

ANCIENT CLAY IMPRESSIONS FROM GREEK METALWORK

(PLATES 5–11)

THIS study is concerned with twenty-one ancient clay impressions and one ancient clay cast which have been found in the excavations of the Athenian Agora.¹ The twenty-one impressions and the lost impression in which the ancient cast was made were taken from Greek, and principally Athenian, metalwork of the 5th and 4th centuries B.C. It is clear from the contexts that several impressions were taken from metal objects which had only just been completed. The impressions and the cast functioned as workshop records and as models for craftsmen and customers.

Only one of the impressions was made from a statuette (1). The rest of the impressions were taken from metal reliefs, most of which belonged to the handles or bodies of vessels (2–14). The other reliefs came from armor (15, 16), horse decorations (17, 18), jewelry (19, 20), a decorative or votive relief (21), and a mirror (22).

Six other such ancient clay impressions and casts from the Agora have been published previously.² Outside of the Agora material only a small number of objects has ever been identified as ancient clay impressions or casts from 5th or 4th century metalwork.³ The Agora pieces thus provide the bulk of our evidence for the existence in Classical times of a practice which is well documented for the Hellenistic and Roman periods.⁴ The Agora material also gives us valuable insight into the Athenian

¹ This paper is a condensation of a doctoral dissertation submitted to Princeton University. For permission to publish these pieces and for her advice and encouragement at every step of the way I am very grateful to Dorothy Burr Thompson whose own articles are fundamental to any work in this field (D. B. Thompson, *Hesperia*, 8, 1939, pp. 285–316, in *Hesperia*, Suppl. VIII, 1949, *Commemorative Studies in Honor of Theodore Leslie Shear*, pp. 365–372, and *Hesperia*, 38, 1969, pp. 242–251). I would also like to thank Professor E. B. Harrison, Professor Kayser of the Roemer-Pelizaeus Museum, Hildesheim, Professor Vierneisel of the Staatliche Museen, Antikenabteilung, West Berlin, and Professors Gorbunova and Mantcevitich of the Hermitage Museum, Leningrad.

² Cf. note 1 above and also an impression from the Pnyx in G. R. Davidson and D. B. Thompson, *Hesperia*, Suppl. VII, *Small Objects from the Pnyx: I*, 1943, no. 103, p. 155.

³ Thompson, *Hesperia*, Suppl. VIII, pp. 365–372; W. Züchner, *Jahrb.*, Erg. XIV, *Griechische Klappspiegel*, Berlin, 1942, pp. 195, 222; G. Rodenwaldt, *Jahrb.*, 11, 1926, pp. 191–204 (recent bibliography in J. Dörig, *Jahrb.*, 80, 1965, pp. 253–259); G. M. A. Richter, *Handbook of the Greek Collection*, Cambridge, 1953, p. 98, pl. 79, c; R. Higgins, *Catalogue of Terracottas in the British Museum*, London, 1954, no. 1076, p. 293, pl. 147; D. M. Robinson, *Olynthus*, XIV, Baltimore, 1952, no. 356, p. 260, pls. 106, 110; H. Walter, *Bericht über die Ausgrabungen in Olympia*, VI, Berlin, 1958, p. 199, fig. 128.

⁴ Clay impressions and casts: G. R. Davidson, *Corinth*, XII, *The Minor Objects*, Princeton, 1952, no. 471, p. 62, pl. 45 and no. 478, p. 63, pl. 46; W. Züchner, *Jahrb.*, 65–66, 1950–51, pp. 175–205; E. Minns, *Scythians and Greeks*, Cambridge, 1913, p. 365, fig. 265; Züchner, *Jahrb.*, Erg. XIV, nos. 11, 12, pp. 109, 147.

Plaster impressions and casts: O. Rubensohn, *Hellenistisches Silbergerät in antiken Gipsabgüssen*,

metalworking industry in the second half of the 5th century and the first half of the 4th century B.C.

TECHNIQUE OF THE IMPRESSIONS

The clay impressions are strikingly uniform in fabric and in technique. All of the impressions, with one exception, are made from a fine-grained buff Attic clay. The gritty micaceous clay used in **18** is so dissimilar to the clay used for the other pieces as to suggest that the impression itself was not made in Athens.

Both the front and the back of many of the pieces are covered with fingerprints which were made when the original mass of clay was worked with the hands. When softened, the clay was flattened into a slab. Many of the examples were made from several layers of thin slabs and in several instances these layers have separated so that the back of the impression is entirely missing.

The metal object was almost always held in the left hand. The clay slab was grasped with the right hand and was pressed so firmly over the metal surface that the fingers usually made deep indentations in the back of the impression. The small size of these prints suggests that the work was done by young apprentices.

Before the impression was removed from the metal object excess clay on the back and sides was usually sliced away. After the impression was removed it was occasionally retouched.⁵ On two examples a few details were erased with a rag which has left the imprint of its texture (Herakles Mask, **5** and Reclining Youth, **15**). Unparalleled among our pieces is the treatment on the Herakles in Combat, **16**, where a smooth band of clay was carefully laid over the beaded border. Since **16** is also our only impression from a Hellenistic relief, it may well be that Hellenistic workshops were inclined to rework their impressions.

The Agora impressions have several common characteristics by which they can be distinguished from molds either for terracotta figurines or for terracotta reliefs:

1. The back of the impression is rarely smooth or convex; usually it has deep finger marks.
2. The clay on the surface into which the metal object has been pressed is noticeably compressed.

Berlin, 1911; G. M. A. Richter, *A. J. A.*, 62, 1958, pp. 369–377; A. Adriani, *Röm. Mitt.*, 67, 1960, pp. 111–125; *idem*, *Arch. Class.*, 7, 1955, pp. 124–138; K. Schefold, *Meisterwerke Griechischer Kunst*, Basel, 1960, no. 372, pp. 274–275; D. B. Thompson, *Journ. Egypt. Arch.*, 50, 1964, pp. 147–163; G. Rizzo, *Röm. Mitt.*, 12, 1897, pp. 253–306. G. M. A. Richter, *A. J. A.*, 74, 1970, pp. 296–297 discusses the plaster casts (and part of a plaster mold) which were discovered in Baiae in 1954. From these plaster casts, themselves made in piece molds from original statues, marble copies were produced by means of the pointing process.

⁵ Especially evident is the reworking on the ancient cast in Corinth (Thompson, *Hesperia*, Suppl. VIII, pp. 365–372, pl. 48, 2–3). On the cast or on the missing impression the staff of the satyr was reworked to become a club.

3. Often there is a doubling of objects on the representation indicating that the clay slid over the surface of the metal object.
4. The representation on the impression is usually not of a complete unit of a design or of an entire figure. In the latter case the part of the body which is represented is not a part which is ordinarily treated as a unit by a koroplast; e.g. on several of our impressions the representation consists of a head and chest (Maenad, **8** and Maiden, **9**) or the waist to feet (Maiden with Trigonon, **12** and Archaistic Maiden, **21**).
5. The representation usually shows very fine engraved lines, particularly in the hair or eyebrows, and also stippling, fine dotting, or hatching.

These last two features are also characteristic of ancient plaster impressions and casts which were taken from Hellenistic and Roman metalwork.

DATE OF THE IMPRESSIONS AND CAST

Eighteen of the twenty-two pieces were found in securely dated contexts.

One impression may have been found in a 6th century B.C. context but the dating is uncertain.

<i>Impression</i>	<i>Findspot</i>	<i>Suggested Date of Metal Object</i>
2. Horse Head	G 11, possibly 6th cent. B.C.	early 6th cent. B.C.

Five impressions were found in contexts of the 5th and 4th centuries B.C.

8. Maenad	M 18, 6th–5th cent. B.C.	405 B.C.
17. Nike	A–B, 21–22:1, 420–390 B.C.	420
4. Dionysos	E 16:3, 4th cent. B.C.	420–400
10. Dancing Satyr	T 13, early 4th cent. B.C.	405–390
18. Dancer	S 19:3, late 5th cent. to 320 B.C.	370–350

These five examples are the earliest securely dated Greek clay impressions from metalwork. The style of their representations indicates that all of them were taken and buried not long after the metal reliefs were themselves completed. Confirming this conclusion is the sharp detail on **8** and **10** indicating that these impressions can only have been taken from reliefs which were very fresh.

Impressions **4**, **17**, and **18**, on the other hand, were taken from metal reliefs which were worn. **17** and **18** probably belonged to horse prometopidia, **4** to the handle of a vessel; in both locations one would expect the metal reliefs to have received rough treatment. It is not surprising, therefore, that these three less sharp impressions were found in burial deposits, indicating that the pieces had been intentionally discarded.

The majority of the Agora pieces were found in Hellenistic or Roman contexts.

Only one of the original metal reliefs can be dated on stylistic grounds later than 330. Thus the contexts allow two interpretations: 1. The impressions were taken in

<i>Impression</i>	<i>Findspot</i>	<i>Suggested Date of Metal Relief</i>
3. Satyr Mask	P 21:4, late 3rd cent. to 150 B.C.	450 B.C.
19. Gorgoneion	M-N, 15:1, 175-150 B.C.	435-390
20. Gorgoneion	C-D, 19-20, 5th-1st cent. B.C.	435-390
9. Maiden	B 22 (?), Hellenistic	405-395
11. Herakles/Giant	D 17, Early Roman	400-390
12. Maiden and Trigonon	H 4, Hellenistic	400-390
21. Archaistic Maiden	C 19, 4th-2nd cent. B.C.	405-380
5. Herakles Mask	R 22, Hellenistic-Roman	375-350
6. Barbarian Head	C 17, Hellenistic	380-330
7. Palmette	E 14:1, ca. 250 B.C.	350
13. Aphrodite	D 17, Hellenistic	360-330
16. Herakles in Combat	K 13, Hellenistic to 160 B.C.	3rd-2nd cent.

the Hellenistic and Roman periods from metal objects which had been carefully preserved through the years. 2. The impressions were taken close to the time when the metal objects were made and were found useful by the subsequent generations of artists until finally the pieces were lost or discarded as outmoded.

Supporting the second interpretation is (1) the late 5th to 4th cent. B.C. contexts of the five examples discussed above, proving that impressions were being taken at this early date; (2) the homogeneity among all the pieces (except **18**) in terms of the clay and the technique by which they were made; (3) the remarkable clarity of most of the representations. While one would expect fine metal objects to have been carefully preserved, the exceptionally crisp detail on most of the impressions suggests that the metal reliefs had just been completed at the time when the impressions were taken.

The ancient cast, **9**, is difficult to date. The clarity of the representation suggests that the (missing) impression in which the cast was made had itself been taken when the metal relief was new. The cast itself, however, could have been made at any time in the 4th century or Hellenistic period.

USE OF THE IMPRESSIONS AND CAST

The twenty-one ancient impressions and the ancient cast were used in one or both of two ways:

1. In most cases the impression was presumably used as a record of what a metal workshop had produced.⁶ It could be used as a sample from which customers could order, as an inspiration to craftsmen when creating new reliefs, and as a guide for apprentices in mastering basic poses of figures or the fundamental techniques of working metal. We have several examples of Hellenistic freehand relief "sketches" which

⁶ See an impression from the Agora found in the debris of a metalworking establishment in Thompson, *Hesperia*, 8, 1939, p. 289, note 23.

were obviously used for these purposes, but an actual impression would have been far more helpful.⁷ The Agora impressions are thus the predecessors of the Hellenistic and Roman workshop collections of plaster impressions and casts.⁸

Impressions taken from the sides of small relief vases would surely have also proved useful to the artists who made the Attic clay relief vases, since this class of pottery was obviously strongly influenced by contemporary metalwork.⁹

2. In the case of the handle heads and palmette (2-7), which have been impressed in their entirety, an exact copy could have been made by casting a wax positive made in the impression.¹⁰

It is important to emphasize the ways in which our impressions could not have been used. First, because the majority of the representations are incomplete or faulty (details blurred or doubled), these impressions could not have been used as molds for making clay casts which could be attached to relief pottery.¹¹ Nor could they have been used for casting bronze replicas. Our pieces are totally different in fabric and in appearance from the molds used for casting bronze. These were usually made of a gritty, large-grained clay, slabs of which were built up in layers. The topmost layer, into which the representation was worked, was made of a somewhat finer grained clay, but one still coarser than that from which our impressions were made. Molds for bronze casting are much thicker than these clay impressions; they are often blackened from burning and occasionally have traces of bronze still clinging to them.

DATE OF THE METALWORK

Nineteen of the twenty-one impressions, as well as the missing one in which the cast, **9**, was formed, were taken from metal reliefs which were made between 450 and 330 B.C. A large proportion of these impressions was taken from metal reliefs which can be dated roughly between 410 and 380 (**4**, **8-12**, **19-21**).

Of the remaining three impressions, **1** is from an Archaic statuette, **2** is from an Archaic vase handle, and **16** is from an archaizing relief probably made in the third or first half of the 2nd century B.C.

FORMS OF THE METALWORK

The majority of the metal reliefs belonged to vessels, either to the handles (2-7)

⁷ Züchner, *Jahrb.*, 65-66, 1950-51, pp. 204-205; Züchner, *Jahrb.*, Erg. XIV, pp. 138-139; J. Sieveking, *Jahrb. Muench. Kunst*, 12, 1921-22, pp. 117-129.

⁸ See note 4 above.

⁹ E. A. Zervoudaki, *Ath. Mitt.*, 83, 1968, pp. 1-88, especially p. 75.

¹⁰ M. Gjødesen, *A. J. A.*, 67, 1963, p. 334 suggests that identical Archaic handle reliefs must have been made in this way.

¹¹ Zervoudaki, *Ath. Mitt.*, 83, 1968, pp. 74-75 feels that in most cases the reliefs on these vases are not casts made in impressions from metal reliefs; however, she lists several exceptions: no. 1, p. 11; no. 2, p. 12; no. 59, p. 73.

or to the sides (8–14). Two reliefs probably formed part of prometopidia, reliefs attached to horse bridles (17, 18). The reliefs behind 15 and 16 probably belonged to armor. It is likely that the Gorgoneia (18, 20) were worn as jewelry. Finally there are impressions from a foot belonging to an Archaic statuette (1), from a decorative or votive relief (21), and from a mirror (22).

The forms of metalwork from which these impressions were taken are fairly representative of the kinds of objects which we know were being made during the later 5th and the 4th centuries:¹² vessels, armor, and mirror reliefs principally intended for private ownership.

Because of the quality of the workmanship on the reliefs, it is likely that most of the objects were made in silver with the medallions (19, 20) perhaps in gold.

THE ATTIC METAL INDUSTRY

The style of most of the representations is so close to the style of Attic sculpture and vase painting that we can confidently conclude that the metalwork behind those impressions was Attic also. Some of the latter (9–14) were taken from small Attic vessels with low reliefs and thus confirm the hypothesis that there was a class of small Attic metal relief vessels by which the contemporary Attic clay relief pottery was inspired.¹³

One of the impressions was taken from the side of an Attic relief vessel which was the size of a hydria or krater (8). It would seem, therefore, that there were indeed Attic metal counterparts to vessels like the Chertomlyk amphora, the Berlin Maenad krater, and the Derveni krater.¹⁴

For several of the impressions (Horse Head, 2; Herakles Mask, 5; Palmette, 7; Dancer, 18) there is not enough evidence to determine if the original relief was Attic. However, because the fabric and technique of three of these (2, 5, 7) are identical to that of the rest of our pieces, we can at least be confident that the impressions themselves were made in Athens.

Most of the metalwork from which the impressions were taken dates between 410 and 380, a fact which suggests that the Attic metalworkers were especially active during these years. The literary tradition also attests to the enthusiasm for Attic metalwork at the end of the 5th century. We hear of the luxurious metal objects which

¹² D. Strong, *Greek and Roman Gold and Silver Plate*, Ithaca (N.Y.), 1966, pp. 74–89.

¹³ See note 9 above.

¹⁴ Chertomlyk amphora: Strong, *op. cit.* (note 12 above), p. 88, pl. 21, dated *ca.* 350 B.C.; M. Artamonov, *The Splendor of Scythian Art*, New York, 1969, pls. 162–176.

Berlin Maenad krater: W. Züchner, *Programm zum Winckelmannsfest*, XCVIII, *Der berliner Mänadenkrater*, Berlin, 1938.

Derveni krater: C. Makaronas, *Δελτ.*, 18 B', 1963, pp. 193–196, pls. 230–234; C. Havelock, *Hellenistic Art*, Greenwich, 1969, pp. 236–237.

Athenians like Anytos and Alkibiades possessed,¹⁵ while Sokrates deploras the contemporary rage for gilded armor (Xenophon, *Mem.*, III, 10, 9). Xenophon tells of the many and varied foreign metal objects which his troops brought back to Greece with them.¹⁶

Two substantial stimuli to the Attic metal industry were surely the Athena Parthenos and the Zeus at Olympia; their intricate metalwork probably boosted the prominence of the craft. Our earliest evidence for metal cheekpieces decorated with elaborate reliefs dates not long after the Athena Parthenos whose cheekpieces surely had reliefs of griffins upon them.¹⁷ The representations on several previously published clay impressions from the Agora have obviously been inspired by figures on the Parthenos Shield or on the Throne of the Zeus.¹⁸

One should also keep in mind that in the 440's and 430's the best metal craftsmen must have been attracted to Athens in order to work on the Athena Parthenos. Young boys were probably encouraged to enter a craft which seemed to hold the promise of continued employment. When the great state projects were completed there must have been some outstanding metal craftsmen who were then available and indeed eager to accept remunerative consignments from private citizens. This economic situation would explain the striking reflections of the Parthenos Shield in reliefs which were executed some decades afterwards, a tendency to be expected from older craftsmen who would cling to the style and glory of their youth.

The amount of surviving metal relief ware which has been attributed to Attic workshops of the 5th and 4th centuries is disappointingly small. Unfortunately the Agora impressions can only confirm that disappointment. The representations tell us that Attic metalwork did not deviate in style, iconography, or quality from contemporary Attic vase painting and sculpture. The Agora impressions strengthen the Attic attribution of only a very few examples of metal relief ware from this period.¹⁹

¹⁵ Alkibiades ordered his servants to remove half of Anytos' gold and silver vessels (Plutarch, *Alk.*, 5); Alkibiades was also said to have exhibited as his own the state's golden vessels (Andokides, *Against Alkibiades*, 4, 29) and to have made daily use of them (Plutarch, *Alk.*, 18). Alkibiades' shield was gilded and had an Eros and a thunderbolt upon it (Plutarch, *Alk.*, 18).

¹⁶ Xenophon, *Anabasis*, I, 2, 27; I, 8, 29; IV, 3, 26; IV, 4, 22; VII, 2, 23; VII, 3, 18, 27. Harpalos gave Demosthenes a Lykian phiale and a foreign kylix (Plutarch, *Dem.*, 25).

¹⁷ N. Leipen, *Athena Parthenos*, Toronto, 1971, pp. 33, 58; for cheekpieces: Thompson, *Hesperia*, 8, 1939, pp. 289ff.; Davidson and Thompson, *Hesperia*, Suppl. VII, no. 103, p. 155; Rodenwaldt, *Jahrb.*, 11, 1926, pp. 191-204; U. Gehrig, *Führer durch die Antikenabteilung*, Berlin, 1968, Misc. 7863, p. 166, pl. 19.

¹⁸ Thompson, *Hesperia*, 8, 1939, pp. 293ff.; Davidson and Thompson, *Hesperia*, Suppl. VII, no. 103, p. 155.

¹⁹ A mirror in Züchner, *Jahrb.*, Erg. XIV, no. 12, p. 13 and p. 222, fig. 126; a hydria relief of Artemis with a stag and another of Boreas and Oreithuia, both in New York in D. von Bothmer, *Bull. Met. Mus.*, N.S. 8, 1954-55, p. 197; a hydria relief of Boreas and Oreithuia in Sophia in G. M. A. Richter, *A. J. A.*, 50, 1946, no. 17, p. 365; a third hydria relief with Boreas and Oreithuia in Athens in N. M. Verdelsis, *Arch. Eph.*, 1950-51, pp. 80-105; two fragmentary reliefs from Olynthos in D. M. Robinson, *Olynthus*, X, Baltimore, 1952, no. 15, a, b, pp. 19-30, pl. 4.

The Agora impressions do, however, support the argument for a strong Attic tradition of metal engraving. It is clear from our representations that engraving played a significant role in the execution of a metal relief whether it was cast from wax or worked in repoussé. There are so many striking stylistic parallels between the Agora material and the engraved metal vessels and ivory fragments which have been found in Bulgaria and the U.S.S.R. that there can be little question that many of these engraved pieces were made in Athens during the second half of the 5th century.²⁰

It is more difficult to distinguish between individual workshops. The low relief and preference for engraved effects on 10–12 are quite distinct from the higher relief and minimum engraving on 15. These differences, however, are probably principally due to the date when the artist was working and to the size and type of object for which the relief was intended. On the other hand, it is logical to expect that a workshop might specialize in a certain type of metal object—delicate relief vessels, for example (10–12), as opposed to more boldly modeled reliefs for cheekpieces.²¹

TECHNICAL ADDENDA: CASTING AND REPOUSSÉ

A cast relief can be made by the same method as that used for casting an object in the round.²² A solid wax positive is encased in plaster or clay. The wax is melted out and molten metal is poured into the cavity. Different effects can be obtained depending upon the treatment of the wax. One can work with very hard wax for a carved effect or melt the wax so that it can be easily modeled. Melted wax can also be dribbled over the surface so that parts of the representation (perhaps the eyebrows on 4, for example) are in high relief.

²⁰ Ivory: Artamonov, *Scythian Art*, pls. 257–262; B. Pharmakowsky, *Arch. Anz.*, 29, 1914, p. 210; S. Reinach, *Antiquités du Bosphore cimmérien*, Paris, 1892, pls. 79–80.

Engraved vessels: Strong, *op. cit.* (note 12 above), p. 79 (pair of kantharoi with Dionysiac scenes); p. 80, pl. 15, b (phiale from Duvanlij with apobatoi); p. 79 (cup from Duvanlij with woman riding horse); pp. 78–79 (Bellerophon and Chimaera on silver kylix in Hermitage); p. 79 (Dionysos and maenad on kylix in Hermitage); p. 79 (dish with figures in Hermitage; also K. Scheffold, *Röm. Mitt.*, 46, 1931, pp. 119–129); p. 79 (cup with women in Hermitage); p. 80 (phiale with Bacchic scenes in Hermitage).

²¹ An ancient clay cast from the Agora (Thompson, *Hesperia*, 8, 1939, pp. 301–303) and another in Corinth (Thompson, *Hesperia*, Suppl. VIII, pp. 365–366, pl. 48, 2–3) have a strikingly similar style. The chasing around the contours of the figures is so deep as to form an actual grooved outline. It is also noteworthy that both pieces are ancient casts; perhaps it was customary for this Attic workshop to make casts from their impressions.

²² For technique in general see bibliography and discussion in J. Charbonneaux, *Les bronzes grecs*, Paris, 1958, pp. 3–23; D. Mitten and S. Doeringer, *Master Bronzes from the Classical World*, Mainz, 1967, pp. 9–15; H. Maryon, *A. J. A.*, 53, 1949, pp. 93–125; G. Untracht, *Metal Techniques for Craftsmen*, New York, 1968, pp. 93–119; G. M. A. Richter, *A. J. A.*, 45, 1941, p. 376; D. K. Hill, *Hesperia*, 12, 1943, pp. 97–114; Thompson, *Hesperia*, 8, 1939, pp. 285–316; *idem*, *Hesperia*, 38, 1969, pp. 242–251; Strong, *op. cit.* (note 12 above), pp. 7–13; D. von Bothmer, *Bull. Met. Mus.*, N.S. 21, 1962–63, pp. 154–166; R. Raven-Hart, *J. H. S.*, 78, 1958, pp. 87–91. I also learned a great deal about metal techniques from interviews with the craftsmen at the Kirk Sterling Company (Baltimore, Maryland) and the Franklin Mint (Franklin Center, Pennsylvania).

An alternate method of creating a metal relief is by working it in repoussé. The artist secures a thin sheet of metal in a bed of pitch and then “bumps” out the basic forms by alternately hammering from the front and from the back. Then he takes a punch to outline or chase the contours of the design. Finally he adds engraved detail. Miss Hill has pointed out the three distinctive characteristics of a repoussé relief. The relief is thin; it is undercut; and the back of the relief closely follows the contours of the representation.²³

It is not always possible to determine the technique of a metal relief from a study of the representation alone. Craftsmen both at the Franklin Mint (Franklin Center, Pennsylvania) and at the Kirk Sterling Company (Baltimore, Maryland) believe that the only way one can accurately determine how a relief has been made is to examine the back of it. Unlike a cast relief the back of a repoussé relief will echo in intaglio the representation on the front. Thus because the Agora impressions reproduce only the front, both firms agreed that we lack the vital evidence by which we could decide how the metal reliefs had been made.

Although we cannot determine the answer definitely, it is logical to expect that they were produced by the same techniques as those employed to make similar forms of contemporary metalwork. From the small amount of surviving metalwork of the 5th and 4th centuries B.C., it appears that handles decorated only with a single motif (2–7) were usually cast.²⁴ Mirror reliefs were usually worked in repoussé²⁵ as were those which were attached to armor.²⁶ Reliefs on the bodies of vessels were variously cast or worked in repoussé.²⁷

The technique of repoussé was employed rarely if at all in the first half of the 5th century. There is, however, abundant evidence for its use from the 430's through the 4th century. It is likely that the stimulus for this revival came from the reliefs on the

²³ D. K. Hill, *Hesperia*, 13, 1944, pp. 87–89. The narrow mouth of a vessel presents no great difficulties since one can use a hammer which works on a simple extension operated by a pedal.

²⁴ It is generally agreed that most of the more elaborate hydria-handle reliefs were worked in repoussé (C. Picard, *Mon. Piot*, 28, 1940, pp. 73–103; D. von Bothmer, *Bull. Met. Mus.*, N.S. 13, 1954–55, pp. 193–200; Verdelis, *Αρχ. Έφ.*, 1950–51, pp. 80–105) with several exceptions which were cast: von Bothmer, *op. cit.*, p. 197; Richter, *A. J. A.*, 50, 1946, pp. 361–367; Charbonneaux, *Bronzes grecs*, pp. 46–7, 141, pl. 9, 1.

²⁵ Züchner, *Jahrb.*, Erg. XIV, p. 138.

²⁶ W. Lamb, *Ancient Greek and Roman Bronzes*, Chicago, 1929, pp. 174–175; K. Neugebauer, *Jahrb.*, 49, 1934, p. 171, fig. 7; G. M. Hanfmann, *A. J. A.*, 58, 1954, pp. 227–228; A. Rumpf, *Röm. Mitt.*, 38–39, 1923–24, p. 475, fig. 20.

²⁷ Situla in East Berlin with Perseus and Medusa: Lamb, *Bronzes*, p. 187, believes it repoussé; electrum jug in Hermitage: Strong, *op. cit.* (note 12 above), pp. 87–88, believes it repoussé; oinochoe in Trieste: F. Winter, *Jahresh.*, 5, 1902, pp. 115–116, believes it repoussé; Chertomlyk amphora: Strong, *op. cit.*, p. 88, believes it repoussé; bronze situla in Boston: M. Comstock and C. Vermeule, *Greek, Etruscan and Roman Bronzes in the Museum of Fine Arts, Boston*, Greenwich (Conn.), 1971, pp. 302–303; Lamb, *op. cit.*, p. 187, and Hill, *Hesperia*, 12, 1943, pp. 97ff., believe it repoussé, but Charbonneaux, *Bronzes grecs*, p. 50, believes it was cast; Maenad krater: Züchner, *Winckelmannsfest*, XCVIII, pp. 3, 10 and Charbonneaux, *op. cit.*, p. 47, agree it was cast.

Athena Parthenos and the Zeus at Olympia. The reliefs on Athena's sandals and shield were probably cast²⁸ but then given a substantial amount of coldwork: additional chasing and engraving. This practice was certainly traditional for large cast statues and has been observed on metal relief ware from the Hellenistic period.²⁹ It is interesting to note that both the Franklin Mint and the Kirk Sterling Company advocate and practice just this combination of casting and repoussé in making their own metal relief work.

It would not have been a difficult step for Attic artists inspired by the Pheidian reliefs but working on a smaller scale to have begun to execute their own reliefs entirely by repoussé.

CATALOGUE

The first paragraph describes the state of the ancient object, which is almost invariably an impression (in the negative) except for 9 which is an ancient cast. The fabric is assumed to be Attic buff clay unless otherwise indicated. "Left" and "right" refer to the spectator's point of view.

The second paragraph describes the representation on the modern or ancient (9) cast. Curvature, where present, is noted, although there is usually not enough evidence to estimate the original circumference. "Left" and "right" indicate proper left and right.

1. Ancient Impression from a STATUETTE:
 FOOT. 525–495 B.C. Pl. 5.

T 3460. Area E–H, 17–20; context unknown. PH. 0.053; PW. 0.052 m. Gray clay, burned. Broken across top and down right side. Imprint of fabric over front. Rough flat back with faint diagonal finger impressions.

Modern cast: H. 0.047; W. 0.025 m. Ankle to toes of left foot which is especially fleshy on its left side. Metatarsal bones clearly modeled. Toe roots approximately on a line; each toe separated from others. Very long toes are half to two thirds of the length from instep; second toe projects beyond big toe; small toe does not turn in and reaches only to second joint of third toe. Tips of

toes point upward with nails and wrinkles of joints clearly incised. Faulty impression of edges of toes. Traces of other foot.

The closest parallels are the feet of Archaic korai.³⁰ Our example should be earlier than 490 since the toes of the Euthydikos kore are much shorter than our own and both the toes and the instep are much fleshier.³¹

There is no clear evidence for the date of the impression but it is interesting to note that at the end of the 5th century long and bony feet come back into fashion.³²

The impression of fabric was probably made when a cloth was used to smooth the wax model before it was cast.

²⁸ V. Strocka, *Piräusreliefs und Parthenosschild*, Bochum, 1967, p. 129, also suggests that the figures were individually cast and were 0.70–0.80 m. high.

²⁹ A. Roes and W. Vollgraff, *Mon. Piot*, 46, 1952, pp. 39–67 for the kantharos from Stevensweert which was cast in several pieces, then chased and engraved.

³⁰ G. M. A. Richter, *Korai: Archaic Greek Maidens*, London, 1968, no. 116 (Acr. no. 682), pp. 73–75, figs. 364–365; H. Payne and G. Mackworth-Young, *Archaic Marble Sculpture from the Acropolis*, London [1936], no. 159, p. 75, pl. 123; see also no. 4098, p. 69, pl. 38, 1; no. 1360, p. 70, pl. 45.

³¹ Richter, *Korai*, pp. 99–100, figs. 571–572, "early 5th c."

³² P. Arias and M. Hirmer, *A History of 1000 Years of Greek Vase Painting*, London, 1962, pl. 216; cf. also the stele of Hegeso in R. Lullies and M. Hirmer, *Greek Sculpture*, New York, 1960, pl. 187.

2. Ancient Impression from a HANDLE:
HORSE HEAD. 600–550 B.C. Pl. 5.

T 1481. Area G 11; context possibly 6th cent. B.C. PH. 0.027; PL. 0.047 m. Chipped around edges. Rough back with two finger impressions on top and bottom.

Modern cast: H. 0.024; L. 0.044 m. Right profile. Small ear, ridged brow. Large almond-shaped eye with iris in low relief. Flaring nostrils. Parted lips showing upper and lower teeth. One lock of striated mane falls forward in front of ear; a second lock is brought forward from behind ear. Cheek strap and brow band of two straps; throat-strap a continuation of brow band. Rosette, mostly broken away, at midpoint of cheek strap. Noseband of three straps overlies cheek strap and continues under chin. ξ -shaped cheekpiece attached to noseband.

The Assyrian bloodlines are unmistakable, although Assyrian horses wear no brow band or throatlatch and their cheekpieces are usually triangular.³³ The closest parallels to this horse appear on 7th century Cycladic pottery from Delos³⁴ and on a Lakonian plate in the Hermitage from the second half of the 6th century.³⁵ Comparable, although again less detailed, horse heads appear on a number of Greek bronze protomes and plate handles from the 6th century.³⁶ Like our head the horses of the handles are worked in high relief but

not completely in the round; therefore it is most likely that our head was also intended for a handle.

3. Ancient Impression from a HANDLE:
SATYR MASK. Ca. 440 B.C. Pl. 5.

T 4002. Deposit P 21:4, context late 3rd cent. to 150 B.C. PH. 0.075; PW. 0.038 m. Broken down left side; chipped across bottom. Back has three almost vertical finger impressions. Oval cut at rim of mold probably from a fingernail.

Modern cast: H. 0.061; W. 0.027 m. Hair is parted in center and brushed to the sides in four wavy locks, each finely striated. Wide tainia with raised borders across forehead, disappearing under hair at temples; a rounded end hangs down over ear. Eyelids open at inner corner, dot for pupil. Snub nose, full lower lip. Mustache is hatched above lip; its long ends flow diagonally into beard with a deep groove following upper contour. Beard starts at jawline and throat, leaving chin bare.

Because the satyr was associated with Dionysos and because the frontal satyr mask had apotropaic connotations,³⁷ a satyr mask was an appropriate and traditional choice for the handle of a wine jug or drinking cup.³⁸ The size of our relief indicates that the original vessel was a hydria or krater.

Dating our relief near the middle of the 5th century are the reserved chin,³⁹ the large eye with the inner corner open,⁴⁰ and the ogival arch at the

³³ R. Barnett, *Assyrische Palastreliefs*, Prague, 1959, pl. 64; A. de Ridder, *Collection de Clerq*, II, Paris, 1903, pp. 141–144, pl. 23; cf. J. K. Anderson, *Ancient Greek Horsemanship*, Berkeley, 1961, pp. 67–75 for discussion of history of curved cheekpiece.

³⁴ C. Dugas, *Exploration archéologique de Délos*, XVII, *Les vases orientalisants de style non Mélien*, Paris, 1935, no. 1, p. 25, pl. XV, a, pl. LXXI; see also pls. XVI, XVIII, XX.

³⁵ O. Wildhauer, *Jahrb.*, 38–39, 1923–24, pp. 28–37, pl. 1.

³⁶ C. Blinkenburg, *Lindos: Fouilles de l'acropole, 1902–1914*, I, *Les petits objets*, Berlin, 1931, no. 744, pp. 222–223, pl. 31; U. Jantzen, *Ath. Mitt.*, 63–64, 1938–39, no. 8, pp. 140–155, pl. 37, 4; B. Filow, *Die archaische Nekropole von Trebenische*, Berlin, 1927, no. 70, pp. 54, 97.

³⁷ C.V.A., Schloss Fasanerie 1 [11], 6, 8 [484, 486]; C. Haspels, *Attic Black-Figured Lekythoi*, Paris, 1936, pp. 91, 223, pl. 31, 1; Richter, *Handbook of the Greek Collection*, p. 63, pl. 45, d; W. Wrede, *Ath. Mitt.*, 53, 1928, pp. 88–92.

³⁸ A kantharos from Duvanlij in B. Filow, *Die Grabhügelnekropole bei Duwanlij in Sudbulgarien*, Sofia, 1934, no. 4, p. 106, fig. 132, pl. 8, 5–6; a situla from Derveni in Makaronas, *Δελτ.*, 18 B', 1963, pl. 227; a situla from Dodona in C. Carapanos, *Dodone et ses ruines*, Paris, 1878, no. 9, p. 34, pl. 17; an oinochoe in I. R. Bokotopoulos, *Ὀδηγὸς Μουσείου Ἰωαννίνων*, Athens, 1973, pl. 18.

³⁹ J. D. Beazley, *Greek Vases in Poland*, Oxford, 1928, no. 76, p. 27, pls. 15–16, by Sotades.

⁴⁰ G. M. A. Richter, *Attic Red-Figured Vases*, New York, 1967, p. 92.

center part.⁴¹ Close parallels are the satyrs of the Euaion Painter.⁴² It is noteworthy that the ends of our satyr's hair and beard do not flow out around his head in the style of metalwork from the late 5th and 4th centuries (see 5).

4. Ancient Impression from a HANDLE: DIONYSOS MASK. 420–400 B.C. Pl. 5.

T 1215. Deposit E 16:3, context 4th cent. B.C. PH. 0.055; PW. 0.047 m. Complete. Smooth back with three vertical finger impressions.

Modern cast: H. 0.043; W. 0.032 m. Noticeable curvature. Grooved edge of relief follows contour of beard. Hair is parted in middle and brushed to each side in curly locks. Tainia with raised borders is tied across forehead on top of ivy wreath of which pointed leaves are visible; rounded end of tainia hangs below each ear. Thin eyebrows in high relief. Eyes open at corners; short ridges indicate eyeballs. Mouth slightly open with full lower lip. Long ends of mustache are finely striated and flow into beard of curly locks. Surface of beard worn.

The grooved border indicates that the head belonged at the base of a handle. The pronounced curvature of the relief suggests a small vessel, perhaps a chous which was used during the drinking contests of the Anthesteria.⁴³

Very similar representations of Dionysos appear in Attic vase painting from the second half of the 5th century.⁴⁴ Our head was probably made in the later part of this period since the eyes are noticeably elongated with short lower lids and heavy upper lids. Contemporary handles with similar

heads of Dionysos appear on the Berlin Maenad krater.⁴⁵

5. Ancient Impression from a HANDLE: HERAKLES MASK. 375–350 B.C. Pl. 6.

T 2126. Area R 22, context Hellenistic to Roman. PH. 0.096; PW. 0.046 m. Left side of impression broken away. Four horizontal finger impressions on back.

Modern cast: H. 0.066; W. 0.034 m. Herakles wears the lion skin at the front of his head just above the hairline; wispy ends of its mane flutter out to the side. Herakles' own hair forms short shell curls which are brushed back from the forehead. Short wavy strands of hair for mustache and at top of beard. More loosely twisted curls surround hair and beard. Ridged, stippled eyebrow. Large round eye open at inner corner with upper lid in high relief. Mouth slightly open with full lower lip. Ear was erased. Part of tongue pattern visible beside right ear.

The size of our head and the absence of curvature suggest that the original metal relief belonged to the center of a handle for a volute krater; a Herakles mask appears in this position on the Derveni krater.⁴⁶

It is quite clear that our Herakles originally had a very short beard and that a halo of curls was added to ease the transition to the background. This treatment first appears in metalwork of the last quarter of the 5th century and can be observed in the lion skin of the Herakles on a bronze handle from this period in New York.⁴⁷ The handling of the hair and beard on our head finds its closest

⁴¹ Cf. the Lemnian Athena in W. Fuchs, *Die Skulptur der Griechen*, Munich, 1969, p. 558, fig. 668; also Athena on metopes from Olympia in B. Ashmole and N. Yalouris, *Olympia, The Sculptures of the Temple of Zeus*, London, 1967, pls. 154–159.

⁴² *C.V.A.*, Oxford 2 [9], 52 [416], 3, pp. 107–108; Richter, *op. cit.* (note 40 above), p. 107, fig. 87.

⁴³ A. Pickard-Cambridge, *The Dramatic Festivals of Athens*, Oxford, 1968, p. 10, fig. 8.

⁴⁴ Arias and Hirmer, *Vase Painting*, pl. 199 (the Kleophon Painter, ca. 435–420); L. Lawler, *Mem. Am. Ac. Rome*, VI, 1927, pp. 69–112, pl. 14, 5; L. Curtius, *Vermächtnis der antiken Kunst*, Heidelberg, 1950, pp. 133ff.; L. Deubner, *Attische Feste*, Berlin, 1932, p. 97, pl. 8, 3.

⁴⁵ Züchner, *Winckelmannsfest*, XCVIII, p. 13, dated 400–390.

⁴⁶ Makaronas, *Δελτ.*, 18 B', 1963, pp. 193–196, pls. 233–234.

⁴⁷ Richter, *Handbook of the Greek Collection*, p. 95, note 35, pl. 76, e.

parallels on coins of *ca.* 375–350⁴⁸ and on two similarly dated hydria reliefs, one from Pharsalos, the other from Chalkis.⁴⁹ Our head must be earlier than the introspective and more schematic Herakles on a late 4th century bronze handle in St. Louis.⁵⁰

The craftsman who took our impression must have felt that the ear on the original metal relief had been unsatisfactorily executed and thus he erased this area.

6. Ancient Impression from an ATTIC HANDLE: BARBARIAN HEAD. 380–330 B.C. Pl. 7.

T 2361. Area C 17, Hellenistic context. PH. 0.067; PW. 0.059 m. Large chip missing from right side. Smooth back. From a worn relief.

Modern cast: H. 0.063; W. 0.056 m. Slight curvature. Long rectangular face with furrowed brow and thick eyebrows overhanging small heavily lidded eyes open at inner corners; pupils rendered in low relief. High cheekbones. Triangular nose with wide nostrils and remarkably thin bridge. Mouth open with short lower lip. Hatched, drooping mustache with ends lying on loosely waving, triangular beard. Beard falls in two sets of long locks, the second beginning at jawline. Shoulder-length hair parted in the middle and flowing loosely on either side of face to shoulders.

Since the shoulders on our piece are curiously narrow, the original metallic representation prob-

ably existed only as a bust which was attached to the base of a handle. The size and curvature of the relief suggest a hydria or krater.

Similar although less detailed representations of barbarians appear on Attic clay relief vases from the workshop of Xenophantos (*ca.* 375–350).⁵¹ Since it is clear that this class of pottery was based upon Attic metallic counterparts, it is quite possible that the barbarian figures themselves were also inspired by examples such as our own from Attic metalwork.

Barbarians with heads almost identically like our own appear on an electrum repoussé jug in the Hermitage (*ca.* 380–330).⁵² The superb execution of the vessel points to Greek workmanship although the genre scenes show such familiarity with local customs that we must assume that the craftsman was working locally. The artist of the jug may have been trained in an Attic workshop or based his designs upon Attic works like our own.⁵³

7. Ancient Impression from a HANDLE: PALMETTE. *Ca.* 350 B.C. Pl. 6.

T 905. Deposit E 14:1, context mid-3rd cent. B.C. PH. 0.065; PW. 0.037 m. Mended from two pieces. Large sections missing from middle; back rough and chipped.

Modern cast: H. 0.062; W. 0.037 m. Slight curvature. Tall central petal with pointed tip flanked by six petals with rounded, drooping tips. All petals have convex surfaces with raised edges. In center of palmette and in higher relief is second

⁴⁸ C. Kraay, *Greek Coins*, New York, 1966, no. 468, pl. 148 (Larissa, *ca.* 350); no. 513, pl. 159 (Arkadian League, 370–360); no. 608, pl. 181 (Klazomenai, *ca.* 375).

⁴⁹ C. Rolley, *Les bronzes; Monumenta graeca et romana*, V, i, Leiden, 1967, no. 147, p. 16, pl. 49; Verdelis, *Ἀρχ. Ἔφ.*, 1950–51, p. 84, fig. 2, pl. 3.

⁵⁰ Mitten and Doeringer, *Master Bronzes*, no. 149, p. 144; see also plaster impression in Rubensohn, *op. cit.* (note 4 above), no. 7, p. 21, pl. 8.

⁵¹ Zervoudaki, *Ath. Mitt.*, 83, 1968, nos. 35–39, pp. 26–28, 49, 63.

⁵² Artamonov, *Scythian Art*, pls. 226–229, 232, 233; *idem*, *The Metropolitan Museum: From the Lands of the Scythians*, New York, 1975, no. 81, p. 112, pls. 17, 18; cf. also the Chertomlyk amphora, *Scythian Art*, pls. 162–176.

⁵³ It is quite possible that the ultimate source of this barbarian face is to be found in representations of Pan. Particularly close to our head are the Pans on two bronze mirror reliefs which Züchner dates between 375 and 325: Züchner, *Jahrb.*, Erg. XIV, no. 26, p. 24, pl. 15 and no. 59, p. 46, pl. 20; see also the Pans on votive reliefs from the end of the 5th century in S. Karouzou, *National Archaeological Museum: Collection of Sculpture*, Athens, 1968, N.M. 1329, p. 60 and N.M. 1879, p. 136.

palmette. Its central vertical petal is flanked by five petals with slightly drooping tips. All these petals are convex with rounded tips. In center of second palmette is part of a tall acanthus leaf; at least four of its pointed leaves are visible. At base of palmette is an acanthus leaf which curves to the side. Beside it a grooved cauliculus grows obliquely upward; from the cauliculus a grooved spiral winds inward toward the third petal of the palmette.

Palmettes were traditional motifs at the base of handles and appear to have been a particularly popular choice for metal vessels made in the 4th century.⁵⁴ Although none of the surviving contemporary examples can be confidently attributed to a specific school, Attic equivalents were surely being made. Comparable palmettes were painted beneath the handles of many Attic black-glaze vases which belong to a class of pottery surely inspired by metallic counterparts.⁵⁵

The closest parallels to this palmette are not in metalwork but in pottery and on marble reliefs. On Attic clay relief vases of *ca.* 375–350 the painted palmettes have petals with identically rounded drooping tips and the petals are similarly separated from each other along their entire length.⁵⁶ Also like our example is the horseshoe-shaped profile of these painted palmettes so that the greatest width is across the third or fourth petal from the bottom.

On the stele of Theodotos the palmette also grows directly from the acanthus bed while the cauliculi emerge horizontally from the acanthus leaves.⁵⁷ Contemporary with the stele (*ca.* 350)

is the Corinthian capital at Tegea;⁵⁸ its tall acanthus leaf which rises vertically between the cauliculi is much like the acanthus leaf in the center of our palmette.

Several loomweights found on the Pnyx are stamped with palmettes of an early 4th century type.⁵⁹ It is certainly possible that the stamps used to mark these loomweights were themselves impressions from palmettes in metalwork, but it is unlikely that our own piece was used in this way, both because of the noticeable curvature of the surface and because the base of the palmette was not entirely impressed.

8. Ancient Impression from a VESSEL:

MAENAD. *Ca.* 405 B.C. Pl. 6.

T 3512. Area M 18, context 6th and 5th cent. B.C. PH. 0.046; PW. 0.063 m. Broken on all sides except for cut on right end of bottom. Smooth back with impressions of three fingers and part of fourth running vertically.

Modern cast: H. 0.033; W. 0.058 m. Slight curvature. Right breast and arm of female moving to her left. Right arm flung out behind her with elbow slightly bent. Thin chiton lies closely upon breast and forms several very shallow broad vertical ridges below the nipple. Beneath the arm are broken tubular folds with spherical pockets. Over the chiton is a nebris passing over the left shoulder and below the right breast; it has a wavy upper border and is held in place by two diagonal straps. Above nebris is wide waistband edged with double ridges.

⁵⁴ Cf. a silver jug from Bulgaria in Velkov, *B.I.A.Bulg.*, 12, 1938, p. 438, fig. 224; a jug from Derveni in Makaronas, *Δελτ.*, 18 B', 1963, pl. 225; Chertomlyk amphora in Artamonov, *Scythian Art*, pls. 162–176.

⁵⁵ G. Kopcke, *Ath. Mitt.*, 79, 1964, no. 74, p. 35, pl. 23, 2 (amphora dated *ca.* 350) and no. 135, p. 41, pl. 29, 3 (pelike of 360–350); see also impression from a 5th cent. palmette in Robinson, *Olynthus*, XIV, no. 356, p. 260, pls. 106, 110.

⁵⁶ Zervoudaki, *Ath. Mitt.*, 83, 1968, no. 26, p. 23, pl. 6, "350" and no. 1, p. 11, pl. 7, "c. 375–350".

⁵⁷ H. Möbius, *Die Ornamente der griechische Grabstelen klassischer und nachklassischer Zeit*, Berlin, 1929, p. 36, pl. 18, B.

⁵⁸ G. Gruben, *Die Tempel der Griechen*, Munich, 1966, pp. 124, 126, figs. 112–113.

⁵⁹ Davidson and Thompson, *Hesperia*, Suppl. VII, nos. 81–84, p. 75 and p. 82, fig. 33. For an analogous stamp, perhaps stemming from a metal vessel (together with a mold on which the representation is ultimately derived from the same original), cf. H. A. Thompson, *Hesperia*, 5, 1936, pp. 175–176.

The closest parallels for the gesture of the arm and the treatment of the drapery appear on the Maenad Reliefs (*ca.* 405).⁶⁰ Although most maenads wear their nebrises over the left shoulder,⁶¹ the diagonal strap on our figure is unusual. The size and curvature of the relief suggest that the original vessel was a hydria or krater; analogous representations of maenads appear on the Berlin Maenad krater⁶² and on the Derveni krater.⁶³

9. Ancient Cast out of an Impression from a
VESSEL OR PLAQUE: MAIDEN. 405–395
B.C. Pl. 7.

T 2241. Area B 22 (?), Hellenistic context. PH. 0.037; PW. 0.049 m. Left side only preserved. Back smooth.

Waist to thigh of woman facing front. Right leg relaxed. Right arm extended slightly away from the body with hand holding fold of himation, the ends of which fly out behind the arm. Peplos with a girded overfold extending to mid-thigh. Edges of overfold brought around to center where they fall in swallowtails over the abdomen. Bunch of drapery caught above the girding at center of waist. Overfold overhangs the girding at the side with hem falling in omega-shaped pattern. Drapery lies closely upon right thigh forming several narrow diagonal ridges. Bracelet on right arm. Faulty impression of the hem of overfold. To her right are traces of drapery belonging to a second figure.

Because the fragment is small and we are twice removed from the original metal relief it is difficult to be certain about the curvature or the function of that original.

The handling of the drapery dates the relief close to 400. On the Treasury Decree of 398 B.C. Athena's overfold forms a similar sagging pocket where it overhangs the girding.⁶⁴ The omega-like patterns in the hem of our maiden's kolpos have parallels on the Maenad Reliefs (*ca.* 405)⁶⁵ and on the himation of the Hera on the Samian Decree of 403/2.⁶⁶ The knot of fabric above our figure's girding is a motif found on the Bassai frieze,⁶⁷ the Dexileos stele,⁶⁸ and on a metope from the Argive Heraion.⁶⁹

10. Ancient Impression from an ATTIC
VESSEL: DANCING SATYR.
405–390 B.C. Pl. 7.

MC 1229. Area T 13, context early 4th cent. B.C. PH. 0.075; PW. 0.063 m. Broken across bottom. Chipped on right side. Four vertical fingertip impressions on back.

Modern cast: H. 0.065; W. 0.051 m. Curvature. Nude, youthful satyr skips to his right looking back to his left. Weight on left leg with right leg kicked up behind him. Right foot wears boot extending to calf. Arching, finely striated tail with long thin tip. Right arm outstretched slightly with hand grasping arm of lyre of which five strings are visible. Left arm flung out behind with hand holding double flutes. Panther skin over elbow with finely hatched edges. Thick, wavy wreath of which five leaves are visible; two short pointed horns; right ear has pointed tip. Wreath of leaves encircles the vase below the rim; three appear on our piece in low relief; central rib

⁶⁰ Fuchs, *Skulptur*, pp. 522–523, figs. 610–614.

⁶¹ An appliqué from Dodona in Gehrig, *Führer* (Berlin), Misc. 10582, p. 216, pl. 19, "400"; the Naples Lenaea stamnos in Arias and Hirmer, *Vase Painting*, pls. 208–209; a relief from Piraeus in M. Bieber, *History of the Greek and Roman Theater*, Princeton, 1961, p. 32, fig. 113.

⁶² Züchner, *Winckelmannsfest*, XCVIII, p. 13.

⁶³ Makaronas, *Δελτ.*, 18 B', 1963, pp. 193–196, pls. 230–234.

⁶⁴ J. Svoronos, *Das Athener Nationalmuseum*, Athens, 1903, pl. 107.

⁶⁵ Fuchs, *Skulptur*, pp. 522–523, figs. 610–614.

⁶⁶ K. Johansen, *The Attic Grave Reliefs of the Classical Period*, Copenhagen, 1951, Acr. 1333, p. 150, fig. 76.

⁶⁷ H. Kenner, *Der Fries des Tempels von Bassae-Phigalia*, Vienna, 1946, no. 534, pl. 15.

⁶⁸ Lullies and Hirmer, *Greek Sculpture*, pl. 192.

⁶⁹ G. Eichler, *Jahresh.*, 19–20, 1919, p. 72, fig. 56.

and veins visible. Stem of wreath passes above leaves.

The size and curvature of the relief indicate that the original metal vessel was an oinochoe or a squat lekythos and thus a metal equivalent of the well-known class of Attic relief pottery.⁷⁰ It is interesting to note that identical leaves appear in the corresponding position on the Derveni krater.⁷¹

Our figure has the characteristic features of late 5th and early 4th century Attic representations of satyrs who had become assimilated to Pan.⁷² The artist extended the tip of the more typical stubby tail apparently in imitation of the longer flowing horsetails of 5th century silens.

Dating the relief to the early 4th century are the still incorrect torsion of the chest, the use of the panther skin to avoid foreshortening the left arm, and the affected gesture of the right hand. The flying ends of drapery have many parallels on the Bassai frieze.

On a number of Attic vases from the 4th century a satyr appears with an ivy wreath and flutes or is shown dancing on the tips of his toes with a panther skin draped over his arm.⁷³ The kothoroi, lyre, and flutes with which our figure is provided are surely a theatrical allusion although probably not a specific one.

11. Ancient Impression from a VESSEL:

HERAKLES OR GIANT. 400–390 B.C.

Pl. 8.

T 2924. Area D 17, early Roman context. PH. 0.039; PW. 0.04 m. Broken all around except

for two small places on lower edge. Surface also chipped. Surface of back is completely missing.

Modern cast: H. 0.033; W. 0.037 m. Slight curvature. Nude left shin and foot extended behind figure moving to his right. No foreshortening. Long toes with second toe longer than big toe. Nails carefully engraved. Between the legs hang two paws with detailed rendering of hair and nails. Ground is stippled and has undulating upper contour.

The original metal vessel was small, perhaps a squat lekythos or a chous.

Around the end of the 5th century both Herakles and giants frequently appear in this pose, usually with their animal skins swirling about them. Herakles appears in this manner on the Bassai frieze⁷⁴ and there are analogous representations of giants on several Attic vases.⁷⁵ The foot is ordinarily foreshortened, but it is obvious that the artist of our relief preferred to show as much detail as possible of each toe. The foot is characteristic of feet on Attic vases from the end of the 5th century:⁷⁶ the toes are very long and carefully separated from each other and the second and third toes are of equal length.

12. Ancient Impression from an ATTIC

VESSEL: MAIDEN WITH TRIGONON.

400–390 B.C.

Pl. 7.

T 3990. Area H 4, Hellenistic context. PH. 0.056; PW. 0.05 m. Broken across top. Chipped on left side; large chip missing from right side of surface. Smooth back with finger marks.

⁷⁰ Zervoudaki, *Ath. Mitt.*, 83, 1968, pp. 1–88.

⁷¹ Makaronas, *Δελτ.*, 18 B', 1963, pp. 193–196, pls. 230–234.

⁷² F. Brommer, *Jahrb. Muench. Kunst*, 15, 1949–50, p. 28, fig. 37; R. Carpenter, *Mem. Am. Ac. Rome*, 18, 1941, p. 7; K. Schefold, *Kertscher Vasen; Bilder griechischer Vasen*, III, Berlin, 1930, p. 11, pl. 7, B, "c. 355".

⁷³ Y. Miliadis, *A Concise Guide to the Acropolis Museum*, Athens, 1971, p. 38 (Kertsch Iekanis); K. Schefold, *Untersuchungen zu den Kertscher Vasen*, Berlin, 1934, no. 93, pl. 27, no. 346, pl. 38, no. 547, pl. 38; J. D. Beazley, *J.H.S.*, 59, 1939, no. 86, pp. 40–41.

⁷⁴ Kenner, *Bassae*, no. 541, pl. 21; also see cheekpiece from Gorlo, Bulgaria in Velkov, *B.I.A. Bulg.*, 12, 1938, p. 435, fig. 218 and a bronze relief with Herakles in P. Wuilleumier, *Tarente des origines à la conquête romaine*, Paris, 1939, p. 323, pl. 16, 3.

⁷⁵ Arias and Hirmer, *Vase Painting*, pls. 220–221; A. von Salis, *Jahrb.*, 55, 1940, p. 91, figs. 1, 2, and p. 125, fig. 20; see also giant on ancient cast from Agora in Thompson, *Hesperia*, 8, 1939, p. 296, fig. 9.

⁷⁶ Arias and Hirmer, *Vase Painting*, pl. 216, "410".

Modern cast: H. 0.041; W. 0.04 m. Curvature. Waist to feet of female seated in right profile. Diphros with turned legs; underside of seat, far side, and back are visible. Footstool with curved animal legs is shown at an angle. Continuous ridge beneath diphros and footstool serves as ground line. Maiden is barefooted with right foot crossed over left. She wears sleeved chiton and himation which is wrapped around her legs with the ends falling down her left side. Himation edges on thigh and ankle turn up to show underside. Trigonon rests on left knee; all angles are acute. Nine strings run diagonally from upright side to base which is stippled. Maiden's left hand strokes strings farthest from her body, her right hand those closest to her. Faulty impression of right hand and of some folds of himation.

The ridged ground line has many parallels among the class of Attic relief pottery which was made in the first half of the 4th century.⁷⁷ The size and curvature of our relief suggest that the original vessel was a metal equivalent of this group, probably a squat lekythos or oinochoe.

Our maiden is playing what was probably a quite demanding musical instrument. This is the type of trigonon known as the spindle-harp. The standard spindle-harp had three straight sides, two of which met at a right angle. The instrument was held so that the right angle was closest to the body.⁷⁸ Our example is unusual in having all the

angles acute, although a similarly shaped trigonon appears on a pelike by the Meidias Painter in New York.⁷⁹ Other contemporary representations of trigona show considerable variation in the angle at which the strings are set and in the position of the hands.⁸⁰

Dating the relief to the end of the 5th century are the perspective rendering⁸¹ and the proportions of the diphros⁸² (the distance to the disc being less than one quarter the length of the entire leg). Also characteristic of this period are the angling of the footstool,⁸³ the affected gesture of the wrist, and the scalloped folds of drapery which have close parallels on the Maenad Reliefs (ca. 405).⁸⁴ Seated maidens whose drapery is similarly handled appear on an Attic bronze mirror relief in Berlin⁸⁵ and on an Attic clay relief vase by Xenophantos,⁸⁶ both dated around 400.

13. Ancient Impression from a VESSEL:

APHRODITE. 375–350 B.C. Pl. 8.

T 2950. Area D 17, Hellenistic context. PH. 0.082; PW. 0.048 m. Broken down right side and at bottom. Right side of surface much chipped. Upper left corner of surface has groove made by fingernail. Three vertical finger impressions on back.

Modern cast: H. 0.066; W. 0.04 m. Curvature. Female stands turned to her right, her left knee bent with the foot slightly behind her, a scepter in

⁷⁷ Zervoudaki, *Ath. Mitt.*, 83, 1968, pp. 7–8, especially no. 12, p. 17, pl. 10.

⁷⁸ M. Wegner, *Das Musikleben der Griechen*, Berlin, 1949, pp. 47ff., 126, 164.

⁷⁹ G. M. A. Richter, *A. J. A.*, 43, 1939, pp. 1–6.

⁸⁰ G. M. A. Richter and L. Hall, *Red Figured Athenian Vases: The Metropolitan Museum of Art*, New Haven, 1936, no. 144, p. 181, pl. 147, and no. 145, p. 182, pl. 146; E. Langlotz, *Griechische Vasen in Würzburg*, Munich, 1923, no. 541, p. 111, pl. 201; R. Herbig, *Ath. Mitt.*, 54, 1929, pl. 8. Several different forms of the trigonon appear on contemporary gems (J. Boardman, *Greek Gems and Finger Rings*, New York, 1970, pp. 197, 288, pl. 472; pp. 199, 290, pl. 517; pp. 206–7, 293, pl. 600; cf. Wegner, *op. cit.* [note 78 above], pp. 47ff.).

⁸¹ J. White, *Perspective in Ancient Drawing and Painting*, London, 1956, p. 28, pl. 5, a.

⁸² G. M. A. Richter, *The Furniture of the Greeks, Etruscans, and Romans*, London, 1966, pp. 39–40, figs. 207–208.

⁸³ C. Blümel, *Katalog der griechischen Skulpturen des fünften und vierten Jahrhunderts v. Chr.*, Berlin, 1928, K 31, pp. 31–32, pl. 40 (a grave stele dated ca. 400).

⁸⁴ Fuchs, *Skulptur*, pp. 522–523, figs. 610–614.

⁸⁵ Züchner, *Jahrb.*, Erg. XIV, no. 12, p. 13, and p. 222, fig. 126, called Attic, ca. 400.

⁸⁶ Zervoudaki, *Ath. Mitt.*, 83, 1968, no. 59, p. 32, pl. 4, 3, “end of the 5th c.”; Schefold, *op. cit.* (note 73 above), p. 103, fig. 41, “410–400”.

left hand. Wears thin sleeved chiton which lies closely upon breasts and rests on edge of right shoulder. One end of himation frames the left shoulder and falls down in front of left arm; rest of himation passes behind back, is drawn up from right shoulder by right hand, then forms a roll passing across hips and over left elbow. Face in left profile; hair is parted in center with finely striated wavy locks wrapped in a roll around the face concealing the ear. Large earring and beaded necklace. Above her head two boukrania alternate with two eight-petaled rosettes. One boukranion has fillet passing behind horns with ends hanging in tassels down each side. Faulty impression of left hand.

H. A. Thompson, *Hesperia*, 19, 1950, p. 334, pl. 106, c.

The size and curvature of our relief indicate that the original metal vessel was probably an oinochoe or squat lekythos.

The necklace, earrings and thin, slipping chiton are characteristic of representations of Aphrodite on bronze mirror reliefs from the first half of the 4th century.⁸⁷ On a Kertsch lekanis dated to 350⁸⁸ two figures, one of them Aphrodite, are posed and draped in the manner of our figure; a third woman on the vase is shown with the hairstyle and earrings of our figure.

The handling of the drapery on our relief points to a date in the second quarter of the 4th century. Like the himation of our figure, the peplos of the Eirene of Kephisodotos (*ca.* 374)⁸⁹ lies closely upon the front and back of the relaxed leg while the fabric falls over the thigh in several vertical, panel-like folds. The deep furrows in the bulky roll of our figure's himation are close to those of the Aphrodite of Arles (*ca.* 360).⁹⁰

Decorative borders on some Attic black-glaze vases from the second quarter of the 4th century frequently consist of boukrania wrapped in fillets and attached to garlands.⁹¹ Many similarly dated Attic clay relief vases have continuous decorative borders made up only of rosettes.⁹² The boukrania and rosette border on our relief is not common on Attic vases of this period but does appear on contemporary Apulian pottery.⁹³

14. Ancient Impression from a VESSEL: RECLINING SATYR. 350–325 B.C.

Pl. 8.

T 1947. Area A–D, 16–23, context Turkish to modern. PH. 0.047; PW. 0.052 m. Broken at left side. Λ scratched on back.

Modern cast: H. 0.043; W. 0.037 m. High relief worked under flaring rim which is partly preserved. Satyr reclines on his left side facing viewer, the left knee bent with the leg drawn back. He plays the double flutes, leaning his left elbow on a cushion covered by drapery, the right elbow on the right thigh. Himation wrapped around waist and legs. Short curly hair beneath ivy wreath; pointed ears, snub nose. Phorbeia tied over cheeks and beard with ends falling to shoulders. In front of couch, table with omphalos-cake, bunch of grapes, and other fruit. Seated on the couch to satyr's right is the left leg of a draped female shown frontally. Her left hand rests on his left knee. Behind satyr's right knee is a thyrsos and possibly a garland of ivy leaves.

The flaring rim of our relief suggests that the original relief belonged to a kantharos. Representations similar to that of our relief appear on two fragments from Attic black-glaze relief kantharoi which are dated between 325 and 300

⁸⁷ Züchner, *Jahrb.*, Erg. XIV, no. 26, p. 24, pl. 14; no. 4, p. 7, pl. 6; no. 17, p. 14, pl. 16; no. 21, p. 18, pl. 13; especially no. 12, pp. 13, 222, fig. 126.

⁸⁸ Scheffold, *op. cit.* (note 73 above), p. 22, pls. 13, 14, "350".

⁸⁹ Fuchs, *Skulptur*, p. 360, fig. 399.

⁹⁰ *Ibid.*, p. 216, fig. 233.

⁹¹ Kopcke, *Ath. Mitt.*, 79, 1964, p. 28, pl. 11, 3, 4, "370"; no. 118, p. 39, pl. 25, "c. 360, bell krater from Lecce"; no. 214, p. 46, pl. 36, 3, "perhaps Apulian, 320–00", but Zervoudaki, *Ath. Mitt.*, 83, 1968, no. 71, p. 34, pl. 26, 1, thinks it is close to Attic work of *ca.* 325–300.

⁹² Kopcke, *Ath. Mitt.*, 79, 1964, pls. 10, 14–18.

⁹³ Beazley, *J.H.S.*, 59, 1939, no. 86, pp. 35–44, dated before 347.

B.C.⁹⁴ Our relief is probably earlier, although the considerable height of the relief, far higher than on 9 for example, indicates a date within the second half of the century.⁹⁵

In 5th century Attic vase painting satyrs appear at symposia only to perform for Dionysos and his guests.⁹⁶ During the 4th century, however, the satyrs become guests in their own right.⁹⁷ On an Attic krater of the early 4th century, the satyr's couch is set beneath an ivy bower;⁹⁸ perhaps the garland on our relief belonged to a similar structure.

The mark on the back of the impression probably served as the catalogue number in a workshop collection.

15. Ancient Impression from a HELMET(?):
RECLINING YOUTH. 375–350 B.C.

Pl. 9.

T 2930. Area C 17, context mixed to late Roman. PH. 0.099; PW. 0.084 m. Broken at top; chipped at right edge and at bottom of inside surface. Inside shows both finger impressions and texture of rag. Palm and fingertip impressions horizontally on back.

Modern cast: H. 0.09; W. 0.077 m. Curvature. Nude youth reclines to his left on the stepped base of a herm. He leans on his right elbow; his right

hand holds the end of a spear or staff. Right leg extended, left leg drawn back with left hand resting on thigh. Mantle draped over left knee and spread beneath him. Head turned three-quarters right; iris of eye in relief. Pilos over short, wavy hair. A ledge extends to his left at chest level; above it are rosette and tendrils. On other side of herm is nude youth standing in right profile. Shield(?) over left arm. Area in front of this youth is erased. Deep rim beneath figures. H. A. Thompson, *Archaeology*, 2, 1949, p. 185; *idem*, *Hesperia*, 19, 1950, p. 334, pl. 106, b; D. B. Thompson, *Hesperia*, 38, 1969, p. 247, pl. 66, c.

The considerable height and projection of the rim beneath the figure indicates that the original object was both substantial and intended for a great deal of use, since the rim was obviously meant to protect the representation. A rim like this one is not common on contemporary metal vessels and would seem to be more appropriate to a helmet. Our relief could conceivably have belonged to that part of a Chalcidian helmet which protected the nape of the neck.⁹⁹ The relief could also have belonged to a metal version of the pilos which the reclining figure, most appropriately then, is wearing.¹⁰⁰

The object which the youth is holding has a smooth, regular shaft and is, therefore, more likely

⁹⁴ Kopcke, *Ath. Mitt.*, 79, 1964, nos. 295, 296, p. 52, pl. 42, 4–5; see also fragments of bell kraters, nos. 320, 324, p. 54, pl. 45, 10.

⁹⁵ On a plaster cast from a metal relief of about this period the figure is in high relief while the leaves are lightly engraved in the background: Rubensohn, *op. cit.* (note 4 above), no. 48, p. 63, pl. 7.

⁹⁶ W. Hahland, *Vasen um Meidias; Bilder griechischer Vasen*, I, Berlin, 1930, p. 5, pl. 12, a (Painter of the Berlin Dinos); N. Alfieri and P. Arias, *Spina*, Munich, 1958, pls. 110–111 (krater by Polion, ca. 420).

⁹⁷ H. Sichtermann, *Griechische Vasen in Unteritalien*, Tübingen, 1966, no. 52, p. 42, pl. 85, “350 or later”; Beazley, *J.H.S.*, 59, 1939, no. 82, pp. 30–32, “early 4th c.”; K. Schauenburg, *Jahrb.*, 88, 1973, pp. 1ff., 8–10, fig. 9.

⁹⁸ Beazley, *J.H.S.*, 59, 1939, no. 52, p. 42, pl. 85; H. Metzger, *Représentations dans la céramique attique du IVe siècle*, Paris, 1951, no. 34, pp. 149, 152, pl. 21, 1.

⁹⁹ G. M. A. Richter, *Greek, Etruscan and Roman Bronzes*, New York, 1915, no. 1535, p. 411; for Chalcidian helmets dated ca. 530–490 B.C. cf. E. Kunze, *Bericht über die Ausgrabungen in Olympia*, VIII, Berlin, 1967, pp. 144, 158, 182, pls. 77–79. S. Karouzou (*B.C.H.*, 95, 1971, p. 129, fig. 18) discusses a late 5th cent. pelike on which is a Chalcidian helmet with a decorated bowl. There is a rim similar to our own on the helmet of the Achilles from Tegea (good photo in A. Delivorrias, *B.C.H.*, 97, 1973, p. 130, figs. 7–8).

¹⁰⁰ Richter, *op. cit.* (note 99 above), nos. 1540, 1541, pp. 412–414; pilos worn in battle on late 5th cent. pelike in Karouzou, *B.C.H.*, 95, 1971, p. 129, fig. 18.

to be a spear than a staff. The spear would have to be a short one, however, since the youth's hand lies over the top of the shaft.¹⁰¹ Neither the attribute nor the pose definitively identifies the figure since nude reclining youths with spears appear frequently in 4th century vase painting. Sometimes this type of figure represents Orestes, Kephalos, or the Dioskouroi, but often the youths are nameless, especially those who wear a pilos and petasos and are shown leaning or reclining on herms.¹⁰²

The ornament on the vase is quite similar to that which is found on Attic clay relief vases of the first half of the 4th century.¹⁰³ Dating our figure close to 375 are the furrowed, angularly shaped pockets in the himation which find close parallels on a grave stele in Munich.¹⁰⁴ The undisturbed passage of fabric which is gently folded back upon itself recalls the handling of the kolpos on the Eirene of Kephisodotos¹⁰⁵ (ca. 374). Characteristic of grave reliefs from this period is the angling of the herm and of its steps.¹⁰⁶

16. Ancient Impression from a CUIRASS: HERAKLES IN COMBAT.

Ca. 480 B.C.

Pl. 9.

T 578. Area K 13, Hellenistic context to ca. 160 B.C. PH. 0.067; PW. 0.044 m. Broken across top and down left side. Two vertical finger impressions on back. From a worn relief.

Modern cast: H. 0.063; W. 0.045 m. Herakles is in right profile, weight on right leg, left knee

bent with heel visible just behind right knee. Left knee rests on rounded body of animal whose curling tail is partly visible. Sword belt across Herakles' waist. Lion skin hangs down back covering buttocks and blowing out behind to show underside; its tail spirals upwards. Beaded border was added separately to impression by superimposing it upon oval contour left by metal relief.

The original metal relief was U-shaped and had a border of large beads which the artist of our impression carefully covered over with a strip of clay. The shape of the object, the border, the low relief, and the archaizing treatment of a Heracleian labor all suggest that our impression was taken from a relief which decorated a cuirass. Several comparable bronze cuirass reliefs have been found at Dodona.¹⁰⁷

The kneeling stance suggests that Herakles is struggling with the Keryneian Hind. The combat is first represented in this manner on a metope from the Athenian Treasury at Delphi; subsequently this grouping became the conventional way of portraying the conflict.¹⁰⁸ Our figure, however, has clearly been treated in an archaizing manner: the vertical, flat-footed right leg supports the body while the jutting torso and bent left leg suggest a forward lunge. Similar archaizing treatments of Heracleian labors appear on two of the Dodona reliefs. One relief, on which Herakles is shown wrestling with Apollo for the Delphic tripod, is dated by Kunze in the late Hellenistic period.¹⁰⁹ Another recently discovered, and prob-

¹⁰¹ Metzger, *Représentations*, no. 26, p. 313, pl. XLI.

¹⁰² Orestes: Metzger, *Représentations*, no. 39, p. 287, pl. XXXIX. Kephalos: *Ibid.*, no. 72, p. 344, pl. XLIV. Dioskouroi: Karouzou, *B.C.H.*, 95, 1971, p. 130. Herms: Metzger, *Recherches sur l'imagerie athénienne*, Paris, 1965, pp. 85ff. and no. 24, p. 84, pl. 30; no. 25, p. 85, pl. 38, 1; no. 27, p. 85, pl. 38, 2; no. 24, p. 84, pl. 30. Hermes appears in this pose on a silver-plated bronze relief from Corinth (O. Broneer, *Hesperia*, 16, 1947, p. 242, pl. 63, 25).

¹⁰³ Zervoudaki, *Ath. Mitt.*, 83, 1968, pp. 7-8, and no. 12, p. 17, pl. 10.

¹⁰⁴ K. Schefold, *Meisterwerke griechische Kunst*, Basel, 1960, no. 331, pp. 247, 258.

¹⁰⁵ Fuchs, *Skulptur*, p. 360, fig. 399.

¹⁰⁶ A relief from Piraeus in Fuchs, *Skulptur*, p. 494, fig. 576, "c. 380"; note the similar handling of the drapery.

¹⁰⁷ Carapanos, *op. cit.* (note 38, above), p. 33, pl. VI, 1 and see note 110 below.

¹⁰⁸ P. de la Coste-Messelière, *Fouilles de Delphes*, IV, iv, Paris, 1957, pp. 117ff., pls. 51-56.

¹⁰⁹ E. Kunze, *Olymp. Forschungen*, II, Berlin, 1950, p. 116.

ably contemporary, relief depicts the struggle with the Nemean lion: Herakles is shown in a kneeling pose very similar to that of our own figure.¹¹⁰

The handling of the lion skin on our impression, both the inflated folds and the way the tail forms a question mark, is reminiscent of Attic vase painting from about 480,¹¹¹ but exhibits an *expertise* and a flamboyance which are more characteristic of an archaizing spirit. A similar treatment of Herakles' lion skin appears on the Dodona Tripod relief mentioned above.¹¹²

17. Ancient Impression from a
PROMETOPIDION: MAENAD.

Ca. 420 B.C.

Pl. 10.

T 2236. Deposit A-B, 21-22:1, context 420-390 B.C. PH. 0.114; PW. 0.051 m. Reddish clay, mended from two pieces. Broken down right side. Rivet hole at top. Back smooth. Impression unusually thin. From a worn relief.

Modern cast: H. 0.106; W. 0.044 m. Draped female floats to her left, head in right profile gazing upward. Himation held like sail, left arm bent and above head, right arm lowered and extended behind her, perhaps holding attribute. Torso frontal with knees in right profile. Both feet dangle, right foot frontal, left turned out at side. Girded peplos has short overfold and deep U neckline; both armholes very deep. Drapery lies

closely over abdomen, revealing navel, and falls without folds off legs, forming inflated tubular folds which billow out behind her. Hair rolled around head above ear. Left hand holds tendrils or fillet. Oval profile of original relief.

The size of the relief as well as its narrow shape would be suitable to a prometopidion, an ornamental as well as protective device which was worn on a horse's brow.¹¹³ A rivet would have attached the relief to a leather backing. It is also possible that our metal relief was fastened to a sword hilt since both the shape and the representation recall a plaster impression in Hildesheim which was taken from a sword hilt dated to the 4th century.¹¹⁴

The gesture of our figure's arms, her tip-toed stance, and the position of her head all convey an abandonment and ecstatic self-absorption which are most appropriate to a maenad. Comparable figures in vase painting appear on the Naples Lenaea stamnos¹¹⁵ and on a krater by the Dinos Painter which is dated about 420.¹¹⁶ The combination of frontal and profile views in the pose of our figure suggests a date also about 420. The thinness of the chiton and the tubular folds of drapery recall the treatment of drapery on the Nike of Paionios¹¹⁷ while the gentle curve of our figure's kolpos is like that on the Athena of the Treasury Decree of 421 B.C.¹¹⁸

Maidens with windblown drapery appear fre-

¹¹⁰ J. P. Michaud, *B.C.H.*, 97, 1973, pp. 322, 325, figs. 146, 147; A. K. Orlandos, *Tò "Epyov*, 1972, pp. 44-45, figs. 36, 37.

¹¹¹ Ashmole and Yalouris, *Olympia, The Sculptures of the Temple of Zeus*, fig. 23 (Onesimos); D. von Bothmer, *Amazons in Greek Art*, Oxford, 1957, no. 13, p. 132, pl. 70, 2 (the Harrow Painter); R. Lullies, *Griechische Vasen der reifarchaischen Zeit*, Munich, 1953, pl. 88 (Douris).

¹¹² See notes 107 and 109 above.

¹¹³ E. Pernice, *Programm zum Winckelmannsfest*, LVI, *Griechisches Pferdegeschirr*, Berlin, 1896, pp. 27-29; an ancient clay impression in Corinth (Davidson, *Corinth*, XII, no. 471, p. 62, pl. 45) was almost certainly taken from a prometopidion. It is interesting to note that the Corinth impression, like our own, was taken from a relief which was slightly concave across its broadest dimension, surely to protect the relief; Xenophon (*Anabasis*, I, 8, 6) notes that prometopidia were worn in battle; cf. also Schefold, *Meisterwerke*, no. 349, p. 264, "330, Tarentine".

¹¹⁴ Rubensohn, *op. cit.* (note 4 above), no. 46, p. 62, pl. 10.

¹¹⁵ Arias and Hirmer, *Vase Painting*, pls. 208, 209.

¹¹⁶ J. D. Beazley and B. Ashmole, *Greek Sculpture and Painting*, Cambridge, 1932, fig. 110.

¹¹⁷ Fuchs, *Skulptur*, p. 203, fig. 218, "421".

¹¹⁸ E. Kjellberg, *Studien zu den attischen Reliefs*, Uppsala, 1926, no. 39, pl. 12.

quently in sculpture from the end of the 5th century, not only on the Maenad Reliefs¹¹⁹ but also on the Nike Parapet,¹²⁰ and on acroteria from the Temple of Apollo at Delos¹²¹ and the Nereid Monument at Xanthos.¹²² These acroteria have been variously identified as wingless nikai, aurai, nereids, and nymphs.¹²³ The self-control of their poses distinguishes them from maenads, but it is interesting to note that nymphs had traditional connotations of irrationality, associations of which Plato was acutely aware.¹²⁴

**18. Ancient Impression from a
PROMETOPIDION: DANCER.**

370–350 B.C.

Pl. 10.

T 1809. Deposit S 19:3, context late 5th cent. to 320 B.C. PH. 0.07; PW. 0.062 m. Gritty micaceous orange-buff clay. Broken across top and down upper left and right sides. Uneven back with three vertical fingertip impressions. From a worn relief.

Modern cast: H. 0.072; W. 0.044 m. Bare legs and feet of figure facing front. She alights on the ball of her right foot which, except for heel, is modeled in the round. Left knee is bent and slightly advanced; left foot is drawn back and to the side with weight resting lightly on toes; left foot in low relief with toenails engraved. Two ridges across left shin. Rocks or leaves beneath and to sides of feet.

The relief is too narrow to have been a cheek-piece, but the shape is suitable for a prometopidion. Although most surviving prometopidia are oval,¹²⁵ an example from Elis dated to the later 4th century has two straight and two curving sides.¹²⁶

The floating stance of the figure recalls the Nike of Paionios but the short skirt is more characteristic of kalathiskos dancers.¹²⁷ These maidens are usually represented dancing on their toes and were popular motifs in 4th century metalwork.

The coarse clay used in this impression is similar to, although slightly finer than, the clay which was used to make molds for bronze casting. This choice of fabric may indicate that the impression is not Attic or it may simply mean that the impression was a halfhearted attempt upon a relief which was fairly worn to begin with.

19. Ancient Impression from JEWELRY:

GORGONEION. 435–390 B.C.

Pl. 10.

T 3231. Deposit M–N, 15:1, context 175–150 B.C. PH. 0.054. Broken across top and down left side. Surface chipped. Back smooth.

Modern cast: H. 0.045; W. 0.051 m. Loosely tangled curls are individually striated and brushed behind large spiral ears. Eyebrows are narrow ridges, finely stippled, which dip at bridge of nose in deep frown. Eyelids do not meet at inner corners; upper eyelids stippled, arch on side of

¹¹⁹ Fuchs, *Skulptur*, pp. 522–523, figs. 610–614.

¹²⁰ R. Carpenter, *The Sculpture of the Nike Temple Parapet*, Cambridge (Mass.), 1929.

¹²¹ F. Courby, *Exploration archéologique de Délos*, XII, *Les temples d'Apollon*, Paris, 1931, p. 238, figs. 274, 275.

¹²² P. Coupel and P. Demargne, *Fouilles de Xanthos*, III, Paris, 1969, p. 157, date the monument near 400; cf. B. R. Brown, *Anticlassicism in Greek Sculpture of the Fourth Century, B.C.*, New York, 1973, pl. 25.

¹²³ Cf. an acroterion from the Athenian Agora in B. Schlörb, *Jahrb.*, Erg. XXII, *Timotheos*, Berlin, 1965, pp. 40–42 and p. 20 for Nereid, N.M. 3397. P. N. Boulter, *Hesperia*, 22, 1953, pp. 140–147, identifies the wingless female on another acroterion from the Agora as Hebe.

¹²⁴ *Laws*, 7; 815, c; *Phaidros*, 238, d, 241, e.

¹²⁵ U. Ippel, *Programm zum Winckelmannsfest*, XCVII, *Guss und Treiarbeit in Silber*, Berlin, 1937; F. Marshall, *J.H.S.*, 29, 1909, p. 158, fig. 10; see also note 113 above.

¹²⁶ F. Marshall, *J.H.S.*, 29, 1909, p. 159.

¹²⁷ W. Fuchs, *Jahrb.*, Erg. XX, *Die Vorbilder der neuattischen Reliefs*, Berlin, 1959, pp. 91–96; W. Züchner, *Jahrb.*, Erg. XIV, no. 165, pp. 99–100, fig. 50; Artamonov, *Scythian Art*, pl. 267; H. Hoffmann and P. Davidson, *Greek Gold Jewelry from the Age of Alexander*, New York, 1965, no. 16, p. 91, “4th–3rd c. B.C.” and no. 17, p. 93, “late 4th c. B.C.”.

nose. Iris incised; dot in high relief for pupil. Nose broadens at base. Thick wide lips slightly open with tongue extending just over lower lip to cleft of chin.

20. Ancient Impression from JEWELRY:

GORGONEION. 435–390 B.C. Pl. 10.

T 2194. Area C–D, context 5th–1st cent. B.C. PH. 0.044; PW. 0.055 m. Broken across bottom. Back smooth with three faint vertical finger impressions.

Modern cast: H. 0.037; W. 0.047 m. Hair has center part flanked on each side by five snail curls at hairline. Curls wind in toward face except for bottom curls on each side; faint arcs at cheek level for dangling hoop earrings. Two snakes rise above hair at crown. Arching brows in low relief. Upper eyelid overlaps lower at outer edge but lids do not meet at inner corners. Dotted pupils; hooked nose with distended nostrils. Bowed lips with extended tongue.

Because our metal reliefs had no curvature, they cannot have belonged to the handles or sides of vessels. It is possible that they were intended for

the center of a low dish or bowl¹²⁸ or for the lid of a pyxis¹²⁹ but there are no close contemporary metal parallels which have the size and low relief of our pieces. The extreme delicacy of the workmanship suggests that they were used as jewelry.¹³⁰ The earliest surviving Greek gorgoneion pendant dates to the 3rd century B.C. and is based upon the beautiful gorgoneion type of the 4th century.¹³¹ However, it is certainly possible that the artist of that pendant was continuing an earlier tradition represented by our reliefs.

Our reliefs may also have been worn as brooches. It is interesting to note that in late 5th century vase painting Athena wears a very large gorgoneion which she has often pinned at a rakish angle.¹³²

Although the origins of the humanized gorgoneion can be traced back to the Angelitos Athena,¹³³ the fully humanized gorgoneion seems to have first appeared on the aegis of the Lemnian Athena.¹³⁴ Our heads are probably slightly later, however, since they most closely resemble the gorgoneion on the Hephaisteion Athena¹³⁵ and the gorgoneion on Athena's shield on a relief from the Nike Parapet.¹³⁶ Particularly similar is the gorgoneion on an im-

¹²⁸ Cf. a bronze dish with a youth's head, dated 360 B.C. in Schefold, *Meisterwerke*, no. 319, p. 260; a calyx-cup type of pottery with relief medallion in B. Sparkes and L. Talcott, *The Athenian Agora*, XII, *Black and Plain Pottery*, Princeton, 1970, pp. 121–122. Gorgoneia are common motifs on the interior medallions of Megarian bowls: cf. G. R. Edwards, *Hesperia*, Suppl. X, *Small Objects from the Pnyx: II*, 1956, no. 48, p. 98; no. 51, p. 99; no. 84, p. 102; also pp. 85, 90–91, dated ca. 250–150 B.C.

¹²⁹ Kopcke, *Ath. Mitt.*, 79, 1964, pp. 26–31, discusses black-glaze pyxides, apparently inspired by metal equivalents.

¹³⁰ The appearance of gorgoneia in contemporary jewelry attests to their continued popularity as decorative or apotropaic motifs: Boardman, *Greek Gems and Finger Rings*, pp. 206–207, 293, pl. 602; pp. 223–224, pl. 731 and color pl. 6.

¹³¹ Hoffmann and Davidson, *Greek Gold*, no. 94, p. 232; A. Furtwängler, *Die Sammlung Sabouloff*, II, Berlin, 1883–1887, p. 45 for two gilded terracotta discs perhaps worn on a cross band between the breasts.

¹³² Hahland, *Vasen um Meidias*, p. 13, pl. 19, b; I owe this suggestion to E. B. Harrison; also cf. E. Pfuhl, *Malerei und Zeichnung der Griechen*, Munich, 1923, figs. 576, 595.

¹³³ B. S. Ridgway, *The Severe Style in Greek Sculpture*, Princeton, 1970, pp. 29–31, pl. 39.

¹³⁴ B. Ashmole, *Architect and Sculptor in Classical Greece*, New York, 1972, p. 75, pl. 87. The similarity to the gorgoneion of the Angelitos Athena strengthens Raubitschek's argument (see note 133 above) that the Angelitos Athena is also by Pheidias.

¹³⁵ H. A. Thompson, *Hesperia*, 18, 1949, pp. 234, 258, pl. 51; H. A. Thompson and R. E. Wycherley, *The Athenian Agora*, XIV, *The Agora of Athens*, Princeton, 1972, p. 148, note 152; E. Buschor, *Medusa Rondanini*, Stuttgart, 1958, pl. 57, 2.

¹³⁶ Carpenter, *Nike Temple Parapet*, no. 28, pp. 46–47, pl. 19.

pression taken from a metal belt buckle.¹³⁷ Neither of our reliefs should be later than the first half of the 4th century since the beautiful gorgoneia which appear after this date no longer have the schematic lips and eyebrows of our reliefs.¹³⁸

**21. Ancient Impression from a RELIEF:
ARCHAISTIC MAIDEN.**

405–380 B.C.

Pl. 11.

T 2890. Area C 19, context 4th–2nd cent. B.C. PH. 0.056; PW. 0.043 m. Broken across top. Chipped on lower right side. Back smooth with light vertical finger impressions.

Modern cast: H. 0.054; W. 0.037 m. Left leg and most of right leg of draped female, standing with left leg completely frontal, right leg slightly behind left and turned out at side. Chiton falls in stepped panels between the legs and down the left side; the top panel of each group has an incised band just above the hem. Drapery is pulled tightly over the legs revealing the knee and falling in evenly spaced, thin folds running diagonally from the left hip. Two pointed ends of himation fall in front of right leg. Left foot is shown completely in the round wearing sandal with broad strap.

The low relief and absence of curvature suggest that the impression was taken from a decorative plaque or votive relief.

The stepped folds of drapery flanking the legs have surely been influenced by late 5th century

archaizing representations of peplos-clad figures with girded overfolds.¹³⁹ Our figure, however, lacks the long overfold and so she must be wearing the chiton and short diagonal himation. She cannot be wearing the long diagonal himation because there is no indication of an undergarment.

One of our earliest post-Archaic examples of an archaizing chiton-clad idol comes from the Argive Heraion and dates near 400 B.C.¹⁴⁰ It appears that a number of chiton-clad idols were made in the following years, many of them in Attica.¹⁴¹ Our relief was probably made at this time, and in Athens, since there was a strong linear and archaizing trend in Attic art of this period.¹⁴² Indeed, omega-shaped patterns very similar to those on our figure appear on the Maenad Reliefs.¹⁴³

**22. Ancient Impression from a MIRROR:
DIONYSOS AND BRIDE.**

Ca. 350 B.C.

Pl. 11.

T 2010. Area C 20, Byzantine context. PH. 0.066 m. Broken across bottom and chipped around edges. Four oblique finger impressions on back.

Modern cast: L. 0.11; H. 0.06 m. Nude youthful Dionysos sits three-quarters right on couch, head turned to his left. Hair is parted in the middle with locks flanking the part brushed towards the face; rest of hair is brushed back in short curls beneath an ivy wreath with two locks falling forward onto each shoulder. Dot in relief for pupil.

¹³⁷ Thompson, *Hesperia*, 38, 1969, pp. 242–251; Thompson and Wycherley, *Agora*, XIV, p. 187, pl. 94, c, d.

¹³⁸ T. Macridy, *Jahrb.*, 26, 1911, p. 203, fig. 17, p. 214, dated to beginning of 4th cent.; Buschor, *Medusa Rondanini*, p. 33, pl. 46, 3; Hoffmann and Davidson, *Greek Gold*, no. 94, p. 232, “3rd c. B.C.”; G. Riccioni, *Riv. Ist. Arch.*, N.S. 9, 1960, pp. 187–193.

¹³⁹ D. B. Thompson, *Hesperia*, 28, 1959, pp. 133ff.; E. B. Harrison, *The Athenian Agora*, XI, *Archaic and Archaistic Sculpture*, Princeton, 1965, pp. 53, 63, suggests the representations were inspired by a hekateion or an Athena by Alcamenes.

¹⁴⁰ Eichler, *Jahresh.*, 19–20, 1919, pp. 30–31, fig. 23; Harrison, *Agora*, XI, p. 51; note figure in archaizing high-girt peplos on a metope from Bassai in C. Cockerell, *The Temples of Jupiter Panhellenius and Apollo Epicurius*, London, 1960, no. 3, p. 52, pl. 5.

¹⁴¹ E. Schmidt, *Archaistische Kunst in Griechenland und Rom*, Munich, 1922, p. 50, pl. 22; Harrison, *Agora*, XI, pp. 51–52.

¹⁴² Archaizing representations of Hermes and of Athena appear on oinochoai which have been dated about 410 B.C. (R. Green, *Hesperia*, 31, 1962, no. 10, p. 86; no. 15, p. 88; p. 92).

¹⁴³ Fuchs, *Skulptur*, pp. 522–523, figs. 610–614.

Round(?) object in left hand. Right arm extended toward chin of woman seated to his right. She is in right profile, mantle wrapped around head and body exposing only eyes and left hand which draws down a fold of drapery from Dionysos' right thigh. Flying to right behind her is nude boy-Eros who touches the back of her head with his right hand. His torso faces three-quarters right, head turned back to Dionysos. He wears a melon coiffure with knot high on back of his head. Wings are open without foreshortening and in low relief. Long thin hatched primaries, single row of oval hatched binaries, two rows of short rounded tertiaries. Upper parts of wings are feathered.

A draped female is seated to Dionysos' left on same couch. She gazes intently at him, her right hand resting on his right shoulder, left arm on pillow woven with banded decoration. She wears chiton beneath himation which is drawn under right shoulder, across breasts and over left shoulder, covering left arm to wrist. Curly hair is parted in center and gathered in knot on top of head, with several short curls falling toward her face; dangling earring. Curved rim along top indicates that original relief was circular.

D. B. Thompson, *Excavations of the Athenian Agora*, Picture Book No. 3, *Miniature Sculpture*, Princeton, 1962, no. 30.

The size and shape of the relief and the theme of the representation are appropriate for a mirror.¹⁴⁴ The style of the figures and the height of the relief indicate that the relief was made, surely in Athens, about 350 B.C.

This representation of Dionysos is a familiar one in Attic vase painting and on Attic plastic vases from the first half of the 4th century B.C.¹⁴⁵ The drapery and hairstyle of the maiden who is embracing Dionysos has been derived from a well-known statue of Persephone of which other adaptations appear on Attic vases from the second quarter and middle of the 4th century.¹⁴⁶ The encouraging gesture the maiden makes is more suitable, however, to Peitho than to Persephone or to Ariadne.¹⁴⁷ Peitho is traditionally found in bridal scenes where she is usually shown comforting the hesitant bride. In this scene, however, she is attending to the bridegroom, for Dionysos is making the traditional gesture which a bridegroom made to his bride.¹⁴⁸ Identical gestures appear on a vase by the Kodrus Painter¹⁴⁹ and on an Attic clay relief lekythos dated ca. 375–350 B.C.¹⁵⁰

The female whom Eros is presenting to Dionysos is dressed as an initiate¹⁵¹ in the garb which was also customary for a bride.¹⁵² Her himation is drawn over a peak of hair in a style which was popular about 360.¹⁵³

¹⁴⁴ Züchner, *Jahrb.*, Erg. XIV, pp. 32–40; pp. 131–144 (especially type C).

¹⁴⁵ Richter, *Attic Red-Figured Vases*, p. 161, fig. 123 (the Pompe vase); also on plastic vases in M. Trumpf-Lyritzaki, *Griechische Figurenvasen*, Bonn, 1969, no. 147, p. 54, pl. 21; also on Kertsch vases, see note 102 and impression 15 above.

¹⁴⁶ H. Metzger, *Recherches* (note 102 above), no. 2, p. 34, pl. 14 and no. 30, p. 40, pls. 20–21; J. Travlos, *Pictorial Dictionary of Ancient Athens*, New York, 1971, p. 294, fig. 382; B. Ashmole, *J.H.S.*, 71, 1951, pp. 25–26.

¹⁴⁷ Cf. Peitho on epinetron by Eretria Painter in B. Schweitzer, *Sitz. Heid. Akad. Wis. Phil.-Hist. Klasse*, Abhandlung 6, *Mythische Hochzeiten*, Heidelberg, 1961.

¹⁴⁸ On a vase of ca. 400 by the Xenophantos Painter (Zervoudaki, *Ath. Mitt.*, 83, 1968, no. 59, pp. 32, 49, pl. 3). Adonis makes the gesture to Peitho who, however, is turning toward and perhaps pointing at Aphrodite who is seated opposite Adonis.

¹⁴⁹ A. B. Cook, *Zeus*, III, ii, Cambridge, 1940, p. 1054, fig. 849.

¹⁵⁰ Zervoudaki, *Ath. Mitt.*, 83, 1968, no. 44, p. 30, pl. 9, 1.

¹⁵¹ D. B. Thompson, *Troy: The Terracotta Figurines of the Hellenistic Period*, Supplementary Monograph 3, Princeton, 1963, pp. 102ff.

¹⁵² The bride's face, however, is usually not veiled; cf. A. Brueckner, *Ath. Mitt.*, 32, 1907, pp. 79ff.; F. Studniczka, *Jahrb.*, 34, 1919, p. 132, fig. 30.

¹⁵³ Davidson and Thompson, *Hesperia*, Suppl. VII, nos. 43–45, pp. 120, 143.

Our scene may well illustrate part of a ritual which Miss Bieber believed was the subject of several Kertsch vases.¹⁵⁴ Miss Bieber suggested that in the 4th century the Athenian bride participated in an extended series of initiation rites which began with the Lenaia in the month of Gamelion

and culminated at the Hieros Gamos during the Anthesteria. Our relief appears to allude to that final ceremony which may have been a presentation or symbolic marriage of the bride with Dionysos.

ELLEN REEDER WILLIAMS

THE JOHNS HOPKINS UNIVERSITY

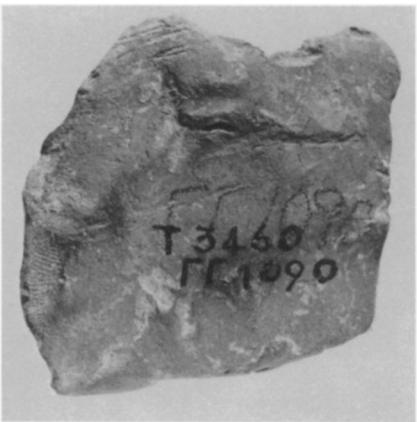
¹⁵⁴ M. Bieber in *Hesperia*, Suppl. VIII, 1949, pp. 31–38.



1. Impression



1. Cast



1. Back



2. Cast



2. Back



4. Cast



3. Impression



3. Cast



3. Back

Scale 1:1 or as shown



5. Impression



5. Cast



5. Back



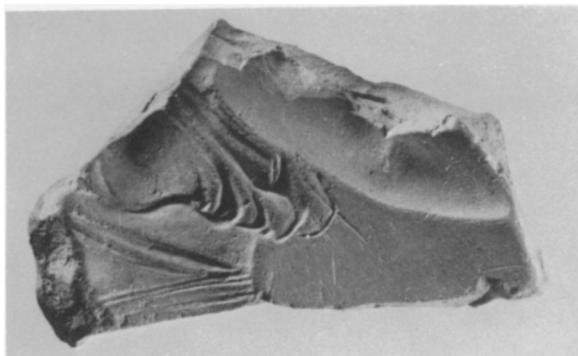
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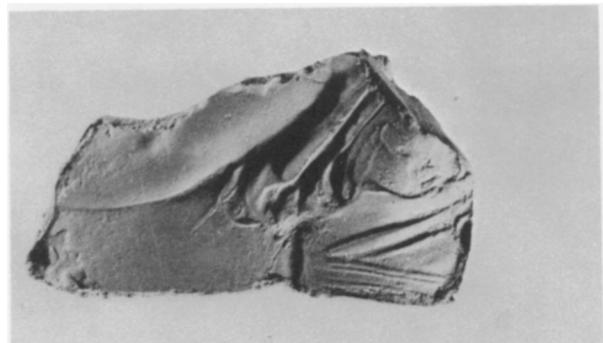
7. Cast



7. Back



8. Impression



8. Cast



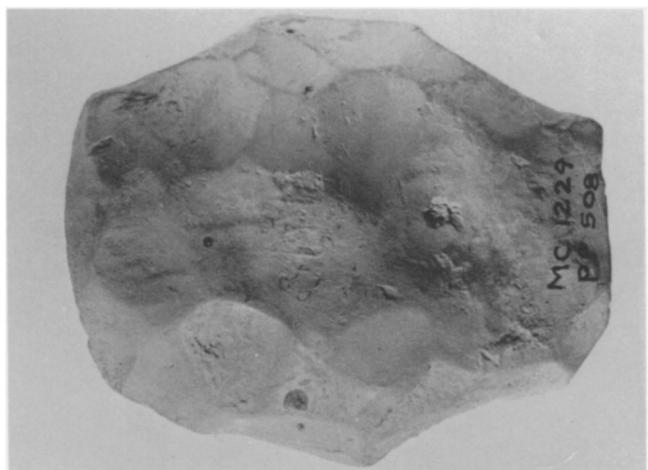
6. Cast



10. Impression



10. Cast



10. Back



9. Ancient cast



12. Impression

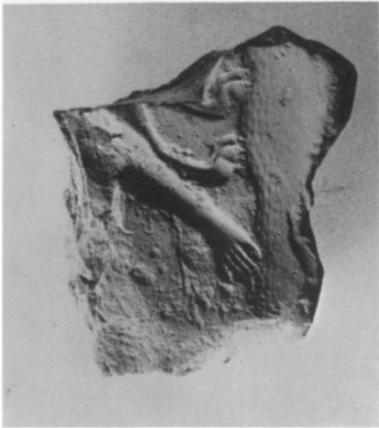


12. Cast

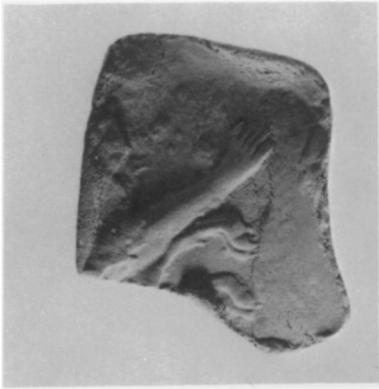


12. Back

Scale 1 : 1



11. Impression



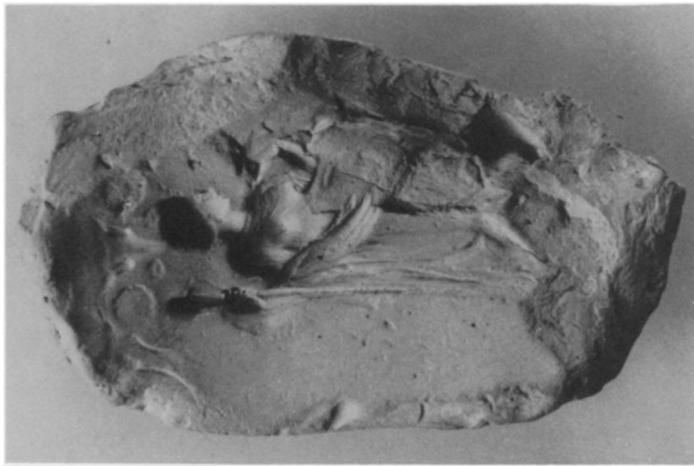
11. Cast



14. Cast



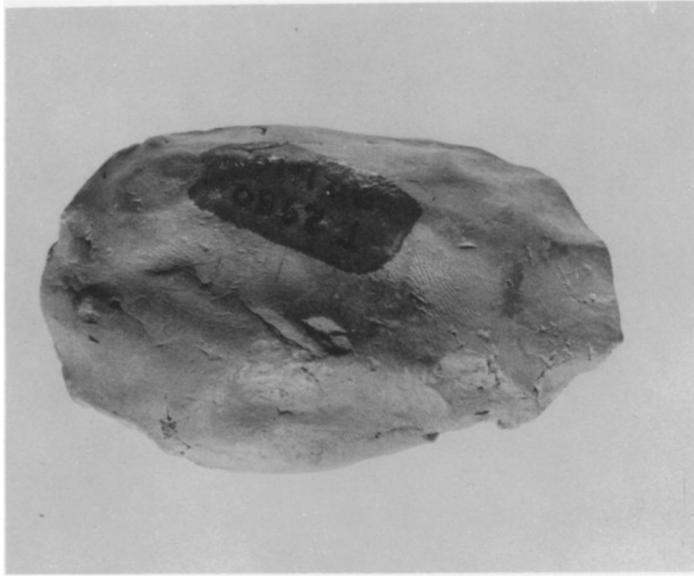
14. Back



13. Impression



13. Cast



13. Back

Scale 1:1



15. Cast



15. Back



16. Impression



16. Cast



16. Back

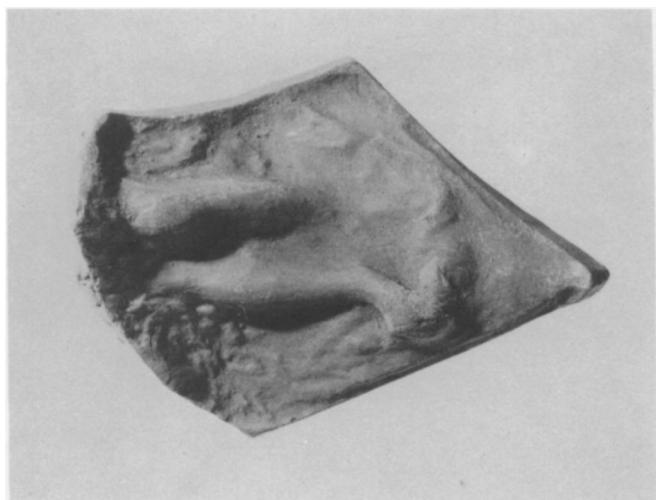
ELLEN DRYDEN REEDER: ANCIENT CLAY IMPRESSIONS FROM GREEK METALWORK



17. Cast



17. Back



18. Cast



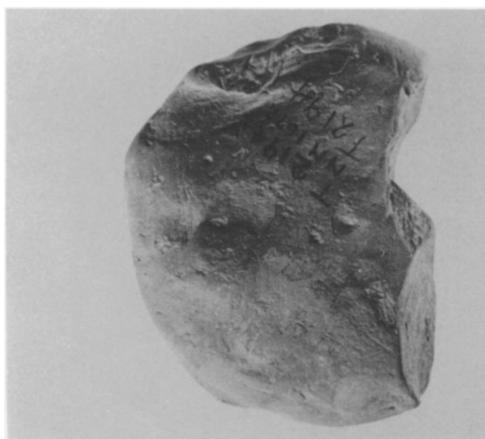
19. Cast



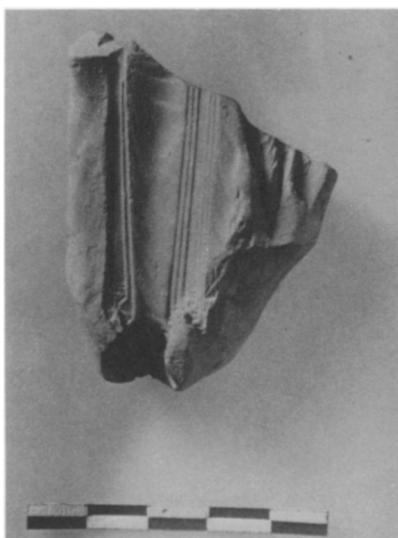
19. Back



20. Cast



20. Back



21. Cast

21. Back

21. Impression



22. Cast



22. Back

Scale 1:1 or as shown