on one of the more important vases of the group, a plate from Ostia (see Figure 55).<sup>68</sup> The Campo Santo fragment looks quite insignificant at first, but in the context of fourth-century Christian iconography in Western art, an important observation can be made about it. Taking into account its diameter and that of the halo still visible behind the tree, it allows only enough room for a very simple composition of three standing figures framed by palm trees (see reconstruction).

Such a composition can be linked only to a number of monuments (found mainly in Rome) displaying the same composition and representing Christ standing on a mountain with the four rivers of Paradise (Genesis 2:10-14) and giving the Law—a volume inscribed *Lex Domini*—to Peter on his left while Paul stands on his right; palm trees always frame this scene, the *Traditio Legis*, or Transmission of the Law. It first



Figures 42–49. Bowl (cat. no. 9), second half of 4th–early 5th century. H. 7.7 cm, Diam. 18 cm. The Metropolitan Museum of Art, Gift of J. Pierpont Morgan, 1917, 17.194.328



Figure 50. Drawing of cat. no. 9 (Elizabeth Wahle)



Figure 51. Julian the Apostate, A.D. 357. Rome, Antiquarium Comunale, inv. no. 7233 (from Antieke Beschaving [1973])



Figure 52. Fragment and reconstruction. The shape of the vase might have been circular. Campo Santo (from *Römische Quartalschrift* [1892])

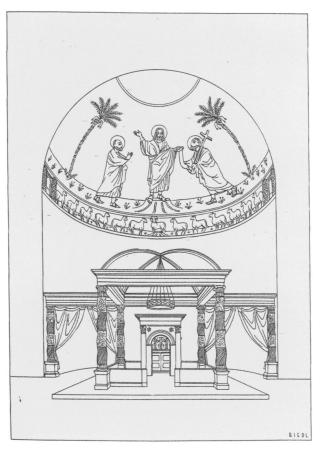


Figure 53. Reconstruction of the apse of St. Peter's (from *Cahiers archéologiques* [1959])

appeared, according to T. Buddensieg, on the mosaic of the apse of St. Peter's in Rome that was put up in the second half of the fourth century (Figure 53). Most of the objects displaying this scene (sarcophagi, paintings, reliefs) also date from the second half of the fourth century.<sup>69</sup> Another glass fragment from the Vatican (Figure 54; see comparandum no. 37) features the center of the same composition; the palm tree is still faintly visible behind Peter. The symbolism of this image, the exhortation and the life-giving flowing water, appears explicitly in a text of St. Hippolytus (ca. 170-235): "A perennial stream is flowing. Four rivers are flowing from it, watering the earth. It is the same with the church: Christ, who is the river, is announced to the world by the four gospels. He waters all the earth and sanctifies everyone who believes in him, according to the prophet: 'Rivers will flow from his body.""70

The fifth vase, the aforementioned plate from Ostia (Figure 55; see comparandum no. 4), representing Christ holding a long cross on his left shoulder, is

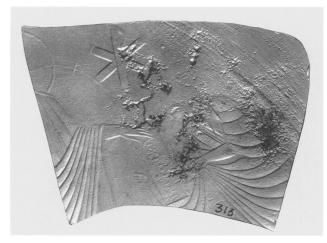


Figure 54. Fragment. Vatican Museum, inv. no. 313 (photo: Vatican Museum)

almost identical to the well-known St. Lawrence mosaic from the Mausoleum of Galla Placida in Ravenna (Figure 56). The latter is dated, and there seems to be a consensus among specialists, to 425-450. The glass is unlikely to be the inspiration for the (very) official iconography of the mausoleum; and if the reverse is true, the glass would also be dated to 425-450. But a mosaic of the church of San Pietro Crisologo in Ravenna shows a *Christus militans* with exactly the same gesture. This mosaic, as we know from Agnellus, was made in the late fourth or early fifth century, before being remade in the mid-fifth century.<sup>71</sup> This remake, as is often the case, could very well have reproduced the earlier composition.

The sixth vase, a lost plate known from two seventeenth-century drawings, pictures an aristocrat, the prefect of the annona; this kind of glass was usually made to celebrate the nomination of a civil servant to a higher office by picturing the grantee in his new functions. So since the prefect of the annona became an important personage and acceded to senatorial rank only after 326, we can assume that this date is a terminus a quo for the lost plate.<sup>72</sup>

Another official commission, represented today by a small fragment with the head of Rome (or Constantinople) Nicephore found in Rome (comparandum no. 15), can be reconstructed to a certain degree. The large size of the original plate, 35 centimeters in diameter according to Paribeni, and the squeezed impression made by the surviving figure would leave room for one oversize or two smaller central figures flanked by personifications of both capitals, as Paribeni noticed; more precision would in this case be mere speculation. The fact, however, that Rome and Constantinople appear side by side on coinage from 343 on<sup>73</sup> would tend to place this fragment in the second half of the century.

And finally, a tiny fragment was discovered in Carthage in a cistern sealed about 425 by the construction of the Theodosian wall.<sup>74</sup>

These vases therefore provide us with circumstantial evidence (if nothing else) that indicate a floruit stretching between 326 and 425, more likely between the middle of the fourth and the early fifth century.

This conclusion also favors a late dating of the aforementioned Antiquarium Comunale fragment (see comparandum no. 2). Indeed, a way to tentatively date this scene is to do so by linking it with a securely dated group. In the light of the chronology we propose, the earlier candidates, Diocletian and Constantine, can be ruled out. Constantius's late *vicennalia* of 357,<sup>75</sup> Valens, Gratianus, Valentinianus, Theodosius, and Honorius would still be acceptable.<sup>76</sup>

Only one solution, however, would explain the *vicennalia* inscription, the name Severus written over a secondary figure, and the lack of a crown on the head of the main figure. The latter could be Julian the Apostate, Caesar of Constantius II from 355 to 360; his coinage prior to his accession to the throne shows him undiademmed,<sup>77</sup> and his *magister equitum* in 357/358 was named Severus.<sup>78</sup> We may suppose that the Antiquarium Comunale bowl is one of a pair of identical vases, one of which showed Constantius and



Figure 55. Christ. Museo Ostiense, inv. no. 5201 (from *Bollettino d'arte* [1952])



Figure 56. Mosaic of St. Lawrence at Mausoleum of Galla Placidia, Ravenna

the other Julian, each surrounded by his respective retinue. We have to realize that officially commissioned glassware, just like silverware, could form a set of several pieces.

We will make a final remark. Several vases of this group (comparanda nos. 2, 3, 12, 15, 18, 22, 23, 33, 35, 41) show a sitting or standing figure where the vertical axis of the composition is obvious; furthermore, they sometime display an architectonic background, otherwise rare in the production of the Master of the Cup of Daniel. These details are reminiscent of the ivory diptychs and sumptuous silverware, such as the *missorium* of Theodosius,<sup>79</sup> which were gifts distributed by the emperor and new grantees of high office. The outlandish expenditures lavished on such occasions forced Theodosius<sup>80</sup> to introduce legislation to limit them; newly appointed magistrates then replaced ivory and silver with glass.

#### COMPARANDA:

1. Bowl, seven joined fragments, found in Concordia. H. 3.6; Diam. 15.8. Concordia, Museo Nazionale, no. 297. Daniel between two lions. Notizie degli scavi di antichità (1882) p. 367; M.-T. Floriani-Squarciapino, "Coppa cristiana da Ostia," Bollettino d'arte 37 (1952) p. 209, fig. 7; R. Barovier, "Due vetri incisi tardo-romani," Bollettino dei Musei civici veneziani 3-4 (1973) p. 46, fig. 26; P. Da Villa Croce, Bulletin de l'AIHV9 (1981-83) p. 87, fig. 2; R. Barovier-Mentasti, "La coppa incisa con 'Daniele nella fossa dei leoni' al Museo nazionale Concordiese," Aquileia Nostra 57 (1983) pp. 158– 172; B. Caron, "Un Verre gravé représentant Cybèle et Attis mourant," Bulletin Antieke Beschaving 66 (1991) p. 172, fig. 3; idem, "Glass Bowl," p. 51, fig. 11; idem, "Note sur deux dessins représentant un verre gravé," Échos du monde classique/Classical Views 37 (1993) p. 365, pl. VII.1.

2. Plate, rim fragment, found in Rome (Figure 52). H. 6.5; Diam. 21. Rome, Antiquarium Comunale, no. 7233. Seated, bearded, and undiademmed figure and retinue with inscription: VOTA XX MVLTA XXX; over an attendant: SEBERVS. L. Bruzza, "Frammento di un disco di vetro che rappresenta i vicennali di Diocleziano," Bollettino comunale 10 (1882) pp. 180-190, pl. 20; H. Fuhrmann, "Studien zu den Consulardiptychen verwandten Denkmäler I: Eine Glasschale von der Vicennalienfeier Constantins der Grosse zu Rom im Jahre 326 n. Chr.," Römische Mitteilungen 54 (1939) pp. 161-175; C. Cecchelli, Vita di Roma nel medio evo (Rome, 1951-52) p. 153; Barovier, "Due vitri incisi," p. 43, fig. 24; Salomonson, "Kunstgeschichtliche," p. 54, figs. 39, 40; P. Righetti, Bulletin de l'AIHV 9 (1981-83) p. 154, fig. 2; G. Brands, "Ein Glasschalenfragment im Antiquarium Comunale in Rom," Jahrbuch für Antike und Christentum 26 (1983) pp. 107-127; Harden, Glass of the Caesars, pp. 223-224, no. 124; K. Painter, "A Fragment of a Glass Dish in the Antiquarium Comunale in Rome," KJVFG 22 (1989) pp. 87-91; A. Tedeschi, "Il vetro di 'vicennalia,'" pp. 35-36, figs. 1-3; Caron, "Note sur deux dessins," p. 365, pl. VII.2.

3. Plate, five fragments, of which two are joined, found in Ravenna. Reconstructed Diam. 24. Ravenna, Soprintendenza ai Beni Ambientali Architettonici, no. RA 6529. Seated high dignitary. F. Berti, "Vetri incisi," in *Ravenna e il porto di Classe* (Bologna, 1983) p. 174, no. 12.8; Tedeschi, "Il vetro di 'vicennalia," p. 38, fig. 8.

4. Bowl, sixteen joined fragments, found in Ostia (Figure 56). H. 5.6; Diam. 18. Museo Ostiense, no. 5201. Christ as the Good Shepherd. Floriani-Squarciapino, "Coppa cristiana," pp. 204–210; idem, "Vetri incisi portuensi del Museo sacro del Vaticano," *Rendiconti della Pontificale accademia di archeologia* 27 (1953–54) p. 256, fig. 1; C. Pavolini, *Ostia-Vita Quotidiana* I (Rome, 1978) p. 37, pl. 17.

5. Fragment of bowl and plate, findspot unknown. Sarasota, Ringling Museum of Art. Christ as the Good Shepherd. Froehner, *Collection Gréau*, no. 1098, pl. 188.4.

6. Bowl, rim fragment, uncertain findspot (Rome?). Collection of the Campo Santo. Scene of *Traditio Legis*. M. Armellini, "I vetri cristiani della collezione di Campo Santo," *Römische Quartalschrift für Altertumskunde* 6 (1892) p. 55, pl. 3.2.

7. Plate, rim fragment, findspot unknown. L. 13; reconstructed Diam. 22–23. Bologna, Museo Civico, no. ROM 152. Palm tree. G. Meconcelli-Notarianni, Vetri antichi nelle collezioni del Museo civico archeologico di Bologna (Bologna, 1979) p. 34, no. 20.

8. Bowl, three fragments, two of which are joined, found in Falerone. Reconstructed Diam. 22. Whereabouts unknown. Daniel and Habakkuk in the lions' den. G. Brizio, "Scoperte di antichità varie dell'epoca romana," *Notizie degli scavi di antichità* (1903) p. 111, fig. 7; Caron, "Un Verre gravé," p. 173, fig. 6; idem, "Glass Bowl," p. 52, fig. 13.

9. Plate, two nonjoined fragments, found in Rome. Whereabouts unknown. Cybele and Attis. A. Riegl, *Die* spätrömische Kunstindustrie (Vienna, 1901) pp. 170–171, pl. 23; Caron, "Un Verre gravé," p. 170, fig. 1; idem, "Glass Bowl," p. 51, fig. 12.

10. Fragment of plate, found in Porto. L. 9.1. Museo Sacro Vaticano, no. 301. Two standing figures. Floriani-Squarciapino, "Vetri incisi portuensi," pp. 265–266, fig. 7; Fremersdorf, *Antikes Glas*, p. 87, no. 829, pl. 48; Caron, "Un Verre gravé," p. 172, fig. 4.

11. Fragment of plate, found in Porto. 13.2 x 5.5. Museo Sacro Vaticano, no. 298. Figure in a shroud, and putto. Floriani-Squarciapino, "Vetri incisi portuensi," pp. 260– 262, fig. 5; Fremersdorf, *Antikes Glas*, p. 90, no. 843, pls. 55, 57; Caron, "Un Verre gravé," p. 173, fig. 5.

12. Fragment of plate, found in Porto. 15 x 8.7. Museo Sacro Vaticano, no. 299. Goddess, Tellus, and Genius. Floriani-Squarciapino, "Vetri incisi portuensi," p. 263, fig. 6; Salomonson, "Kunstgeschichtliche," pp. 51–52, fig. 40; Fremersdorf, *Antikes Glas*, p. 87, no. 827, pl. 47.

13. Plate, three fragments, two of which are joined, found in Porto. L. 17; H. 4.35. Museo Sacro Vaticano, nos. 314, 315. Christ between two saints. G.-B. De Rossi, "Utensili cristiani scoperti in Porto," *Bollettino de archeologia cristiana* 6, 3 (1868), p. 38, pl. 1.1; Garrucci, *Storia della arte* 6, p. 98, pl. 464, no. 2; Floriani-Squarciapino, "Coppa cristiana," p. 210, fig. 9; idem, "Vetri incisi portuensi," p. 257, fig. 2; Fremersdorf, Antikes Glas, p. 91, nos. 844–845; Barovier-Mentasti, "La coppa incisa," p. 168, fig. 4.

14. Plate fragment, found near Ravenna. L. 5.5; reconstructed Diam. of central medallion 10.5. Private collection. Head of Oceanus. R. Farioli, "Un Verre gravé de Ravenne de style roman [sic] tardif," Annales du 3e Congrès International d'Étude Historique du Verre, Damas 1964 (Liège, 1965) pp. 79-84; J. Philippe, Le Monde byzantin dans l'histoire de la verrerie (Bologna, 1970) p. 89, fig. 47.

15. Bowl, rim fragment, findspot unknown. 9.2 x 5.7; reconstructed Diam. 35. Rome, Museo Nazionale dei Termi. Rome and Constantinople. R. Paribeni, "Nuovi monumenti del Museo nazionale romano," *Bollettino d'arte* 12 (1918) pp. 51–52, fig. 2; idem, *Le Terme di Diocleziano e il Museo nazionale romano* (Rome, 1932) p. 299, no. 1025; Floriani-Squarciapino, "Coppa cristiana," p. 210, fig. 10; Salomonson, "Kunstgeschichtliche," p. 48, fig. 35; Barovier, "Due vetri incisi," p. 42, fig. 23; Tedeschi, "Il vetro di 'vicennalia," p. 37, fig. 6.

16. Bowl, rim fragment, found in Rome. Reconstructed Diam. 23. Murano, Museo Vetrario, no. CL. VI, 1859. Head of Isis. Barovier, "Due vetri incisi," p. 40, fig. 21.

17. Fragment of body, findspot unknown. Whereabouts unknown. Head of Hydra. Froehner, *Collection Gréau*, pl. 188.2, no. 1094.

18. Plate fragment, found in Rome. 8 x 7.7. Whereabouts unknown. Head of Rome facing front. Sagui, "Verreries de l'antiquité tardive," pp. 192–193, fig. 4.36; idem, "Produzione vetrarie," p. 124, fig. 8.68.<sup>81</sup>

19. Plate fragment, findspot unknown. 10.5 x 2.4. Museo Nazionale Romano, no. 380801. Haloed head facing front with phoenix; St. Paul. De Tommaso, "Vetri incisi," p. 103, fig. 6.

20. Bowl, rim fragment, findspot unknown. 6.2 x 7.7. Whereabouts unknown. Nymph. Froehner, *Collection Gréau*, pl. 185.2, no. 1087.

21. Bowl, thirteen joined fragments, findspot unknown. H. 3.8; Diam. 21.5. British Museum, no. GR. 1967.11-22.1. Peirene, Pegasus, and Bellerophon. Harden, *Masterpieces of Glass*, p. 72, no. 95; idem, *Glass of the Caesars*, p. 219, no. 121.

22. Plate, four fragments, three of which are joined, findspot unknown. Collection of the Campo Santo. Two registers of standing figures. Armellini, "I vetri cristiani," p. 54, pl. 3.1; Caron, "Note sur deux dessins," p. 364, pl. VI.2.

23. Plate, findspot unknown. Lost; only two drawings remain, one in the Royal Library, the other in the Vatican Library. Prefect of the annona. G.-B. de Rossi, "Le horrea sotto l'Aventino e la 'Statio annonae Urbis Romae,'" Annali dell'Instituto di corrispondenza archeologica (1885) pp. 223-234; DACL I, 2, cols. 2274-2276, fig. 776; C. Vermeule, The Dal Pozzo Albani Drawings of Classical Antiquity in the Royal Library at Windsor Castle, Transactions of the American Philosophical Society, n.s., part 2 (1966) pp. 31, 114; Painter, "A Fragment of a Glass Dish," p. 92; Tedeschi, "Il vetro di 'vicennalia," p. 37, fig. 5; Caron, "Note sur deux dessins," pp. 349-358, pls. 1, 11.

24. Bowl, rim fragment, findspot unknown. H. 5.5; L. 7.6. Museo Sacro Vaticano, no. 304. Horseman. Fremersdorf, *Antikes Glas*, p. 88, no. 832, pl. 48.

25. Plate, two nonjoining fragments, found in Porto. 14.2 x 7. Museo Sacro Vaticano, nos. 302, 303. Hunters. De Rossi, "Utensili cristiani," no 25, pl. 1.2; Floriani-Squarciapino, "Vetri incisi portuensi," p. 261, fig. 4; Fremersdorf, *Antikes Glas*, pp. 87–88, nos. 830, 831, pls. 47, 48; Caron, "GlassBowl," p. 50, fig. 9.

26. Bowl, rim fragment, found in Palestrina. Reconstructed Diam. 17.5. Murano, Museo Vetrario, no. CL-VI, 1858. Hunter. M. Vigil Pascual, *El vidrio en el mundo antiguo* (Madrid, 1969) p. 151, fig. 130; Barovier, "Due vetri incisi," p. 44, fig. 25; idem, "La coppa incisa," p. 166, figs. 2, 3; Salomonson, "Kunstgeschichtliche," p. 48, fig. 36.

27. Plate fragment, findspot unknown. H. 8.6; W. 7. Museo Sacro Vaticano, no. 300. Man in Eastern dress. Fremersdorf, *Antikes Glas*, p. 87, no. 828, pl. 46.

28. Bowl, rim fragment, findspot unknown. L. 21.6. Toledo Museum of Art, no. 23.1888. Hounds and a stag. Salomonson, "Kunstgeschichtliche," p. 48, fig. 37; *Art in Glass: A Guide to the Collection* (Toledo, 1969) p. 31.

29. Bowl, rim fragment, findspot unknown. Sarasota, Ringling Museum of Art. Quadruped. Froehner, *Collection Gréau*, pl. 188.5, no. 1098.

30. Conical plate, rim fragment, findspot unknown. H. 8.4. Museo Sacro Vaticano, no. 316. Man facing right. Fremersdorf, *Antikes Glas*, p. 91, no. 847, pls. 54, 56.

31. Bowl, chipped rim, findspot unknown. Diameter 6.3. Corning Museum of Glass, no. 66.1.38. Christ and the Paralytic. Sangiorgi, *Collezione di vetri antichi*, no. 149; Koetzche, in *Age of Spirituality*, p. 442, no. 401; Charleston, *Masterpieces*, p. 52; Harden, *Glass of the Caesars*, p. 222, no. 123; D. Whitehouse, *Roman Glass in Corning* (Corning, 1988) pp. 46-47.

32. Bowl, rim fragment, findspot unknown. H. 5.9; L. 6; reconstructed Diam. 20-23. Museo Sacro Vaticano, no. 305. Procession. Garrucci, *Storia dell'arte* 6, p. 91, pl. 462, no. 13; Fremersdorf, *Antikes Glas*, p. 91, no. 848, pls. 54, 56.

33. Plate fragment, findspot unknown. H. 9.3. Museo Sacro Vaticano, no. 14856. Musician. Fremersdorf, *Antikes Glas*, p. 88, no. 833, pl. 47.

34. Bowl, rim fragment, findspot unknown. Whereabouts unknown. Hunter. Froehner, *Collection Gréau*, pl. 185.5, no. 1090.

35. Plate fragment, findspot unknown. L. 5.5. Sarasota, Ringling Museum of Art. Fragment of a figure in a uniform. Froehner, *Collection Gréau*, pl. 193, no. 1103; A. Oliver Jr., "Tapestry in Glass," *JGS* 17 (1975) pp. 68–70; Tedeschi, "Il vetro di 'vicennalia," p. 36, fig. 4.

36. Bowl, rim fragment, found in Rome. H. 6.6. Museo Sacro Vaticano, no. 312. Baptism scene and inscription: ALBA [and] MIRAX . . . G. de Rossi, "Insigne vetro, sul quale è effigiato il battesimo d'una fanciulla," *Bollettino di archeologia cristiana* 3,1 (1876) pp. 7–15, pl. 1; Garrucci, Storia dell'arte 6, p. 93, pl. 464, no. 1; A. Pératé, L'Archéologie chrétienne (Paris, 1892) p. 350, fig. 240; F. Doelger, "Die Firmung in den Denkmälern des christlichen Altertums," Römische Quartalschrift für christliche Altertumskunde 19 (1905) p. 22; A. Profumo, "Un baptisterio cristiano," Studi romani 1, 2–3 (1913) p. 117, pl. 14.1; DACL I, 2, col. 3130, fig. 1115; L. De Bruyne, "L'Imposition des mains dans l'art ancien chrétien," Rivista di archeologia cristiana 12 (1943) p. 241, fig. 32; Cecchelli, Vita di Roma, p. 153; Fremersdorf, Antikes Glas, p. 91, no. 849, pls. 54, 56.

37. Plate fragment, found in Porto (Figure 55). H. 7.8; L. 11. Museo Sacro Vaticano, inv. 313. Transmission of the Law and inscription: LEX DOMINI. De Rossi, "Utensili cristiani," pl. 1.3; Garrucci, *Storia dell'arte* 6, p. 98, pl. 464, no. 5; *DACL* VI, 2, col. 1577, fig. 5408; Floriani-Squarciapino, "Coppa cristiana," p. 209, fig. 8; idem, "Vetri incisi portuensi," p. 259, fig. 3; Fremersdorf, *Antikes Glas*, p. 91, no. 846, pl. 55.

38. Plate rim, three joined fragments, found in Iruña (Spain). L. 10.5. Museo Arqueológico de Álava no. R80/.531.1R. Flying Perseus. J. M. Blázquez Martínez, "Perseo volande sobre un vidrio de Iruña," Zephyrus 9 (1958) pp. 118–121 (cites G. Nieto, El oppidum de Iruña [Álava] [Vitoria, Spain, 1958] fig. 116); Vigil Pascual, Vidrio, p. 151, fig. 130; A. Balil, "Vidrio tardo romano de Iruña," Estudios de arqueología alavesa 6 (1973) pp. 173–181; Museo arqueológico de Álava (Vitoria, 1983) pl. 146.

39. Plate fragment, found in Carthage. 7.6 x 4. Royal Ontario Museum, no. 1 N 17. Forearm. J. Hayes, "Réflexions sur la verrerie des époques tardives à Carthage," *Cahiers des études anciennes* 17 (1985) p. 118, fig. 6.

40. Plate, rim fragment, found in Carthage. L. 10.7; W. 4.5. Royal Ontario Museum, no. 5280. Putto. Hayes, "Réflexions sur la verrerie," p. 118, fig. 8.

41. Plate fragment, found in Ravenna. L. 9; W. 7. Bologna, Museo Nazionale, no. BO 38996. Cuirassed charioteer. Berti, "Vetri incisi," p. 174, no. 12.4.

42. Plate, rim fragment, findspot unknown. Sarasota, Ringling Museum of Art. Feminine headdress. Froehner, *Collection Gréau*, pl. 190.6, no. 1103.

43. Fragment, findspot unknown. Bartoldy collection, Berlin Museum. Christ under an arcade, according to Garrucci, *Storia dell'arte* 6, p. 91, pl. 462, no. 12.

44. Fragment, findspot unknown. Campo Santo collection. Christ or apostle under an arcade. Armellini, "I vetri cristiani," p. 54, pl. 2.1.

45. Bowl, rim fragment, found in Marignano.  $6 \ge 4.7$ ; reconstructed Diam. 11. Aquileia, Museo Nazionale, no. 53323. Man with toga. L. Bertacchi, "Deux nouveaux verres d'Aquilée à décor paléochrétien," Annales du 4<sup>e</sup> Congrès International d'Etude Historique du Verre, Ravenne-Venise 1967 (Liège, 1967) pp. 109–112; S. Kurinsky, The Glassmakers; an Odyssey of the Jews (New York 1991) pp. 166–167, mistakingly identified with the sacrifice of Isaac.

46. Fragment, findspot unknown. Verona, Museo Publico. Christ or a saint. Garrucci, *Storia dell'arte* 6, p. 93, pl. 463, no. 5.

47. Plate, six nonjoined fragments, found in Classe. H. 3; reconstructed Diam. 19. Ravenna, Soprintendenza ai Beni Ambientali Architettonici, no. RA 4741. Pegasus and Bellerophon. Berti, "Vetri incisi," p. 174, no. 12.7.

48. Fragment of hemispherical cup, findspot unknown. 5.2 x 6.1. Museo Nazionale Romano, no. 380800. Man in Eastern dress; inscription on the rim: LET... De Tommaso, "Vetri incisi," p. 102, fig. 4.

49. Fragment of plate, found in Rome. 4.3 x 3.9. Whereabouts unknown. Vine scroll. Sagui, "Produzione vetrarie," p. 124, fig. 8.67.

50. Fragment of plate, found in Rome. 8.9 x 4.2. Whereabouts unknown. Lyre. Sagui, "Produzione vetrarie," p. 124, fig. 8.64.

51. Fragment, found in Rome. Whereabouts unknown. Athlete. Cited in Sagui, "Produzione vetrarie," p. 126 and n. 32, where she quotes Pensabene in Archeologia laziale 3 (1980) p. 77, fig. 9, pl. 18.8; M. Sternini, "Il vetro in Italia tra V e IX secolo," in Le Verre de l'antiquité tardive et du Haut Moyen-Age, AFAV (1993) p. 247, fig. 2.

We could mention six unpublished fragments in the Corning Museum of Glass: 66.1.143; 66.1.146; 66.1.148; 66.1.145; 66.1.141; 72.1.18, plus the following vase, catalogue number 10, and at least one unpublished plate from the antiquities market.

**Cat. no. 10** (Figures 57, 58). Dept. of Medieval Art, 18.145.4. Formerly in the Valicella Library, Rome. Free-blown rim fragment, slightly greenish. L. 8.9; H. 4.5.

The rounded rim is marked by three grooves. On the body is an edicule with a rounded roof, two elongated acroteria, and open double doors. On the inner side of the doors, a lozenge is inscribed within two rectangles. Inside the edicule, the upper part of a body in a shroud and facing right is visible. On the right, the upper part of the body of a man, holding a staff and with a haloed head, faces left. A retrograde inscription (meant to be read from the inside and reading . . . LBAT IN LAIAVRS) identifies the scene: the Raising of Lazarus.

The engraving is wide, clean, rather deep. The features and the hair are finely rendered.

DATE: second half of fourth-early fifth century.

BIBLIOGRAPHY: F. Buonarrotti, Osservazioni sul'alcuni frammenti di vasi (Florence, 1716) p. 60; Garrucci, Storia dell'arte 6, p. 91, pl. 462, no. 11; Mowat, "Exemples de gravure antique," p. 297, no. 15; DACL VI, 2, col. 1578, no. 3.

Buonarrotti read the inscription LIAT IN LAIAVRS; Garrucci, Leclercq, and Mowat, LIATA LAIAVRS. This



Figure 57. Fragment (cat. no. 10), second half of 4th-early 5th century. L. 8.9 cm, H. 4.5 cm. The Metropolitan Museum of Art, Rogers Fund, 1918, 18.145.4

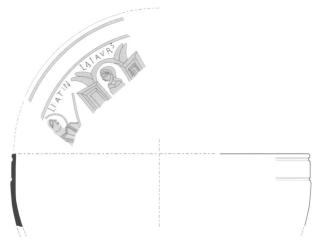


Figure 58. Drawing of cat. no. 10 (Elizabeth Wahle)

vase, because of the treatment of the features of the head and the stiffness of the folds, probably belongs to the preceding group.

**Cat. no. 11** (Figures 59–62). Dept. of Greek and Roman Art, 13.198.5. Pale blue free-blown conical vase, polished rim, a button under the body; intact. Found near Hama (Syria), according to the dealer. H. 14.9; Diam. 6.9.

In the middle of the body, on opposite sides, two bunches of six grapes are pictured; in between is an eight-branched star. Over the grapes, between two fillets, a Greek inscription reads, IIIE ZHCHC (phonetically spelled for the correct IIIE ZHCAIC, "Drink so that you may live!") and diagonal hatching. This expression has sometimes been used in a religious context,<sup>82</sup> since it can be construed as being linked to



Figures 59–61. Vase (cat. no. 11), 4th–5th century. H. 14.9 cm, Diam. 6.9 cm. The Metropolitan Museum of Art, Charles Stewart Smith Memorial Fund, 1913, 13.198.5

the celebration of the Eucharist and the consecration of the wine; but in this particular case it has no cryptographic religious meaning whatsoever. This simple drinking expression is met time and time again on vases, written phonetically in the Greek or Latin alphabet (or even a mixture of both), in a number of ways, by people who had only a passing acquaintance with Greek, but knew its meaning: "Cheers!"<sup>83</sup> Under the grapes is hatching between two fillets. The motifs are rendered by abrasion.

#### DATE: fourth-fifth century.

BIBLIOGRAPHY: Eisen, Glass, pl. 101; Harden, "Highdown Hill Glass Goblet with Greek Inscriptions," Sussex Archaeological Collections 9 (1959) p. 14, pl. VI. B; G. Weinberg, "A Parallel to the Highdown Hill Glass," JGS 5 (1963) p. 28, figs. 4, 6.

This group was first identified by Harden.<sup>84</sup> The decoration is only abraded and quite simple: star, rosette, animal, grapes in bunches. A Latin or Greek inscription usually appears around the rim. None of the dozen or so vases of the group comes from a dated context; but from the study of the shapes, Harden could nevertheless date it to about the end of the fourth and the early fifth centuries. The dispersed findspots (Great Britain, Spain, Italy, Syria, Egypt) suggest the work of an itinerant workshop, although Harden narrows the area of fabrication to Syria or Egypt: "All in all, I would prefer to count it as

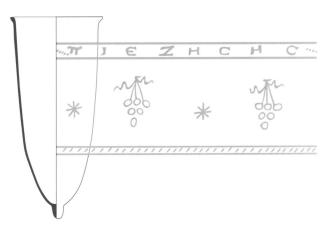


Figure 62. Drawing of cat. no. 11 (Elizabeth Wahle)

Egyptian; that is, no doubt, an Alexandrian piece."<sup>85</sup> An Eastern origin is possible, but there is no overriding reason to place it in Alexandria. As we mentioned earlier, the temptation to label as Alexandrian every Eastern glass product is an unfortunate reflex, based partly on literary sources and their overenthusiastic interpretation;<sup>86</sup> but most of them predate the *floruit* of figure-engraved glass in the Roman world. There is little or no archaeological evidence of engraved glass production in Alexandria in late antiquity.

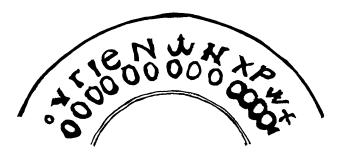


Figure 63. Inscription on bottle from Worthing Museum

### COMPARANDA:

1. Bottle, neck cracked, found in Highdown Hill, Sussex. H. 20.3; Diam. of the mouth 6. Worthing Museum, no. 3500. Hares, dogs, and inscription (Figure 63). Harden, "Highdown Hill," p. 3, fig. 1; Weinberg, "A Parallel to the Highdown Hill," p. 26, figs. 4, 6.

2. Bottle, findspot unknown. H. 21.2; Diam. of the mouth 4.3. University of Missouri, Museum of Art and Archaeology, no. 62.14. Bunch of grapes. Weinberg, "A Parallel to the Highdown Hill," pp. 25–27, fig. 2.3–6.

3. Bottle, found in Syria. H. 14.7. Whereabouts unknown. Stylized plants. Harden, "Highdown Hill," p. 15, fig. 5.

4. Bowl, found in Cologne. Diam. 16.5. Cologne, Römisch-Germanisches Museum, no. 6142. Palms and stars with Greek inscription, IIIE ZHCAIC. F. Fremersdorf, *Römische Gläser aus Köln* (Cologne, 1939) pl. 42; Harden, "Highdown Hill," p. 15, pl. VIIIa.

5. Bowl fragment, found in Holme Pierrepont (Nottinghamshire). British Museum, no. 1931.3-31.2. Birds and Latin inscription, SEMPER [vivas]. D. Harden, "Glass Vessels in Britain and Ireland, A.D. 400-1000," *Dark Ages Britain: Studies Presented to E.T. Leeds* (1956) p. 136, pl. 15g; idem, "Highdown Hill," p. 16, pls. 7, 8c.

6. Plate, findspot unknown. Diam. 44.5. San Antonio Museum of Art, no. 86.138P.726. Peacock. San Antonio Museum of Art: The First 10 Years (San Antonio, 1990) p. 60.

7. Bowl, fragmentary, found in Elche. Diam. 33. Madrid, Museo Arqueológico, no. 57.685. Chrisma. D. Roque Chabas, "La patera de Illici," *El archivo* 4, 9 (1890) p. 241; Leclercq, *DACL* XIII, 2, col. 2419, fig. 9982; Harden, "Highdown Hill," p. 16, fig. VIIa; Vigil Pascual, *Vidrio*, p. 151, fig. 130.

8. Bottle, findspot unknown. H. 21.7; Diam. 6.3. Private collection, ex coll. Constable-Maxwell. Bunches of grapes. Constable-Maxwell Collection of Ancient Glass (London, 1979) p. 146, no. 264; 3000 Jahre Glaskunst von der Antike bis zum Jugendstil (Kunstmuseum Luzern, Lucerne, 1981) p. 95, no. 348.

9. Bottle, findspot unknown. H. 20.3; Diam.5.7. Private collection, ex coll. Constable-Maxwell. Arcades. *Constable-Maxwell Collection*, p. 146, no. 266.

10. Beaker, found in Rome. H. 8.1; Diam. 6.8. Museo Sacro

Vaticano, no. 328. Vases and tracery. Fremersdorf, Antikes Glas, p. 83, no. 806, pls. 45a, 45b, 49a, 49b; Harden, Glass of the Caesars, p. 225, no. 125.

**Cat. no. 12** (Figures 64, 65). Dept. of Egyptian Art, 08.268h. Rogers Fund. Free-blown colorless bowl, polished rim; four joined fragments of rim and body. Found in Hibris, Khargah Oasis, Egypt. H. 4; Diam. 18.5.

Bust of a man, facing front, head to the right, holding a bow with his right hand. In the field are lines and hatching. The engraving of the body is crudely delineated by deep rough cuts; the features of the face and the curly hair are marked by a line of points joined with a scratched line. The bow and a few hatchings are abraded. There was room enough on the other side for at least one figure, perhaps Artemis or Actaeon. DATE: fifth century.

UNPUBLISHED.

The findspots of the vases of the same group



Figure 64. Bowl (cat. no. 12), 5th century. H. 4 cm, Diam. 18.5 cm. The Metropolitan Museum of Art, Rogers Fund, 1908, 08.268h



Figure 65. Drawing of cat. no. 12 (Elizabeth Wahle)

(Montenegro, Egypt, and northern Italy) suggest an itinerant workshop. The engraving, especially of the head, is at first glance reminiscent of the so-called Lynceus group, which was centered in Cologne, according to Fremersdorf,<sup>87</sup> or "the East," according to Harden,<sup>88</sup> and dates from the third century. There are now reasons to believe that a good part of this group's production was made in the Rhine area, but itinerant it probably was.

Be that as it may, the relation here with the Lynceus group is superficial. None of the vases of the group comes from a known context; the Italian one, however, features a Christian scene that would be unusual for the third century, and is too much out of step with the compositions usually seen on the vases of the Lynceus group. The rendering of the body, with more squarish lines, is not at all akin with this group. The late date proposed by Bertacchi is probably justified.

#### COMPARANDA:

1. Plate, fourteen joined fragments, found near Aquileia. H. 2.3; L. 17; W. 18.5; reconstructed Diam. 28. Aquileia, Museo Nazionale, no. 53528. Christ and apostles. L. Bertacchi, "Deux nouveaux verres," pp. 112–115; Philippe, *Monde byzantin*, p. 86, fig. 45; *Milano, Capitale*, p. 222, nos. 3f5c.

2. Plate, thirteen fragments, seven of which are joined, found in Doclea (Montenegro). Reconstructed Diam. 32. Louvre, no. MNC 324. Dionysiac scene. Mowat, "Exemples de gravure antique," pp. 281–286; Fremersdorf, *Figürliche*, p. 24, pl. 23.3.

We can also mention unpublished fragments from the Toledo Museum of Art, nos. 358.853 and 80.1128, and the Corning Museum of Glass, nos. 72.1.15, 76.1.140, 79.1.295, and 64.1.52. None of them comes from a known context.

**Cat. no. 13** (Figures 66, 67). Dept. of Greek and Roman Art, 81.10.238. Ex coll. Charvet; gift of H.G. Marquand. Molded flat plate with a footring, colorless; iridescent; part of the footring missing. H. 1.3; Diam. 10.7; footring Diam. 5.1.

On the outside, within the footring, head with wings facing frontally. Around the ring are thirty-five tongues. The engraving is clean enough; around the incision delineating the head, the cheeks are marked by a shallow depression.

DATE: nineteenth-century forgery.

BIBLIOGRAPHY: Froehner, Collection Charvet, p. 70; Kisa, Glas, p. 666, fig. 254.

The cutting is not "right" for a Roman piece, and the figure is crammed on the underside, a spot where no Roman engraver would have put it when the entire flat



Figure 66. Plate (cat. no. 13), 19th century. H. 1.3 cm, Diam. 10.7 cm. The Metropolitan Museum of Art, Gift of Henry G. Marquand, 1881, 81.10.238

surface of the vase was still completely blank. This surface was also artificially aged with acid. Such a composition is found, however, on genuine Roman glass.<sup>89</sup>

**Cat. no. 14** (Figure 68). Dept. of Greek and Roman Art, 17.194.916. Ex coll. Gréau; Gift of J. Pierpont Morgan. Two joined free-blown fragments of an unevenly flattened rim and body of a bowl(?); greenish glass. 6.2 x 7.7.



Figure 67. Drawing of cat. no. 13 (Elizabeth Wahle)

Palms and vegetal motifs around an inscription framed by two lines, which reads: VIPSANIA MAP-SANI / MVS AEIT HALASSA / SIDI ET / HCLAVDIO AVG LEPICLE / TO. DATE: forgery. UNPUBLISHED.

The grooves around the rim are very sloppily traced; on all other vases, they are always lathe-cut in a clear manner; the engraving of branches flanking the inscription are not ancient-looking. The inscription, finally, does not make any sense and is (strangely!) intact.<sup>90</sup> The cutting is clean and deep.

## ACKNOWLEDGMENTS

I wish to thank Carlos A. Picón, curator-in-charge of the Department of Greek and Roman Art, and Joan R. Mertens, curator of the Department of Greek and Roman Art, as well as Charles Little and Thomas Vinton in the Department of Medieval Art and Marsha Hill of the Department of Egyptian Art, for allowing me to study the Museum's collection of glass. I also thank Elizabeth Wahle (drawings) and Oi-Cheong-Lee (photography) for the remarkable quality of the illustrations. D. Whitehouse, director of the Corning Museum of Glass, and the late K. Luckner, director of the Toledo Museum of Art, kindly allowed me to study the engraved glass in these museums. I am also grateful to N. Adbelouahab, Algiers; D. Ashford, Dorchester; A. Baldéon, Álava; L. Balmaseda, Madrid; A. Dorigato, Venice; U. Heimberg, Bonn; F. Hunter, Edinburgh; C. Metzger, Paris; and F. Naumann-Steckner, Cologne. This research was undertaken during September 1995 with the support of an Andrew W. Mellon Fellowship at the Metropolitan Museum.

#### ABBREVIATIONS

AIHV = Association internationale pour l'histoire du verre BI = Bonner Jahrbücher

DACL = Dom Leclercq in Dictionnaire de l'archéologie chrétienne et liturgique

JGS = Journal of Glass Studies

KJVFG = Kölner Jahrbuch für Vor- und Frühgeschichte MMAB = Bulletin of The Metropolitan Museum of Art MMJ = Metropolitan Museum Journal

## NOTES

1. W. Froehner, Catalogue de la collection Charvet (Le Pecq, 1879); W. Goodyear, "The Charvet Collection of Ancient Glass in the Metropolitan Museum of Art, New York," American Journal of Archaeology 1 (1885) pp. 163-172.



Figure 68. Bowl(?) (cat. no. 14), 6.2 x 7.7 cm. The Metropolitan Museum of Art, Gift of J. Pierpont Morgan, 1917 17.194.916

2. W. Froehner, *Catalogue de la collection Gréau*, 5 vols. (Paris, 1903); G.M.A. Richter, "The Room of Ancient Glass," *MMAB* (1911; republ. 1916) pp. 7–23.

3. "Auction Sale of Classical Antiquities," *MMAB* 23, no. 3 (1928) p. 70, and no. 4 (1928) p. 98.

4. Robert de Forest, director of the MMA, had to defend this massive deaccessioning: "How Museums Can Most Wisely Dispose of Surplus Material," *MMAB* 24, no. 6 (1929) pp. 158–160.

5. A. Oliver Jr. traced a number of the engraved fragments of the 1928 sale: "Tapestry in Glass," JGS 17 (1975) pp. 68–70.

6. E. Le Blant, "Note sur une coupe en verre gravé découverte en Sicile," Mélanges de l'École française de Rome 8 (1888) pp. 213-214.

7. F. Grose, Early Ancient Glass, Toledo Museum of Art (New York, 1989) pp. 185-197.

8. D. Harden, "Ancient Glass, II: Roman," Archaeological Journal 126 (1970) p. 55.

9. R. J. Charleston, "Wheel-Engraving and -Cutting: Some Early Equipment," JGS 6 (1964) pp. 86–87, and idem, Masterpieces of Glass (Corning, 1980) p. 52, on the similarity of the ancient art of the gem cutter and glass engraving. R. Forbes, Ancient Technology V (Leiden, 1964) pp. 175–176, gives a fairly accurate if short description of the development of the glass-engraving industry.

10. Beaker from Wales, National Museum of Wales: R. Wheeler, "The Roman Amphitheatre at Caerleon," Archaeologia 78 (1928) p. 170, pl. 34.1. Free-blown jar from Cyrenaica, Berlin (exact whereabouts unknown): G. Bruns, Schatzkammer der Antike (Berlin, 1946) p. 44, fig. 35. Skyphos from Greece, National Museum, Athens: G. Mackworth-Young and J. Brock, "Excavations in Siphnos," British School of Athens 4 (1949) pp. 90–91, pls. 33, 34,1. Three vases from Begram, Musée Guimet, Paris: P. Hamelin, "Sur quelques verreries de Begram," Cahiers de Byrsa 2 (1952) pp. 18–19, pl. vI. Bowl, British Museum: Harden, "Ancient Glass," p. 56, fig. 4 (said there to be of the 3rd century, which is too late: B. Caron, Cahiers des études anciennes 29 [1995] p. 185). Skyphos from Germany, Berlin, Antiken Museum: G. Platz-Horster, Antike Gläser (Berlin, 1976) p. 83, no. 167. Bowl from Egypt, Girton College: Glass at the Fitzwilliam Museum (Cambridge, 1978) p. 46, no. 86. Plate and skyphos, Corning Museum of Glass: S. Goldstein, *Pre-Roman and Early Roman Glass* (Corning, 1979) pp. 150–151, nos. 318, 320, pls. 19, 39. Plate, our cat. no. 1. Plate, Toledo Museum of Art: Grose, *Early Ancient Glass*, p. 342, no. 617. Unpublished plate from the same museum, cf. note 45. The famous 4th-century situla from the San Marco treasury in Venice, D. Harden et al., *Glass of the Caesars* (Milan, 1987) p. 220, no. 122, is also molded, perhaps to ensure an even thickness required for the fitting of the silver handle. A glass identified as Alexandrian by J. Pijoan, "A Greek Glass Vase from China," *Burlington Magazine* 41 (1922) pp. 235–237, is in reality a forgery. See P. Kaellgren, "Re-attributing a So-called Alexandrian Glass Vessel in the Royal Ontario Museum," *JGS* 24 (1982) pp. 82–86.

11. Froehner, Collection Gréau, p. 80, pl. 57, today in the MMA, acc. no. 17.194.2359-2360; O. Elia, "Le coppe ialine di Stabiae," Bollettino d'arte 42 (1957) pp. 97-103; T. Haevernick, "Beiträge zur Geschichte des antiken Glases XI. Obsidianarbeiten," Jahrbuch des Römisch-Germanischen Zentralmuseums Mainz 10 (1963) pp. 122-130, pls. 22-23; F. Fremersdorf, Antikes, islamisches und mittelalterliches Glas, Catalogo del Museo Sacro della Biblioteca Apostolica Vaticana 5 (Vatican City, 1975) p. 119, no. 1070, this one a flat oval; Goldstein, Pre-Roman Glass, p. 285, no. 858; Grose, Early Ancient Glass, p. 342, nos. 618, 619. Elia, "Le coppe ialine," p. 101, sees a reference to such inlaid cups in a text from Athenaeus, Deipnosophistae, 5.199, who mentions και κυλικεία δύο και ύάλινα διάχρυσα δύο. "Two glass vessels interwoven with gold." (C. B. Gulick [Loeb ed., 1928] translated "Two glass vessels studded with jewels.") But this particular text is in relation to a feast given by Ptolemaeus V for Paulus Aemilius in 168/167 B.C., and in this case, Hellenistic sandwich glasses are much more likely. For such glass, see L. Byvanck-Quarles van Ufford, "Les Bols hellénistiques en verre doré," Bulletin Antieke Beschaving 45 (1970) pp. 129-141.

12. Corning Museum of Glass, no. 66.1.227; Goldstein, *Pre-Roman*, p. 151, no. 320, underlines the relation with obsidian vases. This reminds us that glassworkers could imitate many precious stones; Trowbridge, *Philological Studies in Ancient Glass* (Urbana, 1930) pp. 144–147, to which we can add Musonius, 20.4. I have made extensive use of this rich study for its philological research.

13. Pliny does mention glass dishes imitating obsidian: *Natural History*, 36.198: "Fit et tincturae obsianum genere ad escaria varia [Tableware of (imitation) obsidian is made by means of coloration]."

14. Haevernick, "Beiträge zur Geschichte," pp. 127, 130. The famous Stabian skyphoi are a clue to this. Grose, *Early Ancient Glass*, p. 342, favors an Italian, probably Roman, origin. This is also a possibility, when one considers the wave of Egyptomania that swept Italy in the first century.

15. This concept is based on Harden's principles, according to which groups are to be divided by "shapes, design and techniques"; D. Harden, "The Wint Hill Hunting Bowl and Related Glasses," JGS 2 (1960) p. 46; F. Fremersdorf, Die römische Gläser mit Schliff, Denkmäler des römischen Köln 8 (Cologne, 1967) pp. 20-21, identifies each group strictly by the technique of cutting. It is impossible to know whether one or more engravers worked within a "workshop"; they may have worked alone or with apprentices who carried out the sketch they outlined.

16. Charleston, "Wheel-Engraving," pp. 86–87; Harden, "Ancient Glass," p. 54. L. Sagui, "Produzione vetrarie a Roma tra

tardo-antico e alto medievo," in Paroli and Delogu, La storia economica di Roma p. 124, suggested that the cutting was done in two operations: first, the surface of the picture was merely abraded, delimiting its contour, and then a deeper incision could be made. M. Pelliot, "Verres gravés au diamant," Gazette des Beaux-Arts 2 (1930) pp. 302-308, does not think that diamond was used in antiquity, contra Leclercq, DACL VI, 2, col. 1576, who quotes Pliny but in a context which has nothing to do with glass; A. Oliver, "Rock-Crystal Vessels in Antiquity," Muse 7 (1973) p. 32, does not exclude the use of diamond for carving rock crystal. But rock crystal is mostly sculpted in the round and there is very little similarity between the working of glass and of rock crystal. G.D. Scott, "A Study of the Lycurgus Cup," JGS 37 (1995) pp. 60-61, fig. 23, provides a remarkable reconstruction of a workbench used for the carving of cage-cups; but such a tool, which allows for the simultaneous use of two drills, is uselessly complex for engraved glass.

17. Charleston, "Wheel-Engraving," p. 85, fig. 2.

18. Martial, *Epigrams*, 14.115, "Calices vitrei. Aspicis ingenium Nili: quibus addere plura dum cupit, ah quotiens perdidit auctor opus. [Glass vases. See the skill of the Egyptians: when he tried to adorn even more the (glass) vase, oh! how often did the craftsman lose it.]"; in the same manner, in an excerpt in Clement of Alexandria, *Paedag*. 2.3.35: τορευτῶν περίεργος ἐφ' ὑέλϣ, "superfluity of ornamentation on glass," probably refers to another reliefcut glass. Froehner, *Collection Charvet*, p. 94, n. 4, saw a carved glass in *Greek Anthology* 16.89, but nothing in the poem indicates the material it is made of: "Πίνε," λέγει τὸ τόρευμα: "'Drink' says the carving..."

19. W. Thorpe, "The Prelude to European Cut Glass," Journal of the Society of Glass Technology 22 (1938) p. 17, quotes Martial, 14.102: "Accipe . . . calices . . . surrentinae leue toreuma rotae [Accept . . . cups . . . worked smooth by a Sorrentine wheel]," and believes faceted cups are described here; but it could also be wheel-polished cast glass, as the adjective leve, "smooth, polished," might imply; and on p. 15, referring to Martial, 12.70: "O quantum diatreta ualent ... [Oh! how much can 'diatreta' do . . .]," he believes diatreta to be glass vases; but they could also be of metal. As for rock crystal, Pliny does mention that colorless glass (in his lifetime) is very popular because of its resemblance to rock crystal (36.199: "Maximus tamen honos in candido tralucentibus, quam proxima crystalli similitudine [The greatest popularity is for colorless glass, the most like rock crystal]") and it would be tempting to associate glass engraving with rock crystal carving; but there is hardly any resemblance between carved rock crystal and contemporary engraved glassware. On rock crystal vases, see H. P. Bühler, Antike Gefässe aus Chalcedonen (Stuttgart, 1966); idem, Antike Gefässe aus Edelsteinen (Mainz, 1973); and C. Gasparri, "A proposito di un recente studio sui vasi antichi in pietra dura," Archeologia classica 27 (1975) pp. 35off.

20. Pliny, *Natural History* 36.193: "Aliud torno teritur, aliud modo argenteo caelatur."

21. Martial, 12.74.5 and 14.94.1. He lived from ca. 40 to ca. 104. "Nullum sollicitant haes (vitrea popula) toreumata furem [these wrought-glass cups tempt no thief]"; and "Plebeia toreumata vitri [plebian wrought glass]."

22. Greek Anthology, 9.776; see Trowbridge, Philological Studies, p. 54. The poet says έν δέ με μικρη κρυστάλλω το καλον δαίδαλον Άρσινόη γράψας τοῦτ ἔπορεν Σατυρήιος. "Satyreios wrought me on a little crystal and gave the pretty object to Arsinoe."

23. Without dwelling on this problem, painted or engraved glass

did not yet exist when the poem was written, probably in the middle of the 1st century B.C.; it therefore makes reference to another kind of glass or crystal object.

24. Trowbridge, *Philological Studies*, p. 107 n. 42a. The same notion is found in Pliny, 37.59.

25. Achilles Tatius, Leucippe and Clitophon, 2.3: ὑάλου μὲν τὸ πῶν ἔργον ὀρωρυγμένης translated as "The material of it was wrought rock-crystal" by S. Gaselee (Loeb ed.). Both Trowbridge, *Philological Studies*, p. 26, and Gaselee see here a rock crystal object; but the term *ualos* by the time of Achilles Tatius (ca. 300) had the more narrow meaning of "glass." C. Kondoleon, "An Openwork Gold Cup," JGS 21 (1979) pp. 49–50, was right to make the connection between this text and the cage-cups. Contra M. Vickers, "Rock Crystal: The Key to Cut Glass and Diatreta," Journal of Roman Archaeology 9 (1996) p. 51 n. 30, who thinks this was a rock crystal vase.

26. DACL, XV, 2, col. 2975: Tertullian, De Pudicitia, 7.1: "Procedant ipsae picturae calicum vestrorum [The same pictures are visible on your cups]," and 10.1: "Pastor quem in calice depingis [the Shepherd, whom you picture in the cup]."

27. Liber pontificalis, 16.2: "Et [Zepherinus] fecit constitutum de ecclesia, et patenas vitreas ante sacerdotes in ecclesia, et ministros supportantes, donec episcopus missas celebraret, ante se sacerdotes adstantes, sic missae celebrarentur . . . [(Zephyrinus) did (establish the custom of holding) glass patens in front of the priests, in church, and (to have them held by) assistants, who hold them while the bishop says the mass, the priests standing in front of him. This is how mass should be celebrated]"; trans. from L. Duchesne, Liber pontificalis (Paris, 1955). This text has sometimes been construed (H. d'Escurac-Doisy, "La Verrerie chrétienne découverte à Timgad," Libyca 7 [1959] p. 59) to mean that Zephyrinus allowed the use of glass vessels for the liturgy; the text describes only the introduction of the use of patens, which happen to be of glass. Objects described in the many lists of donations by emperors are usually said to be of gold and silver, never of glass: Duchesne, Liber pontificalis, I, pp. cxliiicxlv.

28. St. Jerome, *Epistolae*, 125.20: "Nihil illo ditius, qui Corpus Domini canistro vimineo, Sanguinem portat in vitro [Nothing can be richer than carrying the Body of Christ in a (simple) wicker basket and His Blood in a glass]." The use of glass vases by poor Christian communities in Egypt during late antiquity and the early Middle Ages is also mentioned in Coptic and Arabic sources. See *Corpus scriptorum christianorum orientalium, Scriptores Coptici, ser. 3, 1 Acta martyrum,* quoted by D. Harden, *Roman Glass from Karanis* (Ann Arbor, 1936) p. 40 n. 1; and in the *History of the Patriarchs of Alexandria, Patrologia orientalis,* V, p. 62, quoted by R. Harris, "Glass Chalices of the First Century," *Bulletin of the John Rylands Library* 11 (1927) p. 293.

29. Gregory of Tours, *Miraculorum libri*, 1.46, "Calyx crystallinus admirabili pulchritudine."

30. Quintilian, *De Institutione oratoria*, 2.21: "Nam scalptura etiam lignum, ebur, marmor, vitrum, gemmas . . . complectitur." Trowbridge, *Philological Studies*, p. 107 and n. 42, read "sculptura" and "ligna." I follow the reading of the J. Cousin ed., in *Les Belles Lettres* (Paris, 1976).

31. Digest (Roman code of law) pp. 9, 2, 27, 29: "Si calicem diatretum faciendum dedisti, si quidem imperitia fregit, damni iniuria tenebitur: si vero non imperitia fregit, sed rimas habebat vitiosas, potest esse excusatus," quoted in Trowbridge, *Philological Studies*, p. 110 and n. 27. This law was written in the early 3rd century. Vickers, "Rock Crystal," p. 59, assumes it refers to "cage-cups," but there is no reason to believe the law does not extend to glass engraving.

32. Contra Thorpe, "The Prelude," p. 19. In the excavations of a glass kiln at Jalame in Palestine, G. Davidson-Weinberg discovered in the refuse pit a few engraved fragments. She supposed that these sherds were not engraved on the spot but were collected as cullets, used as a melting agent in the initial process of glassmaking. Their presence in the refuse merely means that they were rejected by the glassworkers during the sorting out of the glass fragments, collected to be remelted. See *Excavations at Jalame* (Columbia, 1988) pp. 87–102. Martial (10.3.3-4 and 1.41.3-5) and Statius (*Silvae* 1.6.73-74) mention the trade of petty peddlers involved in this business. Salvage and recycling were nothing new in the Roman world!

33. Greek Anthology, 9.753: Χιονέη κρύσταλλος ὑπ' ἀνέρος ἀσκηθεῖσα / δεῖξεν ἀκηρασίοιο παναίολον εἰκόνα κόσμου, / οὐρανὸν ἀγκὰς ἔχοντα βαρύκτυπον ἕνδοθι πόντον "(On a crystal having water inside) The snow-white crystal, fashioned by the hand of man, showed the variegated image of the perfect universe, the heaven, clasping within it the deep-voiced sea" (trans. by Paton, Loeb ed., 1948); *Epigrams*, 51.1: "Jupiter in paruo cum cerneret aethera uitro, risit ... [Jupiter, when he saw the cosmos (pictured) on a small glass, laughed ..."] 43.1: "Fallaces uitreo stellas componere mundo ... [(Uranus could) place deceitful stars on a glassy globe ...]."

34. Trowbridge, Philological Studies, p. 55.

35. For instance, small globular bottles were left with a small neck opening through which the contents, usually perfume, were poured, and then the opening was fire-closed; C. Isings, *Roman Glass from Dated Sites* (Groningen, 1957) pp. 25–26, shape 10. A hollow ball of thick glass of early medieval date from the Newark Museum also gives a good idea of such a globe; S. Auth, *Ancient Glass in the Newark Museum* (Newark, 1976) p. 177, no. 247.

36. O. Brendel, Symbolism of the Sphere (Leiden, 1977), pl. 7 (Villa Albani Mosaic), pl. 9 (Urania), and pl. 17 (Apollo Kosmokrator); K. Lehmann, "The Dome of Heaven," Art Bulletin 27, 1 (1945) p. 25, fig. 67; these illustrations show translucent globes with parallel lines and the line of the zodiac. They remind one of the globe set on a stand pictured on a late gold glass in the Vatican Library: C. Morey, *The Gold Glass Collection of the Vatican Library* (Vatican City, 1959) p. 5, no. 13, pl. 2, 13.

37. For instance, the author of the notice in Harden, *Glass of the Caesars*, p. 224, no. 124, citing Fremersdorf, still hesitates between Rome and Alexandria as the place of production of an obviously Italian, probably Roman, glass, the comparandum no. 2 of our cat. no. 9. The references on Alexandrian glassworks have been gathered by Trowbridge, *Philological studies*, pp. 128–130.

38. D'Escurac-Doisy, "La Verrerie chrétienne," p. 59, wrote that "glass acquired its letters patent of nobility and Christians sought it for its own value." In reality, glass itself was not valuable in the Roman world; its artistic treatment gave it value.

39. For instance, M. Yacoub, "Les Verres romains des Musées de Sfax, Sousse et du Bardo," *Bulletin de l'AIHV* 6 (1971–72) p. 68, suggested that the engraved cup found in the Antonine baths in Carthage was "used to carry the bread that recently baptized neophytes are given on Easter morning"; this is mere speculation. In fact, for all we know, even the Dumbarton Oaks cup and its coun-

terpart from Gerasa (cf. V. Elbern, Berliner Museen 4 [1964] pp. 17-41), with all their religious elements related to Palestinian sites, could be, rather than true chalices, expensive souvenirs, several notches above the mold-blown glass, Menas flasks, and lead gourds mass produced for pilgrims traveling to the Holy Land. J. Engemann, "Spätantike Geräte des Alltagslebens," Jahrbuch für Antike und Christentum 15 (1972) pp. 161-164, also concludes that Roman engraved glassware was not necessarily used for the Eucharist.

40. Isings, *Roman Glass*, p. 117, shape 97c, cites a few examples from Gaul and Germany.

41. For instance, E. aus'm Weerth, "Kleinere Mitteilungen aus dem Provinzialmuseum zu Bonn," BJ 64 (1882) p. 149; F. Behn, "Neue Ausgrabungen in Alzey," Mainzer Zeitschrift 28 (1933) p. 57, figs. 11, 26; W. Braat, "The Glass Collection of the Rijksmuseum van Oudheden at Leiden," Oudheidkundige Mededelingen 44 (1963) p. 110, no. 22; Fremersdorf, Schliff, p. 63, pls. 22, 23; K. Goethert-Polaschek, Katalog der römischen Gläser des Rheinischem Landesmuseums Trier, vol. 1x, Trierer Grabungen und Forschungen (Mainz, 1977) p. 25; J. Salomonson and P. La Baume, Römische Kleinkunst, Sammlung Loeffler, Wissenschaftliche Kataloge des Römisch-germanischen Museums Köln 3 (ca. 1976) p. 167 no. 230, without known findspot, dated from the 3rd or 4th century; this is probably too late.

42. P. Marconi, "Vetri romani nel Museo," Bollettino d'arte 26 (1932) p. 34, fig. 2.

43. J. de Alarcão, "Roman Glass from Troia (Portugal)," Annales du 8<sup>e</sup> congrès de l'AIHV (Liège, 1981) p. 106, figs. 1, 3.

44. Musée Archéologique de Rabat, handle fragment found in Thamusida. Unpublished.

45. Toledo Museum of Art, no. 80.1187. Unpublished.

46. A. Radnoti, "Eine ovale Bronzeplatte aus Regensburg," Bayerische Vorgeschichtsblätter 30 (1965) pp. 188–244, who lists 52 such plates; quoted by S. Tassinari, La Vaisselle de bronze romaine et provinciale au Musée des antiquités nationales,  $29^e$  supplément de Gallia (1975) p. 51, nos. 103, 104, popular from the 2nd to the 4th century; the older ones are in silver.

47. Alarcão, "Roman Glass," p. 106.

48. The square sigma is rare before the 2nd century A.D. W. Larfeld, *Handbuch der griechischen Epigraphik* (Leipzig, 1902) pp. 490–503. The letters seem to be dated to his periods XVII and XVIII.

49. Archives of the MMA.

50. Ibid.

51. Harden, Glass of the Caesars, p. 215.

52. Augustine, to make a point in a sermon, mentions such longlived glasses, *Sermones* 17.7: "Et invenis calices [vitri] ab auis et proauis... in quibus bibunt nepotes et pronepotes... [And you find [glass] cups of grandfathers and great-grandfathers out of which drink grandsons and great-grandsons]."

53. I know of only one representation of this particular episode: R. Delbrueck, "Notes on the Wooden Doors of Santa Sabina," *Art Bulletin* 34 (1952) pp. 139–140. A panel shows the Exodus out of Egypt, the drowning of pharaoh's army, and Aaron's snake eating an Egyptian's snake; all the scenes are related to the Moses cycle and so make the identification certain.

54. See, for instance, the Mittlemann sarcophagus, no. 1991.336: H. Evans, "An Early Christian Sarcophagus from Rome Lost and Found," *MMJ* 28 (1993) pp. 77–79, figs. 3, 4, and F. Deichmann, *Repertorium der Christlich-Antiken Sarkophage* (Wiesbaden, 1967), for instance, nos. 6, 121, 142.

55. F. Braun, "L'Eau et l'Esprit," Revue thomiste 49 (1949) pp. 5-30.

56. On the area of Cologne as origin, see Fremersdorf, *Schliff*, p. 31; for a 4th-century context, beside cat. no. 8, add comparanda nos. 1, 24, 26, 31, 33.

57. Comparanda nos. 1, 9, 10, 27. The only exceptions are the figures I identified as Cain and Abel (comparandum no. 1); they are wearing togas because they are (like Abraham) about to make a sacrifice (Genesis 4:3-4). The tree behind Abraham clearly separates the two scenes, and the sheaf (Cain's offering) is too peculiar an object to be seen as a background filler. In front of the first figure, whatever is left could be identified as a small animal, the offering of Abel. Both offerings in the field are there to identify the figures next to them; they certainly are not the servants d'EscuracDoisy believed them to be.

58. Cf. cat. no. 7, comparandum no. 6. The same picket border is seen on a silver plate from Cesena; see J. Salomonson, "Kunstgeschichtliche und ikonographische Untersuchungen zu einem Tonfragment in der Sammlung Benaki zu Athen," *Bulletin Antieke Beschaving* 48 (1973) p. 34, fig. 24b.

59. Le Blant, "Note sur une coupe," pp. 213-214.

60. R. Barovier-Mentasti, "La coppa incisa con 'Daniele nella fossa dei leoni' al Museo Nazionale Concordiese," Aquileia Nostra 57 (1983) pp. 157–172; see comparandum no. 1. Fremersdorf, Figürliche geschliffene Gläser einer kölner Werkstatt des 3. Jahrhunderts, Römisch-germanische Forschungen 19 (1951) p. 24, supposed this group could be from Alexandria; this has no basis. The contention in Harden, Glass of the Caesars, p. 224, that "there is so little material that it is difficult to make a serious suggestion about the place of production" is not borne out by the fact that many comparanda consistently show Rome and northern Italy as the areas where they were found.

61. L. Bruzza, "Frammento di un disco di vetro che rappresenta i vicennali di Diocleziano," *Bollettino comunale* 10 (1882) pp. 180–190.

62. H. Fuhrmann, "Studien zu den Consulardiptychen verwandten Denkmäler I: Eine Glasschale von der Vicennalienfeier Constantins der Grosse zu Rom im Jahre 326 n. Chr.," *Römische Mitteilungen* 54 (1939) pp. 161–175. A. Chastagnol, "Les inscriptions des monuments inaugurés lors des fêtes impériales," *Mélanges de l'École française de Rome* 100, 1 (1988) p. 24.

63. G. Brands, "Ein Glasschalenfragment im Antiquarium Comunale in Rom," *Jahrbuch für Antike und Christentum* 26 (1983) pp. 107–127, hesitates between Constantine and Constantius; Salomonson, "Kunstgeschichtliche," pp. 51ff., believed him to be Constantius.

64. A. Tedeschi, "Il vetro di 'vicennalia' dell'Antiquarium comunale di Roma: un nuova proposta di lettura," *Bollettino della Commissione archeologica comunale di Roma* XCIV (1991-92) pp. 33-50.

65. A. Riegl, *Die spätrömische Kunstindustrie* (Vienna, 1901) pp. 171, pl. 23.1–2. See comparandum no. 9.

66. J. Matthews, Western Aristocracies and Imperial Courts, 364-425 (Oxford, 1975) p. 242 with bibl.; there are also in Rome and Ostia a number of inscriptions of the late 4th century mentioning aristocrats who were priests of oriental cults; M. Vermaseren, Corpus *Cultus Cybelae Attidisque* III (Leiden, 1980) nos. 229–233, 236–240, 242–244, 246, 263, 283, 295.

67. M. Armellini, "I vetri cristiani della collezione di Campo Santo," *Römische Quartalschrift für Altertumskunde* 6 (1892) p. 55, pl. 3.2. Comparandum no. 7 was probably identical.

68. M.-T. Floriani-Squarciapino, "Coppa cristiana da Ostia," Bollettino d'arte 37 (1952) pp. 204–210; see comparandum no. 4.

69. R. Van den Broek, The Myth of the Phoenix (Leiden, 1972) pp. 248ff., gives a list with the bibliography; on the formation of the composition, see T. Buddensieg, "Le Coffret en ivoire de Pola, St-Pierre et le Latran," Cahiers archéologiques 10 (1959) p. 163, and P. Testini, "La lapide di Agnani con la 'Traditio Legis," Archeologia classica (1973-74) pp. 736-738, who placed the apparition of the prototype about A.D. 370 and its final state in the Theodosian era. M. Sotomayor, "Petrus and Paulus in der frühchristliche Ikonographie," Spätantike und frühes Christentum (Frankfurt, 1984) p. 206, believes sarcophagi are the source of this composition in Rome in the second half of the 4th century. It is also found, a little later, on early-5th-century sarcophagi in Ravenna: J. Kollwitz and H. Herdejürgen, Die Sarkophage der westlichen Gebiete des Imp. Rom., Die ravennatischen Sarkophage 8, 2 (Berlin, 1979) pp. 56 B4, 61 B9. Vase comparandum no. 19 seems to be a variant of the same scene; a phoenix, probably perched on a tree, near a haloed figure, facing frontally-St. Paul, as De Tommaso rightly asserts, "Vetri incisi," p. 103. The iconography of Constantius II often shows him with a phoenix in this position: H. Stern, Le Chronographe de 354 (Paris, 1954) pp. 145-146, pl. IV. 2; but the simplicity of the dress, in the case of comparandum no. 19, precludes this identification.

70. Hippolytus, Commentary on Daniel, 1.17, quoted by Braun, "L'Eau et l'Esprit," p. 12; trans. from the Bardy-Lefèvre ed., Sources chrétiennes XIV (1947) p. 105.

71. J. Kurth, *Die Mosaiken von Ravenna* (Munich, 1912) pp. 225, 228–229, pl. 30.

72. Caron, "Note sur deux dessins représentant un verre gravé," Échos du monde classique/Classical Views 37 (1993) pp. 349-358. See comparandum no. 23.

73. J. M. C. Toynbee, "Roma and Constantinopolis in Late Antique Art," Journal of Roman Studies 37 (1947) p. 138 (see in particular a coin published by Sutherland and Carson, Roman Imperial Coinage VIII [London, 1980] p. 221, no. 232, pl. 7, Rome on the left sitting with Nike in her right hand and Constantinople on the right with Nike in her right hand), not to mention its resemblance to the Barberini Roma painting, the drawing in the calendar of 354, and the Tabula Peutingeriana, in Toynbee, "Roma and Constantinopolis," pls. 8, 9. K. Painter, "A Fragment of a Glass Dish in the Antiquarium Comunale in Rome," KJVFG 22 (1989) p. 91, notes that on the comparandum no. 15 fragment, "To the left of the existing figure is what might be the ears of a horse, and so the emperor may have been mounted ...," but these ears are invisible to me. Paribeni's interpretation still seems the more probable one.

74. J. Hayes, "Réflexions sur la verrerie des époques tardives à Carthage," *Cahiers des études anciennes* 17 (1985) p. 118, fig. 6. See comparandum no. 39.

75. He had two vicennalia: the first one, in 343, celebrated his accession to the rank of Caesar, as junior emperor; the second his 20 years of rule as Augustus. Constantius ruled (as Augustus) from 337 to 361. Salomonson, Kunstgeschichtliche, p. 55, no. 188.

76. Several emperors ruling after Constantine celebrated their *vicennalia* on their coinage, but among them only Constantius and Honorius actually ruled more than 20 years; Brands, "Ein Glasschalenfragment," p. 124 n. 117c.

77. For instance, Sutherland and Carson, *Roman Imperial Coinage*, p. 222, no. 248. In fact, he wore the diadem for the first time in 360 (ibid., p. 16 n. 112). Tedeschi, "Il vetro di 'vicennalia," p. 45, n. 110, considered this solution but rejected it. She noticed that the main figure is bearded, but we know that Julian was already sporting a beard before he became a Caesar; see his *Misopogon*, 351A.

78. A. Jones and J. R. Martindale, *Prosopography of the Later Roman Empire* I (Cambridge, 1971) p. 832, no. 8, a fact also noticed by Salomonson, "Kunstgeschichtliche," p. 56 n. 191, and Brands, "Ein Glasschalenfragment," p. 125 n.121; but Brands does not choose Julian over Constantius, if I read him correctly. During his Caesarship, the name of Julian was routinely associated with Constantius's in decrees, coinage, etc. His power was at first only nominal: J. Bidez, *La Vie de l'empereur Julien* (Paris, 1930) p. 141.

79. J. M. C. Toynbee and K. Painter, "Silver Picture Plates of Late Antiquity: A.D. 300–700," *Archaeologia* 108 (1986) pp. 15ff., 27 n. 16, pl. x a.

80. On these sumptuary laws of 384, see A. Chastagnol, La Préfecture urbaine à Rome sous le Bas-Empire (Paris, 1960) pp. 278–279, and K. Painter, "A Fragment of a Glass Dish," p. 96. It is worth noting that one will find glasses which are obviously largitiones mainly in the group of the Master of the Cup of Daniel; but this engraver was probably not attached exclusively to the emperor's service; his production is too varied. See R. MacMullen, "The Emperor's Largesses," Latomus 21 (1962) pp. 165–166, on artisans attached to the service of the comes sacrarum largitionum. See also R. Delmaire, "Les Largesses impériales et l'émission d'argenterie du IV<sup>e</sup> au VI<sup>e</sup> siècle," in Argenterie romaine et byzantine (Paris, 1988) p. 116.

81. This composition, a bust facing frontally, is reminiscent of the composition on a bronze plate with the head of Oceanos in the middle and marine life surrounding it; cf. Salomonson, "Kunst-geschichtliche," p. 80, fig. 62.

82. DACL, XIV, 1, cols. 1025-1027, usually in connection with longer inscriptions.

83. DACL, XIV, 1, col. 1027, believed that IIIE was a transcription of PIE, "piously" in Latin. But a simple phonetic rendition is more probable.

84. Harden, "Highdown Hill," pp. 3-20.

85. Ibid., p. 19.

86. See note 37.

87. Fremersdorf, Figürliche, pp. 22ff., and idem, Antikes Glas, pp. 16-17.

88. Harden, *Journal of Roman Studies* 42 (1952) pp. 200–201. The discussion on the date and origin of this group sparked a long and lively debate among archaeologists; it was perhaps not recognized right away that engravers were itinerant artists.

89. From Xanten, B. Follman-Schulz, *Römische Gläser* pp. 71–72, no. 40; from Trier, Goethert-Polaschek, *Katalog*, p. 263, no. 1563, fig. 66.

90. I know of no inscription or inscriptions from which the forger might have drawn his inspiration.