

A Roman Figure-Engraved Glass Bowl

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IN 1910 J. PIERPONT MORGAN gave to The Metropolitan Museum of Art a remarkable collection of Roman glass, formerly the Julien Gréau collection,¹ which included a score of figure-engraved pieces. In 1928, at an auction held at the Anderson Gallery in New York,² a number of these figure-engraved glasses were sold.³ The most interesting piece, however, is still in the Department of Greek and Roman Art⁴ and has yet to be fully published (Figure 1).

Blown glass bearing engraved figures appears as early as the first century A.D. (although most pieces date from the second to the fifth century) and is found predominantly in the western provinces of the Roman Empire. The quality of this relatively late production belies the widespread conception that glassware was a declining industry at the end of the empire.⁵ As far as I know, neither an engraver's workshop nor any engraving tools dating back to the Roman Empire have yet been discovered.⁶ R. J. Charleston assumed, rightfully, that these must have resembled gem-engraving tools: a small hand-powered lathe, at the extremity of which the worker could adapt a number of wheels or sharp points. With these he would trace lines, dots, or shallow incisions in the wall of the glass.⁷ A passage in Pliny's *Natural History* obviously applies to cast vessels that were afterward ground and polished on a lathe rather than to engraved glass. This kind of cast-and-ground or polished ware, still popular in the lifetime of Pliny, had all but disappeared by the third century.⁸

In the 1920s, Fritz Fremersdorf, the late curator of the Cologne museum, undertook the task of classifying, by workshops, the large glass collection in his museum.⁹ A number of interesting studies have been published since, and they have considerably

enlarged the corpus of known material.¹⁰ Thus, according to my research, about twenty different workshops can be identified today.

Engraving techniques, such as deep wheel-cutting of narrow incisions, facet-cutting, and lines of points, serve as markers to distinguish one group from another.¹¹ The shape of a vase may help to provide a date. Unfortunately, only a precious few engraved glasses have been found in well-dated contexts. The subject of the scene within each group or workshop may vary widely—Christian or pagan scene, hunting scene, circus scene. This variety reflects the different origins of the patrons.

Patrons probably did not decide exactly what was to be engraved but most likely chose the elements of a particular scene from a sketchbook or pattern-book. Indeed, though details may differ, many subjects (hunting scenes, for instance) seem to follow a set pattern. The small surface of the glass allowed relatively few variations for the engraver. These objects, sometimes available even to customers of modest means, were not intended for everyday use. One can assume that, just like the silverware belonging to wealthier families, they commemorated a happy event in the lives of their owners or were made as gifts (*largitiones*).

Some of the most exquisite pieces, however, were obviously commissioned as presentation plates, or *missoria*,¹² by very wealthy patrons. The best example is a lavishly decorated plate, now lost, documented in drawings of the seventeenth century (Appendix 31). It seems to commemorate the nomination of a very high civil servant in Rome: a prefect of the city or, more likely, a prefect of the *annona* (wheat supply). For such occasions, these plates could be tailor-made to suit the taste of the client.

The reader must realize that the glassblower and the engraver worked independently, not together. A provision existed in Roman law¹³ concerning the

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The notes for this article begin on page 52.



Figure 1. Roman glass bowl. From Froehner, *Collection Julien Gréau* (1903)

responsibility of a glassblower who provided the engraver with a defective glass. Had they worked in the same workshop under common supervision, such legislation would have been unnecessary. Besides, in lists of artisans granted immunities both Theodosian and Justinian codes clearly separated the *vitriarius* (glassblower) from the *diatretarius* (engraver).¹⁴

It is therefore difficult to pinpoint the area of production of engraved glass, because the engraver (much more easily than the glassblower) could travel from city to city, with a small provision of unadorned bowls and plates, in search of better markets. This fact, rather than export alone, might explain the wide diffusion of certain groups.¹⁵ By the concentration of known findspots, the main centers seem to have been situated in Italy, especially around Rome, and in the Rhine area, namely Cologne and Trier, cities that gained military and political importance in the fourth century. Craftsmen were then able to find a large clientele of civil servants and officers in these centers. This may also explain the mix of pagan and Christian themes; the aristocracy in the Western world (especially in Rome), the driving force behind the conservative

reaction, clung tenaciously to its old beliefs.¹⁶

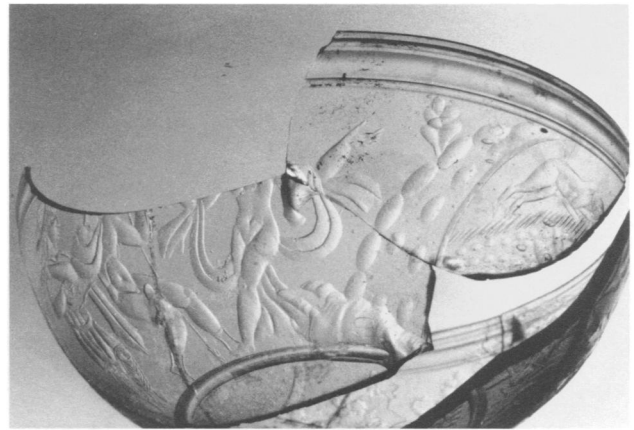
Several of the fragments come from scattered findspots in the eastern provinces—Egypt, Palestine, and Syria. Alexandria must have been home to some workshops, but its devastation and economic decline brought about by the Domitianus rebellion of 297–298 probably forced them to move elsewhere in search of clients.

The Metropolitan Museum's vase, to which we now return (Figure 2), is a free-blown hemispherical bowl. The outer side of the rim is underlined by three parallel grooves. The engraving, done with a rotating wheel, left deep facets on the outer surface. When acquired, it was already broken into nine joined fragments. The bottom, as well as parts of the rim and wall, are missing. The glass, slightly greenish originally, is now somewhat iridescent and very pitted in places: the engraving is almost obliterated where the pitting is very bad.

The wall of the bowl is decorated with seven figures and four animals divided into two groups. The first group is flanked on either side by a clump of trees; the first figure, a man clad in a simple palium, leans on his spear, held in the left hand; he is kept from falling by another man, dressed in a short



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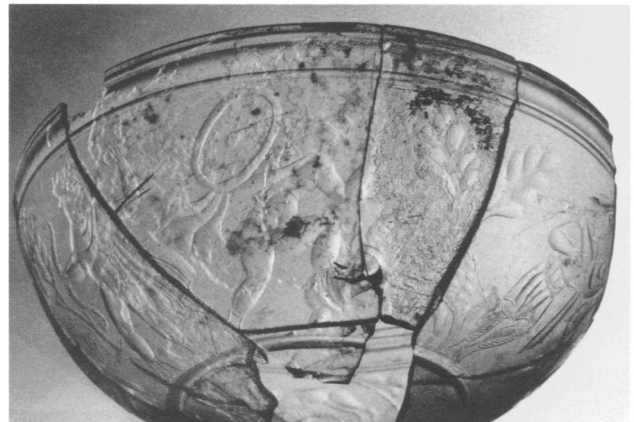
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Figures 2–7. Bowl, Roman, early 4th century A.D.? H. 7.7 cm, Diam. 18 cm. The Metropolitan Museum of Art, Gift of J. Pierpont Morgan, 1910, 17.194.328



Figure 8. Detail of "little hunt" section of Piazza Armerina mosaic, Roman, early 4th century. Rome, Piazza Armerina



Figure 9. Bowl (Appendix 1), Roman. Glass, 14.2 x 8.1 cm. Rome, Vatican Museum (photo courtesy of the Biblioteca Vaticana)



Figure 10. Drawing of a second-century A.D. Roman sarcophagus, showing scene from Euripedes' *Phoenician Women* (from C. Robert, *Die antiken Sarcophagreliefs II, Mythologische Cyklen*, 1890, pl. 60)

tunic and wearing leggings. To the right, a woman is running in their direction with her arms outstretched. A long veil hangs from her elbows; the folds of a pallium are visible behind her legs. At her left, behind the foliage of the tree (Figure 3), a thick fillet delimits the entrance of a lair, from which a boar charges toward the right (Figure 4). This feature marks the beginning of the second group of figures. Because of a break in the wall of the vase, only the boar's back survives, etched with a triple line of ovolos and bristly hair.

In front of the boar, a hunter rushes forward, a spear held firmly with both hands (Figure 5). His right shoulder is covered by a pallium that hangs down to his waist. Two dogs, one by his side and the other near the entrance of the lair, also attack the boar. Behind the hunter, two archers take aim at the animal. Their left hands are held up, the thumb and the index finger still held close together, as if

they had just released their arrows. The first archer, a woman (Figure 6), wears a short tunic with a single strap and the second, a man, has a pallium around his shoulder.

The seventh character, a bearded man who turns his back to the archers, confronts another boar, already half hidden in its lair (Figure 7). He stands with his left leg raised, as if to avoid the charge of the beast. He holds a shield high in his right hand and a spear in the left—a now invisible spear because of the pitting of the glass. His pallium floats behind him and he wears either a helmet or a Phrygian cap.¹⁷ Only the back of the boar is visible behind some foliage,¹⁸ partly obliterated by the poor state of the glass. This episode obviously belongs to the first scene; the boar pictured here has just wounded the falling hunter and escapes toward the bush (Figure 2). G. Del Massias, who made beautiful engravings of these scenes, misread their sequence.

The theme of the boar hunt, rather common in Roman art, is often associated with the myths of the Calydonian hunt and the death of Adonis. The engraver united both subjects here, as Christoph Clairmont and Victorine von Gonzenbach noticed in 1958;¹⁹ on the left, Aphrodite runs toward a fatally wounded Adonis, while the killer boar disappears in the forest in front of the helmeted(?) hunter. In the iconography of Adonis the hunt and the death of the hero usually appear together.²⁰

On the right, one recognizes Meleager and the Calydonian boar; behind Meleager the first archer would be Atalanta, clad in the tunic this huntress customarily wears. As far as I know, this is the only example where both myths are pictured together.

The Metropolitan Museum's glass, as well as a few of the vases belonging to the same group, call to mind a section of the famous mosaic of Piazza Armerina, dated to the early fourth century.²¹ Indeed, we can compare to the Museum's glass the so-called little hunt section (Figure 8), which shows a hunter thrown down on the ground and Adonis' hunting mate, into whose arms he is falling. The latter is also the look-alike of an unseated rider on an engraved glass bowl in the Vatican Museum (Figure 9).²² Both figures have the same gesture, the same clothes with the same folds, and the same leggings. It seems that the engraver and the mosaicist used the same source—conceivably even the same patternbook. While we do not have to look for a particular relation between the glass group and the mosaic of Piazza Armerina, the recurrence of this figure raises the complex problem of the diffusion of sketchbooks in the artistic milieu where mosaicists and glass workers, among others, were especially mobile.

The sources copied in these sketchbooks, none of which has survived, may have been illuminated manuscripts, mosaics, reliefs on public and private monuments, such as sarcophagi, and perhaps other artists' sketchbooks.²³

The figure of Atalanta is reminiscent of the huntress seen on many a Meleager sarcophagus;²⁴ as for Aphrodite, she resembles the Nereids on a sarcophagus of the second century A.D., now in the Ancona Museum.²⁵

The helmeted(?) hunter is puzzling, for it is unusual to see a figure rendered in this way on a hunting scene. It is perhaps derived from a damaged sarcophagus dated to the second century A.D. that bears several scenes from Euripides' *Phoenician Women*.²⁶ Capaneus, among others, is seen about to

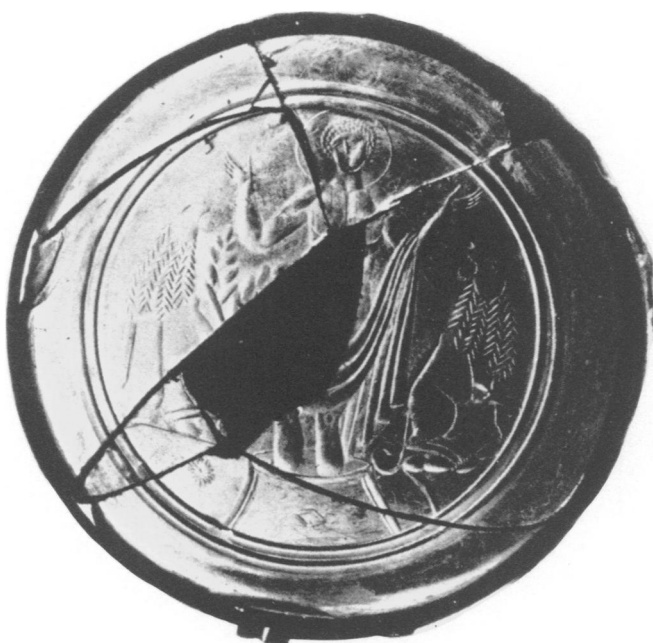


Figure 11. Bowl (Appendix 5), Roman, mid-4th century A.D. Glass, H. 3.6 cm; Diam. 15.8 cm. Rome, Museo Nazionale Concordiese (photo from *Bolletino d'Arte*, 1952)



Figure 12. Plate (Appendix 11), Roman, 4th century A.D. Glass. Formerly Figdor Collection; whereabouts unknown (photo from Riegl, *Die Spätromische Kunstindustrie*, 2nd ed., 1927)

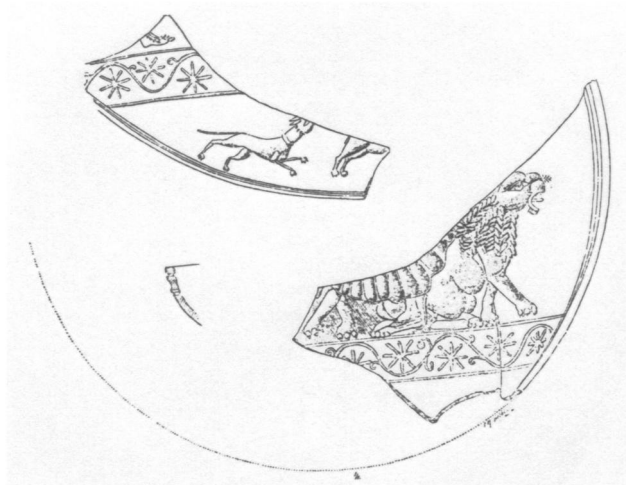


Figure 13. Bowl (Appendix 6), Roman. Glass. Whereabouts unknown (photo from *Notizie degli Scavi di Antichità*, 1903)

scale a ladder to storm Thebes, defiantly raising his shield above his head, one foot on the lower rung of the ladder (Figure 10).

The Museum's bowl belongs to a group of engraved glasses already studied in part by R. Barovier-Mentasti.²⁷ She attributes it to a "Master of the Cup of Daniel" (named after the cup in the Museo Nazionale Concordese), whose floruit she places around the middle of the fourth century in the area of Rome, where his workshop was probably situated. She lists in her article ten vases, including the one illustrated in this essay (Figure 11). She believes it to be from the same hand, and I have no reason to challenge her conclusions as I agree with them. After sifting through the published sources, however, we may add several other glasses to the list of works by the "Master of the Cup of Daniel" (see Appendix).

Among them, two little-known vases are especially interesting. The first one (Figure 12),²⁸ formerly in a private collection, shows Cybele and the death of Attis, a rare enough scene in Roman art.²⁹ The lions in front of the goddess are quite similar to the ones pictured on either side of Daniel in the eponymous cup of the group.³⁰

The second one, a fragmentary bowl discovered in Italy (Figure 13),³¹ apparently represents Daniel and Habakkuk in the lion's den. Only one lion is clearly visible, but it is almost identical to the preceding ones with the triple herringbone pattern of the mane, large almond-shaped eyes, and a short snout.

All these bowls exhibit the same characteristics: the deep-facet cutting, the stiffness of the figures,

the twisting of the torsos (the abdomen is seen from a three-quarter view, the thorax is seen frontally), and the unusual length of the hands and fingers. The head, when seen in profile, is characterized by a long nose, large almond-shaped eyes, and hair and beard formed by several rows of small ovolos. When the head is shown frontally, the cheeks are round, the mouth small, and the eyes still almond-shaped. The folds of the clothes are very wide and very stiff. The foliage³² is usually pictured by deep-facet cuts shaped like palmettes and the tree trunk by a row of ovals.

Because of the quality of its workmanship and the interest of its iconography, the Metropolitan Museum's bowl is one of the fine pieces in this group and it is unfortunate that it has remained little known for so long. The Appendix provides a list (which is by no means exhaustive) of the glasses I believe belong to the same group. They were not necessarily made by the same artist, but were decorated by engravers working in the same workshop (perhaps as apprentices) as the "Master of the Cup of Daniel" or heavily influenced by him.

ACKNOWLEDGMENTS

I wish to thank Joan Mertens for allowing me to study the glass bowl in the Department of Greek and Roman Art, providing photographs of it, and giving me information on the whereabouts of glass formerly in the Museum's collections; Patricia Coyne and David Seale of Bishop's University, who read early drafts of this paper. Part of this research was done at the Dumbarton Oaks Library, while I was a summer fellow in Byzantine studies. It was the subject of a paper read to the congress of the Canadian Classical Association in Charlottetown, Prince Edward Island, May 25, 1992.

NOTES

1. W. Froehner, *Collection Julien Gréau. Verrerie antique . . . appartenant à M. John Pierpont Morgan* (Paris, 1903) nos. 1078–1095. Cf G. M. A. Richter, *MMAB* 6 (1911) suppl. 7.
2. A. Oliver, Jr., "Tapestry in Glass," *Journal of Glass Studies* 17 (1975) p. 68.
3. They were bought by the Sarasota Museum in Florida and the Higgins Armory, Hartford, which recently sold them again; Sotheby's sale cat. no. 1381, Dec. 1991, lot 213 et al.

4. Acquired in 1910, inv. 17.194.328. Froehner, *Collection Julien Gréau*, no. 1092, pl. 187, pp. 1–2; M. Ginsburg, *Hunting Scenes on Roman Glass in the Rhineland*, University of Nebraska Studies no. 41, 2 (Lincoln, 1941) p. 21, fig. 10, and p. 29 n. 47.

5. Contra R. J. Charleston, “Wheel-Engraving and -Cutting: Some Early Equipment,” *Journal of Glass Studies* 6 (1964) p. 87.

6. Charleston, “Wheel-Engraving,” p. 85, does mention Mesopotamian gem-engraving tools packed in a box that was discovered at Tell Asmar, Iraq, in a 2500 B.C. context.

7. Such a lathe is figured on a gem cutter’s gravestone. Charleston, “Wheel-Engraving,” p. 86 and n. 18, p. 85, fig. 2.

8. Pliny, *Natural History*, XXXVI, 193, “Aliud torno teritur, aliud modo argenteo caelatur”: the first part of the sentence, as Charleston explained (“Wheel-Engraving,” p. 85), means that glass may be worked on a rotary tool; but the rest is vaguer: “Some glass is engraved (or inlaid) like silverware.” He may be writing about relief cut-glass or, less likely, about obsidian plates ornamented with glass niello. A fragment of such a plate is in the Corning Museum of Glass; see S. Goldstein, *Pre-Roman and Early Roman Glass in the Corning Museum of Glass* (Corning, N.Y., 1979) p. 285, no. 858.

9. F. Fremersdorf wrote extensively on cut glass. See in particular: *Figürlich geschliffene Gläser, eine Kölner Werkstatt des 3. Jahrhunderts*, *Römische-Germanische Forschungen* 19 (Berlin, 1951); *Die römischen Gläser mit Schliff, Bemalung und Goldauflagen aus Köln*, *Denkmäler des römischen Köln* 8 (Cologne, 1967); *Antikes, islamisches und mittelalterliches Glas . . . in den vatikanischen Sammlungen Roms*, *Catalogo del Museo Sacro della Biblioteca Apostolica Vaticana* 5 (Vatican City, 1975).

10. For instance, M. Floriani-Squarciapino, “Coppa cristiana da Ostia,” *Bollettino d’Arte* 37 (1952) pp. 204–210; idem, “Vetri incisi portuensi del Museo Sacro del Vaticano,” *Rendiconti della Pontificale Accademia di Archeologia* 27 (1953–54) pp. 255–269; D. B. Harden, “The Wint-Hill Hunting Bowl and Related Glasses,” *Journal of Glass Studies* 2 (1960) pp. 44–81; R. Barovier-Mentasti, “La coppa incisa con ‘Daniele nella fossa dei leoni’ al Museo nazionale concordiese,” *Aquileia Nostra* 57 (1983) pp. 158–172.

11. As far as I know, the technical studies of glass engraving prior to the Middle Ages are few. See, however, M. Pelliot, “Verres gravés au diamant,” *Gazette des Beaux-Arts* 2 (1930) esp. pp. 302–308; Charleston, “Wheel-Engraving,” esp. pp. 83–87 with bibl.

12. There are at least five surviving examples of presentation dishes, not only two as D. B. Harden believed (*Glass of the Caesars* [Milan, 1987] p. 224); nos. 19, 24, and 31 of the Appendix, to which can be added a fragment of the former Gréau collection, now in Sarasota (Oliver, “Tapestry in Glass,” pp. 68–70), and fragments now in Rome, M. Armellini, “I vetri cristiani della collezione di Campo Santo,” *Römische Quartalschrift für Altertumskunde* 6 (1892) pp. 52–57, pl. 3.1; only a drawing is published. Although I could not obtain photographs of this vase, I believe it belongs to the group studied here. It is not, however, listed in the Appendix. K. S. Painter, “A Fragment of a Glass Dish in the Antiquarium Comunale, Rome,” *Kölner Jahrbuch für Vor- und Frühgeschichte* 22 (1989) p. 91, mentions a few more fragments he believes belong to presentation plates.

13. M. L. Trowbridge, *Philological Studies in Ancient Glass*, University of Illinois Studies in Language and Literature XIII, 3–4 (Urbana, 1930) p. 110 n. 27, quoting the *Digest* of Ulpian, 9, 2, 27, 29.

14. Trowbridge, *Philological Studies*, p. 110 n. 28; the reference to the Justinian code should read 10, 64, 1.

15. On the problem of the origin of workshops, see, for instance, D. B. Harden, *Journal of Roman Studies* 43 (1953) pp. 201–202, and Ch. Clairmont, *The Excavations at Dura-Europos, Final Report IV*, 5 (New Haven, 1963) pp. 58–59, on the Cologne cut glasses. Whereas Fremersdorf believed them to have been made in Cologne, Harden and Clairmont argued for an eastern origin; mass-produced glassware was indeed exported very long distances from eastern workshops. On the other hand, glass engravers sometimes received commissions for important pieces and could move from one province to another in search of such commissions.

16. This social struggle is well documented. See, for instance, Peter Brown, “Aspects of Christianization of the Roman Aristocracy,” *Journal of Roman Studies* 51 (1961) pp. 1–12. The fragments of the Cybele and Attis plate (Appendix no. 11), to cite but one example, could perhaps be a relic of the short-lived official renewal of this cult by Nicomachus Flavianus under Eugenius (392–394). On this particular point, see J. Matthews, *Western Aristocracies and Imperial Courts—364–425* (Oxford, 1975) p. 242 with bibl.

17. Ginsburg, *Hunting Scenes*, p. 30, identified it as a helmet.

18. On Roman hunting scenes boars are usually pictured rushing in and out of bushes. This is also in accordance with Ovid’s relation of the incident (*Metamorphoses* VIII, 334–337; X, 710–711).

19. They were the first to realize this: “Both myths, i.e., of Meleager and Adonis, are pictured. . . .” Letter dated Oct. 10, 1958, in the MMA Greek and Roman Department archives.

20. On the iconography of Adonis, see W. Attalah, *Adonis dans la littérature et l’art grec* (Paris, 1966); B. Servais-Soyez, “Adonis,” *Lexicon Iconographicum Mythologiae Classicae* (Zurich, 1981) I, pp. 222–229; G. Daltrop, *Die kalydonische Jagd in der Antike* (Berlin, 1966).

21. R. J. A. Wilson, *Piazza Armerina* (Austin, 1983) with bibl.

22. Cf. Appendix no. 1.

23. For the complex question of the use of the sketchbook, see, for instance, K. Dunbabin, *The Mosaics of Roman North Africa* (London, 1978) p. 198; R. J. A. Wilson, “Mosaics, Mosaicists and Patrons,” *Journal of Roman Studies* 71 (1981) pp. 173–177; idem, “Roman Mosaics in Sicily. The African Connection,” *American Journal of Archaeology* 86 (1982) p. 425 and n. 5. The mosaics of Piazza Armerina, according to specialists, were made by North African artisans, who, like painters and sculptors, were itinerant and used sketchbooks; for all we know, these could have been copied and used by glass engravers. But it does not mean that we should look for any particular link between the mosaic of Piazza Armerina and the group of the Master of the Cup of Daniel.

24. G. Koch, *Die mythologische Sarkophage* (Berlin, 1975) VI, p. 91, no. 17, pl. 24a.

25. C. Robert and A. Rumpf, *Die antiken Sarkophagen V*, 1, *Die Meerwesen auf antiken Sarkophagreliefs* (Berlin, 1939) p. 48, no. 118, pl. 38.

26. C. Robert, *Die Antiken Sarkophagreliefs II, Mythologische Cyklen* (Berlin, 1890) p. 192, no. 184, pl. 60; I. Krauskopf, "Eteokles," *Lexicon Iconographicum Mythologiae Classicae* (Zurich, 1988) IV, p. 32, no. 36, with bibl.

27. Cf. Barovier-Mentasti, "La coppa incisa," pp. 157–172; cf. Appendix no. 5.

28. Cf. Appendix no. 11.

29. M. Vermaseren, "L'iconographie d'Attis mourant," in *Studies in Gnosticism and Hellenistic Religions* (Leiden, 1981) pp. 419–431.

30. Cf. Appendix no. 5.

31. Cf. Appendix no. 6.

32. If any, as in the glass studied here and Appendix nos. 3, 13, 28.

APPENDIX

H. = height L. = length W. = width; all measurements are in centimeters

1. Fragmentary plate, unseated hunter, two separate fragments, found in Porto. Museo Vaticano, inv. 302–303. 14.2 x 8.1. G.-B. De Rossi, "Ustensili cristiani scoperti in Porto," *Bollettino di Archeologia Cristiana* (1868) pl. 1, no. 2; Floriani-Squarciapino, "Vetri incisi portuensi," p. 261, fig. 4; Fremersdorf, *Antikes . . . Glas*, pp. 87–88, nos. 830, 831, pls. 47–48.

2. Fragment of hemispherical bowl, horseman. Museo Vaticano, inv. 304. H. 5.5, L. 7.6. Fremersdorf, *Antikes . . . Glas*, p. 88, no. 832, pl. 48.

3. Fragment of bowl, hunting scene, found in Palestrina. Murano, Museo Vittrario, box 40 A. Restored Diam. ca. 17.5. J. W. Salomonson, "Kunstgeschichtliche und ikonographische Untersuchungen zu einem Tonfragment in der Sammlung Benaki in Athen," *Bulletin Antieke Beschaving* 48 (1973) fig. 36; R. Barovier-Mentasti, "Due vetri incisi tardo-romani al museo vittrario di Murano," *Bollettino dei Musei civici Veneziani* 3–4 (1973) p. 44, fig. 25; idem, "La coppa incisa," p. 166, fig. 2, 3.

4. Fragment of bowl, hunting dogs in pursuit of a deer. Toledo Museum of Art, inv. 23.1888. L. 21.6. *Art in Glass: a Guide to the Collection* (Toledo, 1969) p. 31; Salomonson, "Kunstgeschichtliche . . . Untersuchungen," p. 50, fig. 37.

5. Bowl, Daniel between two lions, six joined fragments, the center missing, found in Concordia. Museo Nazionale Concordiese, inv. 297. H. 3.6, Diam. 15.8. *Notizie degli Scavi di Antichità* (1882) p. 367; Floriani-Squarciapino, "Coppa cristiana," p. 209, fig. 7; *Bulletin de l'Association Internationale pour l'Histoire du Verre* 9 (1981–83) p. 87, fig. 2; Barovier-Mentasti, "La coppa incisa," pp. 154f.; B. Caron, "Un verre gravé de Cybèle et d'Attis mourant," *Bulletin Antieke Beschaving* 66 (1991) p. 172, fig. 3.

6. Bowl, Daniel and Habakkuk in the lion's den, three fragments, two of them joined, found in Falerone. Whereabouts unknown. Restored Diam. 22. G. Brizio, "Scoperte di antichità varie dell'epoca romana," *Notizie degli Scavi di Antichità* (1903) p. 111, fig. 7; Caron, "Un verre gravé," p. 174, fig. 6.

7. Bowl, the Good Shepherd, sixteen joined fragments, part of the rim is missing, found in Ostia. Museo Ostiense, inv. 5201. H. restored 5.6, Diam. 18. Floriani-Squarciapino, "Coppa cristiana," pp. 204–210; idem, "Vetri incisi portuensi," p. 256, fig. 1.

8. Fragment. Ringling Museum of Art, Sarasota, Fla. 4 x 6.5. Much like the former; apparently pitted and damaged. Froehner, *Collection Julien Gréau*, no. 1098, pl. 188.4.

9. Fragment of plate, legs of two figures, found in Porto. Museo Vaticano, inv. 301. W. 9.1. Floriani-Squarciapino, "Vetri incisi portuensi," p. 265, fig. 7; Fremersdorf, *Antikes . . . Glas*, p. 87, no. 29, pl. 829; Caron, "Un verre gravé," p. 172, fig. 4.

10. Fragment of plate, figure in funerary garments and putto, found in Porto. Museo Vaticano, inv. 298. 14.5 x 5.5. Floriani-Squarciapino, "Vetri incisi portuensi," p. 260, fig. 5; Fremersdorf, *Antikes . . . Glas*, p. 90, no. 843, pls. 55, 57; Caron, "Un verre gravé," p. 173, fig. 5.

11. Plate, Cybele, dying Attis, and putto, two separate fragments, whereabouts unknown. Formerly in the Figdor collection. Found at Villa Nunziatella, near Rome. A. Riegl, *Die Spätromische Kunstindustrie nach den Funden in Österreich-Ungarn* (Vienna, 1901) pp. 170–171, pl. 23.1; Caron, "Un verre gravé," p. 170, fig. 1.

12. Bowl, Perseus flying, three joined fragments, found at Iruña. Archaeological Museum of Alava. L. 10.5. J. M. Blázquez Martínez, "Perseo volande sobre un vidrio de Iruña," *Zephyrus* 9 (1958) pp. 118–121, quotes G. Nieto, *El Oppidum de Iruña (Alava)* (Vitoria, Spain, 1958) fig. 116; M. Vigil Pascual, *Vidrio en el mundo antiguo* (Madrid, 1969) p. 151, fig. 130; A. Balil, "Vidrio tardo romano de Iruña," *Estudios de Arqueología Alavesa* 6 (1974) pp. 173–181; *Museo arqueológico de Alava* (Vitoria, Spain, 1983) pl. 146.

13. Fragment of plate, man in Phrygian clothes. Museo Vaticano, inv. 300. H. 8.6, L. 7. Fremersdorf, *Antikes . . . Glas*, p. 87, no. 828, pl. 46.

14. Fragment of plate, trans. of the "Lex Domini," found in Porto. Museo Vaticano, inv. 313. H. 7.8, L. 11. De Rossi, "Ustensili cristiani," pl. 1, no. 3; P. Garrucci, *Storia dell'arte cristiana* (Prato, 1880) VI, pl. 464, no. 5; Floriani-Squarciapino, "Coppa cristiana," p. 209, fig. 8; idem, "Vetri incisi portuensi," p. 259, fig. 3; *Dictionnaire d'archéologie chrétienne et liturgique*, VI, 2, col. 1578, fig. 5408; Fremersdorf, *Antikes . . . Glas*, p. 91, no. 846, pl. 55.

15. Bowl, procession, fragment of rim. Museo Vaticano, inv. 305. H. 5.9, L. 6.2. Garrucci, *Storia dell'arte*, pl. 462, no. 13; Fremersdorf, *Antikes . . . Glas*, p. 91, no. 848, pls. 54, 56.

16. Bowl, scene of baptism, fragment of rim. Museo Vaticano, inv. 312. L. 8.1, W. 7.9. G.-B. De Rossi, "Insigne vetro, sul quale è effigiato il battesimo d'una fanciulla," *Bollettino di Archeologia Cristiana* 3, 1 (1876) pp. 7–16, pl. 1, 1; Garrucci, *Storia dell'arte*, pl. 464, no. 1; A. Profumo, *Studi Romani* I, 1–2 (1913) p. 117,

pl. 14.1; *Dictionnaire d'archéologie chrétienne et liturgique*, I, 2, col. 3130, fig. 1115; Fremersdorf, *Antikes . . . Glas*, pp. 91–92, no. 849, pls. 54, 56.

17. Plate, enthroned figure; in the background, putti and cornucopia, large fragment of rim, found in Porto. Museo Vaticano, inv. 299. L. 14.8, W. 8.7. Floriani-Squarciapino, "Vetri incisi portuensi," p. 253, fig. 6; Salomonson, "Kunstgeschichtliche . . . Untersuchungen," p. 55, fig. 40; Fremersdorf, *Antikes . . . Glas*, p. 87, no. 827, pl. 47.

18. Plate, Christ between two saints, three fragments, found in Porto. Museo Vaticano, inv. 314 and 315. L. 17 and 4.35. De Rossi, "Ustensili cristiani," pls. no. 1, 1a; Garrucci, *Storia dell'arte*, 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.

19. Plate, enthroned figure, four fragments, found in Ravenna. Restored Diam. 25. Museo Nazionale di Ravenna, inv. RA 6529. F. Berti, "Vetri incisi," in *Ravenna e il porto di Classe* (Bologna, 1983) p. 174, no. 12.8.

20. Fragment of plate, musician. Museo Vaticano, inv. 14856. L. 9.3. Fremersdorf, *Antikes . . . Glas*, p. 88, no. 833, pl. 47.

21. Bowl, figure wearing a toga, fragment of rim, found in Marignano, near Aquileia. Museo nazionale di Aquileia, inv. 53323. Ca. 6 x 4.7, H. restored ca. 11. L. Bertacchi, "Deux nouveaux verres d'Aquilée à décor paléochrétien," *Annales du 4ème congrès de l'Association internationale pour l'Histoire du verre*, Leyde 1967 (Liège, 1968) pp. 109–112.

22. Bowl, Christ and the paralytic, intact but for the chipped rim. Corning, New York, Corning Museum of Glass, inv. 66.1.38. Diam. 6.3. G. Sangiorgi, *Collezione di vetri antichi dalle origini al V sec. d.C.* (Milan / Rome, 1914) no. 149; L. Koetzche, in *The Age of Spirituality* (New York, 1978) no. 401; D. Harden, "Glass of the Caesars," p. 222, no. 123; D. Whitehouse, *Glass of the Roman Empire* (Corning, 1988) pp. 46–47.

23. Fragment of plate, forearm, found in Carthage. Toronto, Royal Ontario Museum, inv. 1 N 17. 7.6 x 4. J. W. Hayes, "Réflexion sur la verrerie des époques tardives à Carthage," *Cahiers des études anciennes* 17 (1985) p. 118, fig. 6.

24. Plate, seated emperor and his retinue, fragment of the rim, found in Rome. Rome, Antiquarium Comunale. Restored Diam. 21. L. Bruzza, "Frammento di un disco di vetro che rappresenta i Vicennali di Diocleziano," *Bollettino Comunale* 10 (1882) pp. 180f., pl. 10; H. Fuhrmann, "Studien zu den Consulardiptychen verwandten Denkmälern—eine Glasschale von der Vicennalienfeier Constantins des Grossen zu Rom im Jahre 326 A.D.," *Mitteilungen des Deutschen Archeologischen Instituts (ROM)* 54 (1939) pp. 161f.; Salomonson, "Kunstgeschichtliche . . . Untersuchungen," p. 54, figs. 39–40; P. Righetti, *Bulletin de l'Association internationale de l'Histoire du Verre* 9 (1981–83) p. 154, fig. 2; G. N. Brands, "Ein Glasschalenfragment im Antiquarium comunale in Rom," *Jahrbuch für Antike und Christentum* 26 (1983) pp. 107f.; Harden, *Glass of the Caesars*, pp. 223–224, no. 124; Painter, "A Fragment of a Glass Dish," pp. 87–98.

25. Bowl, head of Isis, fragment of rim, found in Rome. Murano, Museo Vittrario. Restored Diam. 23. Barovier-Mentasti, "Due vetri incisi," pp. 39–49, fig. 21.

26. Bowl, fragment of rim. Rome, Museo nazionale romano. Rome Nikephoros. Paribeni, *Bollettino d'Arte* (1918) pp. 51–52, fig. 2; Floriani-Squarciapino, "Coppa cristiana," p. 210, fig. 10, n. 30; Salomonson, "Kunstgeschichtliche . . . Untersuchungen," fig. 35; Barovier-Mentasti, "Due vetri incisi," pp. 41–42, fig. 23.

27. Fragment of bowl, head of Triton or Okeanos, found near Ravenna. Private collection. Restored Diam. of the central zone 10.5. R. Farioli, "Un verre gravé de Ravenne de style roman [*sic*] tardif," *Annales du 3ème congrès des Journées int. 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.

28. Fragment of plate, head of the Hydra of Lerna, whereabouts unknown. 7.8 x 6.5. Froehner, *Collection Julien Gréau*, no. 1094, pl. 188.2.

29. Plate, Pegasus and Bellerophon, thirteen fragments; part of the wall is missing. British Museum, inv. GR Dept. 1967.11–22.1. H. 3.8, Diam. 21.5. D. B. Harden, *Masterpieces of Glass* (London, 1968) no. 95; idem, *Glass of the Caesars*, p. 219, no. 121.

30. Bowl, nymph or personification of a spring, fragment of rim. New York, Metropolitan Museum of Art, acc. no. 17.194.916. 8 x 11.5. Froehner, *Collection Julien Gréau*, no. 1087, pl. 185.2.

31. Plate, distribution(?) of corn. Now lost, known from two drawings. One of the drawings is in the Dal Pozzo-Albani collection, Windsor Castle Library, Windsor, England; C. Vermeule, *Transactions of the American Philosophical Association* n.s. 56, P. 2 (1966) p. 31, ill. p. 114, and the other is in the Suares papers, in the Museo Vaticano; G.-B. de Rossi, "Le horrea sotto l'Aventino e la statio Annonae Urbis Romae," *Annali dell'Istituto di corrispondenza archeologica* 57 (1885) pp. 223–234; Dom H. Leclercq, "Annona," *Dictionnaire d'archéologie chrétienne et de liturgie* I, 2, col. 2274–2276, fig. 776. The analysis of the iconography (this was the topic of a paper read to the Canadian Classical Association meeting in Victoria, B.C., May 20, 1990) shows that the glass drawn by the two anonymous artists belonged to the group studied here. This object was in the Gualdi collection, which may have been the one dispersed in a 1887 sale; Oliver, "Tapestry in Glass," p. 70 n. 8.

32. Fragment of plate, a saint. Rome, Museo Nazionale Romano, inv. 380801. G. de Tommaso, "Vetri incisi dalle Collezioni del Museo Nazionale Romano di Roma," *Kölner Jahrbuch für Vor- und Frühgeschichte* 22 (1989) p. 102, fig. 4 (only a drawing is published).

Four unpublished fragments in the Corning Museum of Glass, Corning, N.Y., probably belong to the same group and can also be mentioned: inv. 66.1.143; 66.1.145; 66.1.146; 66.1.148.