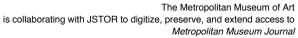
Volume 9 / 1974

# METROPOLITAN MUSEUM JOURNAL





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Designed by Peter Oldenburg. Composition by Press of A. Colish, Inc.; printed by The Meriden Gravure Company; bound by Publishers Book Bindery

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# The Mark of a Second Hand on Ancient Egyptian Antiquities

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#### A SURVEY OF THE QUESTION

WHILE THE SURVIVAL and present condition of ancient Egyptian monuments is largely a matter of chance and has little to do with their form or the content of their inscriptions, they often prove to have been altered for very specific reasons. In order of chronological sequence there are, first of all, the strictly contemporaneous changes made by the artist himself or by his supervisors and fellow craftsmen, to revise a scene or composition.<sup>1</sup> In some cases—and most conspicuously in the case of inscriptions—these alterations are clearly corrections,<sup>2</sup> eliminating errors by the deletion,

1. See, for example, Wm. S. Smith, A History of Egyptian Sculpture and Painting in the Old Kingdom, p. 252; Dows Dunham, "A 'Palimpsest' on an Egyptian Mastaba Wall," AJA 39 (1935) pp. 300-309; Wm. C. Hayes, Scepter of Egypt I, fig. 59, p. 103 (cf. Wm. C. Hayes, "Egyptian Tomb Reliefs of the Old Kingdom," BMMA 4 [1946] p. 174; the traces of the original scene are not visible in J. E. Quibell, Excavations at Saqqara [1907-08] pl. 64); H. G. Fischer, Dendera in the Third Millennium B.C., p. 113, pl. 13. Some examples reflect a transition from earlier to later style: E. Brunner-Traut, "Zur Tübinger Mastaba Seschemnofers III," MDIK 15 (1957) pp. 18-32; H. G. Fischer, "Relief Fragments from Deir el Bahri," Yale University Art Gallery Bulletin 24, no. 2 (Oct., 1958) pp. 32-35.

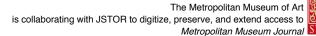
2. An interesting survey of textual corrections in the funerary spells of a Twelfth Dynasty burial chamber is presented by Wm. C. Hayes, *Texts in the Mastabeh of Se<sup>n</sup>-Wosret-'ankh at Lisht*, pp. 25-

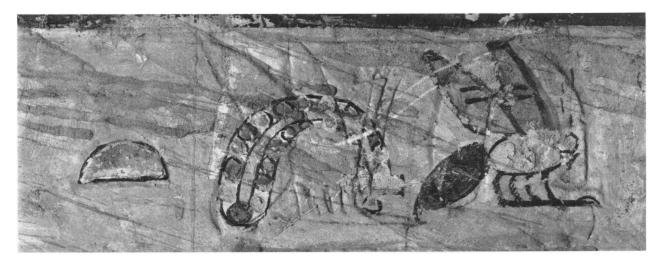
27. An equally systematic survey of corrections in a later New Kingdom temple has been made by John A. Wilson, "Ancient text corrections in Medinet Habu,"  $\ddot{AZ}$  68 (1932) pp. 48–56.

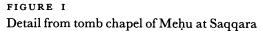
3. Berlin 1204: LD II, 135 (h); Aegyptische Inschriften I, 171, where it is denied that any signs were ever inscribed in the lacuna; H. Schäfer, Die Mysterien des Osiris in Abydos (Sethe, Untersuchungen IV) p. 10, where it is stated that signs have been erased, although no traces remain. For other changes in titles see Jéquier, Monument funéraire de Pepi II, II, pl. 109 (  $\& \Delta$  ) &, with last two signs deleted); H. Fischer, "Three Old Kingdom Palimpsests in the Louvre,"  $\ddot{A} \gtrsim 86$  (1961) pp. 22–28 ( $\& \Delta$  ) replaced by  $A \circ A$  ).

4. Petrie, Athribis, pl. 13. For the addition of omitted signs in titles see also H. Fischer, Inscriptions from the Coptite Nome, pp. 19–20, fig. 2. Similar additions occur in the funerary formulae of a Sixth Dynasty coffin as described and illustrated in Firth and Gunn, Teti Pyramid Cemeteries, p. 99, pl. 58 (1).

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Sixth Dynasty tomb chapel of Meḥu at Saqqara (Figure 1),<sup>5</sup> the sculptor has transposed 4 and 6 in the penultimate title of the same series, or rather has failed to apply "honorific transposition" to the sequence, so that the "King of Lower Egypt" fails to take precedence; this oversight has been rectified by the painter, who imposed the correct sequence on the wrong one, completely disregarding the original outline. Sometimes a bizarre composite results from erasures that were effected by filling an incised sign with plaster and recarving the new surface. In such cases the plaster has frequently been lost, leaving a result such as the two-headed goose in the Ramesside inscription shown in Figure 2,6 which represents a reorientation of the group 5", "Son of Re."

Secondly, there are the alterations—often not much later in date—that were made to eliminate the memory of an individual, and his survival beyond death, by erasing his image,<sup>7</sup> his name,<sup>8</sup> and perhaps

7. E.g., Étienne Drioton, "Une Mutilation d'image avec motif," Archiv Orientalni 20 (1952) pp. 351-355. The image is less commonly erased than the name (see next note), but in the case of one late Old Kingdom tomb (Jéquier, Tombeaux des particuliers, fig. 117, p. 103, pl. 12) the name is erased in the burial chamber, whereas the false door aboveground shows the heads of the figures destroyed while the name is left intact (ibid., fig. 114, p. 99). The same is true of the figures in an adjacent chapel (fig. 116, p. 101), but the burial chamber has been spared completely. In other cases the mutilation is still more selective; A. Klasens describes the figure of a man which shows deep incisions across the neck ("A Stela of the Second Dynasty," Oudheidkundige Mededelingen 46 [1965] p. 3, pl. 1). The mutilation of images in the New Kingdom is discussed by Alan Schulman in "Some Remarks on the Alleged 'Fall' of Senmut," JARCE 8 (1969-70) pp. 29-48, especially p. 36. Further examples of this period are described by Norman Davies in several of his publications of Theban tombs: Tombs of Two Officials, p. 2 (tomb 75); Ken-Amūn, p. 4; Rekh-mi-rē', p. 7; Huy, p. 7; Puyemrê, pp. 22-26 (the last two subsequently restored, as mentioned in note 42 below). Queen Hatshepsut's statues offer the most striking example of methodical destruction (as described by H. E. Winlock, Excavations at Deir el Bahri, pp. 77, 141-142), although it is no longer believed that they were destroyed immediately after her death; cf. the article of Schulman pp. 33-35, and note 8 below.

8. E.g., Junker, Giza IV, pp. 6-7; the name of a wife is eliminated, as also in Cairo CG 1482. Sometimes the name of an attendant is systematically deleted: A. Blackman, Meir V, p. 25, note 1. Other examples: Firth and Gunn, Teti Pyramid Cemeteries, p. 150 and pls. 14 (3), 65 (10), p. 270 and pl. 14 (c) (headrests); Jéquier, Pyramides des reines, fig. 35, p. 58 (offering slab); CG 447 (statue). Royal examples are of particular interest to the historian; besides the well-known erasures of the name of Hatshepsut, most recently discussed by Nims, "The date of the dishonoring of Hatshepsut,"  $\ddot{A}Z$  93 (1966) pp. 97-100, see, for example, Yoyotte, "Le martelage des noms royaux éthiopiens par Psammétique II," RdE 8 (1951) pp. 215-239, and Sauneron, "Les querelles impériales vues à travers les scènes du temple d'Esné," BIFAO 51 (1952) pp. 111-121. Other ramifications of this subject are discussed by G. Posener, "Les criminels débaptisés et les morts sans noms," RdE 5 (1946) pp. 51-56.

<sup>5.</sup> For this tomb see Zaki Saad, "A Preliminary Report on the Excavations at Saqqara 1939-1940," ASAE 40 (1941) pp. 687-690. I am indebted to the late Zakaria Ghoneim for the photograph used here.

<sup>6.</sup> University Museum, Philadelphia, E 635; the figure is taken from Philippus Miller, "A Statue of Ramesses II,"  $\mathcal{J}EA$  25 (1939) pl. 3 (2) following p. 4.

some of his titles<sup>9</sup> as well. But this motive is not necessarily involved if, in such cases, the deleted names and titles have been replaced by those of another individual, indicating a change of ownership by fair means or foul. The reuse of a tomb or monument could, on occasion, require a change in the representations as well as the inscriptions; a man's form might replace that of a woman (Figure 3),<sup>10</sup> or vice versa,<sup>11</sup> a young man might replace an old one<sup>12</sup> or, more rarely, a royal monument might be remodeled for the use of a commoner.<sup>13</sup>

In some cases names were added to figures that were not originally accompanied by any identification. Funerary priests of the Old Kingdom took this means to associate themselves permanently with the tomb chapel in which they served, and if no other alternative were available they might even apply their names to representations of ordinary laborers.<sup>14</sup> A more exceptional example is to be seen in the temple of Ramesses III at Medinet Habu, where a number of nameless princes (borrowed from the reliefs of the more prolific Ramesses II) subsequently acquired the identity of his Twentieth Dynasty successors.<sup>15</sup>

9. Jéquier, Tombeax des particuliers, figs. 41, 43, 44, pp. 37-40, pl. 3; the honorific titles  $2^{-2}$  are selectively erased along with the name Sni.

10. Reisner's Giza tomb 2001; cf. H. Fischer, "Three Palimpsests,"  $\ddot{A}$  86 (1961) p. 28, note 5. The drawing has been made from a 35 mm. transparency.

11. Louvre E 17233: article cited in preceding note, fig. 2, pp. 23, 28–29. Also Macramallah, *Mastaba d'Idout*, pp. 1–2, pl. 6.

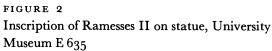
12. MMA 08.201.1: H. Fischer, "A Scribe of the Army in a Saqqara Mastaba of the Early Fifth Dynasty," *JNES* 18 (1959) pp. 245-246, fig. 10 (f).

13. Reworked statuette of king, MMA 22.1.1638: H. Fischer, "Two Royal Monuments of the Middle Kingdom Restored," BMMA 22 (1964) pp. 235-239. A similar reuse seems probable in the case of a Middle Kingdom queen, the uraeus of which has been carefully chiseled away, Walters Art Gallery 22.376: George Steindorff, Catalogue of Egyptian Sculpture in the Walters Art Gallery, no. 65, pl. 10. The reverse of this situation appears in royal reliefs of the Fifth Dynasty, where the figure of an official in the retinue of King Sahure has been altered to represent Sahure's successor Neferirkare: L. Borchardt, Grabdenkmal des Königs Sa zhure' II, p. 32, pls. 17, 33-34, 48.

14. E.g., Firth and Gunn, Teti Pyramid Cemeteries, p. 114; Mariette, Mastabas, p. 315.

15. K. Seele, "Ramesses VI and the Medinet Habu Procession of the Princes," *JNES* 19 (1960), pp. 184–204; also, more recently, Wm. J. Murnane Jr., "The 'King Ramesses' of the Medinet Habu Procession of Princes," *JARCE* 9 (1971–72), pp. 121–131. Cf. the





Here, parenthetically, one may note the deliberate breakage of objects when they were placed in the tomb, a practice that was limited to pots, stone vessels, bows, and staves.<sup>16</sup> Of greater interest is the

introduction of the name of Neferirkare in the pyramid temple of Sahure (end of note 13 above).

16. L. V. Grinsell, "The Breaking of Objects as a Funerary Rite," Folklore 72 (1961) pp. 480-482; 84 (1973) pp. 111-114; for the breaking of staves and bows see also A. C. Mace and H. E. Winlock, The Tomb of Senebtisi, pp. 77, 80, 92-93.

FIGURE 3 Revised figure in Giza tomb 2001

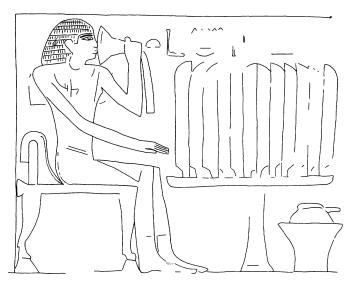
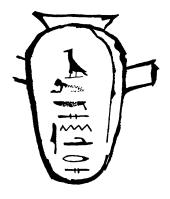
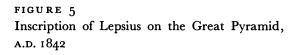
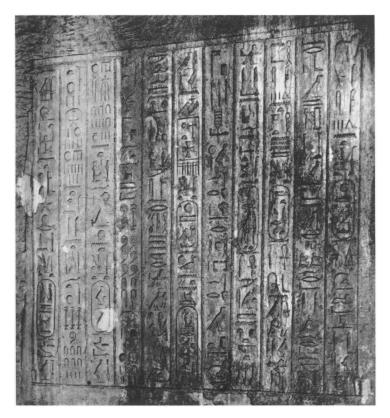


FIGURE 4 Name of Alexander in tomb of Sen-nufer, with drawing of pectoral amulet









gradual erasure that ocurred as texts on temple statuary were repeatedly read by ancient visitors and, at the same time, fingered.<sup>17</sup>

Thirdly, there are the reuses of monuments that have taken place after a considerable span of time, when the personality of the original owners had become too remote to excite either resentment or respect, although their works might still be esteemed as works of art or as antiquities. The first extensive reuse of this kind is Ramesses II's usurpation of monuments belonging to his royal predecessors, and it is significant that he and his son Khaemwase also showed an interest in restoring earlier tombs and temples.<sup>18</sup> In

17. Cairo CG 42126; J 44861: E. L. B. Terrace and H. Fischer, Treasures of the Cairo Museum, pp. 113, 117.

18. For the restorations of Ramesses II see E. Naville, Temple of Deir el Bahari VI, p. 11; The XIth Dynasty Temple at Deir el Bahari I, pp. 17, 24; II, p. 2, pl. 5 (D); Hassan, Giza VIII, pp. 7–9, where he also remarks on his depredations at Giza. Khaemwase left inscriptions commemorating his restorations at the pyramids of Djoser (Lauer, La Pyramide à Degrés: Compléments III, p. 52), Shepseskaf (Jéquier, Mastabat Faraoun, fig. 7, p. 12), and Unis (Drioton and Lauer, "Une inscription de Khamouas sur la face sud de la pyramide d'Ounas à Saqqarah," ASAE 37 [1937] pp. 201-211; also Lauer, ASAE 54 (1956-57) pp. 114-116). This subject is comprehensively discussed in Chap. XII of Farouk Gomaà, Chaemwese, Sohn Ramses' II., Wiesbaden, 1973, which appeared after this article went to press. the succeeding Libyan Period the usurpation of earlier statues was taken up by nonroyal persons as well, as exemplified by the first of the following studies.<sup>19</sup>

The graffiti of ancient Egyptian tourists, who left their names on older tombs and temples along with a few words of admiration, seem to be limited to the New Kingdom,<sup>20</sup> and the oldest monument that bears such inscriptions is the pyramid complex of Djoser.<sup>21</sup> The Greeks and Romans visited the monuments as tourists in the more literal sense of the word, again leaving graffiti behind them. One of the most curious indications of their visits is to be seen in the Theban tomb of Sen-nufer, whose pectoral amulet-a double heart—is neatly inscribed with a hieroglyphic writing of the name Alexander (Figure 4).<sup>22</sup> A second curiosity, of much more recent date (Figure 5), is the hieroglyphic inscription which Richard Lepsius carved upon the Cheops pyramid to commemorate his archaeological and epigraphic expedition of 1842-45.23

A certain number of inscriptions and reliefs of all periods also show "marginalia" of later date—most frequently a detail or hieroglyph that someone felt impelled to copy to try his skill or merely to pass the time.<sup>24</sup> Figure 6 shows two examples of this kind from the left-hand wall of the entrance passage in Perinebi's tomb chapel; they appear at the back of the

19. See below, p. 17 and note 65.

20. W. Helck, "Die Bedeutung der ägyptischen Besucherinschriften," ZDMG 102 (1952) pp. 39-46; D. Wildung, "Besucherinschriften," in Helck-Otto, *Lexikon* I/5, pp. 766-767.

21. Firth and Quibell, Step Pyramid, pl. 83, pp. 77-85.

22. Theban tomb 96: P. Virey, "La tombe des vignes à Thèbes," *Rec. trav.* 22 (1900) pp. 84–85. The detail shown here is taken from a negative of the Metropolitan Museum's epigraphic expedition.

23. From a photograph taken by Albert Lythgoe prior to 1906. For details see Georges Goyon, *Inscriptions et Graffiti des voyageurs* sur la Grande Pyramide, pp. lxxvi-lxxvii, 82, pl. 117. The inscription is visible at the upper right of J. Capart and M. Werbrouck, *Memphis*, fig. 50, p. 53.

24. E.g., Newberry, *Beni Hasan* I, pl. 10; Fischer, *Inscriptions from the Coptite Nome*, pp. 19–20, fig. 2; Fischer, *Dendera*, p. 193, fig. 37, pl. 23c; also an incised sketch on University Museum, Philadelphia, E 13575, the right side of the gateway of Merneptah. For a Coptic sketch in a New Kingdom tomb see N. de G. Davies, *BMMA* 17 (Dec. 1922, Pt. II), p. 56, fig. 9. A sketch of the Queen of Punt (N. de G. Davies, *BMMA* 25 [Dec. 1930, Pt. II], pp. 30–31) should be included in this category, although it appears on a detached flake of limestone rather than on the margin of the original scene at Deir el Bahri.

passage, where both could have been copied from the scenes and inscriptions within. In some cases such sketches may have been the work of professional artists who were copying the scenes, and further evidence of such copying is attested by painted grids which were superimposed on paintings and reliefs at a much later date.<sup>25</sup> Again the oldest reliefs that show such grids are those of Djoser,<sup>26</sup> and it is generally assumed that in this case the grids were added during the Saite Period, some 2000 years later.<sup>27</sup>

It is more difficult to situate the effects of religion, magic, and superstition in this chronological summary. The most immediate example is the modification of hieroglyphs in burial chambers of the Sixth Dynasty, where all sorts of representations of living creatures were suppressed, in whole or in part, to protect the deceased from their presence.<sup>28</sup> In most cases these modifications were planned in advance, but they were

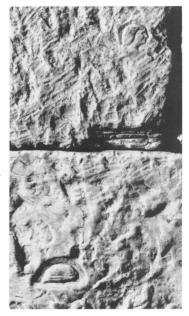
25. These are to be distinguished from the so-called "proportion squares." See the remarks of E. Mackay concerning Theban tomb 93 in  $\mathcal{J}EA$  4 (1917), pp. 74, 75, 84; also C. Ransom Williams, Decoration of the Tomb of Per-neb, p. 10, note 31.

26. Firth and Quibell, Step Pyramid, pls. 15-16, p. 5.

27. Cf. I. E. S. Edwards, *The Pyramids of Egypt*, revised ed. 1961, p. 79.

28. P. Lacau, "Suppressions et modifications de signes dans les textes funéraires,"  $\ddot{A}Z$  51 (1913) pp. 1–64; "Suppression des noms divins dans les textes de la chambre funéraire," ASAE 26 (1926) pp. 69–81; B. Gunn in Firth and Gunn, Teti Pyramid Cemeteries, pp. 171–177.

FIGURE 6 Isolated hieroglyphs in tomb chapel, MMA 13.183.3



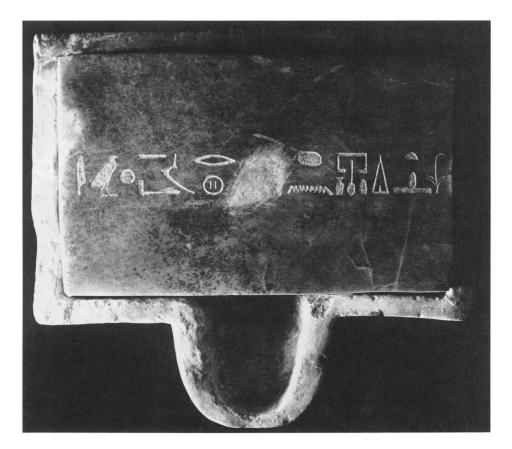




FIGURE 7 Erasure of 3 on a covered offering basin from Saqqara

FIGURE 8 Painted leather fragment from Deir el Bahri, MMA 31.3.98

occasionally introduced as an afterthought.<sup>29</sup> That is probably the explanation of the erasure shown in Figure 7,<sup>30</sup> where the first sign of the title  $\frac{1}{2}$  has evidently been eliminated.<sup>31</sup> A longer interval is involved in the erasure of the name of the god Amun by the Eighteenth Dynasty Atenists,32 as in the case of the much later persecution of the god Seth.<sup>33</sup> But these very selective modifications can hardly be compared with the more recent ravages of Christian and Islamic iconoclasm<sup>34</sup> or Christian morality, as attested not only in the Coptic Period<sup>35</sup> but also in the reign of Queen Victoria. Ancient Egypt has left extraordinarily little to offend moral susceptibilities, and there is virtually nothing that could be called obscene prior to the famous Turin Papyrus dating to the end of the New Kingdom.<sup>36</sup> The earlier tombs and temples treat the theme of procreation forthrightly, although human intercourse is scarcely represented except in schematic and hieroglyphic fashion. The one exception, a more literal hieroglyphic representation in an early Middle Kingdom tomb chapel at Beni Hasan, was censored by a Victorian visitor,37 and the same censorship is still frequently imposed on the emblematic virility of ithyphallic gods such as Min of Coptos.<sup>38</sup> It is exemplified in the Metropolitan Museum by a painted fragment of the Eighteenth Dynasty that is described as an "erotic dance". On the basis of that judgment, the genitals of a naked dancer were painted out, and the original state of the painting can only be seen from a photograph that was made prior to censorship (Figure 8).39

29. In the last two discussions cited in the preceding note Lacau, p. 72, so interprets the erasure (with plaster) of  $|\dot{P}|$  in the offering formula of a Sixth Dynasty coffin; and Gunn, p. 174, similarly interprets the replacement of  $|\dot{P}||_{2}^{-1}$  by  $|\dot{P}|_{2}^{-1}$  on the contemporary coffin of Mereruka. The same explanation has been applied to a group of Eleventh Dynasty scarabs that were mutilated before being placed in the tomb of their owner: H. G. Fischer, Ancient Egyptian Representations of Turtles, p. 18.

30. From the photographic archives of the Egyptian Department of Antiquities at Saqqara, through the kindness of the late Zakaria Ghoneim. The size and material are unknown to me, but it appears to be made of calcite, and it probably is related to the category of calcite offering slabs that were frequently placed in Sixth Dynasty burial chambers (H. Fischer, *Dendera*, pp. 107– 108).

31. It should be noted that this sign is not ordinarily eliminated; see Gunn, discussion cited in note 28, p. 173, note 2; but it is once replaced by phonetic signs in Pyr. 319 (T), as noted by Lacau, "Suppressions et modifications," p. 38. 32. In some cases the deletions involved much more than the name of Amun, and only the hieroglyphic sign of the sun  $(\odot)$  was spared (N. de Garis Davies, *BMMA* 18 (Dec. 1923, Pt. II) fig. 9, p. 45). One may compare the occurrences of the sign  $\neg$  "god," which was likewise spared in an erased inscription of the Old Kingdom: Hassan, *Gtza* VI, Pt. 3, p. 166. The Atenists, on the other hand, sometimes erased the plural of the word for "god" because of its association with Amun, who was "king of the gods": Davies, *Tomb of Ramose*, p. 4.

33. Breasted, "The Philosophy of a Memphite Priest,"  $\dot{A}\chi$  39 (1901) p. 40, note 6, points out that this degree of hostility must have begun after the Eighth Century B.C. since the name of Seth is chiseled out on the Twenty-fifth Dynasty Shabako Stone. The image of Seth was also eliminated, in some cases, by transforming it into another divinity: G. Legrain, "Une Statue du dieu Set," *Rec. trav.* 16 (1894) pp. 167–169 (and O. Koefoed-Petersen, *Catalogue des Statues et Statuettes*, no. 83, pls. 95–97). One may also compare the case of a protodynastic turtle the eyes and paws of which were mutilated at a much later date—most probably at the end of the Dynastic Period (H. G. Fischer, *Ancient Egyptian Representations of Turtles*, pp. 13, 18–20).

34. Sauneron, Le Temple d'Esna (Esna III), pp. xxiv-xxvii, describes how "à une époque difficile à dater exactement, mais postérieure au 'paganisme', les hommes ont réagi devant des images ou des signes hiéroglyphiques dont le sens leur échappait, mais qui leur semblaient chargés de pouvoir." Doctrinal iconoclasm was probably equally selective; L. Habachi, "The Destruction of Temples in Egypt," in Medieval and Middle Eastern Studies in Honor of Aziz Suryol Atiya, pp. 192–198, points out that the process was gradual, and is not specifically attributable to Christianity. Cf. also Alan Schulman, JARCE 8 (1969–70) p. 37.

35. All the female figures of Theban tomb 56 were expunged by an anchorite who used it as a dwelling: N. de G. Davies, *BMMA* 17 (Dec. 1922, Pt. II), p. 56.

36. This has very recently been published in entirety for the first time: Jos. A. Omlin, Der Papyrus 55001 und seine Satirischerotischen Zeichnungen und Inschriften, Turin, 1973. There are, in addition, a certain number of contemporaneous ostraca in the same spirit (L. Keimer, Études d'Égyptologie III, pp. 4-9), and an apparently licentious figurine of much earlier date (Dyn. XIII?) from Lisht is discussed by Elizabeth Riefstahl, "An Enigmatic Faience Figure," Miscellanea Wilbouriana 1 (1972), 137-143. It might be thought that the "Fall von Prüderie aus der Ramessidenzeit" debated by S. Schott,  $\ddot{A}Z$  75 (1939) pp. 100–106, reflects a complementary aspect of prurient interest, but that conclusion seems doubtful. As N. de Garis Davies makes clear in his publication of the tomb in question, Seven Private Tombs, pp. 5-8, the reuse of the Eighteenth Dynasty paintings not only added clothing of naked ladies, but also entailed the remodeling of furniture-all in an attempt to adjust outmoded features to current fashion. That view does not seem seriously incompatible with Schott's final conclusions.

37. A unique hieroglyph, showing a couple on a bed, recorded by Lepsius in 1842 (LD II, 143 [b]), no longer showed the couple when Newberry copied it, about fifty years later (*Beni Hasan* II, pl. 14).

38. See, for example, Petrie, Koptos (1896) pls. 6 (6), 9, 22.

39. MMA 31.3.98. The description is used by Wm. C. Hayes, *Scepter* II, p. 167, and his fig. 92. shows the painting in its retouched condition.



FIGURE 9 Predynastic palette with modern decoration, Leiden

The repair and restoration of monuments was likewise practiced at all periods of antiquity, as in the present day. Sometimes the repairs may have been required even before the work was complete, as in the case of stone statuary which was apt, as the work proceeded, to reveal a flaw or weakness that required an insertion.<sup>40</sup> And wood paneling might show knotholes or splits that had to be patched with "dutchmen".<sup>41</sup> Obviously such repairs, like the corrections and revisions mentioned earlier, must be considered an integral part of the original workmanship. After a lapse of time, however, a repair or restoration may depart from the style of the original,<sup>42</sup> even to the point of becoming anachronistic, as in the case of the plaited beard of a divinity that was supplied to the great sphinx of Giza in the Nineteenth Dynasty;<sup>43</sup> the original beard was certainly the unplaited variety that was worn by kings, but in the Nineteenth Dynasty this monument was considered a god, its association with Chephren having been forgotten. Similarly, the fragments of a wooden coffin that bears the name of Chephren's successor, Mycerinus, and was accordingly attributed to the Fourth Dynasty, was eventually dated to the Twenty-sixth Dynasty on the basis of the style, orthography, and phrasing of the texts.<sup>44</sup> The "restoration" of this royal coffin was a totally new production, and the same was often true of temples that were "renewed" by total replacement. Even when the restoration called for nothing more than fresh paint,<sup>45</sup> one cannot be sure that the earlier colors and details were matched conscientiously.

Coming down to more recent times, there are countless examples of Egyptian antiquities that have been restored in a manner that not only departs from

<sup>40.</sup> MMA 25.6, a basalt statue of Sesostris I, lacks the head, which was carved separately and fastened by means of a tenon (Wm. C. Hayes, *Scepter* I, pp. 180–181); MMA 22.5.2, a diorite statue of Amenophis III (*Scepter* II, p. 235) has lost an inset at the back of the throne.

<sup>41.</sup> The veneer of MMA 68.58, an early Eighteenth Dynasty chair (*BMMA* 27 [1968] p. 90) shows several almost invisible patches of this kind.

<sup>42.</sup> Davies, *Tomb of Puyemrê* I, pp. 23-26. Compare also Davies and Gardiner, *Tomb of Huy*, p. 7, and the usurped and repainted scenes of Theban tomb 45, as described in note 36 above.

<sup>43.</sup> Howard Vyse, Operations Carried on at the Pyramids of Gizeh in 1837 III, pl. following p. 108.

<sup>44.</sup> Ibid. II, p. 93; cf. I. E. S. Edwards, A Handbook to the Egyptian Mummies and Coffins exhibited in the British Museum (1938) pp. 21-23, pl. 8. S. Birch ( $\ddot{A}$  7 [1869] pp. 49-51) seems to be the first to have suggested the correct dating; see also Sethe,  $\ddot{A}$  30 (1892) pp. 94-98.

<sup>45.</sup> As stated in a Thirteenth Dynasty biography which records the repainting of reliefs dating to the beginning of the previous dynasty, two centuries earlier: Louvre C 12 (Sethe, ÅgyptischeLesestücke, p. 76).

the spirit of the original but—to a greater or lesser degree—has destroyed it as well.<sup>46</sup> In some cases such restoration can only be detected by very close scrutiny and research, as exemplified by the last of the following studies. In other cases the result is glaringly apparent, and there is probably no example that is more shocking than the one presented in the second of the studies. This case may well be unique, however, in that the "restoration" was applied to a portion of a statue, completely disregarding the existence of the other parts, which had doubtless been lost from sight. With this example we come to the category of fraudulent alterations or additions designed to lend interest to antiquities of negligible value. There are limestone reliefs that are only very marginally ancient<sup>47</sup>

46. A missing head may be replaced by one from another statue (J. Cooney, "A Reexamination of Some Egyptian Antiquities," Brooklyn Museum Bulletin 11, no. 3 [Spring 1950], figs. 1-2, p. 13 ff.) or by a newly made head (ibid., fig. 3, p. 16 ff.) or new features may be carved on a battered face (J. J. Clère, "The Statue of an Egyptian Priest," Museum Notes, Museum of Art, Rhode Island School of Design 9, no. 4 (May 1952) p. 1; B. V. Bothmer, "The Head That Grew a Face," Miscellanea Wilbouriana 1 [1972] pp. 25-31). Another example of this kind is probably to be seen in Louvre E 11057 (P. Barguet, Chronique d'Égypte 28 [1953] pp. 23-27), a statue of Senmut holding a coil of rope; all the inscriptions were erased, presumably so that the statue could be usurped by someone else, but a new inscription was never added. The ram's head on top of the coil of rope, emblematic of Khnum, was also attacked-probably, as Barguet says, in the reign of Akhenaton-because of its resemblance to the ram of Amun. But its transformation into a human face may well be a modern restoration.

47. J. D. Cooney, "Assorted Errors in Art Collecting," *Expedition* 6/1 (Fall 1963), displays (p. 25, fig. 6) a fragment of Amarna relief to which the head of a queen has been added in recent years; another New Kingdom relief, showing ancient inscription and a modern head, is illustrated by L. Borchardt, "Ägyptische 'Altertümer', die ich für neuzeitlich halte," supplement to  $\ddot{AZ}$  66/1 (1931) pl. 2 (12). Spurious repainting has also been applied to ancient monuments in modern times; see, for example, Cooney, *Amarna Reliefs from Hermopolis in American Collections*, pp. 1–2.

48. Rijksmuseum van Oudheden, Leiden F 1938/10.23, schist, length 23.8 cm.; reproduced by the kind permission of the director, Dr. A. Klasens. For further details see H. G. Fischer, *Ancient Egyptian Representations of Turtles*, p. 20, note 54. Further discussions of this class of forgeries are presented by G. Brunton, "Modern Painting on Predynastic Pots," *ASAE* 34 (1934), pp. 149–156, and A. J. Arkell, "Modern designs on predynastic slate palettes," *JEA* 41 (1955) p. 126.

49. Northampton, Spiegelberg, and Newberry, *Theban Necropolis*, p. 17, pls. 15 (2, 5), 16 (1, 2).

and predynastic pots and palettes the decoration of which is wholly modern (Figure 9).<sup>48</sup> The most mischievous alterations, however, are those which seek to augment the market value of an antiquity by adding a well-known name where none originally existed. One of the most outrageous examples of this kind is a Seventeenth Dynasty statuette of a woman that was excavated at Thebes in the winter of 1898–99 (Figure 10).<sup>49</sup> Its worth was subsequently impaired by the loss of the feet and base, which were already detached when it was found, and the upper left portion of the head, which had already been weakened by a deep chip in the forehead. This was evidently its condition when it came into the possession of an unscrupulous semischolarly collector who erased the

FIGURE 10 Seventeenth Dynasty statuette from Thebes



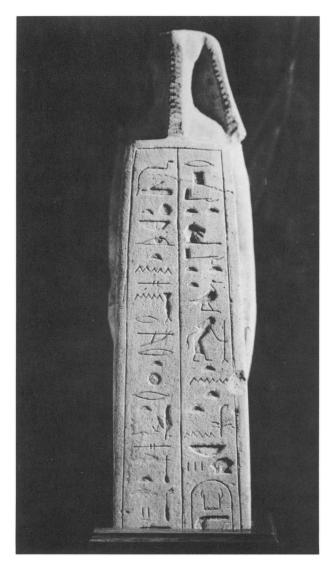


FIGURE 11 Altered inscription on statuette in Figure 10

inscription on the backpillar—a conventional offering formula—and substituted a new one (Figure 11).<sup>50</sup> Evidently taking a cue from a suggestion made by Gauthier in his *Livre des Rois*,<sup>51</sup> the new inscription

50. Now in another private collection, published by permission of the owner. I am indebted to Wm. K. Simpson for bringing this piece to my attention. The identification of the statue is confirmed beyond question by comparing the accidental chips and irregularities such as the vein in the stone which appears on the thighs, or a pit behind the lock of hair that falls on the right shoulder; a larger pit at the right edge of the backpillar was reduced in depth and area by the erasure of the old inscription.

51. Vol. II, p. 167 (XV).

purports to belong to "The Hereditary Princess and Countess, the eldest daughter of the King of Upper Egypt, Lord of Diadems Ka[mose]... She Who Says a Thing and It is Done for Her, Sweet of Love in the Sight of Her Father, Nefertiry...."<sup>52</sup>

Finally, there are those monuments which have not been affected by spurious restoration but have served as a model for modern copies that may be difficult to detect as forgeries—particularly if the original is not available for comparison.<sup>53</sup> If such a comparison is possible, however, the difference usually becomes apparent at a glance. Figure 12 shows an early Twelfth Dynasty stela in Florence<sup>54</sup> beside a facsimile of its counterpart in Athens (Figure 13),<sup>55</sup> the latter a slavish but inept imitation of the first, again revealing the mark of a later hand.

#### A REUSED STATUETTE OF THE TWELFTH DYNASTY FROM BYBLOS

The statuette shown in Figures 14–16 (MMA 68.101) is of greenish schist (greywacke) and stands 15.65 cm. high. The base, feet, and lower part of the legs are now missing; the original height must have been about 20 cm. It represents a standing man, the left leg advanced as usual; his right hand is held palm downward upon the flat and slightly flaring front of a

52. These phrases have probably been pieced together from various sources, such as the titulary of Queen Ahmose, Gauthier, *Livre des Rois* II, 224. The Middle Kingdom writing of *iryt-p't* seems questionable, as does the inclusion (and writing) of *h\_3tyt-'*. The sign has been substituted for || in the name Nfrt-iry. Otherwise the new inscription is fairly plausible—so much so that its antiquity might well be debated if the statuette had not been published in its original state.

53. An example of this kind is discussed by W. Spiegelberg, "Eine merkwürdige Fälschung,"  $\dot{AZ}$  58 (1923) pp. 158–160.

54. Florence 6364: Sergio Bosticco, Le Stele egiziane dall'Antico al Nuovo Regno, no. 17. I am indebted to Dr. Bosticco for the photograph and for his permission to use it here.

55. B. Pörtner, Aegyptische Grabsteine und Denksteine aus Athen und Konstantinopel, no. 17, pl. 5. The material is described as black granite! Antiquites of smaller size are frequently duplicated by casting them in metal or clay; an early example of this kind is presented in H. G. Fischer, "A Frequently Copied Scarab," *JARCE* 2 (1963) pp. 39-41. I have also seen, in the hands of a private collector, a duplicate of the small silver sphinx of Seqenenre in the Mariemont Museum (B. van de Walle, "Antiquités Égyptiennes" in Les Antiquités . . . du Musée de Mariemont [Brussels, 1952] p. 34, no. E 55 [136], pl. 9); this reproduces every detail of the other, including damaged areas. long kilt, and the other arm is folded, again palm downward, upon his chest. He wears a striated, shoulder-length wig that is drawn back behind his ears. The brows are indicated in relief, and a "cosmetic line" in relief projects from the outer corners of the eyes, both of which show traces of an incised pupil. His lips are evidently thick and everted, but

56. Cairo J 52081: Engelbach, ASAE 38 (1938) p. 285, pl. 37 (2) on p. 291 (a hunchbacked retainer from the serdab of Mitry); compare Abd el Hamid Zayed, *Trois Études* (Cairo, 1956) p. 15. For the gesture see Hellmuth Müller, *MDIK* 7 (1937) p. 102. This gesture also occurs in Cairo J 66620 (Hassan, *Giza* I, pl. 72), where it is one of a pair, the second statue mirroring the attitude of the first. Apart from some scribal statues with hands crossed upon the chest, most of the other Old Kingdom examples repre-

#### FIGURE 12 Middle Kingdom stela in Florence, Museo Archeologico 6364

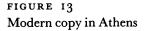


these are badly worn away, and the nose has fared even worse.

The simple attire admits a date fairly early in the Twelfth Dynasty, and so too the gesture of reverence, which is known from at least one Old Kingdom example,<sup>56</sup> although it is much more frequently attested in Twelfth Dynasty statuary.<sup>57</sup> The same conclu-

sent women, and in most cases it is the right hand that is raised.

57. The most comparable examples are Louvre E 17365 (Vandier Manuel d'archéologie III, pl. 78 [2]); Walters Art Gallery 71.509, Steindorff, Catalogue of Egyptian Sculpture, pl. 11 (46); CG 434 (Vandier, op. cit., pl. 76 [3]). The left hand is similarly raised in many other cases, the figures standing, seated, or cross-legged. And in some cases both arms are crossed upon the chest, as in the Old Kingdom.







FIGURES 14, 15, 16 Reused Middle Kingdom statuette, MMA 68.101

sion is likewise suggested by the features; although the large ears indicate that the date is no earlier than the reign of Sesostris I,<sup>58</sup> a date much later than that reign seems unlikely in view of the shape of the brows, the thick lips, and the presence of the cosmetic line. H. W. Müller has pointed out that the last detail does not appear in private statuary until the Eleventh Dynasty and the beginning of the Twelfth.<sup>59</sup> It occurs on the face of a limestone statue from the tomb of Ibu at Qau,<sup>60</sup> generally dated to the reign of Amenemhet III and it occasionally appears on reliefs of the later Twelfth Dynasty,<sup>61</sup> but is not common on either royal or private statuary of that time.<sup>62</sup>

The original inscriptions, on the kilt and backpillar, have been completely removed, and this erasure has all but eliminated the upper edge of the kilt along with

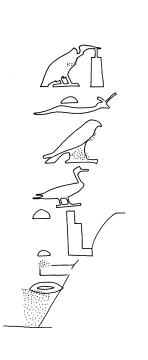




FIGURE 17 Inscriptions of MMA 68.101

the band above it. The newly polished surfaces display the inscriptions (Figure 17) of a much later individual: (front) "The 'Iwn-mwt. f-priest Horsiese, justified"; (back) "The Sm-Priest, Greatest of Those Who Direct the Craftsmen, the Great Chief Horsiese, just[ified]." The second group of titles combines the function of the High Priest of Ptah at Memphis with the lineage of the Great Chiefs of the Meshwesh, and this narrows the identification down to two Memphite high priests named Horsiese who officiated in the Twenty-first and Twenty-second Dynasties, respectively.<sup>63</sup> Of these two, the later one seems the more probable choice in view of the abbreviated form of the title "Great Chief"; for the reference to "the Meshwesh" probably did not begin to be dropped until the later years of the Libyan Period.<sup>64</sup>

The usurpation of a Twelfth Dynasty statuette by an official of the Libyan Period recalls the identical case of a Twenty-second Dynasty commissioner from Palestine who reused a statuette of only slightly later date than the one in the Metropolitan Museum, originally belonging to a vizier.<sup>65</sup> The kilt is shorter than the one customarily worn by a vizier, but it does not seem likely that the pair of straps is to be interpreted in any other way. For the original date, I would suggest the reign of Amenemhet III. While the

58. See Aldred, MMJ 3 (1970) p. 37, discussing examples of royal portraiture.

59. In Festgabe für Dr. Walter Will, 124, 136. The Munich head ( $\ddot{A}S$  5570, pl. 1) does not appear to represent an earlier example; it is very like the sphinx head of Sesostris I from Karnak (Evers, Staat aus dem Stein, pl. 33; Aldred, MMJ 3 [1970] fig. 17, p. 38).

60. Steckeweh, Die Fürstengräber von Qau, pl. 15a; illustrated more clearly in Scamuzzi, Egyptian Art, pl. 18.

61. For example, Newberry, *El Bersheh* I, pl. 10 (temp. Sesostris III; cf. Smith, AJA 55 [1951] pls. 18, 20); Petrie, *Antaeopolis*, pl. 27 (*W3h-k3* II, presumably temp. Amenemhet III).

62. This feature apparently reappears in the Seventeenth Dynasty statue of Prince Ahmose in the Louvre (E 15682; *JEA* 10 [1924] pl. 18), but it was evidently little used in Eighteenth Dynasty private statuary until the reign of Hatshepsut (e.g., CG 42116: Terrace and Fischer, *Treasures of the Cairo Museum*, pp. 97, 100).

63. The first (Dyn. 21, temp. Psusennes) is known from Berlin 23673, 1, 13 (Borchardt, "Die Mittel zur zeitlichen Festlegung," Quellen und Forschung zur Zeitbestimmung der ägyptischen Geschichte, Bd. 2 [1935] p. 99, pls. 2-2a) and Louvre 96 (Malinine et al., Catalogue des Stèles du Sérapéum I, no. 52). The second (Dyn. 22, temp. Pimay) is known from two other stelae in the Louvre (*ibid.*, nos. 22, 23). Cf. K. Kitchen, Third Intermediate Period, §151-152 (Horsiese J) and §155-156 (Horsiese H).

64. Yoyotte, "Les Principautés du Delta au temps de l'anarchie libyenne," *Mélanges Maspero* I, 4<sup>è</sup> fasc., 123 (§3). The complete title is given to Padiese, the father of Horsiese H on Serapeum stela 23 (Malinine et al., *Catalogue des Stèles du Sérapéum* I, p. 23). Neither version of the title is present in the titulary of a later Memphite High Priest named Horsiese (Dyn. 26: CG 1212).

65. Walters Art Gallery 22.203; Steindorff, *JEA* 25 (1939) pp. 30–33 and *Catalogue of the Egyptian Sculpture in the Walters Art Gallery*, no. 145, p. 49, pl. 25. For the interpretation of the title see A. Alt, *BiOr* 9 (1952) pp. 163–164. Several Eighteenth Dynasty statues were also reinscribed in this dynasty: CG 42194, 42206, 42207.



FIGURES 18, 19 Upper parts of Twelfth Dynasty dyad in Boston, MFA 05.89b-c

statuette of the Palestinian commissioner was found in the Egyptian Delta, that of his Memphite contemporary is reported, conversely, to come from the shores of northern Syria, specifically Byblos. It was purchased in Beirut by a European dealer who sold it to the Metropolitan Museum a short time thereafter. One need not, of course, be surprised to find a Middle Kingdom statuette in Byblos, for this site, and the surrounding region, have yielded many other examples of that period.<sup>66</sup> But it is difficult to say whether this one was reinscribed in Lebanon, or whether it went there after the later name was added.

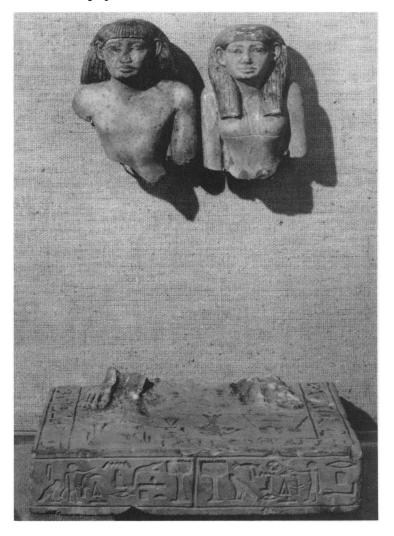
# A DISMEMBERED DYAD OF THE TWELFTH DYNASTY

#### The fragments

In the fall of 1905 Theodore Davis gave the Boston Museum of Fine Arts three fragments of a Middle Kingdom limestone statuette representing a certain

66. Most of this evidence is reviewed by John Wilson in AJSL 58 (1941) pp. 225-236. In addition a fragmentary Middle Kingdom statuette was found at Byblos (Montet, Byblos et l'Égypte, p. 252, fig. 112), and two more fragmentary statuettes of the same period, purchased from a dealer in Beirut and said to come from Qatna, are in the Metropolitan Museum: 67.226, 68.101.

## FIGURE 20 Fragments as assembled in Boston, MFA 05.89a-c





Sobk-hotpe and his wife Shedi-em-niwe (05.89a-c; Figures 18-24).<sup>67</sup> The man wears only a kilt, of which nothing is preserved, and a striated shoulder-length wig, she a long close-fitting dress with shoulder straps and a long tripartite wig. To judge from the physiognomies and the style of her wig, the date lies within the first half of the Twelfth Dynasty, but is not so early as the first reign, or even, perhaps, so early as the first two reigns; thus the range is most probably the fifty years of Amenemhet II-Sesostris II, centering on 1900 B.C.

The backpillar, which terminated just below the level of the shoulders, is completely missing, as is the back edge of the base, which shows the battered remnants of both pairs of feet. Otherwise the surface of the base is in good condition, and the inscriptions, on the top, front, and sides, are almost completely preserved.

A second limestone statuette belonging to a Sobkhotpe and Shedi-em-niwe is described by Weigall in *Rec. trav.* 29 (1907), p. 217. It was acquired by Sir Flinders Petrie and is now in the Egyptology Department of University College, London (U.C. 14346). Since the name of the woman is not attested elsewhere, and since the name of the man is preceded, in both

67. Fragment a (the man) is 9.5 cm. high; fragment b (the woman) is 9 cm.; the base (c) is 3.2 cm. high at the edge.

FIGURE 21 Upper surface of base, MFA 05.89a



FIGURE 22 Proper right edge of base



FIGURE 23 Proper left side of base



FIGURE 24 Front edge of base



FIGURE 25 Reworked central portion of dyad, University College 14346

FIGURE 26 Proper right side of reworked fragment

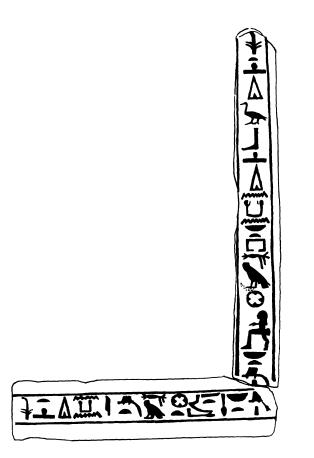
FIGURE 27 Proper left side of reworked fragment

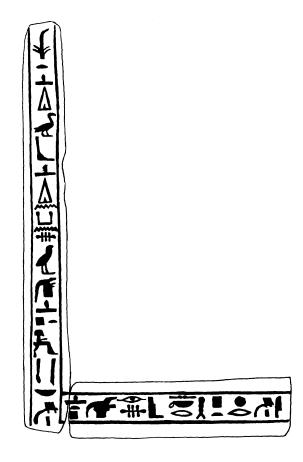
cases, by an identical title, and one that is scarcely less exceptional, it is immediately evident that both monuments belong to the same individuals. When all the evidence was assembled, moreover, including photographs (Figures 25–27) and facsimiles of the inscriptions (Figure 28),<sup>68</sup> the second statuette proved

68. I am indebted to Suzanne Chapman for providing information, rubbings of the inscriptions, and photographs of the Boston fragments, and to Mrs. Barbara Adams for a rubbing and photographs of the fragment in London. All this material has been used in preparing the drawings for Figures 27, 28. The photographs are published with the kind permission of Dows Dunham, of the Boston Museum of Fine Arts, and H. S. Smith, formerly Curator of Egyptian Antiquities at University College. to be both more and less closely related to the other than was anticipated. The inscriptions on each side of the backpillar complete those on the base so precisely that there can be no doubt that they belong to the same monument, which stood about 29 cm. high when complete. The figures, on the other hand, have nothing to do with the other fragments; they are not only a forgery, but a forgery that imitates the style of a later period.<sup>69</sup> They have been carved from those parts of original sculpture that remained on the backpillar when the other pieces, now in Boston, were detached. In this way two statuettes were produced from one, and the spurious sculpture that was carved from the least interesting of the four fragments was authenticated by its ancient inscriptions.

69. The interlaced arms are not known before the New Kingdom, as first observed by Spiegelberg, "Note on the Feminine Character of the New Empire," *JEA* 15 (1929) p. 199. For other examples see Vandier, *Manuel d'archéologie* III, pp. 310, 440, 441, 447.







#### FIGURE 28

Facsimile of inscriptions of Boston and London fragments of dyad, reassembled

#### FIGURE 29

Facsimile of front and upper surface of base (latter inverted)



#### The inscriptions

All the representations and inscriptions on the base and backpillar lack inner detail and are filled with blue paint. Those on the top of the base (Figures 21, 29) are oriented so that they address the statuettes to which they refer, and are upside-down when viewed from the front.<sup>70</sup> A relatively large figure at the upper

70. This orientation is most unusual. Offering tables commonly show the  $\implies$  -sign so that it faces the recipient (false door or statue), but the inscription is almost always oriented so that it can be read by those making the offering; the offering slab of Queen *Wdbtn*, dating to the late Sixth Dynasty, exceptionally orients the  $\implies$  -sign and inscription so that both face the pyramid (Jéquier, *Pyramide d'Oudjebten*, fig. 7, p. 15, pl. 13 [2]), and a few other offering slabs similarly show the inscription and  $\implies$  -sign oriented in the same direction; although these were not found *in situ*, it is probable that the inscriptions also faced the offering niche in these cases: Jéquier, *Monument funéraire de Pepi II*, III, figs. 78, 80, p. 75; Cairo CG 23007 (with name of King *Nb-hpt-R*<sup>+</sup> Mentuhotep; cf. Habachi, *MDIK* 19 [1963] p. 32, fig. 12). But in those cases where statues are associated with offering tables, the right stands with one hand raised in a gesture of invocation, the other hand holding what is evidently the tail of the leopard skin customarily worn by the sm(t)-priest.<sup>71</sup> He is in fact labeled sm(t), and his action is described as "making an 'offering that the king gives'"; the whole of this might also be read: "Making an offering . . . (by) the *smt*-priest." Two tables placed before him are laden with the offerings he invokes: a circular tray on a tall stand bears three loaves of varied shape as well as a goose; a rectangular stand supports two more loaves, flanking a jar. These representations are arranged at different levels so as to fill the space left by the feet of the standing couple.

At the top edge, and continuing down the left side, is the invocation which the sm(t)-priest pronounces: "It is pure<sup>72</sup>—an offering that the king gives to the spirit of *Sbk-htp* and to the spirit of her who is revered with Nemty,<sup>73</sup> Lord of the Twelfth U.E. Nome,<sup>74</sup> *Šdi-m-niwt.*"<sup>75</sup> The corresponding column on the opposite side reads: "He who is revered with Nemty, Lord of the Twelfth U.E. Nome, *Sbk-htp*, possessor of reverence."

The proper right and left sides of the base and backpillar (Figure 28) contain the following phrases: (right) "One revered with Ptah-Sokar, the Osiris,<sup>76</sup> the Magician(?)<sup>77</sup> Sbk-htp"; "An offering that the king gives, and an offering that Geb gives to the Magician(?) Sbk-htp justified, possessor of reverence"; (left) "An offering that the king gives to the spirit of *Šdi-m-niwt*, justified, possessor of reverence"; "An offering that the king gives, and an offering that Geb gives to the spirit of the Mistress of the House *Šdi-mniwt*, possessor of reverence."

orientation is always normal: Louvre E 11573 (Vandier, Manuel III, pl. 85 [4]); Turin 3082 (*ibid.*, pl. 83 [3]); Petrie and Brunton, Sedment II, pl. 51; MMA 22.1.107a-b (A. C. Mace, BMMA 16 [Nov. 1921, Pt. II] p. 13, fig. 14); Brooklyn 57.140 (Bothmer, Brooklyn Museum Bulletin 20/4 [Fall 1959] fig. 2, p. 13).

71. For similar examples of the costume cf. Blackman, Meir VI, pl. 17; de Morgan, Fouilles à Dahchour 1894, pl. 11; 1894-95, pl. 14; Griffith, Siût and Dêr Rîfeh, pl. 2. For the reading of sm(t) see Gardiner, Ancient Egyptian Onomastica I, 39\* ff.

72. Cf. *irt htp-di-nswt in hry hbt: iw w'b n k3.s* (Newberry, Beni Hasan I, pl. 18); also Tylor and Griffith, Paheri, pl. 6: the son, clad in the leopard skin, offers *prt hrw m ht nbt iw w'b* "funerary offerings consisting of everything—it is pure."

73. For the reading of the name of this divinity as Nmty rather than 'nty, see O. D. Berlev, Vestnik Drevnej Istorii 1 (1969) pp. 3-30.

The front edge of the base (Figures 24, 29) is divided in two halves, the hieroglyphs being oriented toward the center. On both sides, near the outer corners, the standing figure of a priest makes a gesture of invocation toward one of a pair of offering tables at the center. The sequence of the inscriptions is retrograde, reading inward, and the one on the left reads: "The sm(t)-priest (he says), 'An offering that the king gives, to the Osiris Sbk-htp.'" The corresponding inscription on the right is: "The *iry-p't*-priest (he says), 'An offering that the king gives, to the Osiris *Šdi-m-niwt*.'"

It will be noted that the *iry-p*'t-priest, in contrast to his counterpart, does not hold his garment and therefore does not appear to wear a leopard skin. In royal offering scenes of the New Kingdom (Figures 30, 31)78 this officiant similarly lacks the leopard skin and follows the sm(t)-priest just as, in the present case, he occupies the subordinate right-hand side of the base and gives the invocation for the wife, while the sm(t)priest is on the left side, associated with the man. Probably the iry-p't also figured in the funerary cult of Twelfth Dynasty kings, but their pyramids have unfortunately left only a few fragments of relief, so that the evidence is sadly incomplete. At any rate the two functions of sm(t) and iry-p't seem to be united in the late Twelfth Dynasty tomb chapel of Wh-htp at Meir, where numerous other usurpations of royal prerogatives may be observed. The officiant in question is clad in a leopard skin (Figure 32)79 and is accompanied by the caption  $\underline{\bigcirc} = \underline{\bigcirc} = \underline{]} = \underline{\bigcirc} = \underline{]} =$ iry-p't who offers him an 'offering that the king gives.'"

74. For the writing of the nome emblem see below, p. 26.

75. This name is highly unusual. A masculine example is known from Dyn. XX (Ranke, PN II, p. 319 [16]) and names of the pattern NN-*m-niwt* are common from the late New Kingdom onward (*ibid.*, p. 50, notes 1, 2; p. 51, note 1) when *niwt* presumably refers to Thebes; but it can hardly have that meaning in this case in view of the date.

76. Note that this epithet also occurs before the names of both the man and his wife on the front of the base, in the more usual context of funerary offerings; cf.  $\ddot{A}Z$  90 (1963) pp. 37–38.

77.  $S_{\mathcal{J}}(w)$ ; discussed below, pp. 26–27.

78. Figure 30 is from Naville, The Temple of Deir el Bahari IV, pl. 110 (cf. pl. 112). Figure 31 is from Winlock, Bas-Reliefs from the Temple of Rameses I at Abydos, pl. 9.

79. Blackman, Meir VI, pl 15.

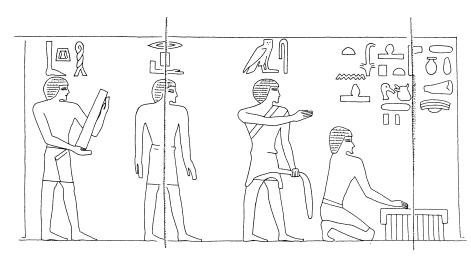
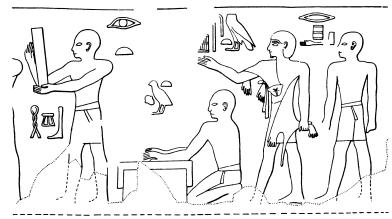


FIGURE 30 Detail of offering scene in temple of Hatshepsut at Deir el Bahri. After Naville

FIGURE 31 Detail of offering scene in reliefs of Ramesses I from Abydos. After Winlock



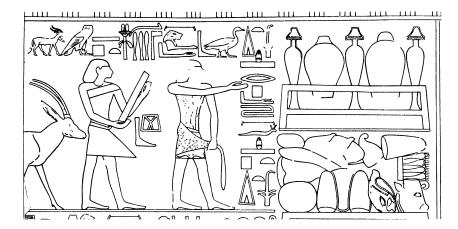


FIGURE 32 Twelfth Dynasty offering scene from Meir. After Blackman

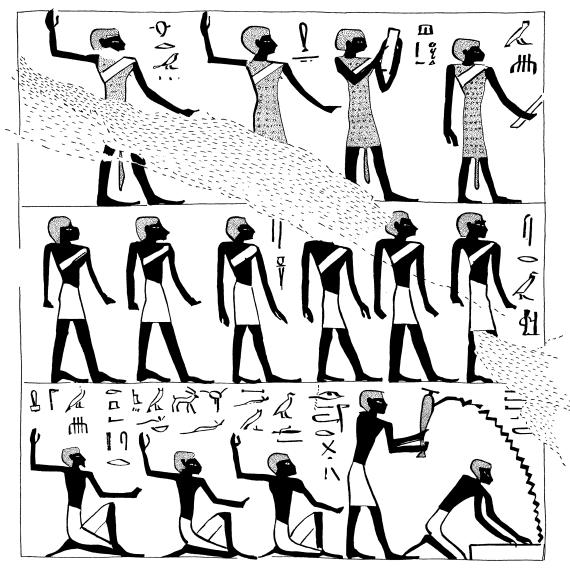


FIGURE 33 Twelfth Dynasty offering scene on a coffin from Asyut

Even earlier evidence for the appearance of the *iry-p't* in a funerary context is provided by a coffin from Asyut, the date of which cannot be much later than the beginning of the Twelfth Dynasty.<sup>80</sup> On the inside of the back, directly opposite the representation of the false door, is a most unusual scene (Figure 33)<sup>81</sup> representing three registers of funerary officiants. The uppermost series, wearing the leopard skin as well as the lector priest's bandoleer, are labeled *imy-hnt*, *hry hbt*, *hm-t3*, and *hry-wrw* "the chamberlain, the lector priest, the 'servant of the earth,' and 'one who is over

the great.""<sup>82</sup> The second series of officiants, wearing the bandoleer, are labeled  $\dot{srw}$  and  $\dot{smr}(w)$  "officials

80. On the dating of the Asyut coffins see Schenkel, Frühmittelägyptische Studien, §44a.

81. Drawn from the photograph in Chassinat and Palanque, Une campagne de fouilles dans la nécropole d'Assiout, p. 68, fig. 4, pl. 19. According to de Buck, CT II, p. xiii, note 9, the coffin is in the Louvre, but the back, containing the scene described here, is not to be found.

82. The last two designations are exceedingly rare but occur again in the Eighteenth Dynasty: Davies, *Five Theban Tombs*, pls. 7, 9, 10. The *hry-wr* also appears in Davies, *Rekh-mi-re*<sup> $\cdot$ </sup>, pls. 80–82; on pl. 80 he is accompanied by the *iry-p*<sup> $\cdot$ </sup>t.

and companions." The officiants in the lowermost register lack the leopard skin and bandoleer. Two of them "pour water," while the last three kneel, making a gesture of incantation; the caption above these three figures reads: "making incense (on) the fire, offering to him in his rank and dignity, and in all his places,<sup>83</sup> (by) the *iry-p*<sup>6</sup>t, the chamberlain, the seal-bearer of the god."<sup>84</sup>

The use of the prestigious title iry-p't by a funerary officiant is readily explained by its hereditary aspect; it conveys the idea of the heir and survivor that is the fundamental idea of priesthood in ancient Egypt, whether it relates to the gods or the dead. Evidently the iry-p't-priest plays the role of Horus, the heir of his father Osiris, and of his grandfather Geb.<sup>85</sup>

The retrograde arrangement of the texts on the front of the base will be discussed in a forthcoming monograph on the orientation of hieroglyphic inscriptions. For the present it is sufficient to say that it primarily relates to other retrograde inscriptions that involve a speech, and more particularly a speech that concludes with the name of the person who is addressed. The use of retrograde sequence on this part of the monument is also appropriate because it enables the orientation of the hieroglyphs to correspond to that of the inscriptions on the sides of the base, yet directs the offering formulae to the center. In this respect it is closely related to Middle Kingdom offering slabs that frequently apply the same procedure to the texts at the bottom edge.<sup>86</sup>

#### The provenance

Both the owner and his wife are "revered with  $\frac{2}{3}$   $\xrightarrow{\smile}$ ," which certainly refers to the Twelfth Nome of Upper Egypt or to its capital. A Middle Kingdom stela in Brussels (Figure 34)<sup>87</sup> invokes offerings which

84. The last of the designations is an administrative title that acquired a secondary meaning in the context of the funerary ritual: cf. Sauneron, *BIFAO* 51 (1952) pp. 137-171, who does not, however, include this example.

85. The funerary use of the title is not mentioned by Gardiner Onomastica I, p. 14\* ff., who somewhat misleadingly states that "crown-prince" was "the only meaning still alive in Ramesside times." For the hereditary aspect see, in addition to Gardiner's

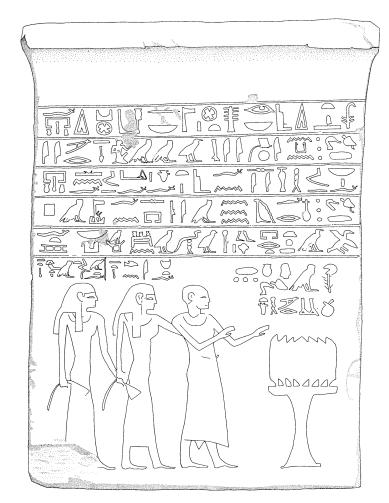


FIGURE 34 Brussels E 2161

remarks, those of Helck, "Rp't auf dem Thron des Gb," Orientalia 19 (1950) pp. 416-434. Again the priestly function is not discussed (even the case of *Yi-fpr-nfrt*, p. 427, who presided over the Osirian mysteries as  $s_{3}$ -mr. f" the loving son"), but Helck aptly quotes Pyr. 1458e (CT I, 179e/i): "Thou (Osiris) art the Great One, Lord of Abydos... Thoth has given him the throne of Geb, but Horus is the *iry-p't*." Elsewhere in the Pyramid Texts Geb is called the "*iry-p't* of the gods," and his son Osiris is called the "*iry-p't* of Geb."

86. I have summarized these uses of retrograde sequence in "L'Orientation des textes," *Textes et langages de l'Égypte pharaonique* I (Cairo, 1973) pp. 21-23.

87. Brussels E 2161. Drawn from the photograph reproduced in the sales catalogue Antiquités . . . appartenant à P. Philip (Paris, 1905) no. 38. A hand copy of the text is given by Speleers, Recueil des inscriptions, p. 17 (75); this is to be added to the evidence presented by Gardiner, Ancient Egyptian Onomastica II,  $69^*-70^*$ . The stela is said to come from Gebelein, but that provenance hardly seems possible in view of the internal evidence provided by the inscriptions.

<sup>83.</sup> Cf. CG 1486 (Dyn. XII, Dahshur): "an offering that the king gives in all thy dignities (*m s'hw.k nbw*) and in all thy places which thou lovest." Also Boston MFA 13.4333, Dyn.VI (H.Fischer, *Dendera*, Pl. 30 [b]): "in his name, in his dignity, in his rank."

"come forth upon the altar of  $\frac{1}{2} \sum_{i=1}^{2}$ "; the owner's mother is *M*<sub>3</sub>*tit-m-h*<sub>3</sub>*t*, a theophoric name referring to the lioness goddess, who was worshiped along with the falcon god and is the sole divinity attributed to  $\leq 1$  in the nome list of the Karnak shrine of Sesostris I.88 Both divinities are known from the Old Kingdom tombs of Deir el Gebrawi,89 but the capital was evidently located about fifteen kilometers to the southeast, at Atwala; this site has yielded a Thirteenth Dynasty fragment of relief from the temple of  $\sum_{n=1}^{\infty}$  $\frown$  minimized and a late offering slab (CG 20037) that invokes offerings in the name of  $\frac{1}{2} \subseteq \frac{1}{2} \stackrel{\circ}{\sim} .90$  The cemeteries near Atwala were persistently looted at the end of the last century, and these operations may well have produced both the statuette, which was presented in 1905, and the stela, which was auctioned in the same year.91

#### The title S3w

The sole title of Sobk-hotpe, written and and hot be, occurs only very rarely in precisely this form. The Wörterbuch (III, 414 [4]) cites the Twelfth Dynasty stela CG 20597 for ## as a title, and probably rightly so: Lange and Schäfer (Grab- und Denksteine III, p. 156) take this as part of a name, reading the whole as  $\frac{1}{10} - \frac{1}{2}$ , but their transcription in II, p. 237, shows  $\frac{333}{n}$ , i.e., the title  $s_{\mathcal{J}}(w)$  plus the common name  $\mathcal{N}b(.i)$ -pw (Ranke, PN I, 184 [14]). The title ## also precedes the name of a certain Sin in Sinai inscription 105 (temp. Amenemhet III). In neither case does the context suggest the meaning, but ## occurs again in an Eighteenth Dynasty scene representing funerary ceremonies; here an attendant labeled ### follows another who is  $\mathcal{D}$  ### (Davies, *Five* Theban Tombs, pl. 2); this last is one of the several designations of magicians (Gardiner, PSBA 39 [1917], p. 44) and is known from the Old and Middle Kingdoms in the form  $\square$   $\bigwedge$  (Hassan, Giza II, figs. 17, 22, 25, 27) and  $\bigwedge$   $\bigwedge$  (Sinai inscr. 90). The Sinai inscriptions also provide evidence for persons called  $\bigwedge$   $\searrow$  who are at the same time doctors and are therefore equally clearly s<sub>jw</sub> in the sense of "protector" or "magician" (inscr. 117a, 121, where  $\bigwedge$   $\bigotimes$  also occurs as an independent title), and the same association is attested in the Ebers Papyrus (99, 2-3; cf. Gardiner, o.c., 33).

It seems doubtful, however, that the Sinai example of ### 5 means "magician" in view of a rock inscription at Aswan (Petrie's no. 286) which seems to refer to the same individual,<sup>92</sup> mentioning his father in this case rather than his mother:

Sinai 105 ## 第三 1 [ \_ ] ?] 答[ ] 道 Aswan 286 丽 ? ## 二 1 二 1 證

The meaning of  $\overline{hn}$   $\stackrel{\circ}{\frown}$  is obscure, but may represent a nisbe-form <u>hnwty</u>, as it evidently does in the Old Kingdom title  $\stackrel{\Box}{\frown}$   $\stackrel{\circ}{\frown}$   $\stackrel{\Box}{\frown}$   $\stackrel{\circ}{\frown}$  "one who is within the workhouse of Ptah."<sup>93</sup> If so, <u>hnwty-sj</u> would be syn-

88. Lacau and Chevrier, Une Chapelle de Sésostris I<sup>er</sup>, pl. 3. Here and in *MDIK* 20 (1965) pl. 35, the sign above  $\sim$  resembles a knife and is so interpreted by Kees on p. 103, but it is simply the left side of  $\simeq$ , the missing portion of which has been filled with plaster. Here it may also be noted that the example of  $\approx 70$ , which is quoted by Spiegelberg, *Rec. trav.* 25 (1903) p. 185, and is there identified as U.E. Nome 12, is actually  $\approx 70$  (a crocodile), as T. G. H. James has kindly informed me.

89. Davies, *Deir el Gebrâwi* I, pls. 8, 23; II, pl. 26 (*M3tit*); II, pls. 21, 24 (both divinities).

90. Ahmed Kamal, ASAE 3 (1902) pp. 80-81.

91. See note 87 above.

92. Petrie, Season in Egypt, pl. 11. In Petrie's copy the signs  $\overline{\mathfrak{A}}$  have mistakenly been fused together.

93. Cairo CG 191. I doubt that *bnwt* "Werkstatt" (*Wb.* III, 368[13]) is involved in either case, and it should be noted that the *Wb.* errs in citing *Urk.* I 148 (read p. 149); this is  $\overline{\mathfrak{M}}_{\square}^{\square}$  "Residence." The other evidence is no earlier than the New Kingdom.

onymous with the aforementioned title *imy-s3* "one who is within a corps (of workers),"<sup>94</sup> and this in turn would support the interpretation of  $s_3w$ , in the other case, as "ganger," which is the meaning tentatively suggested in Peet-Gardiner-Černý, *Sinai*, p. 109.

I find it difficult, however, to believe that the translation "ganger" is applicable in the present case. A person of so humble a rank would hardly have been able to purchase a statuette of the quality that Sobkhotpe was able to afford. For this reason alone one may conclude that he was more probably a "magician."

#### AN EIGHTEENTH DYNASTY DYAD WITH AN ALTERED INSCRIPTION

#### The sculpture

Representations of corpulent men are well known in relief and statuary from the Fourth Dynasty onward, and a relief of only slightly later date contrasts the obesity of a middle-aged husband with the youthful slimness of his wife.<sup>95</sup> Such a contrast is rarely presented in either relief or statuary, however, and the example shown here (Figures 35–38) may be the earliest of its kind in three dimensions. The closest comparison is provided by the statue of Bak and his wife, dating to the Amarna Period (Figure 39),<sup>96</sup> although a second New Kingdom example (Figure 40) is closer in date and more comparable in respect to attire.<sup>97</sup>

94. Compare  $\overline{m}_{2}^{\circ}$  and  $\overline{m}_{1}^{\circ}$  (var.  $\overline{m}_{11}^{\circ}$ ), which, according to *Wb*. III, 373 (3), is known from the Ptolemaic Period in reference to priests or sages and is presumably to be interpreted as "one who is within the (priestly) phyle(s)."

95. Fischer, "A Scribe of the Army in a Saqqara Mastaba of the Early Fifth Dynasty," *JNES* 18 (1959) pp. 243–248, fig. 8.

96. Berlin (Charlottenburg) 1/63: W. Kaiser, Jahrbuch der Stiftung Preußischer Kulterbesitz 2 (1963) p. 133 ff; Ägyptisches Museum Berlin (Berlin, 1967) no. 766.

97. Pushkin Museum, Moscow, 2099. In his Manuel d'archéologie III, pp. 495, 504, Vandier dates this statuette, along with another, representing the same man's wife, to the reign of Tuthmosis I. Lacking the publication in which the texts are presented (Turaiev, Statues et statuettes de la Collection Golénischef, nos. 46–47), I have obtained further information from Professor Vandier, including a reference to Porter-Moss, *Topographical Bibliography* I (2nd ed.), Pt. 1, p. 414, where the statuettes are identified as coming from Theban tomb 345. A slightly later date is possible, however; Kees  $\ddot{A}$ ,  $\ddot{Z}$  85 [1960] (p. 47) believes the tomb to be "etwa Hatschepsut," but this would not necessarily mean a difference of more than eight years, while a date within the reign of TuthmoThe difference between the proportions of the man and woman is accentuated if they are viewed from the side, as is the difference in attitude. The feet of the woman remain together, as dictated by earlier tradition, and unlike later statuary of the New Kingdom in which women more usually extend the left foot at least slightly, echoing the more decisively advanced foot that is characteristic of men.<sup>98</sup> These differences are mitigated by the massive backing from which the two figures emerge, and by the equally massive base on which they stand. A harmonious effect is also struck by the mass and contour of the woman's wig, which—since her husband is wigless<sup>99</sup>—nicely balances the lower and larger mass of his flaring kilt.

Despite the fact that it stands only 29.7 cm. high, the balanced simplicity of the statuette creates an impression of monumentality that is in keeping with the hard dark stone from which it is made.<sup>100</sup> In this respect it seems to continue the style and taste of the later Middle Kingdom. The faces, however, have acquired the slightly squinting blandness of the early New Kingdom, and seem rather masklike compared to the more expressive physiognomies of the Twelfth Dynasty. The interlaced arms of the couple represent an entirely new feature, as far as representations of husband and wife are concerned, and this may be one of the earliest examples.<sup>101</sup>

The form of the wife's wig is similar to those of the early New Kingdom, consisting of long braided strands

sis I would still be about fifty years later than the beginning of the Eighteenth Dynasty. Further illustrations of the statuettes (in addition to those mentioned by Porter-Moss) are to be found in S. Khodzhash, *Egipetskoe Iskusstvo v Gosudarstvennom Musee Izobrazitelnikh Iskusstvo Imeni A. S. Pushkina* (Moscow, 1971) pls. 34-37; Irmgard Woldering, *Gods Men and Pharaohs* (Fribourg, Switzerland, n.d.) p. 134.

98. Cf., for example, MMA 24.7.1424 (Hayes, *Scepter* II, fig. 31, p. 62), with one foot very slightly advanced, and the earlier statuette MMA 16.11.369 (*Scepter* II, fig. 5, p. 15), with the feet together; also Figure 40.

99. A usual feature in representations of portly aging men; see JNES 18 (1959), p. 245 (article cited in note 95 above).

100. The stone has been identified by Pieter Meyers as gabbro, but it might also be called diorite (or dioritic-gabbro).

101. See note 69 above. Groups belonging to the preceding Second Intermediate Period generally show clasped hands, as exemplified by MMA 16.10.369 (Hayes, *Scepter II*, fig. 5, p. 15) and Northampton, Spiegelberg, Newberry, *Theban Necropolis*, pl. 15 (1, 3).



FIGURES 35, 36, 37, 38 Eighteenth Dynasty dyad, MMA 62.186

but the crown of her head shows a lozenge-shaped blank area (Figure 41) for which I can find no parallel; presumably it is related to the median band, or pair of bands, that appears on most women's wigs of the early Eighteenth Dynasty (e.g., Figure 40).<sup>102</sup>

The clothing shows none of the changes that begin to appear in the mid-Eighteenth Dynasty, since the statue is presumably of earlier manufacture. The single strap of the wife's dress is extremely uncommon in statuary, but is occasionally found in two-dimensional representations from the Old Kingdom onward,<sup>103</sup> and is more frequently seen on those of the early New

102. See Vandier, Manuel III, p. 254. Possibly this detail represents a "skull plate" (Arabic kurs) like that of the headdress shown in Winlock, Treasure of Three Egyptian Princesses, p. 14, pl. 4.

103. For the Old Kingdom see Stachelin, Untersuchungen zur ägyptischen Tracht, p. 168, who cites Oriental Institute, Mereruka, pl. 94; Junker, Giza X, figs. 44–45, pl. 18a; CG 250. For the Middle Kingdom see Blackman, Meir II, pl. 3, and CG 20456, 20754.



Kingdom.<sup>104</sup> It is considerably more surprising to find a single, narrower strap repeated in the husband's attire; while single straps are not unknown in earlier representations of men, they generally belong to the costume of workers or soldiers and are bandoleers, not intended to support the kilt.<sup>105</sup> Normally the long kilt lacks any support of this kind whatever except in the case of the vizier's harness, as attested from the late Middle Kingdom onward—a cord passed behind the neck and fastened at two points on the front edge.<sup>106</sup> In the present case the fastening of the kilt, which

104. E.g., MMA 19.3.33 (Hayes, Scepter II, fig. 7, p. 19); 12.182.3 (*ibid.*, fig. 93, p. 169); Davies, *Rekh-mi-rē*<sup>4</sup>, pls. 9, 63, 64, 66, 67, 73.

105. For soldiers and workmen see Fischer, Kush 9 (1961) p. 66, note 48. The Middle Kingdom examples in Lange and Schäfer, Grab- und Denksteine, all represent the costume of the lector priest: CG 20246, 20404, 20515, and all the cases shown in Pt. IV, pls. 82–83 except 427 (a soldier).

106. Vandier, Manuel III, p. 250; for examples of the vizier's straps on stelae see CG 20102, 20690.

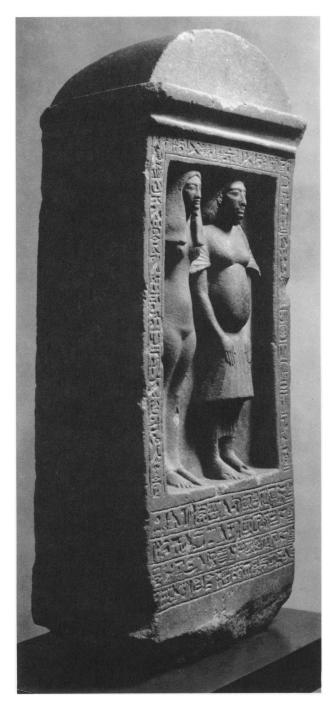


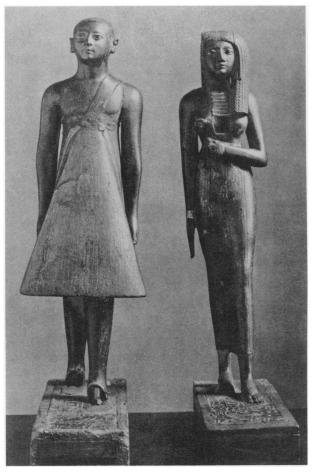
FIGURE 39 Eighteenth Dynasty dyad, Amarna Period, Berlin (West) 1/63

FIGURE 40 Eighteenth Dynasty dyad, Pushkin Museum, Moscow 2099 seems to derive from the Old Kingdom dress bow, is also unexpected, although there are some other New Kingdom examples where this knot is revived in connection with the archaic half-goffered kilt.<sup>107</sup> And the very loose form of the knot is probably unique. There is, however, one other early New Kingdom example of a long kilt with single strap and knot—the wooden statuette in the Pushkin Museum, Moscow (Figure 40).

#### Inscriptions

The inscriptions on the base (Figure 42) identify the couple, but his name is lost, leaving only a title that preceded it: "w'b-priest." She is "His wife, the Mistress of the House, Yotes-resu,<sup>a</sup> who is called Tjare."<sup>b</sup>

107. See Engelbach, ASAE 29 (1929) p. 45, referring to CG 42125 and cf. also CG 42132.



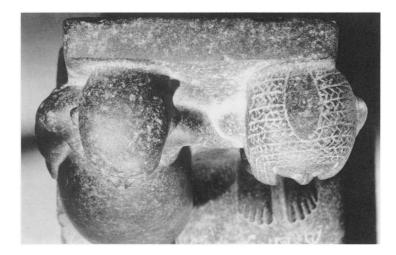


FIGURE 41 Detail of woman's headdress, MMA 62.186

The inscription on the back (Figure 43) comprises four vertical columns, the left pair referring to the husband, the right pair referring to his wife. The lower part of the surface, including the entire width of the backpillar and more than three-fifths of its height, has been ground down to eliminate the original signs and a new inscription has replaced this portion of the old one. The substituted signs have a fresher look than those on the base, but this contrast is less apparent on the upper portion of the backpillar since the signs there have been scraped out to reduce the contrast. Otherwise the signs at the top of the backpillar correspond to the style of those on the front. There are, however, some slight alterations in the group  $\sum_{i=1}^{n} a$  at the upper right.

Although the secondary inscription is more or less suited to the lines above it, it has produced a lack of continuity between the first and second column of each pair. This problem is indicated, in the following translation, by a series of dots and by a partial restoration of the original context, while the whole of the secondary inscription is distinguished by italics:

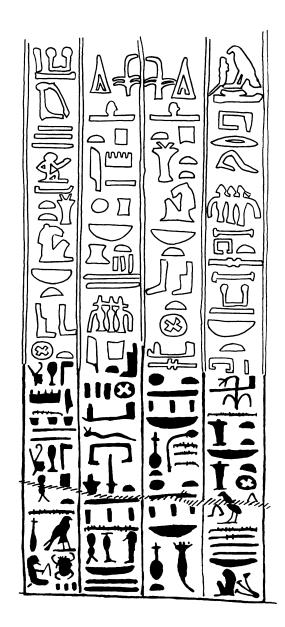
(Left, 1) An offering that the king gives (to) Amun<sup>c</sup> Lord of Thrones-of-the-Two-Lands, Presiding over Karnak, that he may give funerary offerings to One who is Praised of the Lord of the Two Lands<sup>d</sup> ... (2) ... [to] the spirit of the w<sup>c</sup>b-priest of Bastet, Mistress of Bubastis, the Priest of Amun (Lord) of Thrones-of-the-Two-Lands, the priest of Ptah, Na-nefer-kheperu.<sup>e</sup>





FIGURE 42 Inscription on base of MMA 62.186

FIGURE 43 Inscription on backpillar of MMA 62.186



(Right, 1) An offering that the king gives (to) Bastet, Mistress of Bubastis, that she may give everything goodly and pure, everything goodly and sweet<sup>1</sup>... (2)... and the pleasant [breath] that goes forth from her,<sup>§</sup> to the Mistress of the House, the Chantress of Bastet, Mistress of Bubastis, Iw-nes-neb-tawy,<sup>h</sup> justified.

#### Comments on the inscriptions

(a) Ranke, PNI, p. 51 (14); attested in the Middle Kingdom and Dyn. XVIII.

#### (b) Not attested in PN.

(c) Although the surface is slightly pitted in this area, there does not seem to have been any attempt to erase the name of Amun. The reversal of the divine name may be intended to make it face the titles and name of the deceased recipient of offerings; at all events the reversal is evidently intentional, for it departs from the usual rightward orientation. This reversal would in turn imply that the goddess Bastet faces him too.<sup>108</sup>

(d) The epithet *hsy* is common (*Wb*. III, 156 [7]), although I do not have a parallel for *nb t3wy* in this phrase, nor can I cite another example of the determinative ]. This must be the equivalent of  $\square$ , which, again according to *Wb*., occurs after the New Kingdom; it derives from *hsy* as a designation of temple statues (*Wb*. III, 157).

(e) Not attested in *PN*. It is theoretically possible, but not very probable, that the name is to be read *Ny-Hr-nfr-hprw*, in which case it would refer to the Horus Nefer-kheperu, Nubkheperre Intef VII of the Seventeenth Dynasty. And if the first element is  $n_j$ , it is equally difficult to recognize a reference to either of the two Eighteenth Dynasty kings who called themselves *Nfr-hprw-R*<sup>4</sup>, as Tuthmosis III sometimes did, following his nomen, or Amenophis IV, as his prenomen, although one Amarna name,  $\stackrel{\dagger}{\oplus} \stackrel{\bigcirc}{\to} \stackrel{\frown}{=} \stackrel{\textcircled{\oplus}}{=} 109$  apparently refers to the name of Amenophis IV as *Nfr*- hpr(w) (Ranke, PN I, 199 [12]), and one might perhaps compare  $\mathbb{N}^{\uparrow} \stackrel{\circ}{\downarrow} \stackrel{\circ}{\odot}$  which Ranke interprets as  $N_{j-n}fr$ -[nfr-?] $ib-r^{\circ}$  (PN I, 169 [25]). But, as Ranke notes in PN II, 82, names of this pattern ( $n_{j}$ +adjectival verb) did not come into use until the Twenty-second Dynasty.

(f) Barta, Aufbau, pp. 90, 175, 213 (Bitte 15a) quotes three examples dating to the early Eighteenth Dynasty, the Second Intermediate Period, and the Graeco-Roman Period, for iht nbt nfrt w'bt iht nbt ndmt bnrt. Several other similar examples may be cited from New Kingdom stelae in the Cairo Museum: CG 34101, 34102, 34117, 34168, all of which combine nfrt w'bt on the one hand and ndmt bnrt on the other. Some Eighteenth Dynasty examples also combine *iht* nbt nfrt w'bt and iht nbt nfrt bnrt, as in the present case (Davies, Griffith Studies, pls. 39, 40; and Menkheperrasonb, pl. 29), and another has ht nbt nfrt ndmt . . . ht nbt nfrt w'bt (CG 42138), but none shows the sequence ht nfrt bnrt ndmt and only one example has come to light (Barta, Aufbau, p. 197) that shows the sequence bnrt ndmt instead of ndmt bnrt.

(g) Since ndmt bnrt is the normal sequence when these two words occur together (see preceding comment), it does not seem likely that bnrt ndmt is to be read here, and it is even more improbable that this combination would follow nfrt. Furthermore both ndm and the following participle pri lack a feminine ending. Although pri might nonetheless refer to ht nfrt (as in CG 605 and J. E. Quibell, Excavations at Saqqara [1908-10], pl. 86 [1]), prrt is the expected form. It is therefore virtually certain that ndm pri belongs to the common formula <u>t</u><sub>3</sub>w ndm pri hnt.s (or hnt. f, if the divinity is masculine); cf. Barta, Aufbau, pp. 116 (Bitte 78a), 146 (78b, 79b), 165 (78a), where pri m (or pri m hnt) sometimes replaces pri hnt.<sup>110</sup> Note also the reversal of the feet in  $\subseteq^{\square} \land$ , which is probably not accidental since it occurs in a number of other cases,<sup>111</sup> one of which involves the same phrase:

<sup>108.</sup> Some analogous examples will be found in my forthcoming *The Orientation of Egyptian Hieroglyphs*, §25.

<sup>109.</sup> Ranke, referring to Bouriant et al., Culte d'Atonou, p. 79, also gives the writing  $\frac{1}{2}, \frac{4}{3}, \frac{6}{3}, \frac{6}{3}$ , but I can find no evidence of this.

<sup>110.</sup> Presumably the meaning is the same in both cases (compare Wb. III, 303); I doubt that Barta can be right in

translating pri hnt.s as "die vor ihr hervorkommt." For further examples see BM 1513 (*Hieroglyphic Texts* V, pl. 29); Quibell, Ramesseum, pl. 27 (1), which has m hnt. f; CG 42121; Tylor and Griffith, Paheri, pl. 1 (left). All of them invoke "his (the god's) pleasant breath which comes forth from him" (13w.fndm pri hnt[.f]).

<sup>111.</sup> The evidence will be presented in *The Orientation of Egyptian Hieroglyphs*, §40.

 $\forall \square \land \square \land \square = (Petrie, Gizeh and Rifeh, pls. 27B)$ [bottom left], 27N [1]).

(h) Not attested in Ranke, PN; evidently  $\stackrel{\frown}{=}$  is a mistake for  $\stackrel{\frown}{=}$ .

#### Conclusions

In view of the lack of continuity between the first and second column in each half of this inscription, it is unlikely that the reinscribed portion is the work of an ancient Egyptian, and this conclusion is reinforced by several other considerations. In the first place the alterations do not seem to have served any practical purpose; they can hardly be regarded as a correction or restoration,<sup>112</sup> and it is equally difficult to believe that they represent a later usurpation, for in that case one would expect the names on the base of the statue to have been changed; it is those inscriptions, after all, that most directly "determine" the statue's identity. Even if one makes the unlikely assumption that a later individual merely wished to share the statue with the original owner by usurping the funerary formulae on the back, he would have applied the changes to the titles and names alone and not to an entire segment of the inscription that, on the one hand, leaves some of the original titles unaltered and, on the other hand, includes portions of the funerary formulae that are not only irrelevant to the presumed change of ownership but actually, as a result of the changes, have become less intelligible.

The only other purpose that these changes could have served is a prosthetic one. Presumably the lower part of the inscription was more scarred and pitted than the upper portion, and this may have been the point of impact when the statue was broken into two pieces, although a corner has also been detached from the left front corner of the base. Once the surface had been smoothed down, the "restorer" had to complete the inscription by adding new signs. He did not—as in another case which I have discussed elsewhere<sup>113</sup> attempt to fill in the space with hieroglyphs imitated from the original; instead he copied another ancient text that was somewhat different in style<sup>114</sup> but must otherwise have seemed to have filled the need felicitously. The most conspicuous stylistic difference is the form of the sign —, which is written — or — in the upper part of the four columns and on the base, and is — in all four columns within the reworked area. Other differences appear in the phrases identifying Amun and Bastet:

In both cases the lower part of the inscription shows greater brevity. These points of consistency suggest that the substituted text was copied from a single inscription rather than from several sources. The copyist evidently followed the original very closely, but he did not understand the logic of the reversal in the first of the left-hand pair of columns, and reversed the remaining signs so that their orientation was the same. Obviously the copy cannot be trusted in every detail, and one would like to verify some of the orthographic peculiarities, such as  $\overline{012}$ ,  $\overline{012}$ , and  $\overline{\bigcirc}$  (the last presumably representing *nb* t<sub>3wy</sub>).

If the presumably modern restorer worked from a single inscription and if—as the woman's title indicates—the second inscription came from Bubastis, it is interesting that the man is a priest of Amun and Ptah, for these gods, however important in their own right, are not known to have had a cult in that city.<sup>115</sup> A relatively late date is suggested by as a writing of  $m_3$ 't-hrw after the woman's name. According to W. Erichsen's study of the epithet in question, the use of is first attested in the Amarna Period, but does not

<sup>112.</sup> The restoration of extensive portions of the texts on a statue is attested by CG 42114. A stela of the same person— Senmut—was similarly effaced and extensively restored: Helck,  $\dot{AZ}$  85 (1960), pp. 23-34, believes that the erasures were made by the Atenists and the restorations by Horemheb or Seti I. That explanation is excluded in the present case because the name of Amun was left intact.

<sup>113. &</sup>quot;The inscription of *In-it. f*, born of *Ifi*," *JNES* 19 (1960), pp. 258–260.

<sup>114.</sup> Cf. A. Wiedemann, *PSBA* 33 (1911) pp. 167–168, concerning a statue in Athens the inscription of which is a forgery "copied from a genuine inscription which is unknown to us."

<sup>115.</sup> For their mention there see Labib Habachi, *Tell Basta*, pp. 111–117; it is assumed that, in most cases, the evidence involves monuments brought from other places.

become common until the Nineteenth Dynasty and later.<sup>116</sup> The man's name, if correctly read as Nanefer-kheperu, is even more distinctly later, since names of this pattern did not become current until the Twenty-second Dynasty. The writing of *hsy* as  $\{1, 2\}$  also suggests this late a date.<sup>117</sup>

116. Acta Orientalia 6 (1928) p. 272; Spiegelberg, Rec. trav. 26 (1904) p. 49, had already come to very nearly the same conclusion. 117. Another relatively late feature is the writing of  $\Delta^{\mathcal{D}A}$  in the name *Iw-n.s-nb-t.3wy*, which does not seem to become common before Dyn. XIX (e.g., CG 561, 606). The form of — is occasionally attested after the New Kingdom: relatively late examples are to be found in Petrie, Abydos III, pl. 25 (left), and Randall-Maciver and Mace, El Amrah and Abydos, pl. 31/D7, the latter dating to the Libyan Period. But it is also known earlier, in the Middle Kingdom (Petrie, Diospolis Parva, pl. 27, bottom right; Steckeweh, Die Fürstengräber von Qâw, pl. 14 [a]; Carnarvon and Carter, Five Years' Explorations at Thebes, pl. 49 [MMA 26.7.1438]), and Second Intermediate Period (Petrie, Koptos, pl. 8 [Dyn. 17]; BM 40958 [Hieroglyphic Texts V, pl. 19]); also in the Old Kingdom, e.g., CG 1495 and Junker, Giza IV, pls. 4–8.

#### SOURCES ABBREVIATED

AJA—American Journal of Archaeology

AJSL—American Journal of Semitic Languages

ASAE—Annales du Service des Antiquités de l'Égypte

ÄZ—Zeitschrift für Ägyptische Sprache und Altertumskunde

BIFAO—Bulletin de l'Institut Français d'Archéologie Orientale

BiOr-Bibliotheca Orientalis

BM—British Museum

BMMA—Bulletin of the Metropolitan Museum of Art

CG+number—Monuments in the Egyptian Museum, Cairo, numbers referring to Catalogue général des antiquités égyptiennes du Musée du Caire:

- CG 1-1294: Ludwig Borchardt, Statuen und Statuetten von Königen und Privatleuten I-IV (Berlin, 1911-34);
- CG 1295-1808: Ludwig Borchardt, Denkmäler des Alten Reiches I-II (Berlin, 1937-64);
- CG 20001-20780: H. O. Lange and H. Schäfer, Grab- und Denksteine der Mittleren Reichs I-IV (Berlin, 1902-25);
- CG 23001-23256: Ahmed Kamal, Tables d'offrandes I-II (Cairo, 1906-09);
- CG 42001-42191: Georges Legrain, Statues et statuettes de rois et de particuliers I-II (Cairo, 1906-09)

- CT-A. de Buck, The Egyptian Coffin Texts, 7 vols. (Oriental Institute Publications, Chicago, 1935-61)
- JARCE—Journal of the American Research Center in Egypt
- JEA—Journal of Egyptian Archaeology
- JNES-Journal of Near Eastern Studies
- LD-C. R. Lepsius, Denkmaeler aus Aegypten und Aethiopien (Berlin, n.d.)
- MDIK—Mitteilungen des Deutschen Archäologischen Instituts Abteilung Kairo
- MMA—Metropolitan Museum of Art
- MM7-Metropolitan Museum Journal
- PSBA—Proceedings of the Society of Biblical Archaeology
- Ranke, PN- H. Ranke, Die ägyptischen Personennamen (Glückstadt, 1935, [1952])

RdE-Revue d'Égyptologie

- Rec. trav.—Recueil de travaux relatifs à la philologie et à l'archéologie égyptiennes et assyriennes
- ZDMG-Zeitschrift der Deutschen Morgenländischen Gesellschaft

## The Iron Age at Dinkha Tepe, Iran

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TO THE MEMORY OF

Rodney S. Young, 1907-1974

IN 1966 THE UNIVERSITY MUSEUM of the University of Pennsylvania and The Metropolitan Museum of Art, working together as the Hasanlu Project, began excavations at Dinkha Tepe, a site in the Ushnu valley, near Lake Rezaiyeh (Urmia), in northwestern Iran. Background information about the site and the reasons for excavating there, as well as a preliminary report on the 1966 season, were presented in 1968 (Muscarella 1968, pp. 187–196). The reader is referred to that report to avoid repetition of the information here.<sup>1</sup> In 1968 a second campaign was conducted at Dinkha Tepe. The field work was mainly concerned with Bronze Age re-

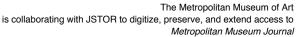
1. The staff for the 1966 campaign is listed in Muscarella 1968, p. 187. In 1968 the staff consisted of the writer and Robert H. Dyson, Jr., as Co-Directors, Christopher Hamlin, Carol Hamlin, Matthew Stolper, Elizabeth Stone, William Sumner, and Harvey Weiss as site supervisors, and Marie Sherman Parsons as Registrar. Most of the drawings were made by Mary Voigt and Maude de Schauensee (1966). John Alden and Elizabeth Hopkins inked the drawings; their expenses were paid for by a generous grant from the Schimmel Foundation. I wish to thank all the individuals mentioned as well as the Schimmel Foundation for their cooperation in the production of this report. I also wish to thank Robert H. Dyson, Jr., Louis D. Levine, and T. Cuyler Young, Jr., for discussions and opinions exchanged over the years about Iron Age problems, and for reading this report in manuscript. Of course, I alone assume responsibility for the format and the conclusions expressed, and for not always following their advice.

mains, but part of an Iron II structure was excavated and is discussed below.

It will be recalled from the earlier report that an Iron Age cemetery, containing burials of both the Iron I and II periods, was discovered, that the cemetery overlay Bronze Age strata, and that there were no architectural or burial remains of the Iron III period. A terminology for the levels was established in which the Iron II period was called Dinkha II (counting from the top down; Dinkha I was the Islamic period), the Iron I period, Dinkha III, and the Bronze Age strata, Dinkha IV.

This paper first reports on the Dinkha III cemetery, its burials and their contents, and its relations with contemporary sites. Following this is a report and discussion on the Dinkha II architecture and burials. No attempt is made here to write a history of the Iron Age or a definitive summary of that period. Not enough information is available at present and several good summaries already exist (Dyson 1964a, pp. 34-40; 1965, pp. 195-213; 1968a, pp. 29-32; Young 1965, pp. 55-59, 62-68, 70-83; 1967, pp. 22-29; Burney, Lang 1972, pp. 113-126). Rather, the emphasis here is on Dinkha Tepe itself.

The mound was first divided into large grid-squares one hundred meters to a side, and these were then subdivided when necessary into ten-meter excavation





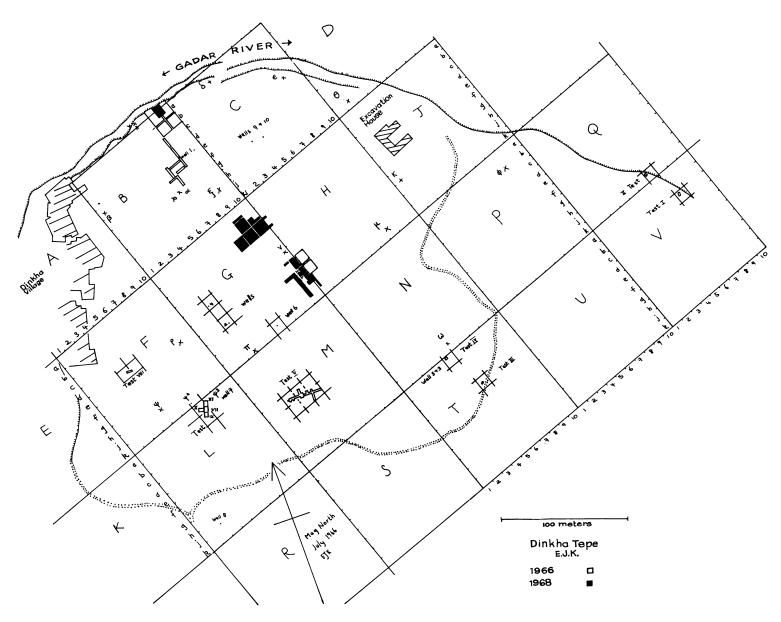


FIGURE I Plan of excavation trenches

squares. In addition to these squares, shorter test trenches and wells were opened at various parts of the mound (Figure 1; Stein 1940, p. 369, fig. 23 for a contour plan).

#### DINKHA III PERIOD

One hundred and five burials were excavated on the mound. Thirty-three of these are of the Dinkha III or

Iron Age I period (Muscarella 1968, p. 189, incorrectly listed twenty-six; see Table I). The majority of the burials were excavated in the four northern excavation squares, the main cemetery area of the mound, but some were found in the south and west. Whether these latter burials were originally thinly scattered away from the main center at the north, or whether they were part of a regular cemetery area encircling the mound is not known, as extensive excavations were not conducted in these areas. If there was a settlement on the mound that belonged to Dinka III it could have been in the center and eastern sections, but no architectural remains attributable to this period were recognized.

The dead were buried in individual graves with no markers; the brick tombs generally opened to the east. Men, women,<sup>2</sup> and children were buried in the same area and apparently given the same burial rites. All the burials of Periods III and II were placed within pits, which were then refilled; in a few cases we were able to recognize the pit lines (Muscarella 1968, p. 190, fig. 7).

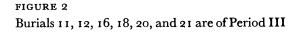
Dinkha III burials were recognized primarily by the associated grave goods, artifacts quite familiar to us from the Hasanlu excavations. In general, the burials were stratigraphically lower in the fill than the later Dinkha II burials; in some cases they were in the same stratum or were only slightly lower than the later burials. Some Dinkha III burials were recognized as being lower in the fill than others of the same period and these *might* be early—although the possibility exists that some pits were dug deeper than others (but compare TT VII, below). In a few cases the pottery types of these deep burials seem to support a conclusion for a suggested earlier deposition (see below).

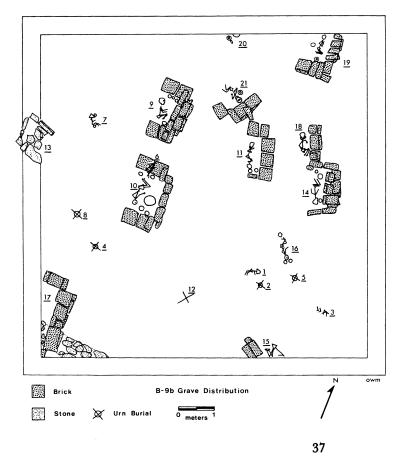
Twenty-three of the burials were simple inhumations while ten were associated with built brick tombs. Of the latter, four consisted of a horizontal row of mud bricks to one side of which was placed the body. Three tombs (B9a,  $\beta$ 22, B9b,  $\beta$ 11, B10b,  $\beta$ 13) consisted of a horizontal row of mud bricks with a projection or arm at each end, forming a three-sided tomb that enclosed the body and goods; one of these tombs (B9a,  $\beta$ 22) had a mudbrick floor. One tomb had an offset at each corner of the arms (Figure 2:21, partly excavated; and Muscarella 1968, fig. 2), a feature common in the next period; two tombs were disturbed. The main horizontal wall had two to four courses and the arms two to three courses, the latter lower than the former. The top course of the horizontal wall overlapped the grave area, often dug

2. No professional physical anthropologist examined the bones when they were excavated, and therefore it is not certain that the sexing was always accurate. The bones are currently being studied by Ted A. Rathbun of the University of South Carolina. For contemporary skeletal material see Rathbun's *A Study of the Physical Characteristics of the Ancient Inhabitants of Hasanlu*, Field Research Projects (Coconut Grove, Miami, Florida, 1972). deeper than the lower level of bricks, and in a few cases collapsed onto the body.

The bodies were oriented N-S or E-W, the former in the majority, and although heads faced all points of the compass, those facing E predominated. The body was placed on the back or side; legs were flexed, with three exceptions; arms were usually flexed before the face, chest, or pelvis, or placed at the sides. Eight skeletons had one arm flexed across the body while the other was bent back tightly, touching its own shoulder. No relationship with regard to age or sex seems to exist in orientation or body position (for details, Table I).

The characteristic ceramic objects of Dinkha III are the bridgeless spouted pouring vessel, never with a handle; the pedestal-base goblet with a vertical loop handle; and a flaring-sided bowl, either with a raised crescent on the interior surface—colloquially called "worm"





bowls—sometimes with holes for suspension, or the same type bowl but without the crescent. These types of vessels are classic diagnostic objects from the Iron I period. Seventeen of the thirty-three burials did not contain a spouted vessel, but nine of these had either the worm bowl or goblet; the eight others, containing only one or two vessels, were low enough in the fill to allow for a Period III designation. Not a single burial contained all three of the diagnostic vessels together (compare below, Geoy Tepe and Hajji Firuz).

Other Dinkha III shapes include deep carinated bowls, carinated jars with relatively large mouths, and basket-handled teapots. These shapes continue into Period II and by themselves are not easily distinguished into Iron I or II.

Eighty-one vessels were recorded from the Dinkha III period, eighty from the burials, one from the fill (Muscarella 1968, p. 193, fig. 17, left). Of these, fifty-six were gray, twenty-three buff,<sup>3</sup> and one was painted: thus the percentage of gray to buff is 71 percent to 29 percent. Whether the surfaces were intentionally fired to these colors by controlling the oxygen within the kilns, or whether the colors resulted fortuitously from firing to firing, or even from uneven control in a given firing, is not clear. However, the fact that in Period II buff pottery predominates might suggest that the coloring was controlled (Young 1965, p. 55).

Within the gray pottery repertory, burnished surfaces outnumbered smoothed surfaces more than two to one; only one had a matt surface. Concerning the buff pottery, of which orange predominated, twelve were smoothed, two burnished, eight matt, and one was red-slipped. About a half-dozen vessels, gray and buff, had traces of mica flakes on the surface. Most of the vessels were made of a paste that had no visible

3. Buff is a term used for the oxidizing firing that produced non-gray (reduced) surfaces. The colors of the buff pottery at Dinkha range from buff to light orange, orange, reddish-orange, and red. The problem is not significant if one realizes that the Dinkha kilns produced both reduced grays and oxidized buff colors. In the text I use the word *buff* in a general sense, for the nongray pottery, and in those particular instances where no specific color other than "buff" was registered. Surfaces are categorized macroscopically as matt (A): no luster; smoothed (B): a slight luster, with some stroke marks visible; burnished (C): stroke marks quite visible and a definite luster. These divisions grade into one another. Interior paste is categorized macroscopically as I: smallgrit inclusions of sand size; II: grit inclusions smaller than sand to inclusions; about a half-dozen had medium-sized grit, and only one (a worm bowl) was made of coarse ware. Thus, the vessels may be categorized as neither of fine nor of coarse ware, but rather what has been called common ware (Young 1965, p. 55). Note that gray and red-slipped wares, and vessels with mica flakes, occur in small amounts in the preceding Dinkha IV period.

The number of vessels placed within a burial varied from one to four, and there seems to be no connection between the number of vessels, or, indeed of burial goods in general, to inhumation or brick tomb, or to age and sex (Table I). Some of the vessels, including all types, had obviously been damaged in antiquity. But this fact did not deter their inclusion in a burial and suggests that vessels placed in a burial were the same ones normally used in the contemporary households.

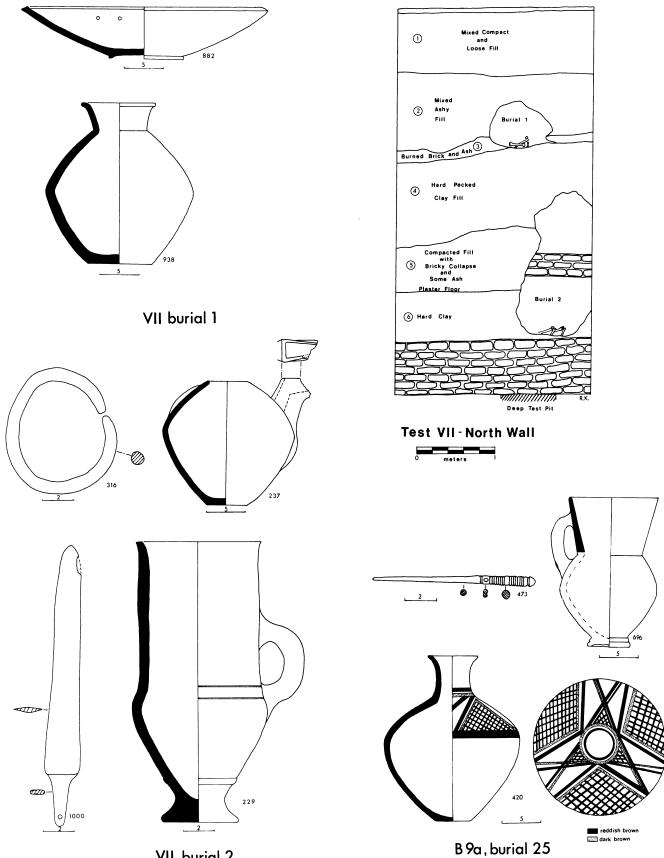
Four burials contained weapons; thirty contained jewelry, worn by men, women, and children, indicating that the dead were adorned as well as clothed. In no burial of the Dinkha III period was an iron object found.<sup>4</sup> An exception could be B10b,  $\beta$ 11, discussed below, and which I consider to belong to the Dinkha II period. Only one burial contained gold, B9a,  $\beta$ 26, and only one burial (B9a,  $\beta$ 23) a cylinder seal (Table I).

Food remains in the form of sheep/goat bones were found in only three burials, but it is quite possible that boneless meat and even liquids, all now disappeared, were placed in some burials (see B9a,  $\beta_{15}$ ).

As stated above, it was possible to recognize that a few burials were deposited earlier in time than others. To these examples we now turn. In TT VII, Grid L, a square  $2.5 \times 1.5$ m, two period III burials were discovered, and by a stroke of luck one had been deposited directly over the other (Figure 3).  $\beta$ 1, the later, found in stratum 2, was an inhumation of a young adult female

no grit inclusions visible; and III: coarse, with grit inclusions larger than sand and visible. For convenience I use the abbreviated forms, e.g., IA, IIB, when describing a vessel in the text. Next to each field number referred to in the text is a letter that gives the present location of the object: M: Metropolitan Museum of Art; P: University Museum, Philadelphia; T: Teheran Museum; D: discarded in the field.

<sup>4.</sup> When a metal object is mentioned in the Dinkha III section it is bronze (not analyzed), except for the gold earrings; and when a spouted vessel or goblet is mentioned, it is a bridgeless spout and a pedestal-base goblet. In the Dinkha II section a spouted vessel always means a bridged one.



VII burial 2



FIGURE 4 Test trench VII, burial 2



FIGURE 5 Painted vessel from B9a, burial 25

placed in an extended position on the R side, oriented N-S, head to N. The body had a pin, plain loop rings, bracelets, and a torque,<sup>5</sup> (all corroded, so discarded), a spouted vessel (933P, like 234 in Figure 16), a bowl with two holes (882D), and a carinated jar (938T), all gray IIC ware.

In stratum 6, but apparently cut from 4, was found  $\beta_2$  (Figures 3 and 4). This was a young adult male in an extended position with the legs slightly flexed, E-W, head to E, placed in a brick tomb (whether the tomb had arms or not we do not know). The skeleton had a plain penannular bracelet on the R wrist (316P), and a tanged dagger, with wood remains on the tang and a wood peg still in the tang hole (1000P), placed behind the head. In the same position was a red-orange IIB spouted vessel with a missing tip (237P), and a tall gray IIB goblet (229P). No other goblet found at Dinkha has the same shape, with straight walls, nor does any other spouted vessel have the same body structure, with relatively tall and straight inner vertical section of the

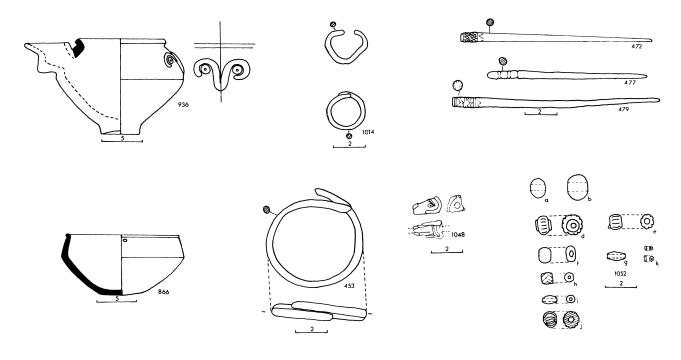
5. By torque I mean a penannular necklace, at Dinkha made from one piece of metal, and not necessarily twisted. In two burials, both of Period III, B9a,  $\beta$ 22, B9b,  $\beta$ 16, originally penannular necklaces had their ends tied together, I have not considered them as true torques. spout—except a vessel from B9a,  $\beta 24$  (Figure 6, 936) also early. The vessel also lacks a "beard" below the spout, and has a narrow mouth. Doubtless this is one of the earliest Iron Age burials at Dinkha.

In B9a a number of period III—but no II—burials were excavated in strata 5a and 6; six burials were also found below these in stratum 7, cut into the Bronze Age deposit. These latter could be early period III burials. One of these burials stands out from the rest because it contained the only painted vessel from the Iron Age at Dinkha.

Bga,  $\beta$ 25 contained the inhumation of a mature adult male flexed and placed on his back, E-W, head to E. He wore a toggle pin with a finely decorated top (Figure 3, 473P), and a necklace of paste beads (1006T); a gray IIC goblet (696T) and a polychrome jar (420T) were the other grave goods. The latter has a cream surface overpainted on the upper body with reddish brown hatched triangles outlined with dark brown lines (Figure 5).

Some of the other possibly early burials in B9a:

 $\beta_{23}$ : Male, mature adult, inhumation, N-S, head S, skeleton poorly preserved in balk. Furniture (Figure 6): two bracelets with overlapping tapered ends (452T, 996D); a bone pendant decorated with drilled holes



B 9a, burial 24

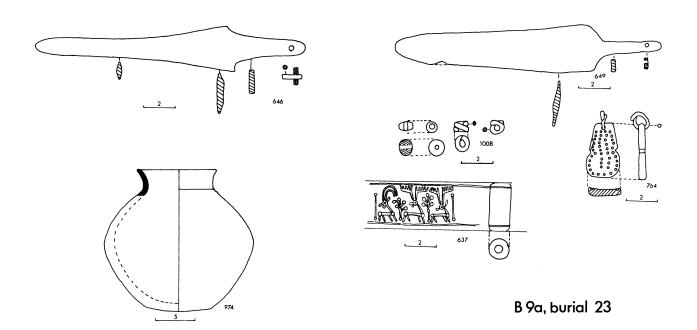
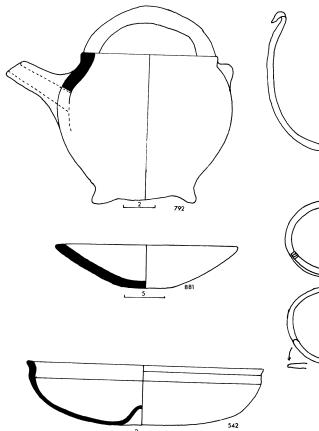
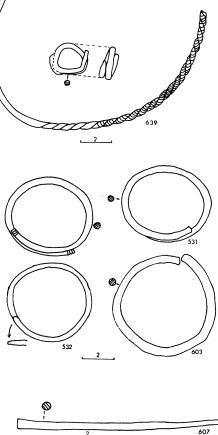
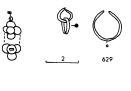
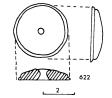


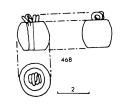
figure 6

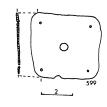




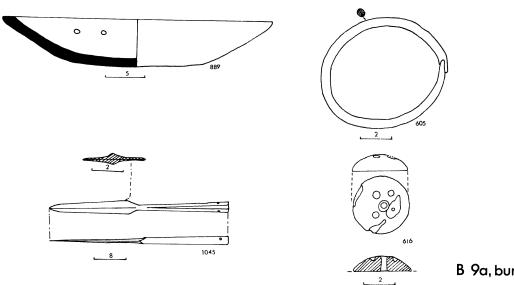








B**9**a, burial 26



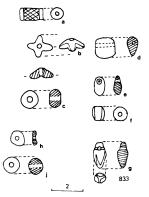




FIGURE 7

and held by a bronze loop (764T); a plain ring (D); various paste beads colored blue and white, some brown stone beads, and a bronze coil (1008P); two tanged daggers (646T, 649T) placed in a jar, 974; a glazed faience cylinder seal of Mitannian design, the ends of which are beveled, perhaps indicating an original holder (information from Edith Porada): a goat or ibex and two stags move right, but turn their heads left; stylized plants divide them (637T). Also one plain squat gray IIC spouted vessel with a ridge at the back (932T), and a gray IIC jar (974D), both at the head, and a gray IIB bowl with two holes (892T), at the feet.

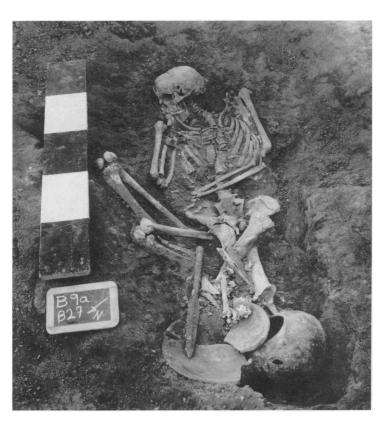
 $\beta$ 24: Mature adult, inhumation, flexed on L side, N-S, head S. Furniture (Figure 6): a bracelet with overlapping ends on R wrist (453T); two plain rings (1014P); one pin with incised top on L shoulder (472T), another on R shoulder (479P), and one with a knobbed head on R arm (477P); a needle by the wrists (D); a white ram's head bead with a blue band (1048M; Muscarella 1968, p. 194, fig. 19);<sup>6</sup> scores of various types of beads by the neck: 1052a, e, f, h, i, j, k, paste; 1052b, copper; 1052d, g, Egyptian blue (T). Two vessels were found slightly below the skeleton: a buff, matt, spouted vessel with a relatively high foot, a short, squat spout, and a stylized "eye" or horn motif in relief at the rear (936T); and a buff, matt, deep, carinated bowl with one hole below the rim (866T).

β26: Child, inhumation, flexed on L side, N-S, head N (Muscarella 1968, p. 192, fig. 16). Furniture (Figure 7): two anklets on L foot (603P for one), the other, 536T, is of the same type as bracelet 532, top; two anklets on R foot (534T, 535T), same types as the preceding; two bracelets with overlapping ends on R wrist (532P, top and bottom); two on L wrist (531T); a plain ring with overlapping ends (600T) on L hand; a bronze bead at throat (468T); two plain pins with blunt tops near throat (478T, 607T); a needle (606D); a torque of twisted wire and bent-back ends and with a twisted loop attached (639P); a bronze plaque pierced with a large central and four smaller corner holes (599P); broken plain rings found by the teeth (D); two gold earrings consisting of a cluster of hollow balls with a loop: one was found by the left leg, the other under the skull; associated with the earrings are gold loops (629T); 76 flattened carnelian beads, 21 similar-shaped

6. Tests on the bead were made by J. H. Frantz and Suzanne Heim in the Research Laboratory of the Metropolitan Museum of Art. The tests show that the bead is not glass, leaving the following possibilities: a glazed soft-stone, faience, or glazed earthenware. Only the surface and the inlay appear to be vitreous. Compare A. von Saldern, "Other Mesopotamian Glass Vessels (1500-600 B.C.)," in Glass and Glassmaking in Ancient Mesopotamia, ed. A. Leo Oppenheim (New York, 1970), p. 217. copper ones, plus 150 round paste beads; and one calcite disc (622T), at the back of the neck. Vessels included a bronze omphalos (542T) by the chin; a broken gray burnished bowl (881D); a broken, buff, smoothed basket-handled teapot with mica flecks (792T), and a broken, gray-brown burnished spouted vessel (922D), same type as 234 in Figure 16), by the feet.

 $\beta_{27}$ : Male, mature adult, inhumation, flexed on back, N-S, head S. Right arm bent back to touch its own shoulder (Figure 8). Furniture (Figure 7): plain bracelet with overlapping tapered ends (605D) on R wrist; a stone button with drilled designs (616P) by L foot; assorted beads by throat: 833a, coarse faience; b, fine faience (glass?); c, paste; d, e, f, carnelian; g, a lotus-bud shape, fine faience; h, j, glass (P); also, a socketed spear on L leg so that the shaft must have passed over the body (1045T; compare Dinkha II burials B9a,  $\beta_9$ , and B10a,  $\beta_{12}$ , Figures 24, 36). At the feet, a dark gray burnished spouted vessel (921D, same as 234 in Figure 16), and a gray IIC worm bowl with two holes (889P).

FIGURE 8 B9a, burial 27



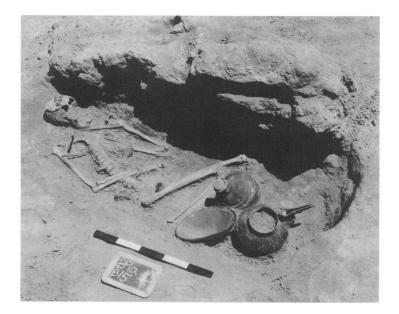


FIGURE 9 B9a, burial 15

We now proceed to some of the other Dinkha III burials; these do not allow themselves to be distinguished as early or late on the basis of stratigraphy or artifact comparisons. Space limitations forbid publication of all the burials, but no important features of the period will be omitted (see Table I). The burials are presented according to their grid positions:

B9a,  $\beta_{15}$ : Female (?), mature adult, flexed, on back, N-S, head N, in horizontal brick tomb (Figure 9). Furniture: one round bracelet with overlapping ends on R arm (307P), two on L (308T, 354D); two plain rings with overlapping ends, one on R hand (595T), one on L (601P); two pins with simple knobbed heads at throat (Figure 52, 400P), one was found sticking up in the fill; another pin with one knob by L arm and another by R (Figure 52, 385T); a needle over the chest (460P); paste and copper beads (301T); and five bronze buttons found on the skull probably from a cap or diadem (617P; B8e, \$8, a Period III tomb of a mature adult, also had five bronze buttons on the head. The buttons as shown in the photograph may be in their original position; there is no comment in the field notes to the contrary). At the feet, a highly burnished gray spouted vessel with ridges uniformly arranged around the body (334M; Muscarella 1968, p. 193, fig. 17, top), a gray IIB bowl with two holes (358T), and a gray IIB jar with two ridges at mid-body (404T) sealed with a stone; this vessel probably held some liquid.

B9a,  $\beta$ 17: Mature adult, inhumation, flexed on L side, N-S, head to N; R arm missing, L bent back onto its own shoulder (Figure 10). Furniture (Figure 11): a flattened bracelet with overlapping ends on L (310T) and R (309P) wrists; an anklet with overlapping ends on each foot (539T, 540P); a plain toggle pin at L shoulder (326D), fragments of another in the fill; a ring of twisted wire with overlapping ends on L hand with cloth impression (466T); a needle in the fill, with top bent back to form the hole (325D); a plain torque on the neck (1038D). Touching the forehead was a gray IIB spouted vessel (337T); by the feet, a broken gray IIC bowl with two holes (893P), and a gray IIC carinated jar (903D).

B9a,  $\beta$ 19: Child, inhumation, flexed on R side, N-S, head S; L arm flexed across body, R bent back onto its own shoulder. Furniture (Figure 12): a plain, not quite round bracelet with overlapping tapered ends (541T), on R wrist; a plain ring, also with overlapping tapered ends (462D), on R hand. A buff IB tripod bowl, feet of

> FIGURE 10 B9a, burial 17



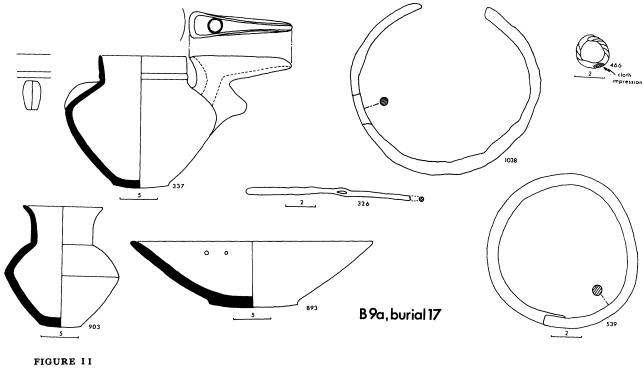
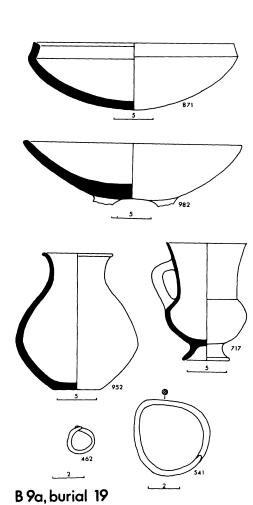


FIGURE 12

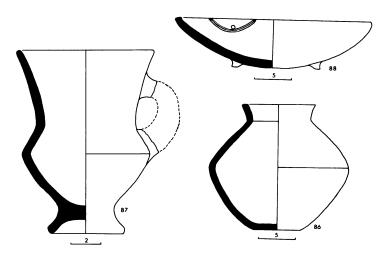
which were broken (982D), resting on a gray burnished jar (952D), at the forehead; at the feet, a buff smoothed carinated bowl (871D) and a gray burnished goblet (717T).

B9b,  $\beta$ 11: Child, flexed on L side, N-S, head N; in brick tomb with projecting arms (Figure 2; Levine 1971, p. 40, top); the fill in the grave was packed in very hard. Furniture (Figure 13): a plain flat band bracelet with overlapping ends (369P); a plain round bracelet with overlapping tapered ends on R wrist (319D), two on L (320P; like Figure 7, 532); two plain loop earrings (?) (351D); a bronze spiral object (bead? pendant?) at the neck (618P); two plain flattened anklets with overlapping ends on L foot (311P), two on R (312D); a shell bead necklace (299P); and a plain torque (538T). Placed at the feet: a gray IIB spouted vessel decorated with ridges around the upper body (84T), an orange IIB carinated jar (83T), and an orange-red IIB bowl (85P).

B9b,  $\beta$ 12: Child, inhumation, flexed on the back, N-S, head S (Muscarella 1968, p. 192, fig. 15). Furniture (Figure 13): a plain bracelet with overlapping ends (350D) on R wrist, the sole jewelry. Covering the head was a gray IIB tripod worm bowl with mica flecks, and one hole (88M; Muscarella 1968, p. 193, fig. 17, right), in which were three astragals; by the feet was a gray IIB



B 9b, burial II



B9b, burial 12

goblet, missing the handle (87P), and an orange IIB carinated jar (86T).

B9b,  $\beta$ 16: Young adult, inhumation, flexed on R side, NE-SW, head S (Figure 2). Furniture (Figure 14): a plain round penannular bracelet on R wrist (300D); a



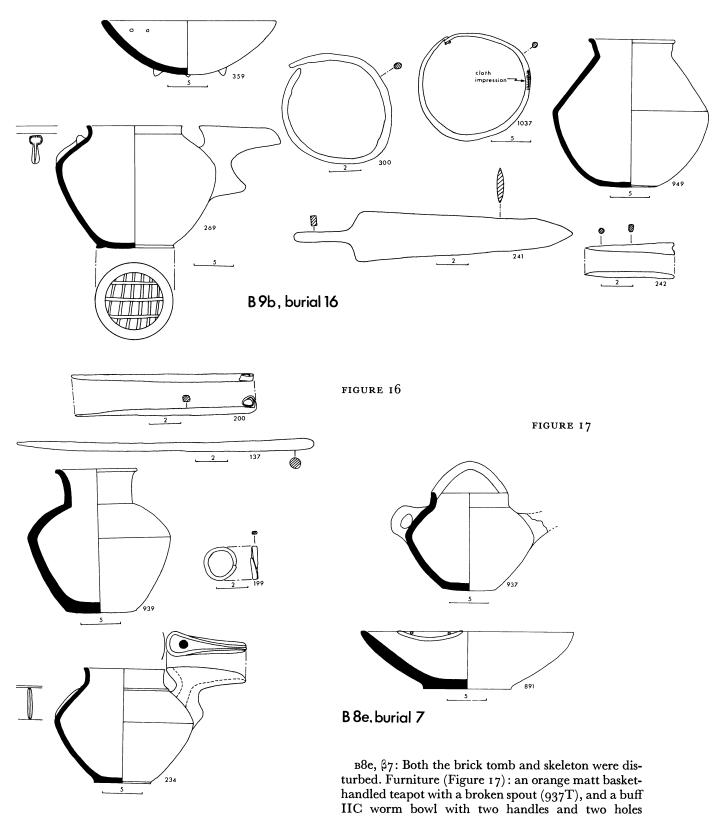
OPPOSITE: FIGURE 14

bronze necklace with its hooked ends linked together (therefore not a true torque), with cloth impressions, at the neck (1037T); a necklace of paste disc beads (301P); a broken bone awl in the fill (242T); and a tanged dagger in the fill (241P). At the head was a gray IIB spouted vessel with a hatched design on the base, exhibiting mica flecks (269T), and a gray smoothed jar, also exhibiting mica flecks (949D); at the feet was a gray IIC tripod bowl with two holes (359T).

BIOD,  $\beta$ IO: Female, mature adult, flexed tightly on L side, N-S, head N; in horizontal brick tomb (Figure I5; Muscarella 1968, p. 189, fig. 2). Furniture (Figure I6): a plain pin at L and R shoulder (138P, 137T); a pin, square in section, with the top twisted into a loop, at R shoulder (200P); a needle at the chest (198T); plain loop penannular earrings (148T); a flattened ring with tapering, overlapping ends on R hand (199P); fifty small round paste and bronze beads at the neck (896T). Clustered at the feet: a gray IIB-C spouted vessel (234P), a gray burnished carinated jar (939P), and a broken red-slipped worm bowl with two holes (357P); animal bones were found in the bowl.

FIGURE 15 B10b, burial 10





(891D). Only these two vessels were found.

B 10b, burial 10

## DINKHA III AND HASANLU V

Not enough material from Hasanlu V has yet been published to permit a comprehensive comparison of the material from both sites. As more Hasanlu material becomes available we will no doubt recognize more parallels and connections than are given here.

The sites are about fifteen miles apart, separated by ridges, but with no impediments to travelers from one site to the other. That travelers, merchants, and perhaps potters and other craftsmen did indeed travel freely and often back and forth is documented by the obvious strong ties between the sites, evidenced by the material culture that was basically the same in many cases, and very close in others (Muscarella 1968, pp. 189, 194). And not only does this closeness obtain in the Iron I period, but, as will be seen, it continued throughout the succeeding Iron II period. Differences did in fact exist, but collectively they cannot alter the suggestion that there was a basic identity of culture at Hasanlu and Dinkha.

BURIALS: Both at Hasanlu and at Dinkha the dead were usually buried in an extramural cemetery in a flexed position with no special orientation. Similar types of pottery, bronze jewelry, and parts of animals for food were deposited in the graves (Dyson 1965, p. 196; 1967, p. 2957; Stein 1940, pp. 397–404). At Dinkha, however, some of the burials were placed in mud-brick tombs, a feature not recorded at Hasanlu, where simple inhumations were the rule. Also, seven of the Dinkha III burials contained torques; at Hasanlu only some Period IV graves contained torques; none were found in Period V.

At least one Hasanlu V burial contained a skeleton that held a vessel in its hand (Stein 1940, p. 402); one burial at Dinkha (Muscarella 1968, p. 192, fig. 15) held a bowl that was placed on its chest.

POTTERY: The Hasanlu V wares were characterized by burnished or smoothed gray and buff surfaces, including red-slipped pottery; but whereas at Hasanlu (in both Periods IV and V) buff surfaces predominated over gray by about 60 percent to 40 percent, at Dinkha III gray surfaces predominated (see above; compare Dinkha II below; Dyson 1965, p. 198; Young 1965, pp. 55, 57; Stein 1940, pp. 401–402). Rare examples of patterned burnished vessels occur at Hasanlu V, but do not occur in the graves of Dinkha III (two such sherds were found in the fill of the lowest Iron Age trash).

Painted pottery was rare at Hasanlu V but occurs in the form of black or red-brown bands on a buff ground (Dyson 1964a, pp. 36–37, fig. 3:3, 6; Young 1965, pp. 55, 57, 67, fig. 8, 70 ff.; these seem to be rare examples of continuity from the Bronze Age). A remarkable and close parallel to the only painted vessel found at Dinkha (Figures 3, 5), was excavated by Stein at Hasanlu in a Period V burial (Stein 1940, p. 401, fig. 110, pls. xxiv, 3, xxxi, 8), neatly adding to the evidence for strong contacts between the sites.

Bridgeless spouted vessels, pedestal-base goblets, worm bowls, jars, and carinated bowls are all recorded at Hasanlu (Dyson 1962, p. 5, fig. 4; 1964a, pp. 36–39, fig. 3; 1965, pp. 195–196, fig. 17; Young 1965, pp. 57, 70–72, 67, fig. 8). But whereas at Hasanlu V no spouted vessels are reported from burials—they occur only on the mound—at Dinkha they were found in burials. Dyson (1965 p. 196) originally suggested that the presence of spouted vessels in Hasanlu IV graves, and also at Geoy Tepe, was a late development; the Dinkha evidence contradicts this suggestion as a general rule.

At least one example of a bowl with a eye/horn motif seen in Figure 6, and at least one example of a baskethandled teapot, both unpublished (but see Stein 1940, pl. XXIV, 1), occur at Hasanlu V. But bowls with vertically pierced handles, jars with one handle, and cups like those found in Hasanlu V (Dyson 1965, fig. 13; Young 1965, pp. 72–73, fig. 11), do not occur in the Dinkha graves.

JEWELRY: The types of pins, bracelets, anklets, etc., from Hasanlu have yet to be published. We can state, however, that torques were not found in the Hasanlu V graves and that a few toggle pins were found (Dyson 1968a, p. 23).

Two Dinkha graves contained bronze buttons or studs that belonged originally to a headband, diadem, or cap (Figure 9). At Hasanlu a Period V burial (VIF,  $\beta$ 8) contained a plain bronze band, curved to fit the head and pierced at both ends, presumably for attachment to another, perishable, material. Headbands were also reported from Period IV graves at Hasanlu.

The gold earrings from B9a,  $\beta 26$  (Figure 7) are similar to gold earrings found in Hasanlu IV's Burnt Building II, attached to an ivory statuette fragment (Muscarella 1966, pp. 134–135, fig. 36). This earring has the cluster of hollow gold balls, but placed under a buttonlike form attached to a twisted gold wire. Another gold earring, consisting of hollow carinated balls in a pyramid cluster, and attached to a loop, was found at Hasanlu in 1947 (Rad, Hakemi 1950, fig. 90b). This earring is more elaborate than, but related in form to, the Dinkha earrings.

WEAPONS: Four of the Dinkha III burials contained weapons, a spear and four tanged daggers in all. In the same Period V burial at Hasanlu that contained the painted jar, Stein (1940, p. 402, pl. XXVI, 2) found a bronze spear; and Dyson (1964a, pp. 34-35, fig. 2:1) published a bronze dagger with a lappet-flanged hilt (57-129) that came from a Period V burial.

As stated above, iron was not found in any Period III burial. At Hasanlu only one iron ring was found in a Period V context (Dyson 1964a, p. 39; 1965, p. 196; 1967, p. 2957).

Two Dinkha III burials each had among the grave goods three astragals placed in a bowl. Were they from meat, or were they game pieces? There is certain evidence in Period II at Dinkha that astragal game pieces were placed in tombs (see below), but it seems to me that in these cases the astragals were probably simply the remains of meat placed as food in bowls.

## DINKHA III AND OTHER IRON I SITES

solduz: Several mounds surveyed in the vicinity of Hasanlu are reported to have Iron Age gray ware (Dyson 1965, p. 196), but it is not certain if they belong to both the Iron I and II periods (Young 1967, p. 22, note 70). One of these sites, the late neolithic or chalcolithic mound of Dalma Tepe, just south of Hasanlu, had a number of Iron I burials deposited in its upper level. One grave, Operation IV,  $\beta 2$ , contained a gray pedestal-base goblet (MMA 62.173.9; Young 1962, pp. 707-708, fig. 8), but little more can be said at present than that an Iron I extramural cemetery existed here and that there may have been a settlement somewhere in the vicinity.

In 1968 at Hajji Firuz, a neolithic mound southeast of Hasanlu, an Iron I inhumation of an adult was found (unpublished). The arms and legs were flexed, and the body was oriented NNW-SSE, head NNW. The grave contained all the classic diagnostic pottery of the period: a bridgeless spouted vessel, a worm bowl, and a goblet (information from Mary M. Voigt). It will be remembered that none of the Iron I burials at Dinkha (or at Hasanlu) contained all three diagnostic vessels together (but see Geoy Tepe, below).

GEOV TEPE: The B period, in particular the contents of a single tomb, Tomb K, represents the sole published evidence for an Iron I occupation here (Burton-Brown 1951, pp. 141 ff., figs. 28, 29, 32, 34; Dyson 1965, p. 196, fig. 2; Young 1965, pp. 70–72, fig. 11, p. 78). Recent tests made at the site indicate that Iron I trash deposits occur; thus evidence of occupation from that period exists although never extensively excavated (personal communication from Robert H. Dyson, Jr.). Geoy Tepe B shares with Dinkha III the bridgeless spouted vessel, the goblet, and the worm bowl, all found together; in addition, there are toggle pins very close to those at Dinkha (Figure 11, 326), and tomb architecture, albeit not bricks but stone (compare Dinkha II).

HAFTAVAN: Here settlement on the mound seems to be indicated along with an extramural cemetery just below the citadel, as at Hasanlu. In the settlement area were found bridgeless spouted vessels and worm bowls; and a spouted vessel and a cup were found in an inhumation burial (Burney 1970, p. 170, figs. 8:1, 7, pl. III; 1973, pp. 155, 162–164; Burney-Lang 1972, fig. 40). No more data are presently available.

YANIK TEPE: No settlement occupation was found, but a cemetery at the foot of the west side of the mound was located. Here eight Iron I burials were excavated, of which only one has been published, A6 (Burney 1962, pp. 136, 146–147, pl. XLIV, figs. 24–29). The flexed bodies have no particular orientation and were placed on the left or right side; the graves were "sometimes lined with mud brick," a feature at present recognized in the Iron Age to my knowledge only at Dinkha. No spouted vessel occurs in A6, but a vessel with a vertical loop handle, similar to the Iron I goblets, was a clue to the grave's approximate date; this burial may belong to a late stage of Iron I.

A burial from Trench P, in which were found toggle pins and a painted jar, along with two hand-made vessels, was dated to the Iron I period, about 1000 B.C. (Burney 1964, p. 60, pl. xv, 14–19); this date is not certain, but if correct, the grave is then surely of the Iron II period. Toggle pins, for example, occur in the Bronze Age and throughout the Iron Age. TASHTEPE: Dyson (1965, p. 196) referred to Iron I pottery from Tashtepe based on Ghirshman's claim (1954, pp. 61–62) that gray wares similar to those from Giyan were found there on survey. These sherds remain unpublished and therefore prevent independent acceptance of Ghirshman's statement (compare Young 1967, p. 22, note 70).

KHURVIN: This site was plundered by local inhabitants and only a few graves were excavated by vanden Berghe (1964, pp. 6 ff.). The graves are not of Iron I date (Dyson 1965, pp. 196, 206) although a particular type of bridgeless spouted vessel of late type is common; Goff Meade (1968, p. 125, note 50)7 dated the burials to Iron II based on analogies with Sialk B. True Iron I vessels said to be from Khurvin, but without archaeological contexts, exist in private collections (vanden Berghe 1959, pp. 123-124, pl. 153, and p. 124, pl. 158 for Chandar; 1964, passim; Ghirshman 1964, figs. 15, 16); others are from controlled field surveys (Young 1965, fig. 9). The bridgeless spouted vessel of Iron I type, goblets, bowls on tripods-similar to worm bowls, but without the worm-are part of the repertory. Also reported are familiar bronze torques, tanged swords, needles, toggle, incised, and plain pins, and pins with curled tops (vanden Berghe 1964, pls. IV, XIV, XV, XXIII, xxvi, xxxiv, xxxix, xLi, xLiii). While we cannot control the information enough to actually know if this metal material is Iron I rather than later, given the material itself and the pottery configuration, it is quite possible that part of it, at least, is early (Moorey 1971, p. 25; for pins and needles, pp. 172-215).

Vanden Berghe also relates (1964, p. 3) that the burials were all inhumations without any particular orientation; presumably he is talking about the burials he excavated, but he implies that he is also discussing those burials dug by the local inhabitants.

MARLIK: Without doubt some of the Marlik tombs belong to the second millennium B.C. while others must be later (Muscarella 1972, pp. 42–43). Bridgeless spouted vessels in metal and pottery, as well as toggle pins and tanged swords, are attested there (Negahban 1964, figs. 25, 29, 41, 108, 121, 135). Two published gold earrings are not dissimilar to the clustered hollow balls on examples from Hasanlu and Dinkha.

KIZILVANK: Bichrome vessels closely paralleling the Hasanlu V and Dinkha III painted vessels discussed above were excavated here (Schaeffer 1948, p. 500, fig. 270; Muscarella 1968, p. 194). Moreover, aside from the specific paint parallels, two of the bridgeless spouted vessels have a short spout, one has a rather narrow mouth, and both have a straight interior wall on the vertical spout, all features in evidence on the vessel from B9a,  $\beta$ 24 (Figure 6). A goblet from the site is similar to those of Iron I type, but it has a flat base. Schaeffer (1948, p. 500) dated these vessels on typological grounds to between 1350 and 1200 B.C. Monochrome red and gray pottery of the Early Iron Age, bronze daggers similar to those from Dinkha III, and a flanged dagger of Iron I type are reported from the site (Burney-Lang 1972, p. 169, fig. 43a, b; compare Dyson 1964a, figs. 1:5, 2:1, and p. 34).

SIALK A: Moving to the south, to central western Iran, we see that the Iron Age culture extended as far southeast as Sialk and as far south as northern Luristan (Goff Meade 1968, pp. 127–132; compare Dyson 1968a, p. 25, for a similar situation existing in the Late Bronze Age).

The necropolis of Sialk VI, Necropole A, provides the relevant information (Young 1965, pp. 61–62, 73, fig. 11). Here only an extramural cemetery is available for study. Some Iron I vessels, however, do come from limited excavation on the South Hill, where we are also told related architecture was cleared (Ghirshman 1939, p. 11).

The skeletons were flexed in single burials, with no particular orientation, except that most of the heads pointed north, as at Dinkha. The pottery covers the range of familiar Iron I wares and shapes (Young 1965, pp. 61–62; Dyson 1965, p. 195). The clothed dead wore bracelets, pins, rings, and at least one needle was found. One tomb contained gold; another, probably late (see also Moorey 1971, p. 316), an iron tanged dagger and an iron point, along with bronze weapons (Ghirshman 1939, pl. XXXIX). Note that Young (1965, p. 62) suggests that Necropole A lasted a long time.

GIYAN: Young (1965, pp. 62 ff.) has reorganized the subdivision for Giyan I, a system accepted by Dyson (1965, p. 195, note 5). At Giyan we have basically a

<sup>7.</sup> Claire Goff (Meade) considers the unbridged spout with curled ornament to be late Iron II, eighth century B.C. (1968, pp. 115, note 17, p. 121), while Dyson considers it to be Iron III, eighth century B.C. (1965, p. 206, fig. 11), and Young (1965, p. 73, fig. 11) lists it as Iron I. The evidence from Sialk B suggests that it was in use in the eighth century.

cemetery with no definite related settlement—except it is possible that Construction A may be contemporary to some of the burials, but this is by no means certain (Young 1965, p. 66). Graves of Giyan I<sup>4</sup>–I<sup>2</sup> are the ones of concern to us.

These graves are simple flexed inhumations with no apparent orientation. Except for one bridgeless spouted vessel of a type also found at Sialk B and at Khurvin, and which may be later than Iron I, the shape is not represented at Giyan (see note 7). The pedestal-base goblet is fairly common, however, especially in I<sup>4</sup> and I<sup>3</sup>. The dead were buried with bronze pins, needles, bracelets and anklets, and occasionally with a tanged dagger, in one case (late?) iron. One skeleton wore a headband of bronze loops, and a single cylinder seal was found (Contenau, Ghirshman 1935, pp. 23, 26, pls. 14, 18). Another seal, of Mitannian type, was found low in Construction A and could have come from a tomb.

GODIN: Three isolated burials containing Iron I material, but with no relationship to any settlement on the adjacent Godin mound, were discovered in a Bronze Age cemetery (Young 1969, p. 19, figs. 24, 25). They are all simple flexed inhumations, oriented E-W, on their R or L sides, facing N or S. Each grave contained a typical Iron I goblet. One grave contained a ring and two pins; another a bracelet and a bronze cup; the third an arrow and a sword with an open crescent handle. Two skeletons held vessels in their hands (compare p. 48 above).

Interestingly, each of the goblets is slightly different in base type and outline, which does not necessarily signify that they were deposited over a long period of time. It should also be noted that several toggle pins with decorated tops from a Godin III, Bronze Age, burial (Young 1969, fig. 30) are quite similar to an early example from Dinkha (Figure 3, 473).

TEPE GURAN: In an occupational context of Level VII, the latest settlement at Guran, a bridgeless spouted vessel with a handle (unlike Dinkha) was excavated (Thrane 1964, pp. 122, 123–124, figs. 23, 24; 1965, pp. 158–159, note 6). Cut into this level, and therefore later, was grave 4, which contained a bronze spouted vessel of a type similar to those from Hasanlu IV and Sialk B (Thrane 1964, p. 129, figs. 30, 31; 1965, pp. 158–159, note 6; Moorey 1971, pp. 276–280). Thrane, nevertheless, dates Level VII to the Sialk B period, that is, to the early first millennium B.C. (also Thrane 1970, p. 31,

850–750 B.C.; Moorey 1971, p. 21).<sup>8</sup> It would seem that the stratigraphically later grave 4 is Iron II in date, and that Level VII may belong to the Iron I period.

A word should be said about the ram's head bead from B9a,  $\beta_{24}$  (Figure 6, note 5; Muscarella 1968, p. 194, fig. 19). Similar "frit" and "glass" beads were found at Nuzi (Starr 1939, pl. 120), Alalakh (Woolley 1955, pl. LXVIII), and al-Rimah (Carter 1965, p. 51), all approximately mid-second millennium B.C. in date. Perhaps we may consider the Dinkha bead an import from Mesopotamia.

It is also of some interest to note here that brick-lined burials have been excavated in southeastern Iran at Shahr-i-Sokhta (R. Biscione et al., *Iran*, XI, 1973, p. 204, pl. xIb), dating to the mid-third millennium B.C.

From the foregoing summary we see clearly that Dinkha III has its closest ties with Hasanlu V. The pottery and pins from Tomb K at Geoy Tepe, albeit evidence from one tomb, suggest close ties between Hasanlu and Dinkha and the western shores of Lake Rezaiveh.9 The same characteristic vessels occur still further north at Haftavan, demonstrating that the culture extended to the northern part of the lake (Young 1967, p. 22, for information that no Iron I wares have been found north of Lake Rezaiyeh).10 That it also existed, or at least was known, on the eastern shore is documented by the finds from Yanik Tepe. However, the little information published to date from this site makes it impossible to evaluate how strong the ties were between the Yanik area and the southern Urmia basin (compare Burney, Lang 1972, p. 117). One must keep in mind the perhaps significant fact that Yanik is the only Iron I site other than Dinkha where brick tombs exist.

Marlik, further east, seems to be in part a contemporary culture with some ties to the west. But without doubt, Marlik remains a unique and individual center

<sup>8.</sup> Moorey inadvertently placed the bridgeless spouted vessel from Thrane 1964, fig. 24, in Grave 4 (Moorey 1971, p. 21); in fact, it was found in situ in Level VII (Thrane 1964, pp. 122-131, figs. 23, 25; 1965, p. 159, note 6; 1970, p. 31, fig. at top). As stated in the text, Grave 4 is related to Sialk B material and is later than Level VII, making the latter possibly pre-ninth-eighth century B.C., probably Iron I as argued here.

<sup>9.</sup> The only anomaly at Geoy Tepe is the use of a multiple burial, whether or not we interpret it as a one-time deposition or a result of continued use.

<sup>10.</sup> Note that a single nipple-base goblet of Iron I type is said to have been found at Toprakkale; H. Th. Bossert, *Altanatolien* (Berlin, 1942) fig. 1201.

(Moorey 1971, pp. 23–24; Dyson 1965, p. 211). Future publication of the tombs and contents should give us more information about the beginning and terminal dates of the tombs.

An Iron I settlement with fairly close ties to the Urmia basin must have existed close to the Khurvin-Chandar cemeteries. Of interest, aside from the pottery and metal ties with the northwest, is the occurrence of bronze torques. As stated, we do not know if they are Iron I or II, but the former is not excluded (Moorey 1971, p. 229). The occurrence of torques in burials is a continuation of an earlier widespread custom (Schaeffer 1948, p. 111, figs. 53, 56, 58, 59, 134, 194, 544, pls. xv, xv1; 1949, pp. 49-120 with reference to the Near East and Europe; Moorey 1971, pp. 229-230), one that continued into the early first millennium at Dinkha II and Hasanlu IV and still later into the Achaemenid period.<sup>11</sup> Besides its use at Dinkha III and II, Khurvin, and Hasanlu IV, the torque was used in Luristan (Godard 1931, pl. xxv1, 78, 80), at Sialk B, and in the Caucasus and Talish regions (Schaeffer 1948, figs. 254, 298, 301; Hånčar 1934, p. 97; Godard 1931, p. 64, fig. 34; Barnett 1967, pp. 177, 174, fig. 27:3; Herzfeld 1941, p. 146, pl. xxx, says some were found at Giyan). We do not really know if the torque was first used in the Talish area, or in the Urmia basin area-whence it could then have moved north and south-or whether the Khurvin examples are contemporary to those at Dinkha, having been a basic element in the Iron I culture from the first years of settlement in Iran.

The painted pottery from Kizilvank is difficult to evaluate. One asks: does this site represent the first stage of the new Iron Age in its incipient phase, thus affording us a clue about the area of origin (see Burney, Lang 1972, p. 116), or was it a backwater, being later than, or even contemporary with, the Iron I culture to the south? It is preferable to leave the questions unanswered at this stage.

The people in the central plateau, at Sialk, Giyan, and Godin, had similar burial practices and included artifacts in their graves similar to those found further north. Tombs at Sialk and Giyan contained tanged daggers of the same type found at Dinkha. But they also occur later at Sialk B (Ghirshman 1939, pls. L, LVII, LXVIII; Moorey 1971, pp. 66–68 for a late dating for some examples). In the north this tanged dagger is clearly earlier than examples with cast hilts.

Finally, we have the three graves from Godin. One wonders if they are in fact isolated and were deposited by a people on the move (as Young 1969, p. 19), or whether there are other burials at Godin still unexcavated that might perhaps indicate a nearby settlement, or more intense use of the area. Without any more information at hand the graves offer us merely a tantalizing glimpse, rather than a substantial view, of the Iron I period at Godin.

It has been stated many times that the Iron I culture represents a new phenomenon in western Iran, a major break with the past and a new age. The information available from the Dinkha excavations reinforces this conclusion both from stratigraphical and cultural evidence. There is a definite break, a hiatus, after the termination of the last Bronze Age settlement. A build-up of debris and erosion material covered this destroyed settlement, creating a hard-packed, easily distinguishable stratum. Ash layers, debris, and erosion material, containing Iron I sherds, coming from the southeast, and thinning at the north, were laid down. It was into these layers that the first Iron Age graves were deposited (Figures 18, 19, 20). Perhaps these Iron Age layers came from the earliest Iron Age occupancy of the mound, from a time before the primary use of the area as a cemetery (it will be recalled that one of the earliest burials came from a test trench in grid L to the west, TT VII,  $\beta_2$ ). In any event, trash and ashes continued to be deposited during the Iron I and II periods.

Culturally the break is equally clear and dramatic, notably in the pottery and in the burial customs, where single inhumations in an extramural cemetery replace

<sup>11.</sup> See note 5. Burton-Brown 1951, p. 6, note 5, Schaeffer 1948, p. 544, note 1, and Schaeffer 1949, p. 109, refer to heavy bronze torques from Geoy Tepe and Iranian Azerbaijan, based on a report from C. C. Lehmann-Haupt. These objects cannot be the same objects we call torques that were found at Dinkha and Hasanlu. Ghirshman 1964, p. 113, fig. 148, following Godard, refers to a gold fragment allegedly from Ziwiye as a torque, but this is not certain. For Achaemenian torques see J. de Morgan, "Découverte d'une Sépulture Achéménide à Suse," MDP VIII (Paris, 1905) pp. 43-44, pl. IV; E. L. B. Terrace, "Sumptuary Arts of Ancient Persia," Boston Museum of Fine Arts Bulletin 13 (1965) p. 27, with references; see also Schmidt 1970, pp. 111-116, and my comments in a review of Schmidt in AJA 75 (1971) p. 444. Note that a torque with twisted ends, similar to Figure 32, B9a,  $\beta$ 14, 1040, seems to be worn by a youth on a relief from Marash: E. Akurgal, The Art of Greece (New York, 1968) pl. 29.





FIGURE 18 East section, B9b; B10b in background

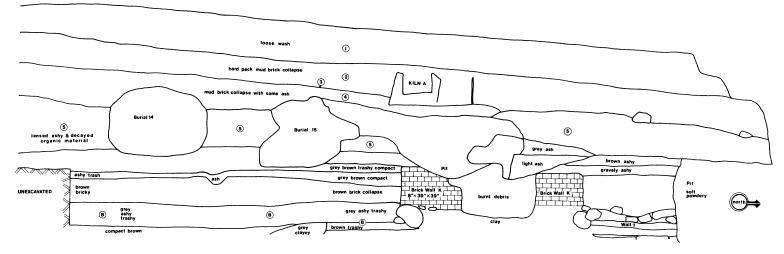
intramural multiple burials. That this new culture represents a "shifting of population," to quote Dyson, and that it represents at the same time a "cultural uniformity," pointing to a "common origin for the Iron I cultures," to quote Young, is beyond dispute. Indeed, all the bricks are not yet available for archaeologists to build a fine structure of full understanding about the nature of the historical events leading to the change. But further excavations, conducted scientifically, will

FIGURE 20

FIGURE 19 East section, B10a. The Urartian site of Qalatgah is faintly visible at the base of the distant hills

continue to supply the necessary information and slowly put into focus the picture we all seek.<sup>12</sup>

12. Excavations by the Archaeological Service of Iran at Gheytareh, north of Teheran, have yielded a cemetery of Iron Age date: K. Fard, "Fouilles dans les Tombes ancien de Gheytareh," *Bastan Chenassi va Honar-e Iran* 2 (1969) pp. 26–30. A pedestal-base goblet of Iron I type, said to come from Kalé Dasht, near Saveh, southwest of Teheran, is in the Teheran Museum, no. 872.



B 1Oa West Section L.D.L

An item of some importance is the fact that at Dinkha we have been able to isolate a few burials and their contents that are of the early Iron I period. At Hasanlu, aside from the polychrome vessel excavated by Stein, we have no recognizable early material. Thus, although it would be rash at present to conclude that the Iron I period began earlier at Dinkha (we still do not know what is in the unexcavated ground at Hasanlu and at other unexcavated local mounds) we can at least illustrate the earliest excavated Iron I material there.

As sharp as the break was with the past, it seems almost certain that the Iron I people had some knowledge of the earlier cultures, probably from scattered pockets of survivors in the penetrated areas. The use of multiple burials at Geoy Tepe, and the use of toggle pins and painted wares (perhaps also of gray and redslipped wares?), reflects a continuity with the past within Iran, even if not of major proportions.

CHRONOLOGY: A C<sup>14</sup> sample from the terminal Bronze Age deposit gave a reading of  $1435 \pm 52$  B.C. (P-1231, half-life of 5730 years; Dyson 1968a, p. 22). This gives us a rough terminus for the end of this settlement and an *ante quem non* date for the following Iron Age.

Three C<sup>14</sup> charcoal samples exist for Dinkha III; each came from separate pits overlying the Bronze Age deposits, from the Iron Age fill. One gives a reading of  $1146 \pm 37$  B.C. (P-1475); the second, stratigraphically earlier than the first, gives a reading of  $1302 \pm 57$  B.C. (P-1474); and the third from a pit resting directly on the Bronze Age level, a reading of 1243± 37 B.C. (P-1449). These readings suggest a general date for the end of the Bronze Age in the fifteenth century B.C., and a range of about the late fourteenth to the late twelfth century for at least part of the overlying Iron Age I burials. They also suggest that the gap between the end of the Bronze Age and the beginning of the Iron Age may have been about one hundred years. To be sure, the pit samples do not necessarily date the earliest nor the latest Iron I burials. (Note that if the recently published MASCA correction dates for C14 readings prove to be stable, it will be necessary to push all the dates further back in time [Ralph et al. 1973, p. 11 and passim]. Thus, the end of the Bronze Age will have occurred about 1600 B.c., and the beginning of the Iron Age about 1500 B.C. And this correction factor

would then change all the dates presented here by 100 or more years.)  $^{13}\,$ 

Dyson (1968a, p. 31) suggested "a working date of  $1350 \pm 50$  B.C. for the beginning of the [Iron I] period," close to the date of 1300/1250 of Young (1965, p. 83; 1967, p. 12). This date, about 1350 B.C., is also proposed by Burney (Burney-Lang 1971, pp. 106, 113, 115-117; also Muscarella 1968, p. 196). Thus the tombs that I suggest are the earliest at Dinkha, B9a,  $\beta_{25}$  and VII,  $\beta_2$ , would presumably have been deposited in the late fourteenth century B.C., at least close to 1300 B.C. Later than these would be burials B9a,  $\beta$ 23, and 24, followed by B9a,  $\beta$ 26, and 27, and perhaps we could accept a general thirteenth-century date for these in the order given. The other burials do not allow themselves to be defined more precisely and presumably span some centuries, if we can accept the fact that a certain conservatism obtained in the middle and later stages of the Iron I period.

The terminal date for the Iron I period can be determined at present only by reference to the large amount of data from Hasanlu. The evidence there suggests that in the eleventh century B.C. (or earlier, given the MASCA corrections) major developments occurred on the Hasanlu mound: the building of fortification walls and large structures, and an expansion of new pottery forms (Dyson 1965, pp. 197–199, 211; Dyson 1968a, pp. 31–32; Young 1965, p. 82; 1967, p. 24).

## DINKHA II: ARCHITECTURE

Evidence for Iron II architecture was found in several areas of the mound: in the main cemetery area and in squares G9a-c.

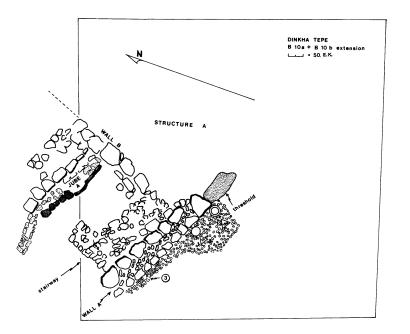
The architecture in the main cemetery area consisted of three kilns and fragments of walls and rooms. The walls were much destroyed by stone gathering and

<sup>13.</sup> I use the standard C<sup>14</sup> dates in the present report and, will continue to use them until more information and discussion on the MASCA corrections are available. If these corrections are eventually proven correct, the dating of the many Iron II objects from the destruction level at Hasanlu IV—the ivories, bronzes, the gold and silver bowls, not to mention the pottery and architecture—shifts dramatically from a late ninth- to a late tenth- or early ninth-century date, with important implications also for the dating of much material not from good archaeological contexts.



FIGURE 21 Kiln, B9a

FIGURE 22



burial activities and therefore no complete structure was preserved.

In square B9b one section of a wall was found under  $\beta_{17}$  (Dinkha II period, Figure 2), a fact that established the existence and abandonment of some structure here before the burial was deposited.

In square B9a in stratum 2, near the surface, a kiln was excavated (see below). It had evidently been cut into a stratum in which there were at least two structures; one, at the northeastern corner of the trench, enclosed by Walls A and B, the other at the northwestern part called Area 1. In the southwest area of the trench, and a level or two below these structures, was a single wall with a threshold preserved, called Wall C. It had been cut into by  $\beta 4$ , which in section was seen to be partly under some stones from Wall B. Urn  $\beta_5$  was under the room area formed by Walls A and B, and urn  $\beta 6$  was under the kiln. The sequence here would appear to be: Wall C, followed by  $\beta_4$ , and 5; then Walls A and B, and Area 1, and finally the kiln. Burials were found in all the strata of Boa, but it is not clear just what the relationship of the structures was to the use of the area as a cemetery, chronologically and culturally. It may be that structures not considered convenient for inclusion in a settlement area were built in the cemetery area. Fred Matson has suggested that the kilns were built here because they would have represented a fire hazard if they had been near a residential section (compare Stein 1940, p. 394, for a kiln near the Hasanlu cemetery; compare also the biblical Potter's Field, and the Athenian Kerameikos).

The kiln of stratum 2 was roughly oval in plan with a hard earth floor, over which was an ash layer, and a wall of vertical bricks set on edge (Figure 21); its entrance faced south. Within the chamber, originally domed, was a firing unit touching the east wall: a N-S wall of bricks (about .40  $\times$  .35  $\times$  .12 m.), made up of two rows of four bricks each laid flat and with an upright at each end, that abutted a small chamber of two upright bricks supporting a brick and a half, which forms the roof. Nothing was found inside the kiln.

Square B10a had two architectural features, a kiln and the remains of an interesting building called Structure A (Figure 22). The axis of Structure A was roughly N-S. Its S wall, A, extant length 5.5 m., consisted of large outer stones filled with smaller ones; the eastern-

most preserved stone was a threshold. To the south of Wall A was a pebble pavement, partly preserved, which was perhaps an outside area. On this pavement were found two buff IA pots (on the plan 16: 109D, 18a: 104D). Abutting Wall A at the north was a rubble packing in an L-shape that was obviously a stairway support. One meter further to the north of the stairway was a series of stones set on edge bordering a stone paved area, .35 to .50 m. in width, that in turn bordered another, wider, paved area of larger stones 1.30 m. in width. Another wall, B, bordered both the paved unit and the stairway at the east and joined Wall A; thus it separated the stairway-paved area from a room to the east that made use of the threshold of Wall A. The paved area seems to be a unit consisting of a jube (a water channel) set next to a narrow pavement, placed within a room-or court-that also contained a stairway to a second story. The juxtaposition of jubes and pavements exists at Hasanlu IV in the area just to the west of the fortification walls, in the northwest quadrant of the citadel area.

This structure was built and abandoned before the kiln was constructed. It seems also that some urn burials were deposited in the area after the abandonment. Stone tomb  $\beta_{15}$  is partly under the stone pavement at the south of the structure, but we cannot be certain that

FIGURE 23 Kiln, B10a



the tomb was earlier: it may have been later and the burial pit could have undercut the remains of the pavement.

The kiln was dug into the fill of level 2, just below the top soil (Figure 23). In plan it was a rough oval built of clay and apparently originally domed. Its entrance on one of the long sides faced southwest. Within the chamber were two units, a lower chamber for firing, and an upper one for the pots, both now collapsed. In the center of the lower chamber was a pillar of three bricks with a single brick on end touching them; this helped to support the upper chamber. The floor of this upper chamber consisted of large bricks or slabs, one of which was found on edge, having slipped. Holes in the floor of the upper chamber were made to carry the heat to the pots.

Within the chambers was found a broken buff IA jar with three nipples on each side (107D), and inside the jar was a fragment of a plain bronze ring. On top of the collapse was a broken, buff spouted vessel (13T).

In square B7f, a small L-shaped trench, a third kiln was partly excavated. It too was very close to the surface and was exactly like the kiln in B9a, with a brick wall and similar firing chamber; it opened to the north, unlike the other two kilns, which opened to the south.

In squares G9a, b, and c, we excavated the poorly preserved remains of a large building; recent stone gathering and burial activity had badly denuded this part of the mound. The building as preserved consists of two rectangular rooms bordered at either end by smaller squarish rooms (Figure 24). The walls, 1.15 m. wide, are made of large stones on the outside faces with smaller stones used as filler, similar to the construction of Structure A in B10a. The brick superstructure was no longer extant but was made of sun-dried clay bricks, to judge by the wash adjoining the walls. The two excavated squarish rooms are the northern limits of the building and they are of uneven size; the easternmost one is about  $3.60 \times 3.75$  m. (N-S  $\times$  E-W); the western is about  $3.60 \times 3.20$  m. There is definite evidence for the existence of a third room to the west, but very little of it has been excavated.

To the south a rectangular room about  $7.40 \times 3.70$  m. was cleared; this is the eastern limit of the building. To its south is a partially cleared area that probably represents a squarish room, balancing the one to the north. The total excavated length of the eastern facade

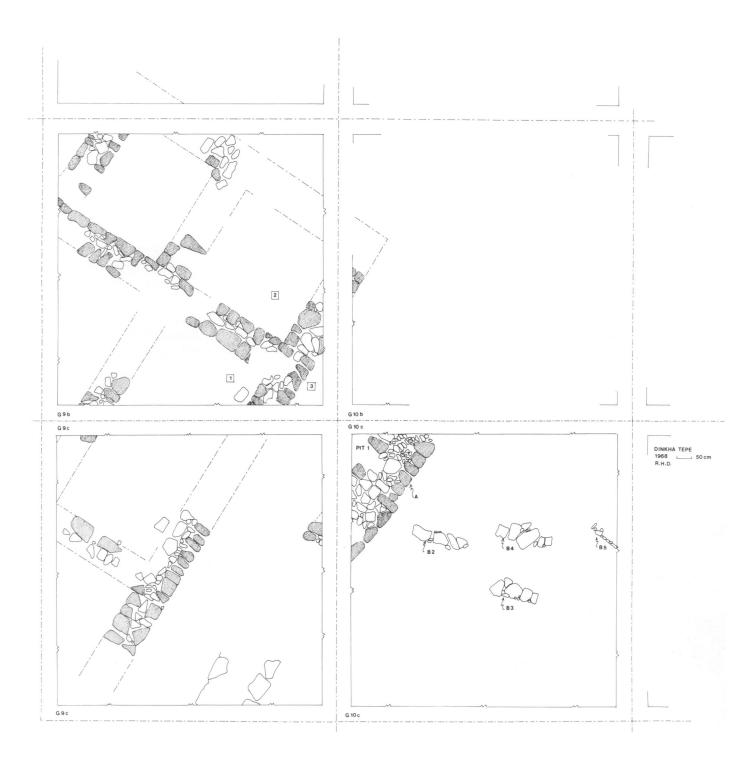


FIGURE 24 G9a, b, c; structure. Burials in G10c are apparently Islamic

is about eighteen m. To the west of the rectangular room is a partially cleared room that could be either another rectangular room, approximate in size to its neighbor, or a larger central room or hall. In the latter case we would expect a balancing rectangular room to the west, in the former case we would expect another rectangular room further west. Thus one could conceive a plan that included three rectangular rooms, bordered at north and south by smaller rooms, or a central hall bordered east and west by rectangular rooms, all bordered by side rooms. Unfortunately, too little was excavated to carry speculation further.

Exterior and interior doors are no longer extant but surely they must have existed. Floors were hard-packed earth, and no artifacts other than Iron II sherds were recovered; there was no evidence of burning.

Of special interest are the two flat stones, about  $50 \times 30$  cm., preserved in situ set into the floor of the easternmost large room. The northern stone is about 75 cm. from the northern wall, and about 13 cm. from the eastern wall; the southern one is about 1.05 m. from the southern wall and about 13 cm. from the eastern wall. These stones clearly appear to be bases for now lost wooden posts. How many other bases originally existed in between the two extant ones is not certain, but there could not have been more than four or five stones as a total number. Was the whole room filled with "columns" at one time? It would seem from the narrow width that the answer is no, although this idea cannot be categorically ruled out. However, it seems easier to visualize a room with a series of posts set around the perimeter, posts that may have held a balcony. In this respect one may make a formal comparison to the posts in the Burnt Buildings at Hasanlu, there set flush against the walls (Young 1966, figs. 1, 2), but nevertheless probably serving the same function. Perhaps we may call the Dinkha building a manor, in the same sense that Claire Goff called the building excavated at Baba Jan in Luristan a manor. This building, slightly later in date than ours, had a columned rectangular room about twice the width as the room at Dinkha (Goff Meade 1968, pp. 112-115, figs. 4, 5; 1969, pp. 117-122, figs. 2-4). The Baba Jan manor's rectangular rooms were also flanked by smaller side rooms, and in plan is not altogether dissimilar to the Dinkha manor.

We may conclude that the Dinkha manor was more than eighteen meters north to south, and more than twelve meters east to west; that it contained at least nine rooms, that the walls were thick enough to hold a second story, and that one of the long rooms had posts or columns. In short, there is evidence for a major building in the Iron II period at Dinkha.

## BURIALS

Sixty-eight burials of the Dinkha II period were excavated, of which nineteen were infant urn burials and will be discussed separately. The burials came mainly from the trenches cut in grid B, but a few were found in G10c and TT III to the south; none were found in B10B. Note that four burials exist that, because of inadequate evidence, could not be attributed to either Dinkha III or II; they are listed separately in Table III.

Twelve of the burials were inhumations, thirty-one were brick tombs, all of the three-sided type, and six (not seven as in Muscarella 1968, p. 189) were stone tombs. Continuing the earlier practice, a N-S orientation was preferred, bodies were placed on the back or sides, arms and legs were usually flexed. In two examples the skeletons had one arm flexed while the other was bent back to touch its own shoulder, a practice more common in the earlier period (Table II).

In the brick tombs the opening was generally to the W, and the body usually faced the wall, less so the opening or sky (Muscarella 1968, p. 190, figs. 5, 6; Figures 2, 29, 34, 38, 40). Four of the stone tombs opened to the E, one (B8e,  $\beta_5$ ) to the W (i.e., that is where the closing slab was placed); one (B8a,  $\beta_1$ ) had a large slab at the N and S. These tombs were rectangular in plan and constructed of irregular stones (Muscarella 1968, p. 189, figs. 13, 14; Figures 33, 34, 41, 42, 46). It seems that three walls, and a roof, composed of large stones, were constructed in place before the burial was sealed by a large slab with filler stones, thus creating a completely sealed chamber. Five of the tombs had a stone floor, the other (B10a,  $\beta$ 6) a smoothed, hard-pack floor. Most of the bones in these tombs had disintegrated, leaving only a few fragments, or nothing at all. Presumably this destruction was caused by the collection of water in the chamber, water that drained slowly, and that occasionally froze and then thawed. In the

open burials drainage was faster and the skeletons were not damaged.

Single burials were the rule but four burials contained two skeletons each. One of these was a mother and infant (B8d,  $\beta$ I), another apparently a mother and child (B8e,  $\beta$ 5II); technically, these could be classified as multiple burials. The two other burials were in stone tombs and contained adults (B8a,  $\beta$ I, B8e,  $\beta$ 5I).

As in the earlier period, men, women, and children were buried in the same cemetery area, with no apparent difference in funeral rites or treatment of the corpse recognized with regard to age and sex—except that infants were sometimes buried in urns.

In two burials of old adults arthritic lipping of the vertebrae was noted (B10b,  $\beta_7$ ,  $\beta_8$ ), and in one burial, that of a child, a partially healed hole in the skull was detected (B10b,  $\beta_3$ ). One burial consisted of disarrayed bones and seems to represent a secondary burial (B10a,  $\beta_{13}$ ).

Burials were recognized as Dinkha II—Iron II in date sometimes by depth, more often by the nature of the contents. This often consisted of a bridged spouted vessel (both with and without handles, and with a "beard" projecting from the base of the spout), or a hydria (a medium-sized storage or water vessel with three handles). In addition to these classic shapes, the various jars, cups, carinated bowls, deep bowls with animal-head handles, and many metal objects, jewelry and weapons, many made of iron, and all well known to us from Hasanlu IV, made attribution fairly easy.

Thirteen of the burials did not have a spouted vessel, but in about eight of these attribution to Dinkha II could be made on the basis of other shapes. As was the case with Dinkha III burials, both complete and damaged pottery were considered as possessions adequate for the dead.

Gray and buff pottery continued to be used side by side. In this period, however, buff pottery predominated. The total number of vessels from Period II was two hundred and fifty-two: two hundred and twentynine from the burials, nineteen urns, two from the kiln, and two from Structure A. Of these, sixty-seven are gray and one hundred and eighty-five are buff (nineteen of these are the urns): the percentage of gray to buff is therefore about 27 to 73.

Among the gray pottery, burnished and smoothed

surfaces are even, twenty-eight recorded for each, four are matt, and six were not recorded by surface treatment. Among the buff pottery fifty-five are smoothed, twenty-four burnished, sixty-nine (counting the urns) are matt, and ten are red-slipped; the rest were not recorded by surface treatment. (Thus, as in Period II, gray vessels were more likely to have been burnished than buff vessels.) In color, sixty-seven vessels are orange, six are red-orange, eleven are red; the rest were simply listed as buff.

In both the gray and buff pottery, common-ware paste, with few or no inclusions visible, predominated about two to one over medium-sized grit. Only two vessels were recorded as having mica flecks (Mica flecks exist not only in Dinkha IV and III, but also on the Iron III pottery from nearby Agrab Tepe, Muscarella 1973, p. 65).

The number of vessels associated with a burial varied from none (usually incompletely excavated burials) to twenty-six, the majority having four or five (Table II), and there appeared to be no special relationship between type of tomb, and age and sex, to numbers of vessels or grave goods. The only notable exception was that most of the stone tombs, but not all, were among the richest of the burials.

Thirty-seven burials contained some form of jewelry; torques were found in four burials. Seven burials contained weapons and only one burial contained horse bits. Jewelry and weapons were made from both iron and bronze, but the latter clearly predominates. A count <sup>14</sup> of the available inventory yields the fact that there are about one hundred and seventy-two bronze pieces of jewelry and eighty-one of iron, and among the weapons there are sixteen made of iron and three of bronze. Sheep/goat bones were commonly found in the burials, and it is possible that liquids were placed in some of the closed vessels.

We have seen that it was possible to isolate a few Dinkha III burials as having been deposited at an earlier stage than other burials of the same period. In a few cases this differentiation was also noted among the later Dinkha II burials. However, in these examples

<sup>14.</sup> It was not possible to give the absolute number of metal objects; some had disintegrated and were not given catalog numbers, and in some cases "rings" in the inventory were given one number, while I counted them as two objects.

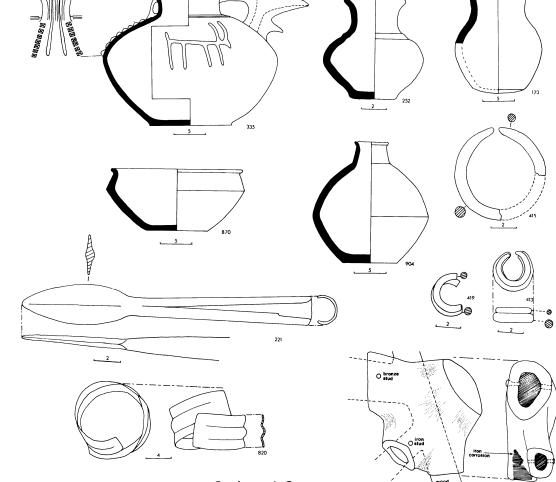


FIGURE 25 Boa, burial 9

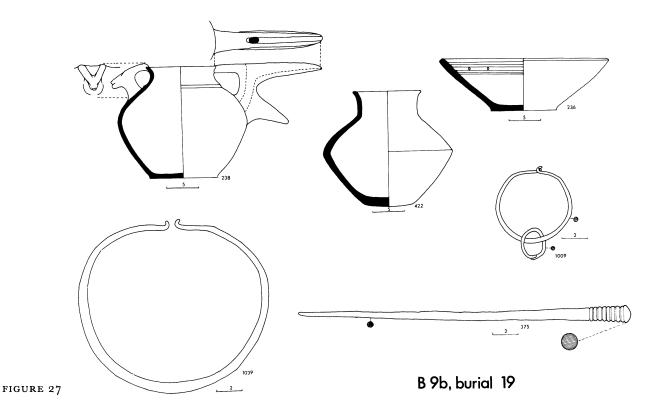
the distinction was suspected primarily on the basis of relative depth and does not seem to have independent support on typological grounds. (Unidentified so far from both Hasanlu and Dinkha is a "transition" grave from Iron I to II.) These possible early graves include Bga,  $\beta_0$ ; Bgb,  $\beta_{10}$ ; B10a,  $\beta_{16}$ ; and B10b,  $\beta_{11}$ :

B9a,  $\beta_9$ : Male, mature adult, flexed on back, E-W, head W; arms at sides touching pelvis; in brick tomb (Figure 25). Furniture (Figure 26): a plain round iron penannular bracelet, broken (415P), and a bronze corrugated band type with overlapping ends (820T) on R wrist; an iron and a bronze penannular ring, both plain (413P), and two plain iron ones, broken (419P), all on R hand; a plain corroded bronze pin (383T); also a necklace of carnelian, paste, and Egyptian blue beads at the neck (389P). A bronze spear with short, ovate blade was placed point up along the left side of the head so that the shaft crossed over the body (221P); and an antler ax with remains of the wood shaft along

FIGURE 26



B9a, burial 9



with a bronze and iron stud in situ (1042T) was placed next to the spear. A broken dark gray IIC spouted vessel, with a horned animal in relief on both sides (335T), resting on a stone, and a broken carinated orange IIA jar (904D), were found on the R side; a sharply carinated orange burnished bowl (870T) was at the head, and two jars one, buff IA (173D), the other orange IIB (252P), one with a sherd over its mouth, were placed at the R shoulder.

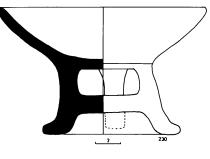
B9b,  $\beta$ 19: Adult, flexed on L side, N-S, head N; in brick tomb. Furniture (Figure 27): two bronze pins with decorated grooved tops at the shoulder area (375P, 382P) a third on the chest (374T); two bronze earrings consisting of a large plain loop with connected hooked ends attached to a smaller loop (1009M, 1010T), a plain bronze ring with overlapping ends (352D), in the fill; a group of beads (394T), and a plain bronze torque with bent ends, at the neck (1039P). At the feet was an orange IIB spouted vessel with an animal-head handle (238M, Muscarella 1968, p. 190, fig. 9), and at the back was a red-orange IIB bowl with flaring sides and two holes set within grooves (236T), and an orange IIB jar (422T).

BIOA,  $\beta$ 16: Infant, flexed on L side, most of the bones missing; N-S, head N; in brick tomb partly destroyed

by B10a,  $\beta 6$  (see below). Furniture (Figure 28): two round, coiled, and twisted bronze bracelets, very corroded (181T, 203T); a simple bronze torque on the neck (187T), along with some beads (439P). At the feet were a gray IIB basket-handled teapot with mica flecks, in fact, probably a milk bottle (224M, Muscarella 1968, p. 190, fig. 8), a gray IIB tripod bowl, with one foot missing (230T), and a small gray IIB jar, also with mica flecks (255D). (Note, in Muscarella 1968, p. 191, fig. 12, the caption should read that the vessels came from B10b,  $\beta 16$ , not B10a.)

BIOD,  $\beta$ II: Female, mature adult, extended on the back with the arms flexed across the chest; N-S, head N; in brick tomb (Figure 29). Furniture: a plain, blunttopped, bronze pin at L shoulder (142P) and R (155T) (compare Figure 7, B9a,  $\beta$ 26, 607, Dinkha III); a bronze pin with a hooked end at the R (154P) and a plain bronze pin (619T: like Figure 16, BIOD,  $\beta$ IO, 137, Dinkha III, and Figure 45, B8a,  $\beta$ I, 709, Dinkha II) over R shoulder; and similar pins in iron, one at R shoulder (444T) and one at L (445P), for a total of six pins. A flat iron ring with three grooves, on L hand (147P), an iron archer's ring on the R (427P; compare Figure 35, BIOa,  $\beta$ 6, 195); a necklace of stone (carnelian, jasper) round beads, others round "frit," paste, "glass," and copper (827T); one is a lentoid antimony

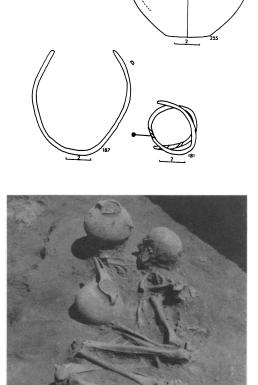




B10a, burial 16



FIGURE 29 B10b, burial 11





bead (437P). In the northeast corner, an orange IIB jar (257P), by the hip a gray IIB one (179D).

At first I was inclined to place this burial in the Dinkha III period, mainly because there are no other extended burials in the II period, and because the pottery was not distinctive. But Stein (1940, p. 400) excavated at Hasanlu an extended burial of Period IV date. Moreover, iron does not exist in any bona fide Dinkha III burial, and archer's rings (iron) occur only in bona fide Dinkha II burials, and in Hasanlu IV. I therefore believe that this burial belongs to Period II.

Finally, there were two burials that were found high in the fill and may be considered to be later than most of the others (B10a,  $\beta_1$ , B10b,  $\beta_2$ ). One is published herewith:

BIOD,  $\beta I$ : Young adult, inhumation, flexed on R side; E-W, head E; R arm extended, L arm touches knees (Figure 30). Furniture: a gray burnished spouted vessel by chest (845T); another spouted vessel, gray IIB, with the spout broken, and with three nipples in an inverse triangle on each side and two vertically placed nipples on the back (191D), at the head; and a gray IIB bottlelike jar (25T) between the other two vessels. There was no jewelry.

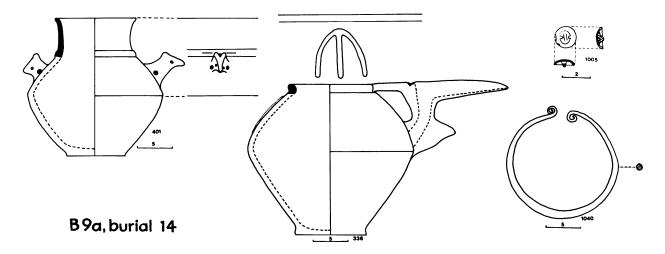
We now return to the other burials of this period, i.e., those not distinguished by stratigraphy as either early or late in deposition. Since this period is relatively well known from the Hasanlu excavations, only some of the burials need to be presented here. They are representative of the whole corpus:

B9a,  $\beta$ 14: Mature adult, flexed on back, N-S, head S; in damaged brick tomb (Figure 31). Furniture (Figure 32): three plain penannular bronze armlets on R arm (306T, 365T, 372P); four bronze penannular rings by hands (463T, 594P); a bronze torque with curled ends at neck (1040T); a stone button (591T); a necklace of plain round paste beads (327T). Beneath the skull, sixty-six astragals and two bronze buttons (1005T). At the feet, a gray bowl (D) placed under an orange IIB spouted vessel (336T); a few feet from the face, an orange IIB vessel with two animal-head lugs (401T). Sheep/goat bones at the knees.



FIGURE 31 B9a, burial 14

FIGURE 32



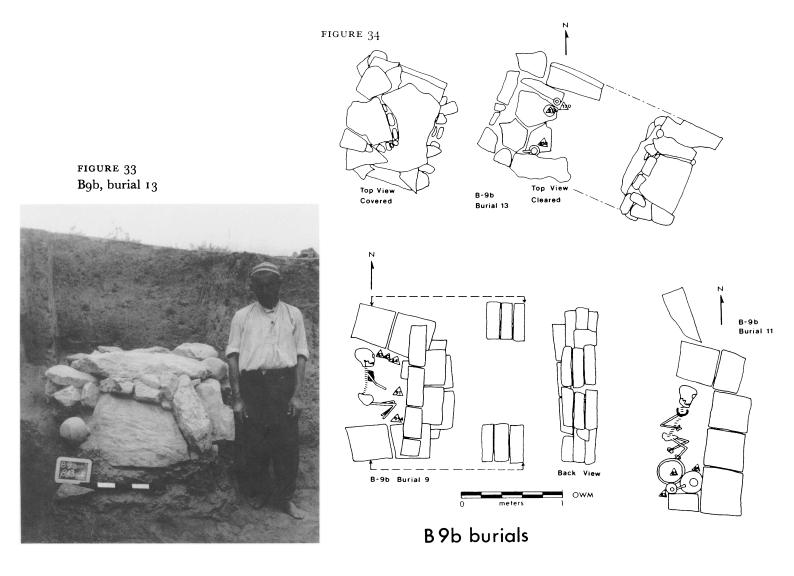


FIGURE 35 B10a, burial 6

B9b, 313: A stone tomb (Figures 33, 34, top): only a few bones extant; apparently N-S. Furniture: outside the entrance slab, an orange IIB jar (89T). Inside, two plain bronze bracelets with overlapping ends (37oT), a red-slipped spouted vessel (85oP), an orange IA jar (17oD), a gray matt carinated bowl (874D), and a coarse, disintegrated vessel. This was the poorest of the stone tombs.

BI0a,  $\beta 6$ : A stone tomb with hard-packed earth floor (Figure 35; Muscarella 1968, p. 191, figs. 13, 14). The few bones suggest a N-S orientation of an adult. Furniture (Figures 36, 37): fifty-three objects; this was one



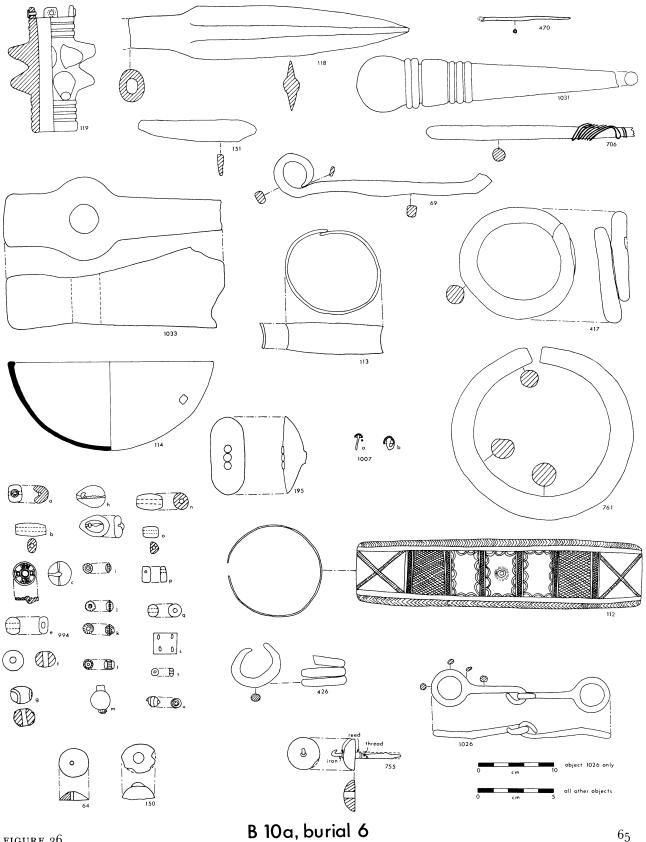
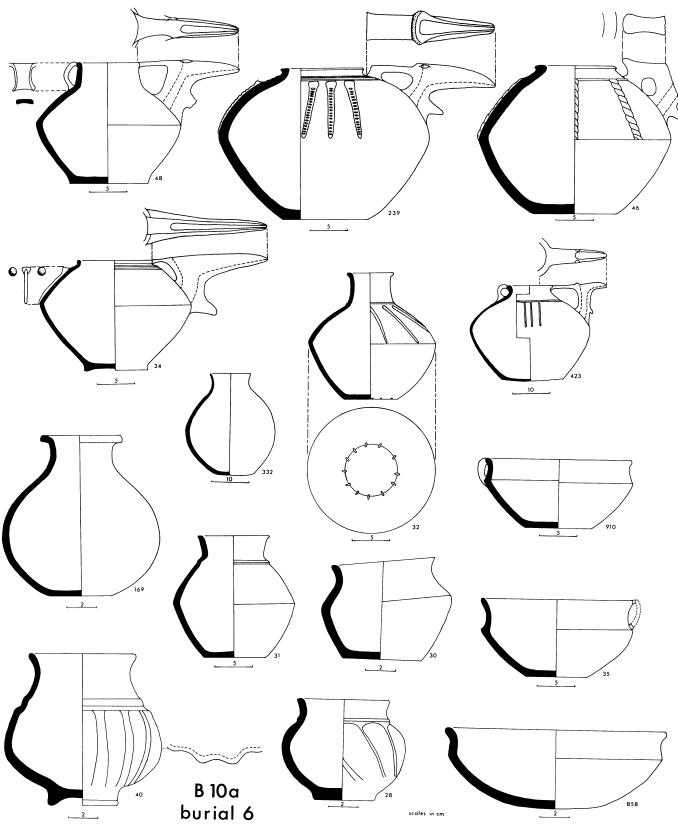


figure 36



of the richest burials in the cemetery. Objects probably belonged to a male warrior. Fifteen vessels (not sixteen as Muscarella 1968, p. 189) were outside the closing slab: buff: 81D, a fragment of a wide-mouthed pot with an oblique spout and no handle; also a disintegrated vessel; buff, IIB: 29D, a broken carinated jar; 332D, a jar; orange IIB: 31P, a carinated jar; 32P, a sharply carinated jar with incisions on the upper body; 33D, a broken jar; 34T, a spouted vessel; 35T, a sharply carinated deep bowl with a handle, now missing; 48T, a spouted vessel; red-orange IIC: 40T, a gadrooned jar; red-orange IC: 423P, a spouted vessel; red-slipped: 30T, an asymmetrical jar; gray IC: 46T, a verticallybridged spouted vessel, with broken spout; gray IIB: 28P, a gadrooned jar. Placed among these vessels was the dismembered, incomplete skeleton of a horse: skull, mandible, humerus, a pair of radii, two cannon bones, two femera, one tibia, and a third cannon bone. Just outside the tomb, by the northwest corner, was an iron socketed spear (118P, visible in Muscarella 1968, p. 121, fig. 14). Just inside the entrance of the tomb were five vessels: an orange matt hydria (248D), two buff carinated bowls (858P, 910D), a small buff IA jar (169D), and a gray IIB spouted vessel (239T). Two bronze penannular anklets (761P, 762T) at the southern part of the tomb give the feet position. With the pottery at the entrance was a corroded iron point (D), a corroded iron object with a rounded head and spike (182D), apparently a mace head with a solid head; also an iron blade (151P), an iron pin with traces of eight layers of cloth (706P), a thick-knobbed iron pin, also with traces of cloth (1031T), a plain round penannular bronze bracelet (129T), and remains of a bronze and iron chain (1054D, compare Figure 44, B8a,  $\beta$ 1). Along the western wall, N-S, were a bronze spiked or star mace head (119P), a plain bronze bowl (114P), an elaborately decorated flat-band bronze bracelet (112T), and a plain concave-sided band bronze bracelet with overlapping ends (113T), along with two plain round iron bracelets with overlapping ends (417P), plus a plain broken round iron (134T) and a plain penannular iron bracelet (120T), for a total of six. There were also clusters of plain iron (426T) and clusters of penannular bronze rings (593D), a bronze, two-piece, jointed, horse bit with a solid ring (1026P), and an iron fragment of another horse bit (69T), an iron shaft-hole ax fragment (1033D), a broken iron archer's ring (195T), a bronze needle (470D), a bronze boss (150P), a bronze stud (1007T), a limestone disc (64P), and a pin consisting of an iron hooked-top set into a bone button and attached to a reed, with traces of thread (755T, compare Figure 47, 756, 757), two bone awls (222T, 223P).

There were also many beads (994T): carnelian—a, n-r; paste—t; "chalky material"—s; amber—b; "glass"— e-g (the latter blue and yellow)—u; cowrie shell—h; Egyptian blue—i-l, cast antimony—c; bronze—m.

BI0a,  $\beta_{12}$ : Male, flexed on R side, N-S, head S; in brick tomb (Figure 38). Furniture (Figure 39): a plain round bronze and a plain round iron bracelet, both with tapered overlapping ends (123P, 124T), by wrists; carnelian, "frit," and paste beads (117D); a beaded cast bronze torque with hooked ends, at neck (115T); a bronze socketed spear resting along L side of head, point up (125T); shaft would have rested along side of the body. By the knees, two gray burnished spouted vessels (835T, 846P); by thighs, an orange smoothed carinated bowl (873D); by feet, an orange burnished carinated jar (965D).

BI0a,  $\beta_{13}$ : Female, adult, inhumation. Bones were found disarticulated, probably representing a secondary burial (Figure 40). Furniture: a bronze stud (925P) was found inside the skull cavity; bronze hemispherical beads with a loop, corroded together in sets of three (923P), and carnelian and frit plain beads, all in the fill (436T); a simple iron ring was under the skull (130T). Also under the skull was an orange IIA jar (98P); other vessels included a gray IIC spouted vessel (261T), an orange IIA, and two buff IIA jars (192D, 193D, 94P). Sheep/goat bones.

BIOA,  $\beta_{15}$ : Stone tomb; part of the floor covered with stone slabs (Figures 41, 42). Bones disintegrated; N-S orientation, head N. Furniture: three corroded knobheaded iron pins at N of chamber (146P, 147P, 186T); two more of same type at SW corner (196T, 197P). In the fill, two bronze figure-eight hairrings (earrings?) (208D, 212P), a collection of beads (Figure 51, 815P): a-carnelian; b, c, d, i, j-paste; e-bronze; f-Egyptian blue; g, h-antimony; also five plain iron rings (217T, 218D), two bronze rings (189P, 216P), some bronze studs (899T); a small iron hooked pin (1030D), and three iron archer's rings (207T, 209P, 1028D). On floor, fifteen pottery vessels: two buff IA hydriai (915D, 916D), a large orange IIB spouted vessel with "crow's feet" decoration in relief at the rear (268P), two buff IA carinated bowls (859T, 860P, both containing sheep/goat bones), four jars: two buff IIB (178D, 266D, one buff IA (172D), and one orange IIB (254T), and an orange IIB cup (232T). In addition, there was a red-slipped, IIB gourd-shaped vessel pierced by two holes at one side (226M; Muscarella 1968, pp. 189-190, fig. 11). There were also two gray burnished spouted vessels (839T, 906D) and two gray jars, one burnished (251D), one smoothed (962D).

BIOD,  $\beta$ 8: Female, old adult, with arthritic lipping of the vertebrae; on back, N-S, head N; in brick tomb,

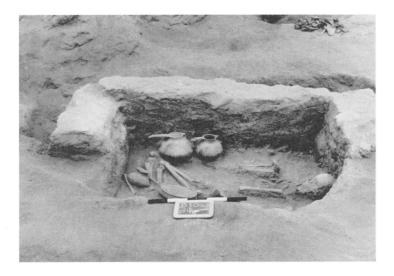
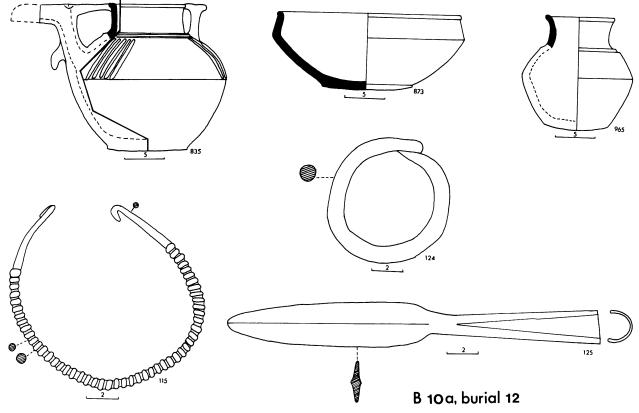




FIGURE 39

partly left in the balk (Muscarella 1968, p. 189, fig. 2). R arm was flexed across the body, L arm was bent back to its own shoulder, a feature found in Period III. Furniture (Figure 43): a bronze knobbed pin at L shoulder (127T) and R (149P) (similar to Figure 27, 375); a flat-band iron ring with tapering ends (133T) on L hand; a bronze needle below R shoulder (135T); an iron ring with cloth traces (162P) on floor; and round carnelian, paste, and bronze beads (442T) inside the bowl 227. By the face were a deep gray IIB bowl with animal-head protome handles (227T, compare Muscarella 1968, p. 191, fig. 12, left, from B10b,  $\beta$ 16), and a gray IIB carinated jar (250T); by the knees was a buff matt hydria (918T). Sheep/goat bones on floor.

B8a,  $\beta_1$ : A stone tomb; noted sticking out from the eroded north slope of the mound; excavation was conducted as a salvage operation.  $\beta_1$  had a neatly laid stone floor and preserved two skulls along with a few other bones; body positions could not be reconstructed (Figure 44, bottom). Furniture (Figures 44, 45): two plain round bronze bracelets with overlapping ends (1012P, 602P), a flattened bronze penannular bracelet (1020T), and an iron one (D); three iron pins (701D,



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FIGURE 40 B10a, burial 13

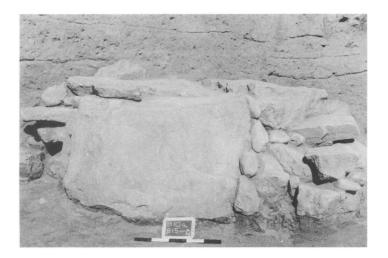
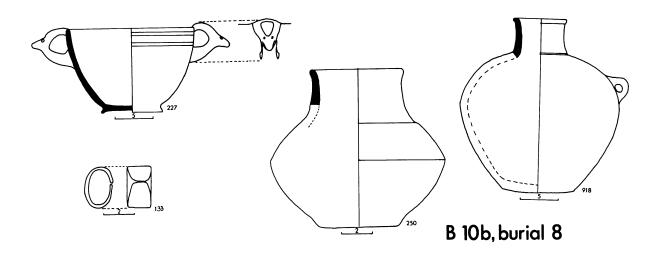




FIGURE 41 B10a, burial 15

FIGURE 42 B10a, burial 15

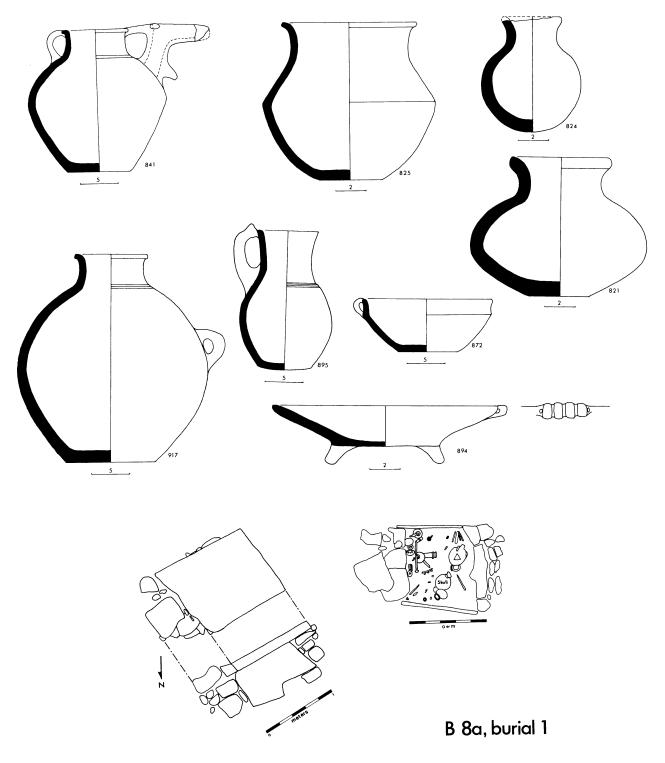
FIGURE 43



709D, 1034—actually 125D); three bronze rings around a finger bone (1013D); bronze figure-eight hairrings (1024D); a bronze needle (1016D); a bronze tack (1011T); two thin bronze strips attached to iron loops (1044P, from a chain?); fragments of a chain (1041T, a, iron; b, bronze) found next to a corroded iron bracelet (not catalogued); three iron blades with curved tips (623T, 624P, 626T), two of these blades

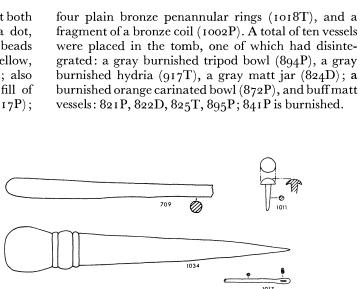
FIGURE 44

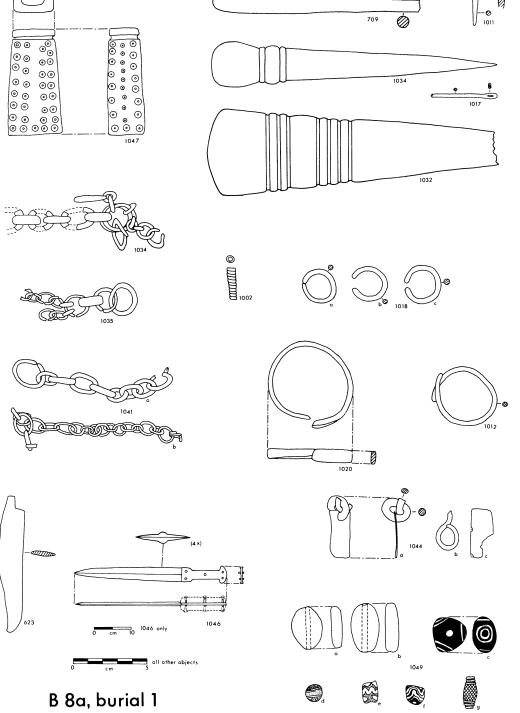
(624, 626) had cloth remains, one (626) had wood remains on the hilt; an iron dagger with a splayed pommel and a straight grip, and with wood fragments of sheathing and hilt insets evident (1046T); a bronze chain (1034P) next to a large iron object (found exploded) that might have been a staff or baton—it seems to be too big for a pin, which it resembles (1032D); a corroded iron point, possibly a large pin, with a bronze



chain (1035T); a bone cosmetic container open at both ends and decorated with incised circles with a dot, empty (1047P); and under bowl 872 a handful of beads (1049T): a, b—amber; c-f—colored glass (yellow, brown, white, and black); g—glazed material; also beads of Egyptian blue and carnelian). In the fill of the chamber were found two bronze needles (1017P);

FIGURE 45





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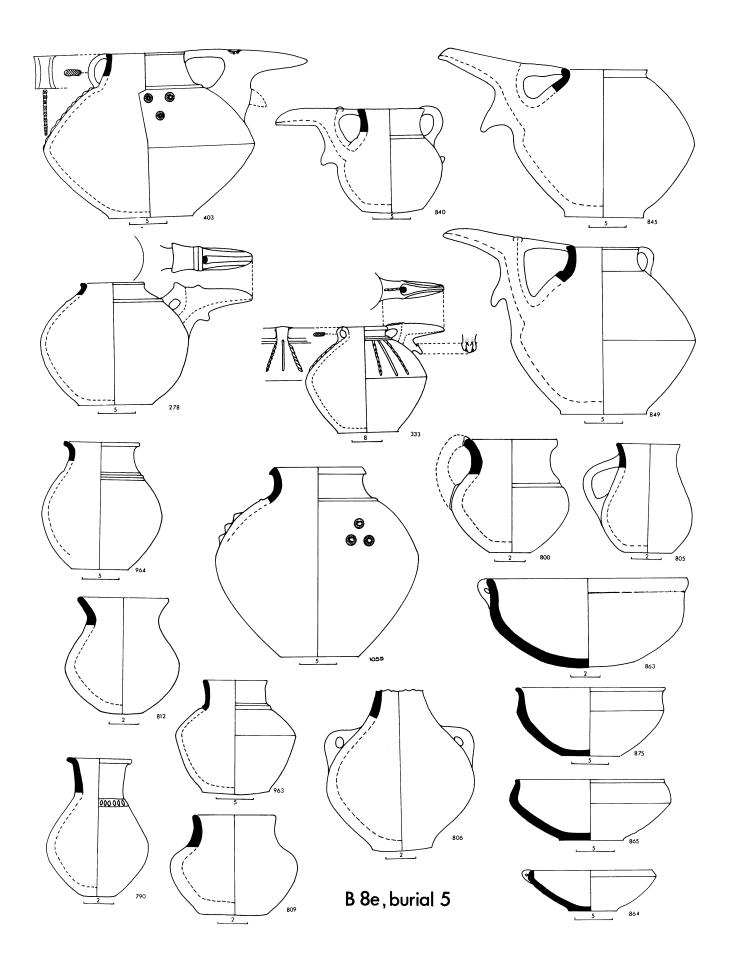


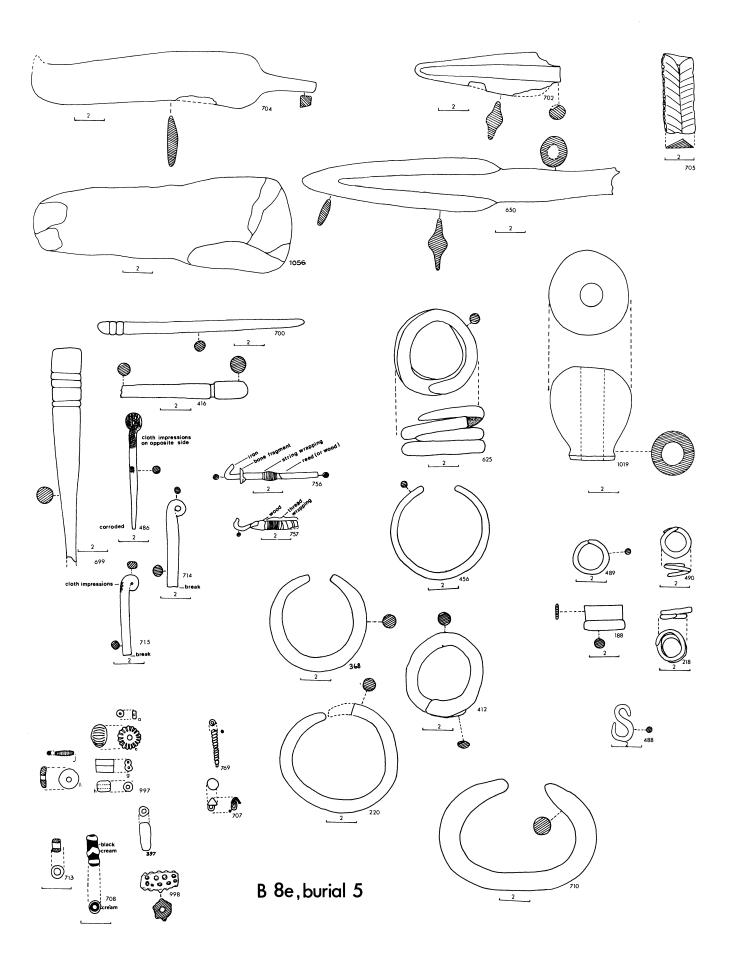
FIGURE 46 B8e, burial 5

B8e,  $\beta_5$ : A stone tomb with stone floor, containing the scanty remains of two individuals, male and female (I). Body positions, not clear, seem to have been N-S. Outside the tomb's western entrance or closing slab was a large pile of pottery partly covered by a broken pithos (Figure 46). Here were twenty-three vessels and under them were two skeletons, a female young adult and a child (II), separated from the stone tomb by a mud brick wall of one course. Wall ran N-S, paralleling the stone tomb, interrupted where it touched the western wall; its total excavated length (measuring the area occupied by the stone tomb section) 2.40 m. Both ends continue into the unexcavated balks, so we do not know the total length. The female and child were placed head to feet in a line, separated by about 45 cm.; they were flexed on their R sides, N-S, heads S, facing the wall, E. Contents of stone tomb (I) (Figure 47): there were five vessels: two bowls, one gray matt (863P), one gray burnished (864T); one gray IIB spouted vessel (278M); one large buff IIB jar with three nipples in triangular form on the sides (1055D); and one redslipped broken jar with narrow neck and two handles (806D). Body furniture (Figure 48): about twenty plain bronze and iron rings (like 489D, 218D); a spiral bronze ring (490D), and a flat-band iron ring attached to a round one (188P); four figure-eight hairrings

(219P, 488D, 1025D), a bronze coil (769T); four bronze penannular bracelets (432P, 455P, 456P); two iron penannular bracelets or anklets (220P, 710T); one iron needle (1021D). Also, three iron pins with looped heads (486T, 714T, 715P); an iron pin with a knob head (416P), and two iron pins with ribbed heads (699D, 700T; three plain iron pins with blunt heads (407T, 409P, 410P); also two iron-reed pin-hooks, with a bone collar (756T, 757P, of the same type as Figure 36, 755). There were also two iron archer's rings (483T, 485P); two socketed iron spear heads (650T, 702D broken); and an iron knife with a curved tip (704P). Each of the two outside skeletons had associated grave goods. The northernmost one, the child, had a pottery jar that disintegrated, an iron bracelet with overlapping ends (412T), two iron bracelets of the same type found together (625P), and a plain bronze bracelet (318T). The female had two buff IA bowls (865P, 875D) containing sheep/goat bones; also two bronze penannular bracelets on one arm (367T), and one on the other arm (368P); also a dark-stone, pear-shaped mace head (1019P). Vessels found outside the stone tomb over the skeletons of burial II (Figure 47): gray IIC: spouted vessels (403P, 848P, 845T, 857D, 849P, 333T), bottle (790P), cup (805P); gray weathered: hydria (919D); gray IB: carinated jar (963D); orange IIC: spouted vessel (840P); buff: hydria (912D); buff IB: hydria (911D); buff IIA: jar (964D); buff IA: jars (812T, 1058D), cups (800D, 807D), carinated bowl (876P); red-slipped: jar (800D). A few objects were inadvertently not recorded as specifically coming from the burials in I or II and are listed here together: an orange jar (262D), a buff carinated bowl (D), and a disintegrated vessel. Also, a bronze tack or stud (707T), a stone ax or pestle (1056D), a bronze coil (769T), an obsidian blade (705T), and many beads: 397P—paste; 713P-bronze; 708T-glass; 997aP-shell; c, jpaste; g, a spacer bead-paste; h-stone; i-bone or shell; 998—paste.

The problem of the relationship between the stone tomb (I) and the burials outside (II) remains to be discussed. What is clear is that the twenty-three vessels were placed partly over both the west wall of the tomb and the brick wall, and the skeletons of burial II. Therefore, both burials I and II were in place and were exposed at the time when the pottery was deposited as a final act. Yet, what is unclear is whether or not one of the burials was already in existence before the second was deposited, i.e., whether the diggers of the second





burial pit inadvertently disturbed the earlier burial, or, whether both burials were deposited simultaneously, with different treatment given the respective bodies. If we prefer the first suggestion we can assume that the burials in II existed first, and that it was accidentally encountered by the stone tomb builders, who, upon completion of their funeral tasks, piled the many vessels over both burials as a pious gesture. If we prefer the second suggestion we must assume a unique occurrence at Dinkha: the fact that at one time four people were buried, two in a closed stone tomb, and two outside. It should be noted that the brick wall was only one course high and its length very long, features not encountered with typical brick tombs at Dinkha. Moreover, the first suggestion implies that when the earlier burial was encountered, instead of recovering it and going elsewhere, the stone tomb builders completely uncovered the bodies. A third possibility presents itself at this point, namely that the whole unit could represent a family vault, the bodies placed there at different times, and that the pottery deposit occurred at the time of the final burial. This suggestion would explain the uncovering of both burials I and II. I prefer to leave the interpretation open rather than force a conclusion, but I lean toward the suggestions of a family vault or simultaneous deposition.

#### URN BURIALS

Nineteen urn burials were excavated at Dinkha Tepe. None of these could be attributed to the Dinkha III period either by low position or by grave goods, but it is not impossible that a very few might have belonged to that time. Most, if not necessarily all, were obviously laid down in the Iron II period as they were usually found high in the Dinkha II fill; in a few cases they had characteristic pottery associated with the urn.

The burial urns were either buff matt storage vessels or large cooking pots, with both wide and narrow mouths (Figure 49: 108D, 111D, 284D). One urn was blackened on the outside and inside, no doubt from use; often the urns were broken or incomplete. Two urns were buff hydriai, and in another case the top of a large pithos was used as an urn; often the mouths of the urns were covered with large sherds. Urns were usually placed on their sides, but a few were found upright, or upside down. Those on their side were oriented N-S or E-W, following the same pattern practiced in the burials. In most instances few or no bones were recovered from the earth fill inside the urns. When the bones were recognizable they were usually those of infants, but in one case (B9b,  $\beta_2$ ), an adult tooth was found in an urn (compare Stein 1940, p. 374; see also pp. 397, 400). Seven urns had pottery placed outside, and four, two of them with gifts outside the urn also, had pottery and jewelry inside.

A sampling of the urn burials:

B9a,  $\beta_3$ : The buff urn (D), tilted up, was covered with a broken buff matt bowl (909D) (Figure 50). Close to the mouth of the urn were a red-orange IIC spouted vessel decorated with a crescent and two nipples on both sides (259T), two small gray IIB jars (79T, 80T), and a large buff jar (102D). Inside the urn were a plain bronze band penannular bracelet (Figure 52, 620P), two plain bronze (464T, 467P), and one iron ring (425D), thirty-nine bronze (386T), stone, paste, and shell beads (376P), and a clay button (D). This was the "richest"-urn burial excavated.

BI0a,  $\beta_2$ : (Figure 49): The buff IA urn (108D) was lying on its side with the mouth to SE; the mouth was broken away. Outside was an orange IIB two-handled jar or flask that had a short upright spout (10T).

BIOA,  $\beta_3$ : (Figure 49): The buff IA urn (284D) was placed with the mouth up and sealed by sherds. An infant's tooth was found inside. Near the urn was a redslipped carinated jar (905D).

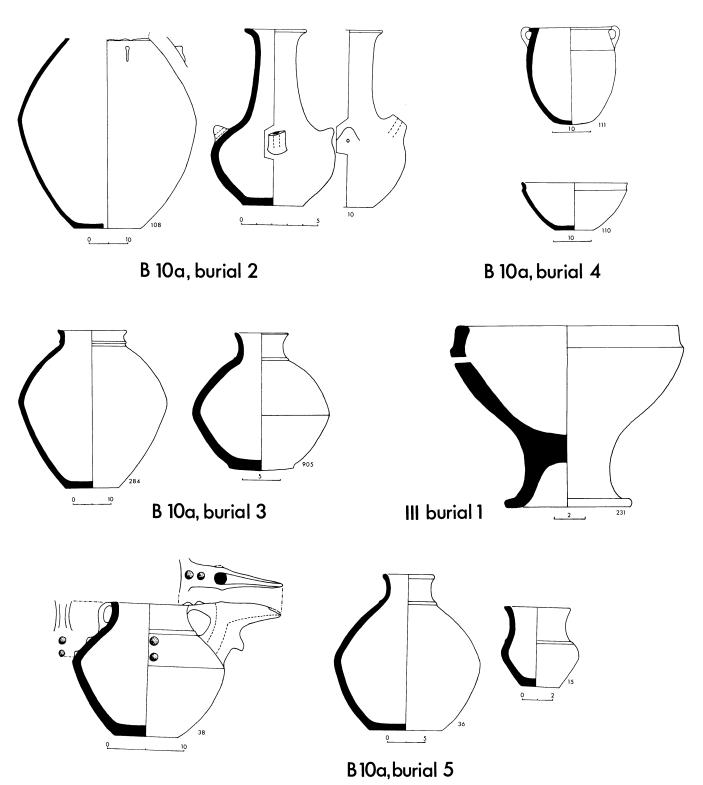
BI0a,  $\beta_5$ : (Figures 49, 51): The buff urn (D) was lying on its side, roughly E-W, mouth E; a large sherd sealed the mouth. To one side were an orange IIB spouted vessel (38T), an orange IIB carinated jar (36T), and an orange-brown IB miniature asymmetrical jar (15T).

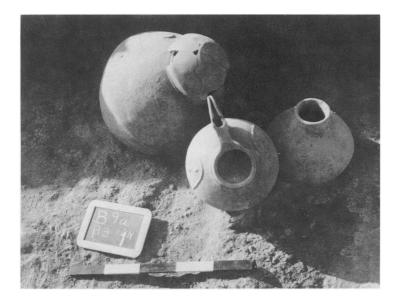
TEST TRENCH III,  $\beta_1$ : (Figure 49): the buff-yellow IB (281D) urn was on its side, facing NW; it contained infant's bones and a bronze ring (D); outside was a gray jar (D) and an orange IIB footed bowl with a hole below the rim (231P).

figure 50 B9a, burial 3

FIGURE 51 B10a, burial 5







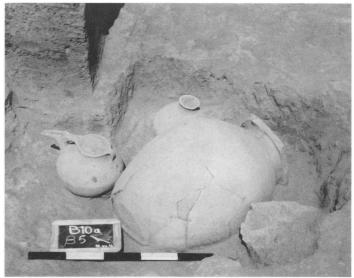
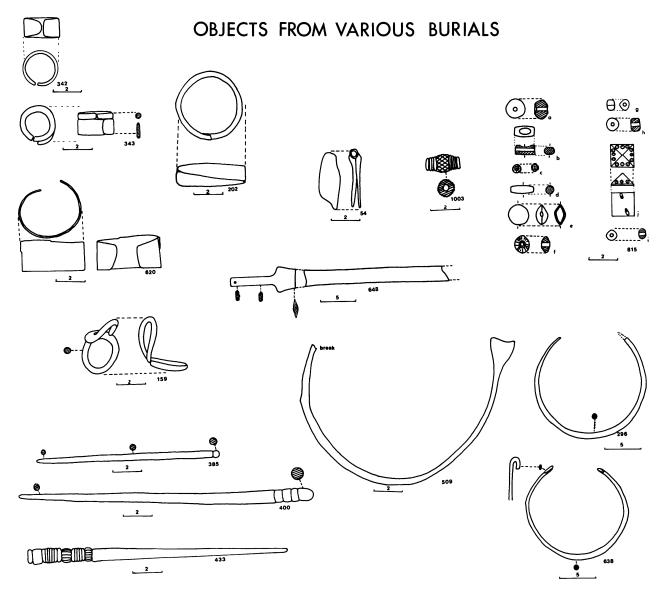


FIGURE 52



Much has been written about the Iron II period in western Iran, so it would serve no useful function to repeat that information here except in those instances where it relates to Dinkha Tepe. That there was cultural continuity in the Iron Age, that Iron II followed Iron I peacefully and without any observable interruption from outside forces, is well supported by the Dinkha excavation. The most obvious evidence is that the Dinkha II burials were deposited in the same cemetery area as the earlier ones, that both simple inhumation and the use of brick tombs continued, that the same body positions and orientations continued, and that earlier customs, such as the extended burial and the placement of an arm bent back, touching its own shoulder, were not forgotten, although rarely practiced. In addition, the same types of grave goods, pottery. jewelry, weapons, and food continued to be placed with the dead. Not least in significance is the fact that the same, buff and gray pottery were produced in both periods. But it is of some interest to note that whereas in Dinkha III gray vessels were more than twice as common as the buff wares, in Dinkha II the ratio is strikingly reversed and buff vessels were nearly three times as common as gray ones (see pp. 38, 59). Obviously, as is to be expected with a dynamic culture that existed for such a long time, and as is the case at other Iron Age sites, the pottery shapes changed-the worm bowl and pedestal-base goblet disappear-and the variety of shapes increased. Yet even within the changing pottery repertory we are able to observe a continuity between Dinkha III and II: the ubiquitous spouted vessels, the basket-handled teapot, the carinated bowls, and many of the jar types.

Only one vessel from the corpus of Dinkha Iron II pottery might be singled out as a possible import: the gourd-shaped red-slipped vessel from B10a,  $\beta$ 15. Three other vessels of this type, two red and one gray, were found in Hasanlu IV (Rad, Hakemi 1950, pp. 59–60). Another, exactly the same in all details, and also red, was seen in the Rezaiyeh market by Kleiss, who related it, incorrectly, I think, to seventh century Urartian ceramics (Kleiss 1971, p. 71, fig. 22, pl. 10:3, left). If these vessels were not locally made at Hasanlu or Dinkha, we do not yet know their source. Among the similar kinds of jewelry placed in the graves of both periods, bracelets, anklets, rings, necklaces, pins, we might single out torques for special mention. Of thirty-four Period III burials, seven contained a torque (see note 5); of fifty Period II burials (not counting urns), four contained torques, a drop from about one-fifth to about one-twelfth. Thus, although still used, fewer people wore them—at least to their graves. It seems that men, women, and children wore torques, although the evidence for this is clearer in the earlier burials.

There is one example of a disarticulated burial (B10a,  $\beta$ 13) in Period II, none in the earlier period, but whether this is culturally significant or merely an occurrence reflecting a local situation is not known. Also, as mentioned above, in Period II four burials contained two individuals each, a feature not encountered in the earlier period.

And one burial in Period II (B10a,  $\beta$ 6) was associated with a fragmentary skeleton of a horse placed outside the tomb. Within the tomb, it will be recalled, was found a complete bronze horse bit and an iron fragment of another. No other burial at Dinkha yielded either a horse bit or a horse skeleton. It is therefore not rash to conclude that the horse probably belonged to the occupant of the tomb and was dispatched as part of the burial ceremony. But where were the other bones of the skeleton? Does the fragmentary nature of the skeleton suggest that the horse was in fact an ordinary animal merely meant for the funeral feast, and that the bones by the tomb represent the dead man's share? It seems to me that the juxtaposition of the horse bit within the tomb and the horse skeleton outside is not fortuitous, and that the horse did have some special relationship to the tomb's occupant. At the same time it would appear that the horse was eaten and that some joints were kept for the mourners. I suggest, therefore, that the horse belonged to the occupant of the tomb and also that the survivors ate it; both ideas need not be mutually exclusive. Keeping this in mind, I believe that we may correctly refer to the existence of a horse burial at Dinkha, as opposed to the idea that the bones represent simply a food deposit. What remains puzzling is the uniqueness of the occurrence of horse bones at

Dinkha, even if one disagrees with the conclusion presented here and believes the bones are food.<sup>15</sup>

Horse burials associated with a human burial occur at Hasanlu in a unique grave excavated in 1947; to date no other example has been found even though the cemetery area has been extensively excavated (Ghirshman 1964, pp. 24–27, 99, fig. 131; Dyson 1965, pp. 208–212). Unfortunately, the contents of this grave have never been identified and published and the date is not known, which makes it impossible to bring it into a discussion of Iron Age horse burials (Muscarella 1968, p. 192).<sup>16</sup>

At Godin Tepe a complete horse skeleton was found in association with a Period III, Bronze Age, tomb (Young 1969, pp. 19–20, fig. 27, pl. xvI). This seems to be the earliest example known in Iran of a horse burial.

In separate graves at Marlik, that is, in graves not associated with human burials, horse's teeth with bits in situ were found (Negahban 1964, pp. 15, 16). This type of individual burial of horse's heads with bits seems also to have occurred in Luristan (Moorey 1971, p. 103). We have no information at present about the dates of these Marlik burials.

A complete horse with artifacts, including a horse bit, was buried in an individual grave, not associated with a human, at Baba Jan, sometime in the eighth or seventh century B.C. (i.e., post Iron II in northern

15. S. Piggott, "Heads and Hoofs," *Antiquity* 3 (1962) pp. 110– 118, summarizes information concerned with the burial of a horse's head and feet, presumably along with the hide. The Dinkha horse burial is of a different type. The description of Scythian horse sacrifices given by Herodotus, IV:62, 72, does not reflect light on the customs at Dinkha.

16. When discussing the horse burial at Hasanlu, Dyson (1965, p. 211, and also Young 1967, p. 33) stated that a Scythian-like cheek piece found at Hasanlu came from Period IV (see also Dyson 1964c, p. 372, fig. 3). This is an error; the piece came from a Period III context. The error was repeated by M. van Loon in JNES 29 (1970), p. 69, and by P. R. S. Moorey 1971, p. 109, and in Iran IX (1971) p. 121. Horse burials occur in the Hittite period, K. Bittel, Die Hethitischen Grabfunde von Osmankayesi (Berlin, 1958) (only skulls and leg bones pp. 16, 24, 63, 65, 72, 73), and in the Mycenaean period, E. Vermeule, Greece in the Bronze Age (Chicago, 1965) pp. 298-299, P. Kabbadias, Proistoriki Archaiologia (Athens, 1909) p. 290; A.J.B. Wace, "Chamber Tombs at Mycenae," Archaeologia 87 (1932) p. 14; AA 1930 p. 170 for a buried terracotta horse; see also the Iliad XXIII, line 170 et seq. Horse burials also occur in Gaza, in the second quarter of the second millennium B.C., F. Petrie, Ancient Gaza I (London, 1931) pp. 4-5, pl. lvii:

terminology; Goff Meade 1969, pp. 123-126; Muscarella 1968, p. 192).

Summarizing all this information, one notes that horse burials are documented in Iran in the Bronze Age (Godin Tepe), in Iron II (Dinkha), and later (Baba Jan).

The major technological change that occurs in Iron II, recognized not only at Dinkha and Hasanlu, but also at all the other sites, is the use of iron alongside bronze. (In fact, one may state in parenthesis, if it would not cause confusion about continuity of culture and upset established terminology, one should think of the Iron I period as "the Late Bronze Age" and the Iron II period actually as "Iron I.")

#### HASANLU IV AND DINKHA II

Dinkha II and Hasanlu IV continued the close relationship existing from the Iron I period and there must have been sustained communication and exchanges. For, aside from the basic architectural features, such as the use of posts in the Dinkha II building, and the juxtaposition of jube and pavement in Structure A, features shared by both cities, practically every pottery shape used by the people at Dinkha II was used by the people of Hasanlu IV: spouted vessels, plain, or decorated with crescents, nipples, or animals in relief, or decorated

Hyksos? Horse burials occur in Phrygia at Gordion and Ankara, see R. S. Young "The Nomadic Impact: Gordion," Dark Ages and Nomads (Istanbul, 1964) pp. 55-56, and T. Özgüç, Belleten XI (1947) p. 80, all from post-destruction tombs. Of apparently contemporary date are three horses buried in a stone-lined tomb at Norsuntepe, H. Hauptmann, "Norsun-tepe, 1970," Anatolian Studies XXI (1971) p. 20. For horse burials in the Caucasus see F. Hančar, Das Pferd in prähistorischer und frühen historischen Zeit (Munich, 1955) pp. 180 ff. Horse burials also occur in Cyprus in the eighth and seventh centuries B.C., V. Karageorghis, Excavations in the Necropolis of Salamis (Cyprus, 1967) Tombs 2, 3, 47. A. Hakemi, "Kalaruz," Archaeologia Viva 1 (1968) p. 65, mentions horse burials but gives no details. That such burials continued in later times in Iran is attested by horse and human bones found together in a first century B.C. tomb at Shahr-i Qumis excavated by John Hansman and David Stronach in 1967 (Journal of the Royal Asiatic Society [1970] I, pp. 41-48). An account of horse burials in the Altai region is given in S. I. Rudenko, Frozen Tombs from Siberia (University of California, 1970). The widespread occurrence of horse burials over a wide chronological and geographical range indicates that no one ethnic group had a monopoly on the practice.

with flutings, ridges, "crow's feet," or with an animal head at the handle, and sometimes with a vertically bridged spout; hydriae, which seem to occur only at Hasanlu and Dinkha; basket-handled teapots; carinated bowls; deep bowls with animal-head protome handles; the (imported?) pear-shaped gourd; the many jar types; knobbed vertical loop handles; asymmetrical handmade bowls; gadrooned jars (Dyson 1964a, figs. 118–121; 1965, fig. 13; Young 1965, figs. 6, 7; vanden Berghe 1959, figs. 144–146; Stein 1940, fig. 109, pls. xxIV, xxx, xxXI; Rad, Hakemi 1950, pp. 59–60, Burney, Lang 1972, p. 125).

Equally shared are the many metal and miscellaneous objects, such as jewelry and weapons: pear-shaped stone mace heads and metal-spiked or star maces are very common at Hasanlu (Rad, Hakemi 1950, fig. 78b; Dyson 1960, fig. on p. 128); so were iron knives with curved tips, and iron socketed spears, found there by the hundreds (compare Moorey 1971, pp. 88-90; compare no. 87, to my Figure 25, B9a,  $\beta$ 9, 221). Bronze and iron archer's rings were excavated in many Hasanlu burials (Stein 1940, pl. xxv, 2; seven iron examples were found at Dinkha) and two bone-antler axes (exactly the same type as in Figure 26, Boa,  $\beta_0$ , 1042) were found at Hasanlu, one in a burial. To my knowledge only one dagger-actually the hilt alone is preserved—exactly paralleling the sole example from Dinkha (Figure 45, B8a,  $\beta$ 1, 1046) comes from Hasanlu; but another similar example was also found there (Dyson 1964a, p. 41, fig. 2:2, pl. 1x, 2; see also Moorey 1971, pp. 70–71).

Plain, jointed horse bits of the same type as Figure 36, B10a,  $\beta$ 6, 1026, as well as twisted and elaborate exam-

17. The number of horse bits found at Hasanlu gives evidence for the use of cavalry and perhaps chariotry there, a fact corroborated by the scenes represented on ivories found at the site, Muscarella 1966, figs. 11, 12 (but no bits are depicted on these horses); see also fig. 10. It is not possible to make any comments about the extent of cavalry and chariotry at Dinkha from the two examples one a fragment—found in one tomb.

18. Compare also M. Mallowan, Nimrud and Its Remains II (New York, 1966) p. 114, fig. 58.

19. Many of the figures on the Hasanlu ivories wear bracelets, and so do those represented on the gold bowl; the nude female figure there also wears anklets.

20. It does not yet seem possible to be certain about specific proveniences of ancient amber: Curt W. Beck, "Analysis and Proveniences of Minoan and Mycenaean Amber," *Greek Roman and Byzantine Studies* 7, 3 (1966) pp. 191-211.

ples occur at Hasanlu in bronze and iron (Ghirshman 1939, pl. cc: 17; 1964, fig. 338, left; compare also fig. 338, right).<sup>17</sup>

The iron and bronze chains from B10a,  $\beta 6$  and B8a,  $\beta 1$  (Figure 45, 1034, 1035, 1041) may have been originally attached to pins as was the case with the many lion pins from Hasanlu (Dyson 1964c, p. 374, figs. 9, 12) and at Haftavan (Burney 1970, fig. 7, middle). Chains occur at Hasanlu not only in connection with lion pins, but individually (although they too may have been connected to other pins), and in a Period III context, attached to a fibula.<sup>18</sup>

It was mentioned before that torques were known at Dinkha III and II, and that they occur in small quantities at Hasanlu IV. Bronze and iron plain round rings, single and doubled, and flat-band rings are common at Hasanlu. Several plain band bracelets, some with concave sides (Figure 36, B10a,  $\beta$ 6, 113), and several examples of the elaborately incised band types (Figure 36, B10a,  $\beta$ 6, 112), were at home at Hasanlu. The dead at Hasanlu were also dressed, and wore anklets, plain loop and figure-eight hairrings, and pins, of exactly the same types as those from Dinkha; they were also furnished with needles (Stein 1940, p. 401).<sup>19</sup>

Literally scores of thousands of beads of all typical materials, including antimony, amber,<sup>20</sup> and Egyptian blue, were found in the graves and on the citadel at Hasanlu. Astragals, polished from use, were found at both sites; Hasanlu produced some that were pierced. We may assume that the same games were played at both cities, which is not surprising inasmuch as knucklebone games have a long history in the ancient Near East, and in modern history as well.<sup>21</sup> Another type of

21. Our workers always asked for discarded astragals from the ancient burials to give to their children; see also C. L. Woolley in LAAA 26 (1930) p. 20, note 1, where it is reported that astragals were placed in modern children's graves. Their occurrence in ancient times is widespread, as the following incomplete listing makes clear: in Iran they are reported, besides those from Hasanlu and Dinkha, from Geov Tepe, Burton-Brown 1951, p. 175, note 15, pl. XXII, A Period; from Sialk B, Ghirshman 1939, p. 245, pl. LXXVIII; from Ghalekuti, N. Egami, et al., Dailaman I (Tokyo, 1965) pl. XLVIII, no. 28; from early Susa, J. de Morgan, MMA en Iran XXIX (Paris, 1943) pp. 46 ff. In Anatolia they occur early at both Hacilar and Çatal Hüyük, J. Mellaart, "Anatolia Before 4000 B.C.," CAH Fascicle 20 (1964) pp. 10, 14; at Troy, H. Schliemann Ilios (New York, 1881) pp. 263, 426; at Alishar, E. F. Schmidt and H. H. von der Osten, in OIC XIX (Chicago, 1932), p. 274, fig. 374; OIP XX (Chicago, 1933) pp. 82-83, fig. 129; bone object from Dinkha, the incised cosmetic container from B8a,  $\beta_1$  (Figure 45, 1047), has many relations at Hasanlu (Stein 1940, pl. xxv, 6; Ghirshman 1939, pl. c, 24; see also Dyson 1964c, figs. 14–17).

In short, the two sites shared a common culture. This conclusion is not contradicted by the fact that there were some differences between the sites, some traits that were not shared in common. For example, burials at Hasanlu continued to be simple inhumations, while at Dinkha, alongside inhumation, the earlier use of brick tombs continued, augmented by the innovation of stone chamber tombs; and at Hasanlu only a few urn burials of undetermined date have been found (compare Stein 1940, pp. 397, 400, date not clear). Certain pottery types, very much in evidence at Hasanlu, do not occur at Dinkha: tripod stands for supporting sputed vessels, which were found in many Hasanlu burials, and spouted vessels with animals sculpted on the spout, or vessels with an animal at the handle (Dyson 1968b, figs. 118, 121; vanden Berghe 1959, pl. 145, c-e); bowls with tab handles, solid and looped, sometimes with animal-head protomes on the body (Dyson 1964c, fig. 13; Young 1965, figs. 6:3; 7:3; Boehmer 1967, p. 580, fig. 7); and vessels on tall hollow stands (Dyson 1964a, figs. 4:7, 9, 10, 11). Nor do we have any evidence at Dinkha for the fine wares with polished gray surfaces, and for glazed wares (Young 1965, p. 55).

Lion pins, metal bells, belts, animal figurines, armor, metal and pottery rhyta, not to mention ivories and

vessels made of precious metals, were not found at Dinkha. But it must be stressed that many of the Hasanlu objects mentioned come from the destroyed *citadel*, whereas at Dinkha we are dealing with a *cemetery* alone and have only the evidence from material placed in burials. However, from the sophisticated and massive architecture preserved at Hasanlu, and from the vast quantity of material remains, both of local and of foreign manufacture (Muscarella 1971a, pp. 263– 265), there can be no doubt that Hasanlu was culturally and economically the richer site, perhaps even the main seat of government and trade in the area. Dinkha, on the other hand, while obviously not poor, was quite clearly a less important site, perhaps because it was closer to the western border.

The strong cultural connections demonstrated to exist between Hasanlu and Dinkha over such a long period of time suggest an hypothesis: that both the Solduz and Ushnu valleys were part of the same ancient state, of which Hasanlu may have been the major city, with Dinkha one of several provincial towns (there are still several unexcavated large mounds in Solduz) governed by a prince or governor. It is also possible that the same language was spoken at both sites. To be sure, we know nothing about ancient place names or languages in the area and therefore can go no further than hypothesizing.<sup>22</sup> But with respect to the material evidence of the two valleys in the Iron Age, they must be treated as one cultural region.

p. 33; Nuzi, Starr 1939, pp. 378–379, 414, 450, and Vol. II, pl. 117, n; at Kish, in the Field Museum of Natural History in Chicago. They also were used in Egypt, H. Schäfer, *Aegyptische Kunst* (Berlin, 1913) fig. 122, and Nora Scott, *BMMA*, Spring 1973, fig. 39. In the West they were common from Bronze Age to Roman times at too many sites to mention here. See, for example, L. Deubner, "Zum Astragalspiel," *AA* 1929, pp. 272–282; *Pauly-Wisowa Supplement*, IV (1924) "Astragalomanteia," pp. 51–55; R. Hampe, "Die Stele aus Pharsalos in Louvre," Winckelmannsprogram der Arch. Gesellschaft zu Berlin (1951); G. Bass, Cape Gelidonya: A Bronze Age Shipwreck (Philadelphia, 1967) p. 133.

22. As stated in the text, there are unexcavated mounds in the area of Solduz, and future work might alter the suggestions made here. At present the Solduz valley is inhabited largely by Turkishspeaking Shia Moslems, the Ushnu valley by Kurdish-speaking Sunni Moslems. Future archaeologists might not be able to surmise from the remains of their material culture as represented by house plans, burial customs, and household goods, that they were two different cultural groups with different languages and histories, and sometimes mutual hostility.

OIP XXIX (Chicago, 1937) p. 433, fig. 488; OIP XXX (Chicago, 1937) pp. 105, 174-175, figs. 101, 196 (late); at Boğazköy, MDOG 72 (1933) p. 77, fig. 12; R. M. Boehmer, Die Kleinfunde von Bogazköy (Berlin, 1972) pp. 35, 181, 203. They were very common in Phrygian Gordion: a large vase filled with astragals was found in one of the burnt buildings, and many were found on the floor of another, R. S. Young in AJA 61 (1957) pp. 321, 327; 446 astragals were found in Tumulus P, a child's tomb, ibid., p. 327. In North Syria they occur at Zincirli, F. von Luschan and W. Andrae, Die Kleinfunde von Sendschirli V (Berlin, 1943) pp. 122-124, fig. 173, pl. 59: p, q; at Hama, P. J. Riis, Les Cimetières à Crémation (Copenhagen, 1948) pp. 30, 35, fig. 22, p. 176; at Carchemish, C. L. Woolley, LAAA 26 (1939) pp. 20-21, 23 f.; note also the relief there with children playing an astragal game, E. Akurgal, The Art of the Hittites (New York, 1962) fig. 122. For Assyria see A. Haller, Die Gräber und Grüfte von Assur (Berlin, 1954) pp. 18, 21-22, 103. For Palestine, see for Lachish, O. Tufnell, Lachisch II (London, 1940) p. 194; for Ugarit, C. F. A. Schaeffer, Ugaritica IV (Paris, 1962) pp. 80-82, 103-105, figs. 64, 65. In Mesopotamia we find them at Tepe Gawra, E. Speiser, Excavations at Tepe Gawra (Philadelphia, 1935)

Visible from Dinkha Tepe to the east is the still unexcavated Urartian site of Qalatgah (Figure 19; Muscarella 1971b, pp. 44-49). During survey work conducted by the Hasanlu Project an Urartian inscription, written for Ishpuini and his son Menua sometime about 810-805 B.C., was found. This important inscription dates the entry of the Urartians from the north into the southern Urmia basin, specifically, into the Gadar and Ushnu valleys. And it is at this very time,<sup>23</sup> as established by independent archaeological research, that Hasanlu IV was violently destroyed and Dinkha II was terminated, probably by abandonment-for it is quite clear that the chronology of Dinkha II depends completely on that of Hasanlu. Surely, these two events, the end of the Iron II culture and the entry of the Urartians into the area are related: the Urartian invasion of the west and south of the lake is the historical event that aborted the flourishing Iron II culture. A few years later King Menua alone set up a stele at Tashtepe, about fifty miles to the east of Dinkha, demonstrating the southeastern limits of the invasion.

## DINKHA II AND OTHER IRON II SITES

We need only present here a few brief comments about Dinkha's material relationship to contemporary sites, since much has already been written about this period. The ties between Hasanlu IV and Sialk B, Geoy Tepe A (in part, for Iron III remains exist there also: Muscarella 1973, p. 72), Khurvin, Giyan 11 (part), and the Zendan I (part) are well known and have been discussed often (Young 1965, pp. 61-68, 70-72; 1967, pp. 24-27; Dyson 1965, pp. 197-203; Boehmer 1967, pp. 576-585; Burney, Lang 1972, pp. 122-126). And because of Dinkha's close relationship to Hasanlu, the same elements in the discussion obtain for Dinkha. Although pottery has been the main element referred to in discussing relationships, we might expand this by including other objects. Thus, at Sialk B several multiple burials existed, and chains, plain jointed horse bits, flat-band rings, decorated band bracelets, and torques were placed in burials there (Ghirshman 1939, pls. 1, LVI, LIX, LXVIII, LXXXV, LXXVII, LXXVIII, LV, etc.; see also Young 1967, pp. 76–77, note 28).

At Khurvin, in addition to the typical Iron II ves-

sels, several metal objects are of interest to us: torques (see above), tweezers, decorated band bracelets, and plain bracelets with tapered ends (vanden Berghe 1964, pls. IV, V, XI, XII, XVII, XXII, XXIX, XLI, pp. 29–30, pl. XLII).

Grave 4 from Tepe Guran should be mentioned again in this context for it contained bronze vessels of a type found at Sialk B and similar to some at Hasanlu IV. The sword also found in the tomb indicates, perhaps, a tenth-ninth century dating for the grave rather than ninth-eighth (Thrane 1964, pp. 158–160, note 6; compare Moorey 1971, p. 21).

A few more Iron II sites may be added to the growing list of Iron II sites in western Iran. Yanik Tepe is said to have yielded gray wares of Hasanlu IV type, but no details are yet available (Burney 1964, p. 60). On the western side of the lake at Haftavan Tepe, we are informed that an Iron II settlement was partly uncovered. Moreover, part of an extramural cemetery was excavated and Iron II burials were uncovered. In one was found a red bridged spouted vessel, but in other burials dating is not so clear-cut (Burney 1970, pp. 165-168, figs. 7, 8:2). Some of the burials had chains attached to pins, and figure-eight hairrings (earrings?), anklets, bracelets, rings, and beads; there was also one Mitannian-type seal (Burney 1970, pp. 165-168, fig. 7; 1972, pp. 134 ff., figs. 8, 9, pl. 1vb). These finds collectively could indicate a date close to 800 B.C.

Until the complete publication of the Marlik material it is not easy to argue strongly for an Iron II occupation here. Nevertheless, the excavator (Negahban 1964, p. 38) and others who have seen the material (Dyson 1965, chart on p. 11; Young 1967, p. 22, note 69; Burney, Lang 1972, p. 118) agree that some of the material from the tombs belongs in the early first millennium B.C. (Compare Moorey 1971, pp. 23–24, who prefers a late second millennium B.C. date.) I, too, think there is evidence for an Iron II occupation there on archaeological and art-historical grounds (Muscarella 1972, pp. 42–43).<sup>24</sup>

23. If the Iron II period ended sometime before 800 B.C., according to possible interpretations of the MASCA correction dates, then the building of Qalatgah had no direct connection with the end of Hasanlu and Dinkha, which would presumably have been in ruins.

24. At Klar Dasht a bridged spouted vessel with three small feet was found: H. Samadi, *Les découvertes fortuites Klardasht, Garmabak, Emam et Tomadjan* (Teheran, 1950) pp. 8, 12, fig. 9. Far away to the southeast at Tepe Yahya (III) a fragment of a gray bridged vessel was found, and we are told that both gray and red wares occur in this level (Lamberg-Karlovsky 1970, p. 27, pl. XIII). This information could indicate that there was an Iron Age level at Yahya, but based on the published material perhaps Iron II/III rather than Iron I/II, as suggested by the excavator.

One final point will be presented here, a point already made by Young (1967, p. 25), that practically all the sites that had Iron I material also had Iron II material. Which is to say that from an archaeological view the Iron Age I and II cultures lasted over a large area for a long time, and may reflect the historical fact that there was a population continuum in much of western Iran until the early eighth century B.C. Of course, Sialk B is the anomaly here because of its extraordinary painted-ware tradition, and here alone one *might* be able to argue against stability (Dyson 1965, pp. 200–201). The isolated Iron I burials at Dalma and Hajji Firuz, and at Godin to the south, should be kept in mind, but they do not contradict a continued distribution of the Iron I and II cultures.

#### CODE FOR TABLES

Burial:

I: inhumation

- B: brick tomb
- S: stone tomb

- Sex | Age :
- F female
- M male
- l infant
- C child
- YA young adult
- MA mature adult
- OA old adult
- A adult

- Body Positions:
- **B** on back
- R on right side
- L on left side; ext. extended
- F flexed
- S arm touches own shoulder

- Head Faces:
- F to feet

ext Reference		P. 44, Figs. 9, 52 (385, 400)		P. 44, Figs. 10, 11					Pp. 44-45, Fig. 12			Pp. 40-43, Fig. 6		P. 43, Fig. 6; Muscarella, 1968,	fig. 19 P. 40 Eirc. 3 E		P. 43, Fig. 7 ; Muscarella, 1968, 4.2 1 6	1 <b>9</b> . 10	P. 43, Figs. 7, 8	P. 45, Figs. 2, 13; Levine, 1971.	p. 40		Pp. 45-45, Fig. 13 ; Muscarella, 1968, figs. 15, 17 right	P. 46, Figs. 2, 14		Figs. 2, 52 (269T)		Fig. 2
stnemmoO	Poorly preserved						Poorly preserved			Poorly preserved:	tomb has brick floor	Poorly preserved			Poorly preserved	i courty preserved							roorly preserved				Skeleton in balk	Partly in balk
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bns snogseW suoenslleosiM												Daggers ;	seal			(	Bronze		Spear					Dagger				
<b>ી</b> ፀ₩9Ι۲Υ	Bracelets, beads	Bracelets, pins, rings, needle, headband, beads	Pin, needle		Torque, bracelets,	beads, needle	Bracelet, pins, ring,	beads	Bracelet, ring	Bronze necklace, ring.	bracelet	Bracelets, ring, bone	pendant, beads	Bracelet, pins, rings,	needle, beads Pin heads		Forque, bracelets, and late nine ringe	earrings, needles, beads	Bracelet, beads	Torque, bracelets,	anklets, earrings,	Diac	Buing	Bronze necklace, bone	awl, bracelet, beads	Torque, bracelets, anklets, pin, beads		Bracelets, pins, ring, beads
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Type	-	8	-	-			-		_	8		_		_	-		_		-	8		-	-	_	(	ю	-	8
Burial	B9a, <i>β</i> 11	15	16	17			18		19	22		23		24	<u>7</u> 5	2 5	26		27	B9b, <i>8</i> 11		1,	1	16		18	B9b, <i>β</i> 20	21

P TABLE I: Dinkha III Burial Data

					P. 46, Figs. 15, 16; Muscarella, 1968. fin. 2		P. 47, Fig. 17	Fig. 52 (433T, 638P)	Fig. 52 (509T)	Pp. 39-40, Fig. 3	P. 40, Figs. 3, 4			
							Disturbed	Disturbed					Poorly preserved	
					×									
											Dagger			
Pins, ring, beads	Bracelet, ring, beads	Bracelet	Bracelet, pin	Bracelet	Pins, earrings, ring, heads	Pins, earrings, ring, needle		Torque, bracelets, pins, button headband, beads	Torque, pins, earrings, ring, beads	Torque, bracelets,	Bracelet		Bracelets, anklets, pins, beads	Bracelets, anklets, pins, ring, beads
ю	7	7	-	-	ю	ю	7	e	ю	ю	7	7	7	4
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uL.	ш	ш	ш	ш	ш	LL.			ш	Ext.	Ext.	Ext.		ш
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F/YA	M/MA	M/MA		F/YA	F/MA	F/MA		AM/?	F/YA	F/YA	Μ/ΥΑ	F/A	_	M/A
-	-	-	_	-	8	8	8	8	-	-	8	-	_	-
B10a, <i>β</i> 19 I	20	22	23	25	B10b, <i>β</i> 10	13	B8e, β7	œ	TT IV, β1	TT VII, β1	2	TT IX, β1	വ	ТТ ХІ, β1

eonereference	Fig. 52 (202T, iron)	Pp. 60-61, Figs. 25, 26	r. o3, rigs. 31, 32 Fig. 2 Fig. 2	rig. 2 Fig. 2 Fig. 2, 33; Levine, 1971, p. 40	Fig. 2 P. 64, Figs. 2, 33, 34 Fig. 2	Fig. 2 Fig. 2 P. 61, Figs. 2, 27	Pp. 64-67, Figs. 35–37 <i>;</i> Muscarella, 1968, 189 ff., figs. 13, 14	P. 67, Figs. 38, 39	P. 67, Fig. 40	P. 67, Figs. 41, 42, 52 (815) ; Muscarella, 1968, fig. 11
<b>ຮ</b> ງກອ <b>m</b> moϽ		Partly in balk Partly in balk	Disturbad	Disturbed Disturbed	No skeleton	Partly in balk Partly in balk	No skeleton ; dismembered horse skeleton	Partly in balk	Disarticulated No skeleton	No skeleton
seno8 leminA		× >	< >	< ×;	×		×	:	×	×
Wespons and Wiscellaneus		Spear, antler ax		C	Spear		Spear, maces, ax, blade, archer's rings, horse bits, bronze	Spear		Archer's rings
Դթտցլւλ	Pins, rings, hairring beads Bracelet, rings, beads	Ring Bracelets, rings, beads Bracelet	rorque, rings, oracelets, beads Beads Rind	Pins, bracelet Pins, beads, button	Bracelets, beads Bracelets Beads	Bracelets, anklets, pins, rings Torque, pins, rings, earrings, beads	Bracelets, anklets, pins, rings, beads, needle, chains, studs	Bracelet Torque, bracelets, beads	Ring, stud, beads Bracelets, anklets, pins, hairrinds, earrinds	Pins, hairrings, rings, studs
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Arm Position	L: ext. R: F R: ext.	L:F at F sides	L LL	шшші	F at sides	iu u	R			
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Body Position	8 8	6 6 6	ر ٥		ж ж		œ	~ ~ ~		
Orientation	S-N N-S	N-S N-S	o ∧'u N-u	, v v v v v v v v	S S S S Z Z	R-N	ິ 2 2	S-N N-S	S-N	S-N
əgA\xə2	F/A C	W/W				F/MA ?/A	AM/?		F/A	
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Burial	B9a, β4 7	80 O C C	B9b, β1	, o – o ,	10 13 14	15 17 19	B10a, <i>β</i> 6	11	13 14	15

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P. 61, Fig. 28		P. 63, Fig. 30	P. 59	Fig. 52 (54T, iron ; 159T, bronze) ; Muscarella, 1968, figs. 2, 6	Muscarella, 1968, figs. 2–5	P. 59, Muscarella, 1968, fig. 2	Pp. 59, 67-68, Fig. 43; Muscarella, 1968, fig. 2	Muscarella, 1968, figs. 2, 7	Pp. 61-62, Fig. 29	/ Muscarella, 1968, fig. 2	Fig. 52 (342T, 343P, iron) ; Muscarella, 1968, figs. 2, 12	Pp. 68-71, Figs. 44, 45	P. 59			Pp. 72-74, Figs. 46–48	Pp. 72-74, Figs. 46-48		
Few bones extant Partly in balk	Partly in balk Disturbed		Partly in balk Skull had a partly healed hole			Arthritic lipping of vertebrae	Arthritic lipping of vertebrae; partlv in balk			Partly destroyed by β9		Two skulls, no skeletons	Mother and child	In balk	Disturbed; in balk Disturbed	Few bones extant; two skulls	Two skeletons		Disturbed
				×	Blade, point		×		Archer's	ም 		Dagger, knives, point				Spears, knife, archer's	Mace		
Torque, bracelet, beads Bracelet, beads			Ring	Pin Pins, hairrings, rings, earrings, studs, beads, tweezer	Bracelet, ring	Bracelet	Pins, ring, needle, beads	Pins, hairrings, ring, earrings, beads	Pins, rings, beads		Pins, rings, hairring, needle	Bracelets, anklets, pins, rings, cosmetic box			Bone needle	Bracelets, pins, hairrings, rings	Bracelets	Beads	
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S-N N-S	S-N N-S	E-W	S-N N-S	E-V N-S	N-S	N-S	S-N	E-W	S-N	S-N	S-N		E-W	S-N	S-N N-S		S-N N-S-N	-S-N	S-N
l M/MA	7/MA 7/MA	AY/S	ပပ	F/MA ?/YA	M/MA	M/0A	F/0A	ပ	F/MA	AM/S	F/MA		F/MA I			M/A F/A	C F/YA		7/A
∞ _	∞ _	-	<u> </u>	<u> </u>	B	B	ß	B	8	ß	B	S	B	B	88	N I	8	8	8
16 17	21 24	B10b, <i>β</i> 1	9 0	4 D	9	7	ω	თ	11	14	B10b, <i>β</i> 16	B8a, <i>β</i> 1	B8d, <i>β</i> 1	3	B8e, β3 4	ਹ	511	9	G10c, <i>β</i> 8

TABLE III: Burials of Undetermined Period

stnemmoO	Low in fill; disturbed	Partly in balk	Disturbed	Disturbed
snogseW			Bronze dagger	
ղթ <b>տ</b> թյւλ	Bone pin			
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вэзвЯ рвеН		Sky		3
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Body Position		8	8	
Orientation		E-W		N-S
egA∖xe2		M/MA		F/MA
Type	-	-	-	-
Burial	B9a, <i>β</i> 21	B10a, <i>β</i> 18	26	B10b, <i>β</i> 12

Fig. 51 (648P)

Text Reference

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Barnett 1967 R. D. Barnett, "The Urartian Cemetery at Igdyr," Anatolian Studies 13 (1967) pp. 153-198 Boehmer 1965 R. M. Boehmer, "Die Grabungen auf den Zendan-i-Suleiman," AA (1965) pp. 746-787 Boehmer 1967 "Forschungen am Zendan-i-Suleiman," AA (1967) pp. 573-585 Burney 1962 Charles Burney, "Excavations at Yanik Tepe, Azerbaijan, 1961, Second Preliminary Report," Iraq 24, 2 (1962) pp. 134-149 Burney 1964 "Excavations at Yanik Tepe, Azerbaijan, 1962, Third Preliminary Report," Iraq 26, 1 (1964) Burney 1970 "Excavations at Haftavan Tepe 1968: First Preliminary Report," Iran VII (1970) pp. 157-171 Burney 1972 "Excavations at Haftavan Tepe 1969: Second Preliminary Report," Iran X (1972) pp. 127-142 Burney 1973 "Excavations at Haftavan Tepe 1971: Third Preliminary Report," Iran XI (1973) pp. 153-172 Burney, Lang 1972 Charles Burney, Andrew Lang, Peoples of the Hills, (New York, 1972) Burton-Brown 1951 T. Burton-Brown, Excavations in Azerbaijan, 1948 (London, 1951) Carter 1965 T. H. Carter, "Excavations at Tell al-Rimah, 1964," BASOR 178 (1965) pp. 40-69 Contenau, Ghirshman 1935 G. Contenau, R. Ghirshman, Fouilles de Tepé Giyan, (Paris, 1935) Dyson 1958 Robert H. Dyson, Jr., "Iran 1957: Iron Age Hasanlu," Univ. Museum Bulletin 22, 2 (1958) pp. 25-32 Dyson 1960 "Hasanlu and Early Iran," Archaeology 13, 2 (1960) pp. 118-129 Dyson 1962 "The Hasanlu Project," Science 135, no. 3504 (1962) pp. 637-647 Dyson 1964a "Notes on Weapons and Chronology in Northern Iran around 1000 B.C.," in Dark Ages and Nomads, ed. M. Mellink (Istanbul, 1964) pp. 32-45

Dyson 1964b "Sciences Meet in Ancient Hasanlu," Natural History Oct. 1964, pp. 16-25 Dyson 1964c "In the City of the Gold Bowl . . .," *ILN*, Sept. 12, 1964, pp. 372-374 Dyson 1965 "Problems of Protohistoric Iran as seen from Hasanlu," JNES 24, 3 (1965) pp. 193-217 Dyson 1967 "Early Cultures of Solduz, Azerbaijan," Survey of Persian Art XIV (Tokyo, 1967) pp. 2951-2974 Dyson 1968a "The Archaeological Evidence of the Second Millennium B.C. on the Persian Plateau," CAH, fascicle 68 (Cambridge, 1968) pp. 3-36 Dyson 1968b "Hasanlu and the Solduz and Ushnu Valleys," Archaeologia Viva 1, 1 (1968) pp. 82-101 Ghirshman 1939 R. Ghirshman, Fouilles de Sialk (Paris, 1939) Ghirshman 1954 Village perse-achéménide, MMA en Iran XXVI (Paris, 1954) Ghirshman 1964 The Arts of Ancient Iran (New York, 1964) Godard 1931 A. Godard, Les Bronzes du Luristan (Paris, 1931) Goff Meade 1968 C. Goff Meade, "Luristan in the First Half of the First Millennium B.C.," Iran VI (1968) pp. 105-134 Goff Meade 1969 "Excavations at Baba Jan 1967 ...," Iran VII (1969) pp. 115-130 Hančar 1934 F. Hančar, "Kaukasus-Luristan," ESA 9 (1934) pp. 47-112 Herzfeld 1941 E. Herzfeld, Iran in the Ancient East (London, 1941) Kleiss 1971 W. Kleiss, "Erkundungsfahrten in Iran 1970," AMI 4 (1971) pp. 51-111 Lamberg-Karlovsky 1970 C. C. Lamberg-Karlovsky, Excavations at Tepe Yahya, Iran, 1967-1969: Progress Report I (Harvard University, 1970) Levine 1971 Louis D. Levine, "The Iron Age Revealed," Expedition 13, 3-4 (1971) pp. 39-43 Moorey 1971 P. R. S. Moorey, A Catalogue of the Persian Bronzes in the Ashmolean Museum (Oxford, 1971)

Muscarella 1966 Oscar White Muscarella, "Hasanlu 1964," BMMA Nov. 1966, pp. 121-135 Muscarella 1968 "Excavations at Dinkha Tepe, 1966," BMMA Nov. 1968, pp. 187-196 Muscarella 1971a "Hasanlu in the Ninth Century B.C. and its Relations with other Cultural Centers in the Near East," AJA 75 (1971) pp. 263–266 Muscarella 1971b "Qalatgah: an Urartian Site in Northwestern Iran," Expedition 13, 3-4 (1971) pp. 44-49 Muscarella 1972 "A Bronze Vase from Iran and Its Greek Connections," MMA Journal 5 (1972) pp. 25-50 Muscarella 1973 "Excavations at Agrab Tepe, Iran," MMA Journal 8 (1973) pp. 47-76 Negahban 1964 E. Negahban, A Preliminary Report on Marlik Excavation (Teheran, 1964) Rad, Hakemi 1950 M. Rad, A. Hakemi, The Description and Results of the Scientific Excavations at Hasanlu, (Teheran, 1950) (in Persian) Ralph et al. 1973 E. K. Ralph, H. N. Michael, M. C. Han, "Radiocarbon Dates and Reality," MASCA Newsletter 9, 1 (Aug., 1973) pp. 1-18 Schaeffer 1948 C. F. A. Schaeffer, Stratigraphie Comparée et Chronolgie de l'Asie Occidentale, (Oxford, 1948) Schaeffer 1949 Ugaritica II (Paris, 1949) Schmidt 1970 E. F. Schmidt, Persepolis III, The Royal Tombs and Other Monuments (Chicago, 1970)

Starr 1939 R. F. S. Starr, Nuzi (Cambridge, 1939) Stein 1940 A. Stein, Old Routes of Western Iran (London, 1940) Thrane 1964 H. Thrane, "Excavations at Tepe Guran, Luristan ...," Acta Archaeologia XXXIV (1964) pp. 121-133 Thrane 1965 "Archaeological Investigations in Western Iran," Acta Archaeologia XXXV (1965) pp. 153-169 Thrane 1970 "Tepe Guran and the Luristan Bronzes," Archaeology 23 (1970) pp. 27–36 vanden Berghe 1959 L. vanden Berghe, Archéologie de l'Iran Ancien (Leiden, 1959) vanden Berghe 1964 Le Nécropole de Khurvin (Istanbul, 1964) Woolley 1955 C. L. Woolley, Alalakh (London, 1955) Young 1962 T. Cuyler Young, Jr., "Taking the History of the Hasanlu Area Back ... Another Five Thousand Years," ILN, Nov. 3, 1965, pp. 707-709 Young 1965 "A Comparative Ceramic Chronology for Western Iran, 1500-500 B.C.," Iran III (1965) pp. 53-85 Young 1966 "Survey in Western Iran, 1961," JNES XXV (1965) pp. 228-239 Young 1967 "The Iranian Migration into the Zagros," Iran V (1967) pp. 11-34 Young 1969 Excavation at Godin Tepe: First Progress Report, Royal Ontario Museum, Art and Archaeology, Occasional Paper 17 (Toronto, 1969)

# Attic White-Ground Cups: A Special Class of Vases

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BLACK-FIGURE AND RED-FIGURE are generally, and rightly, considered the principal techniques of decoration in Attic vase-painting. They were, however, not the only ones. During the second half of the sixth century B.C., considerable experimentation was occurring with the shapes of vases as well as with the dilute glaze and added colors used for the figures and ornament. Of the secondary techniques which emerged, white-ground proved to be by far the most important; its name refers to the thin layer of white slip that was applied to all or part of a vase before the actual painting.

White-ground flourished for over a hundred years, from about 530 through the early fourth century B.C. Its establishment in the Athenian Kerameikos has traditionally been ascribed to Nikosthenes,<sup>1</sup> the chief craftsman and probable owner of a prolific blackfigure factory. Although Nikosthenes and his colleagues produced white-ground works of many shapes<sup>2</sup> during the last quarter of the sixth century, the new

technique may in fact have been developed in the workshop of Andokides, where red-figure originated.<sup>3</sup> This hypothesis can be supported by various kinds of evidence. For instance, the two Andocidean amphorae with white-ground, New York 63.11.64 and Louvre F 203,5 have been dated between about 530 and shortly before 520 B.C.;<sup>6</sup> thus, they occur very early in the development of white-ground as well as of red-figure. Furthermore, the use of slip in both works seems experimental, and cautious. Evidence for the Andocidean hypothesis may also be found in an artistic consideration. A white ground, instead of the usual orange one, did not significantly affect black-figure artists, whose representations consist of solid black glaze forms articulated with incision and added color. With the advent of red-figure, painters gained the freedom to draw their figures and, with white-ground, they literally got carte blanche; they could use line and color to maximum effect and were not constrained by the black

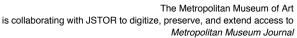
1. E.g., C. Loeschcke, "Dreifussvase aus Tanagra," Archäologische Zeitung (1881) p. 29 ff.; H. B. Walters, History of Ancient Pottery (London, 1905) I, p. 385; E. Pfuhl, Malerei und Zeichnung der Griechen (Munich, 1923) I, p. 281; M. H. Swindler, Ancient Painting (New Haven, 1929) pp. 130, 181; A. Rumpf, Malerei und Zeichnung der Griechen (Munich, 1953) p. 59 (by implication).

2. The Nicosthenic workshop can be credited with the development of the Nicosthenic amphora and the kyathos. It was probably also responsible for the application of slip to these shapes, as well as to black-figure oinochoai. A phiale (London B 678) and a skyphos (London B 681) are among other works that may be associated with the workshop.

4. J. D. Beazley, Attic Red-figure Vase-painters (Oxford, 1963) p. 3, 2 bis (1617); Paralipomena (Oxford, 1971) p. 320. (Paralipomena is hereafter abbreviated Para.).

5. ARV<sup>2</sup> p. 4, 13.

6. Bothmer, "Andokides," p. 212.





<sup>3.</sup> D. von Bothmer, "Andokides the Potter and the Andokides Painter," *The Metropolitan Museum of Art Bulletin* (February, 1966) p. 207.





FIGURE I Cup with white-ground exterior. Stockholm, Medelhavsmuseet 1960:12

FIGURE 2 Interior of cup, Figure 1

glaze background. It would seem, therefore, that there is a technical and esthetic affinity between whiteground and red-figure that does not exist with blackfigure.

Whether Andokides or Nikosthenes introduced the innovation, the significant fact is that both artists were potters. The potter's first occupation was to make vases, but it must also have included the preparation and application of slips.<sup>7</sup> Within the relatively large, yet circumscribed, body of preserved white-ground material, it is clear that consistency in vase design, in the choice and placement of slip and ornament, runs by shape and potter rather than by painter or subject. Moreover, it is equally clear that certain categories and individual pieces were specially made or commissioned according to particular specifications.<sup>8</sup>

The white-ground vases that repay close investigation most generously are the kylikes. Not surprisingly,

7. The conventional potter's signature is "[name] epoiesen," "so-and-so made it." For a recent discussion of the meaning of *epoiesen* see R. M. Cook, "'Epoiesen' on Greek Vases," Journal of Hellenic Studies 91 (1971) p. 137 ff., and M. Robertson, "'Epoiesen' on Greek Vases: Other Considerations," JHS 92 (1972) p. 180 ff.

8. The commissioning of vases, and various ramifications of the subject, has been taken up by T. B. L. Webster in his *Potter and Patron in Classical Athens* (London, 1972). A serious consideration

they have interested scholars since the early nineteenth century. Before 1850, over half a dozen pieces had already been discovered and published; from the last quarter of the century on, lists and studies of whiteground cups began to appear. Worthy of particular note are those by W. Klein, in the second edition of his Euphronios (1886); 9 by P. Hartwig, in his Meisterschalen (1895);<sup>10</sup> and by E. Pottier in Monuments Piot (1895).<sup>11</sup> During the twentieth century, accelerated archaeological activity as well as the scholarship of J. D. Beazley have greatly increased the amount of material and our understanding of it. However, the only effort at a comprehensive publication of white-ground cups has been H. Philippart's Les Coupes Attiques à Fond Blanc (1936).12 Since the appearance of this work, the number of known pieces has increased by more than half, and the possibility now exists of distinguishing major lines of development. Our concern here is to chart this develop-

of the book would divert us from our subject here; while the study is valuable for the quantity of information and the iconographical approach, some of Webster's basic premises are difficult to accept. 9. P. 247 ff.

<sup>10.</sup> P. 484 ff., especially 499 ff.

<sup>11.</sup> P. 39 ff.

<sup>12.</sup> This article appeared in book form and also in L'Antiquité Classique 5 (1936) p. 5 ff.

ment and to introduce the major personalities, notably Euphronios. While our discussion begins with the black-figure material, it focuses on the cups decorated in the outline technique used by red-figure artists. Not only are the outline examples by far the more numerous, but their quality is also remarkably, and consistently, high.

The white-ground cups with black-figure decoration number over thirty; only half of these are reasonably complete and only a third have been attributed. The feature common to all is the application of slip to the outside of the bowl. The white zone begins below the handles and extends toward the lip, covering the entire circumference; in the outline cups of red-figure painters, white-ground exteriors occur comparatively rarely.13 As far as can be determined, the black-figure pieces are primarily of type A, and at least fifteen are eye-cups. Stockholm 1960:12, once on the Swiss art market,<sup>14</sup> is typical in design, in subject matter, and in quality; it may be dated about 500 B.C. (Figures 1, 2). The interior contains a gorgoneion, which is canonical for this shape. The white zone on the exterior shows satyrs, maenads, and vine branches disposed around a pair of black, masculine eyes. London B 679, datable about 510 B.C., is illustrated here to represent the six or so cups without eyes (Figures 3, 4). While the whiteground areas have nothing unusual, this is the only known slipped standard black-figure cup with a frieze surrounding the tondo.15

Besides the two types mentioned above, the extant material presents certain special features. Akropolis 1656 is one of four white-ground topbands, a small

13. The outline cups with slipped exteriors include: Gotha 48  $(ARV^2 p. 20 top)$ ; Cambridge, Museum of Classical Archaeology UP 129 (*Para.* p. 349 bottom); Athens, Akropolis 441  $(ARV^2 p. 333, a)$ ; Fribourg S 212  $(ARV^2 p. 399)$ ; London D I  $(ARV^2 p. 429, 20)$ ; Athens, Akropolis 439  $(ARV^2 p. 860, 2)$ ; Athens, Akropolis 429; Athens, Akropolis 431; Istanbul A6-3440 from Xanthos, H. Metzger, *Fouilles de Xanthos* IV (Paris, 1972) p. 158 (I thank D. von Bothmer for bringing this piece to my attention). The decoration on the outside of Boston 28.1147 is modern, although the slip may be ancient.

14. Ars Antiqua II (1960) p. 54, no. 143. According to the catalogue, the style was recognized by Beazley as recalling the Pittsburgh Painter; the cup does not, however, appear in *Para*.

15. Recently mentioned in K. Schauenburg, "Zu attischschwarzfigurigen Schalen mit Innenfriesen," Antike Kunst Beiheft 7 (1970) p. 33, note 10, and p. 45. The ships in the frieze are discussed in J. S. Morrison and R. T. Williams, Greek Oared Ships (Cambridge, 1968) p. 114, pl. 21d. class of late archaic cups, type A or C, with a narrow figured zone between two broad glaze bands. The fragment (Figure 5) shows a hoplite whose linen cuirass is painted in a second white upon the slipped background. The use of a second white becomes widespread with early classic and classic funerary lekythoi; as this fragment shows, however, the practice existed half a century earlier.

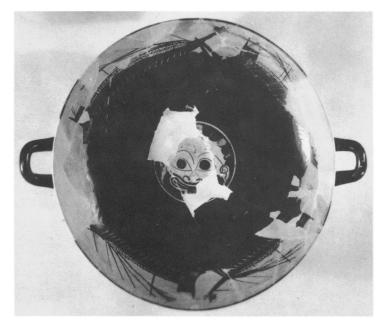


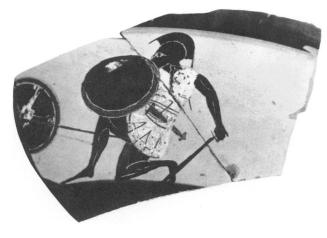
#### FIGURE 3

Cup with white-ground exterior. London B 679 (photo: Courtesy of the Trustees of the British Museum)

#### FIGURE 4

Interior of cup, Figure 3 (photo: Courtesy of the Trustees of the British Museum)





A unique topband of the stemless variety belongs to Jan Mitchell (Figures 6, 7).<sup>16</sup> In addition to being one of the most original, it is also one of the earliest cups presented here, for it may be assigned to the decade 520-510 B.C. The design of the exterior comes particularly close to that of Little-master band cups. Even more remarkable, the interior is entirely covered with slip. The decoration, which fills this surface, consists of a horseman with his dog, and it is supplemented by the potter's boldly written signature, Pamphaios epoiesen. This, and possibly Louvre F 133,<sup>17</sup> are among the very few black-figure cups with white-ground inside the bowl. The footplate of Louvre F 133 and the name of Pamphaios associate these pieces with the Nicosthenic workshop. Within the preserved black-figure whiteground material of all shapes except lekythoi, two personalities recur most often, the potter Nikosthenes and the painter Psiax. It is interesting, therefore, that they

16. On loan to the Metropolitan Museum, L. 63.21.4. J. D. Beazley, *Attic Black-figure Vase-painters* (Oxford, 1956), p. 236, 7; *Para*. pp. 102, 109. The alien foot was removed and replaced by one in plaster designed by H. Bloesch and D. von Bothmer.

17. ABV p. 208, 2 top. The cup is unique in having only the ivy on the outside of the lip applied over white-ground.

18. Cups in some way related to the Nicosthenic workshop include not only Louvre F 133 and the Mitchell piece but also Berlin F 2060 (ABV p. 435, 1 above) and Athens, N.S. AP 402 and 418 (ABV p. 435, 2 above). The only cup associated with Psiax himself is the rather inconclusive fragment Athens, Akropolis 1742 (ABV p. 674). The pieces near the Pittsburgh Painter (Louvre C 10380, ABV p. 630, 1; Stockholm, Medelhavsmuseet 1960:12) are linked to the painter through the Group of Vatican G. 57, thus quite tenuously. Good evidence for the actual collaboration of Nikosthenes and Psiax exists on black-figure vases of other shapes.

19. J. D. Beazley, "Some Attic Vases in the Cyprus Museum," Proceedings of the British Academy (1948) p. 44, no. 4. FIGURE 5 Cup fragment with white-ground exterior. Athens, Akropolis 1656

also appear in connection with cups, even though so few have as yet been attributed.<sup>18</sup>

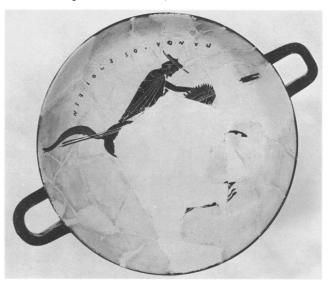
The rarest form of white-ground cup is the covered variety, of which only one complete black-figure example exists (Figures 8, 9). Athens N.M.  $408^{19}$  is an eye-cup of type C whose squat stem is hollowed to allow for filling the bowl. The decoration of the cover and of the exterior is applied over slip; although the execution is not distinguished, the topside is rather



FIGURE 6 Cup with white-ground exterior. Collection Jan Mitchell, New York (photo: Metropolitan Museum)

#### FIGURE 7

White-ground interior of cup, Figure 6 (photo: Metropolitan Museum)





### FIGURE 8

Covered cup with white-ground cover. Athens, N.M. 408 (photo: Deutsches Archäologisches Institut, Athens)

#### FIGURE 9

White-ground exterior of cup, Figure 8 (photo: Deutsches Archäologisches Institut, Athens)



elaborate in having a central tondo, a surrounding figured zone, and an outer frieze of tongues. The same schema occurs on Cabinet des Médailles 182,<sup>20</sup> a cover that has been sheared off its cup. In design, both examples recall the interior of London B 679.

This part of our discussion may close with two fragments in the collection of Herbert A. Cahn (Figures 10, 11).<sup>21</sup> They belong to a cup for which, at the present time, no parallels exist but which is datable about 500 or shortly before. The interior preserves most of the body and part of the head of a satyr, who kneels beneath a vine branch and looks toward a figure (Dionysos?) at his left. The type of motif and the probability that the scene covers the interior would place this work within the Segment Class.<sup>22</sup> The exterior of the Cahn cup is, however, exceptional for the class. In all but two cases,<sup>23</sup> Segment Cups have no decoration whatsoever on the outside, only black glaze. The Cahn fragments show a bearded man grasping the "mane" of a two-headed dog, thus Herakles and Cerberus. Unique for the class is the presence of slip beneath the decoration. The combination of standard black-figure with another technique on a Segment cup can be compared only with Berlin 1958.7;24 its interior has a black-figure subject and a pair of red-figure eves in the exergue.

While their number could be increased, the examples cited give an adequate picture of the white-ground black-figure kylikes. The latter span a period of approximately forty years, about 520–480, and their quality is generally mediocre because virtually no artists of stature worked on such vases. Although they may present features of iconographical or technical interest, the black-figure white-ground cups merge into the mass of late black-figure.

The cups painted in the outline technique by redfigure artists create an entirely different impression. They form a large group of over a hundred pieces. They show variety and development in design, for they were produced by the leading late archaic and early classic masters. At the same time, one artist emerges as

<sup>20.</sup> Beazley, "Cyprus," p. 44, no. 5.

<sup>21.</sup> Inventory no. 803/808.

<sup>22.</sup> ABV p. 212 ff.

<sup>23.</sup> London B 640 (ABV p. 212, 1); Copenhagen, Ny Carlsberg I. N. 3385 (Para. p. 104, top).

<sup>24.</sup> ABV p. 212, 4 bis (Para. p. 103).



FIGURE 10 Fragments of a cup with white-ground exterior. Collection Herbert A. Cahn, Basel

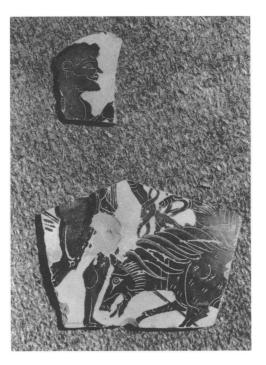


FIGURE 11 Interior of cup, Figure 10

perhaps the decisive innovator, whose influence spread through the example of his works and through his collaboration with others. This artist was Euphronios.

While at least three members of the Pioneer Group produced white-ground vases, only Euphronios has so far left us a white-ground cup (Figure 12). The piece, in the Bareiss Collection,25 has a special shape, for the curve of the bowl is continuous outside but interrupted within by an offset lip.<sup>26</sup> The latter feature serves an artistic function by providing a three-dimensional black frame for the white-ground picture surface. The representation exploits the light-dark contrast further: it shows a satyr, painted in black-figure, playing the double flutes before Dionysos, who is drawn in outline.27 The primary means of characterization is the juxtaposition of techniques, a device that was taken up especially in black-figure lekythos workshops at the end of the sixth century. Its earliest occurrence is here, on one of the earliest known white-ground cups, and Euphronios' contribution to both shape and decoration may not have been negligible.

While the Bareiss cup is a relatively recent addition

to the oeuvre of Euphronios, Gotha Ahv. 48 has been associated with and disassociated from the artist since 1877.<sup>28</sup> Despite its poor state of preservation, one aspect of the Gotha cup is immediately apparent (Figures 13, 14). It combines elements of black-figure design and ornament with red-figure decoration; in other terms, it combines a red-figure interior with a blackfigure type of exterior.<sup>29</sup> The placement of the slip is derived from black-figure. Moreover, the shape, the narrow picture zone with a single motif on each side, and the handle palmettes recall band cups as well as

25. J. R. Mertens, "A White-ground Cup by Euphronios," Harvard Studies in Classical Philology 76 (1972) p. 271 ff.

26. This feature is characteristic of Bloesch's Eleusis and Euaion classes, Formen attischer Schalen (Bern, 1940) pp. 137–138. Two further examples are associated with the potter Pamphaios: London E 37 (Bloesch, p. 64, 14;  $ARV^2$ p. 72, 17) and Vatican I 11 (Bloesch, p. 65, 23;  $ARV^2$  36, below).

27. For an equally remarkable use of outline and black glaze by a red-figure artist, see Akropolis 2165.

28. Bibliography for the piece, with brief annotations, appears in E. Rohde, CVA: Gotha 1 (1964) p. 53.

29. The same unusual combination occurs on the fragment Agora P 22326.

the Mitchell Pamphaios. These are features that were probably determined by the potter. Those which concern the painter and the participation of Euphronios have been so obscured by damage and restoration that they cannot surely be discussed from photographs. Nonetheless, the Gotha cup certainly belongs within the sphere of Euphronios' influence; within this extensive artistic province, the cup should perhaps be considered in relation to the proto-Panaitian group.

The Bareiss and Gotha cups document an achievement of the Pioneer Group that is all too frequently overlooked. Euphronios and his colleagues are best known as painters, the first whose drawing exploits the potential of red-figure. Their technical versatility and inventiveness, however, deserve equal recognition. The three principal Pioneers have left works employing white-ground, coral red, and possibly black-figure;<sup>30</sup> in addition, their signatures prove that they were also potters.<sup>31</sup> They favored cups for the more novel techniques and, indeed, coral red vases of another shape are exceptional.<sup>32</sup> Thus, the name "Pioneer Group" is justified in an even wider sense than originally defined by J. D. Beazley.<sup>33</sup>

The first, and the largest, group of late archaic whiteground cups is associated with the painter Onesimos and his circle. This material draws in Euphronios, for when the latter had turned to potting during the later

30. ABV p. 403, center.

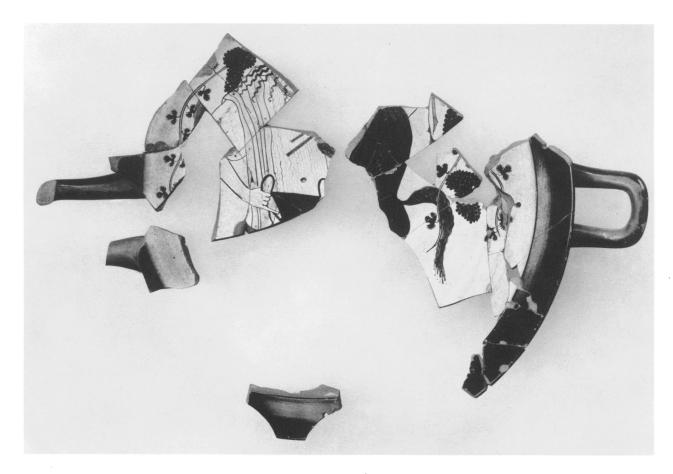
31. The potter signature of Euthymides is documented on a red-figure oinochoe until recently on the Swiss market.

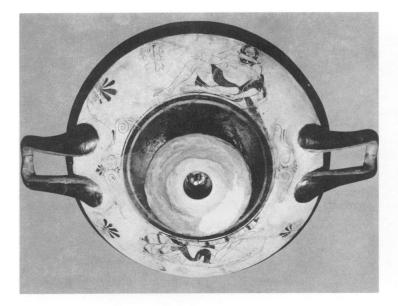
32. B. Cohen, "Observations on Coral Red," Marsyas 15 1970-71) p. 1 ff.

33. Attic Red-figured Vases in American Museums (Cambridge, 1918) pp. 27-28.

#### FIGURE 12

Cup with white-ground interior. Collection Walter Bareiss, Greenwich, Connecticut (photo: Metropolitan Museum)







## FIGURE 13

Cup with white-ground exterior. Gotha Ahv. 48 (photo: Schlossmuseum Gotha and the Staatliche Museen, Berlin)

part of his career, he employed Onesimos over a dozen times. The Eleusis Painter, who was contemporary with and related to the earliest phase of Onesimos' activity, <sup>34</sup> derives his name from two cups in Eleusis. Both works show undecorated black-glazed exteriors and the representation of a deity on white-ground within. They resemble the Bareiss cup in this, as in the shape of Eleusis 619, which was originally lipped inside only.<sup>35</sup>

FIGURE 14 Interior of cup, Figure 13 (photo: Schlossmuseum Gotha)

The four pieces certainly attributed to Onesimos present a distinct use of white-ground. All apparently had a broad white band around a red-figure tondo; being juxtaposed in this way, the two techniques create the strongest possible value contrast. The most complete work, Florence PD 265,<sup>36</sup> preserves part of a *kalos* inscription on the slipped zone and a glaze stripe at the lip that may have been inspired by offset examples (Figure 15). The tondo here, as in the painter's other slipped cups, contains a youth in a scene from everyday life.

Three cups in the style of Onesimos came to light on the Athenian Akropolis;<sup>37</sup> two are illustrated here

34. ARV<sup>2</sup> p. 314.

35. Bloesch, pp. 137-138.

36.  $ARV^2$  p. 322, 29. D. von Bothmer has proposed an addition to the cup, joined of two smaller fragments.

37. Akropolis 434 ( $ARV^2$ p. 330, 5), Akropolis 432 ( $ARV^2$ p. 332, 27), Akropolis 433 ( $ARV^1$ pp. 216–217, 10).

FIGURE 15

Cup with white-ground interior. Florence PD 265 (photo: Soprintendenza alle Antichità, Florence)

98



#### FIGURE 16

Cup with white-ground interior. Athens, Akropolis 434 (photo: National Museum, Athens)

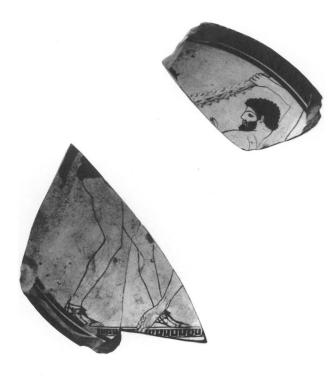
## FIGURE 17

Exterior of cup, Figure 16 (extant decorated portions) (photo: National Museum, Athens)





## FIGURE 18 Cup with white-ground interior. Athens, Akropolis 432 (photo: National Museum, Athens)



(Figures 16-18). While they vary among each other in design and in the presence or absence of exterior decoration, they differ from the surely Onesiman examples in several important respects. They have whiteground over the entire interior and decoration executed in glaze and matte color supplemented by relief. Furthermore, two of the pieces represent Athena, once with her owl and a libation bowl, once with a boy who may be Erichthonios; the third cup depicts the goddess' protégé, Herakles, in his struggle with Apollo over the Delphic tripod. These subjects have a partly religious, partly official character, which is intensified by the painted inscription on Akropolis 434.38 The three cups, therefore, give the impression of display pieces and special dedications. They may not be by the same hand, yet they share stylistic features. Most interesting is the presence of a cyma at the upper border of the exergue in Akropolis 432 and 433.39 The detail is significant because it recurs on cups that can be connected with Euphronios, particularly in his capacity as potter. The connection, in the present case, is provided by Akropolis 434, whose interior preserves traces of Euphronios epoiesen. As the Bareiss piece introduces Euphronios as a painter of slipped cups, so Akropolis 434 and the related examples stand at the head of a series made by him or under his influence.

The second major late archaic workshop producing white-ground cups was that of the Brygos Painter. According to H. Bloesch, the two pieces decorated by the painter himself were potted by Brygos, who on occasion made use of Euphronian ideas.<sup>40</sup> The same two works are also the most noteworthy in the group. The famous cup with a maenad in Munich<sup>41</sup> is unique in having a band of glaze and one of slip surrounding the white-ground tondo (Figure 19). The example in the Vatican<sup>42</sup> has a blank white interior, which suggests that the decoration was never completed; it must have seemed preferable to leave one surface bare than to risk losing the shape and the exterior scenes.<sup>43</sup> Berlin

38. ΣΠΕΝΔΟΤΟΙΔΑΙΜΟΝΙΤΟΙΑΓΑΘ[ΟΙ].

39. A. Waiblinger cites this feature independently in her "Remarques sur une Coupe à Fond Blanc du Musée du Louvre," *Revue Archéologique* 1972, 2, p. 233 ff.

- 40. Bloesch, p. 81 and passim.
- 41. Munich 2645 (ARV<sup>2</sup> p. 371, 15).
- 42. ARV<sup>2</sup> p. 375, 68.
- 43. I thank D. von Bothmer for this suggestion.



FIGURE 19 Cup with white-ground interior. Munich 2645 (photo: Hirmer, Munich)

inv. 324044 is attributed to a hand near the Foundry Painter and to the potter Hieron, most of whose works were painted by Makron. The interior of the Berlin cup shows the relatively uncommon white framing zone. Moreover, while a meander band around the tondo is usual in red-figure cups by the Brygos Painter and his circle, this is the only white-ground piece with such a band. One cannot help wondering whether Hieron was in some way responsible. An effect of the meander here is to establish a definite separation between the tondo and the surrounding field. A cup in Ruvo,45 by the Briseis Painter, another follower of the Brygos Painter, once again displays the unframed tondo; the latter, however, circumscribes the satyr without even defining a space, for the thyrsos passes right through the circle. In subject as in certain details,

- 45. Ruvo, Jatta 1539 (ARV<sup>2</sup> p. 408, 33).
- 46. ARV<sup>2</sup> p. 1558, 3.
- 47. ARV<sup>2</sup> pp. 426-427.

48.  $ARV^2$  p. 428, 11. The cup has now been augmented by ten fragments belonging to the lip, to the white zone, and to the border of the tondo.

49. ARV<sup>2</sup> p. 429, 20.

100

this work calls to mind an unattributed cup found at the Argive Heraion (Figure 20).<sup>46</sup> The two are certainly not by the same hand and the second piece is somewhat later; nonetheless, its style is reminiscent, and what remains of the scene suggests the influence of a work like that in Ruvo.

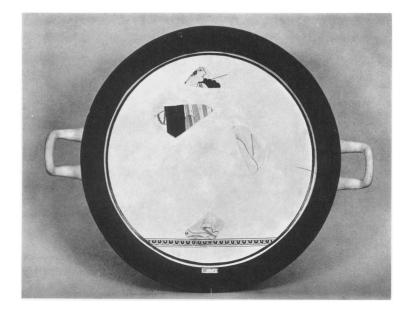
A third major late archaic artist who concerns us here is Douris. Two white-ground cups have been attributed to him; like his other white-ground works, they belong to the earlier phases of his activity, to the time of his greatest dependence on Onesimos and of his possible collaboration with Euphronios.<sup>47</sup> Louvre G 276<sup>48</sup> shows an Onesiman type of interior, with a particularly wide slipped zone. London D 1<sup>49</sup> is considerably more ambitious (Figures 21, 22). It resembles Eleusis 619 and especially the Bareiss cup in the lip, which is offset on the inside only and provides a strong

#### FIGURE 20

Cup with white-ground interior. Athens, N.M. from the Argive Heraion (photo: National Museum, Athens)



<sup>44.</sup> ARV<sup>2</sup> p. 405, below.



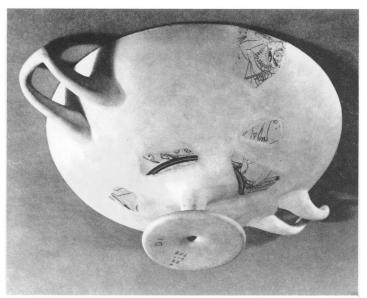


FIGURE 21 Cup with white-ground interior. London D 1 (photo: Courtesy of the Trustees of the British Museum)

black frame for the white picture surface. Again, the subject is a single mythological figure and the groundline consists of a cyma. The exterior of London D 1 is unusual in being slipped as well. The better-preserved side depicts Herakles and Apollo disputing the Delphic tripod. The representation may appear familiar and, indeed, if one excludes the two attendant goddesses, the composition recalls Akropolis 432. The figures are mirror-reversed with Herakles' body seen from the front rather than from behind, yet the relationship is evident in the right arm of Herakles and in the position of the legs, complete with the hero's pointed foot. The Akropolis cup may perhaps have inspired the developing artist, who was enterprising but whose approach had not yet advanced beyond the decorative.

Through his early and middle periods, Douris decorated a large number of red-figured cups with scenes of youths and, more rarely, young women. In these works, he reveals an extraordinary sensitivity to his subjects' appearance and to their moods. His hand may be recognized as well in a white-ground cup from the Athenian Agora that has long been known but has never been attributed (Figure 23). Agora P  $43^{50}$  is a small cup

FIGURE 22 White-ground exterior of cup, Figure 21 (photo: Courtesy of the Trustees of the British Museum)

of type C, lipped inside and outside. According to Bloesch, a date about 480 B.C.<sup>51</sup> is acceptable for it, though the shape stands apart from the mainstream of contemporary developments.<sup>52</sup> This observation is interesting for the potting aspect of Douris' activity. During the earlier part of his career, Douris collaborated with at least five different potters and he painted at least one other white-ground cup with lip offset.<sup>53</sup> He is also indirectly associated with the latter shape, for his colleague, Python, and his follower, the Euaion Painter, contributed to a special group of works that Bloesch has designated the "Euaion Class."<sup>54</sup> In subject, the youth on Agora P 43 finds many Dourian counterparts who are depicted as doing something by

51. L. Talcott, "Two Attic Kylikes," Hesperia 2 (1933) p. 230.

53. The potters who are named in  $ARV^2$  as having employed Douris during his early and early-middle periods are Euphronics, Python, Kleophrades, Brygos, and the "Potter of the Eleusis Group." The kantharos made and painted by Douris also dates to this time.

<sup>50.</sup> ARV<sup>2</sup> p. 1578.

<sup>52.</sup> Bloesch, pp. 129-130, 104.

<sup>54.</sup> Bloesch, pp. 138-139.

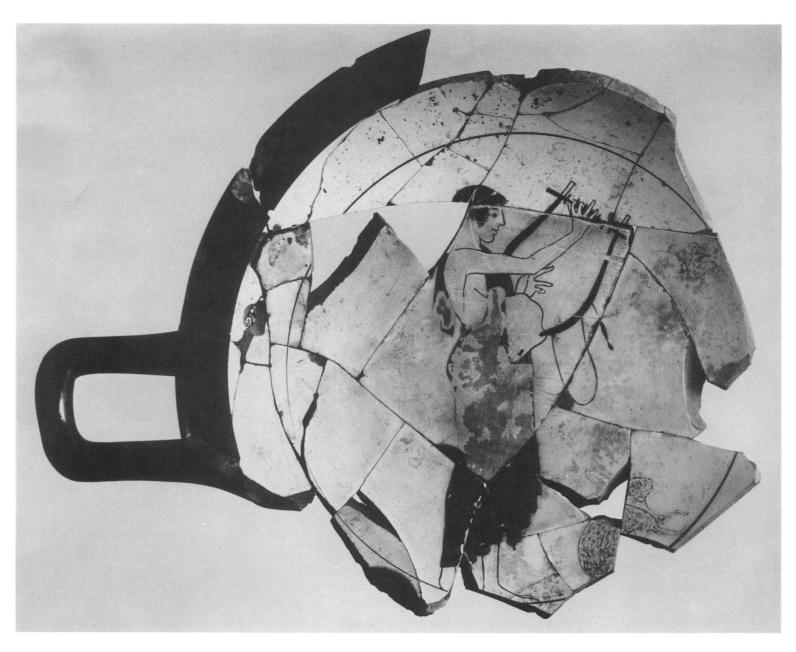


FIGURE 23 Cup with white-ground interior. Athens, Agora P 43 (photo: American School of Classical Studies at Athens) themselves.<sup>55</sup> Stylistically, the face<sup>56</sup> with its open eye and down-curled lower lip, the clumsy hands,<sup>57</sup> the fall of the drapery,<sup>58</sup> the thin lower legs,<sup>59</sup> the shape of the lyre,<sup>60</sup> the hare with its pendant jowl and long mouth,<sup>61</sup> and yet other features, all link this scene with the oeuvre of Douris.<sup>62</sup> It would seem, therefore, that the Agora cup belongs toward the end of the artist's early-middle period, coming somewhat later than Louvre G 276 and London D 1. This is one of the most accomplished of the "sparse" representations, and one feels that the experience of such works prepared, for instance, the school scenes and symposia of Douris' middle period.

The late archaic white-ground cups form an exceptionally cohesive group. They were produced during the years about 515-480 B.C. by the leading workshops of the Kerameikos and, in addition, they give evidence of active artistic intercommunication. Insofar as one dominant influence existed, it may be ascribed to Euphronios. The works themselves show considerable variety in shape and decoration with only the Onesiman examples suggesting any kind of standardization. Though no specific features are peculiar to this period, it is noteworthy that the glaze band within the lip tends to be broad rather than narrow. During the second, early classic, phase of white-ground cup production,

55. E.g., Louvre G 127 ( $ARV^2$  p. 427, 1); Tübingen E 20 ( $ARV^2$  p. 428, 6); Louvre G 122 ( $ARV^2$  p. 428, 10); Louvre G 121 ( $ARV^2$  p. 434, 78); Leipzig T 518 ( $ARV^2$  p. 442, 216); Munich inv. 8710 ( $ARV^2$  p. 443, 219); Boston 01.8029 ( $ARV^2$  p. 443, 226); compare also Eleusis 607 ( $ARV^2$  p. 328, 115) by Onesimos.

56. Cabinet des Médailles 538 ( $ARV^2$  p. 428, 16); Palermo ( $ARV^2$  p. 429, 23); "Amphitrite" on exterior of Louvre G 116 ( $ARV^2$  p. 431, 44); Cabinet des Médailles 539 ( $ARV^2$  p. 438, 134).

57. Berlin inv. 3255 (*ARV*<sup>2</sup> p. 428, 12); Berlin 2285 (*ARV*<sup>2</sup> p. 431, 48); Greenwich, Bareiss (*ARV*<sup>2</sup> p. 432, 51 bis; *Para.* p. 375); Leipzig T 518 (*ARV*<sup>2</sup> p. 442, 216).

58. Himatia: Vienna 3694 ( $ARV^2$  p. 427, 3); Vienna 3695 ( $ARV^2$  p. 429, 26); Munich 2646 ( $ARV^2$  p. 437, 128); especially Florence ( $ARV^2$  p. 443, 220).

59. Vatican (*ARV*<sup>2</sup> p. 427, 2); Vienna 3694 (*ARV*<sup>2</sup> p. 427, 3); Louvre G 118 (*ARV*<sup>2</sup> p. 430, 35).

60. Berlin 2285 ( $ARV^2$  p. 431, 48); Heidelberg 76 and 77 ( $ARV^2$  p. 432, 51); Greenwich, Bareiss ( $ARV^2$  p. 432, 51 bis); see also the shell of the tortoise on London E 48 ( $ARV^2$  p. 431, 47).

61. Louvre G 122 (ARV<sup>2</sup> p. 428, 10); Greenwich, Bareiss (ARV<sup>2</sup> p. 432, 51 bis); Louvre G 121 (ARV<sup>2</sup> p. 434, 78).

62. The zone surrounding the tondo preserves an inscription reconstructed [E]PINO $\Sigma$  K[AAO $\Sigma$ ] by Beazley. Its placement may be compared—with the EPOOEMI $\Sigma$  on Florence PD 265 by Onesimos ( $ARV^2$  p. 322, 29). If Beazley's reconstruction is, in fact, accurate,  $\eta_{PVOS}$  would be a most appropriate gloss on the subject represented.

few new types of design appear; instead, there are new shapes and a pronounced shift in subject matter away from genre scenes. While the general picture is one of greater diversity than before, two workshops in particular provide a focus and the continued activity of Euphronios provides significant and strong continuity.<sup>63</sup>

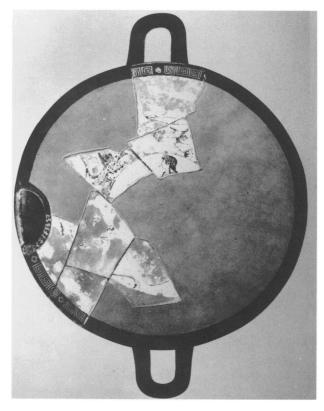
During the late archaic period, most white-ground cups were produced by workshops that specialized in cups. During the succeeding generation, a few pieces are known by the Stieglitz, the Lyandros, and the Boot Painters, for instance; a few more are by artists like the Pan and the Sabouroff Painters who worked primarily on pots. Of the more interesting examples by a pot painter, one may cite two covered cups associated with the Carlsruhe Painter. The cover of Boston 00.35664 has white-ground underlying the picture surface and the surrounding band; the outermost border displays a laurel wreath painted in red-figure, a not uncommon feature favored especially in the Penthesilea workshop.65 The arrangement of the decoration clearly derives from that of standard cups, yet it also recalls that of pyxides, which were popular at this time and which presented the artist with a similar combination of surfaces.66

63. In his review of Philippart (JHS 56 [1936], pp. 251-252), M. Robertson already pointed out the interrelation of the late archaic artists discussed here. At the same time, however, he questioned both the inclusion of the Onesiman cups with white zones and the validity of a "Euphronios Group" that ranged from the Gotha cup to works of the Pistoxenos Painter. It is worth noting that emphasis on the potter's role, a relatively recent development, has knit together personalities to an extent not possible thirty-five years ago.

64. ARV<sup>2</sup> p. 741 below.

65. In cups of the Penthesilean workshop, the laurel within the lip is represented without fruit and with the leaves directed either to left or to right. Among the artists who employed the motif are the Penthesilea Painter (e.g.,  $ARV^2$  p. 880, 12; p. 882, 35), the Splanchnopt Painter (e.g.,  $ARV^2$  p. 891, 1, 3), the Aberdeen Painter (e.g.,  $ARV^2$  p. 919, 1-4), and the Painter of London E 777 (e.g.,  $ARV^2$  p. 939, 1-2 bottom).

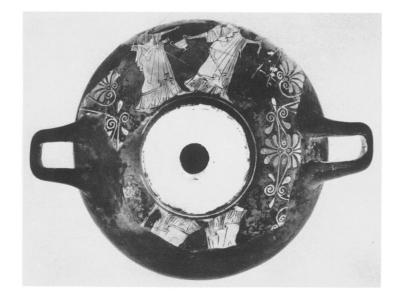
66. The lids of pyxides regularly display a zone of palmettes or of another foliate motif. Interestingly also, the tondo on Boston 00.356 gives the impression of an excerpt from the kind of scene decorating the pyxides Boston 98.887 ( $ARV^2$  p. 774, I above) or New York 07.286.36 ( $ARV^2$  p. 890, 173). Beazley noted that a wreath of laurel like that on the Boston covered cup recurs within the lip of London 88.6–1.611c ( $ARV^2$  p. 827, 2), a cup fragment attributed to the Stieglitz Painter.



#### FIGURE 24

Covered cup with white-ground cover. Delphi, from Kirrha (photo: Ecole Française d'Athènes)

FIGURE 25 Exterior of cup, Figure 24 (photo: Ecole Française d'Athènes)



The Boston piece has been related by Beazley to another in Delphi (Figures 24, 25).<sup>67</sup> The decoration of the cover here consists of a flute player, contained within the tondo, and of a symposium disposed around it. The same design appeared in the black-figure covered cups discussed above, and it recurs in a very few white-ground cups of standard shape.<sup>68</sup> One of these works, which is both incomplete and unattributed, again suggests a special commission.<sup>69</sup> It came to light near the Dipylon Gate and, on the inside, preserves a libation scene and one figure of a surrounding group or procession. The main scene, which was enhanced with details gilded, can be identified through remains of an inscription as Demeter and Kore.

Of the attributed early classic white-ground cups, about one third seem to have been produced occasionally by artists like those named above who have not left more than two or three pieces. The greater part of the attributed material comes from two workshops. The first was that of Sotades and his colleague, the Sotades Painter; it seems to have included other painters and at least one other potter, Hegesiboulos.70 The slipped cups display the establishment's characteristic wishbone handles and fine fabric as well as a narrow glaze band at the lip and a penchant for coral red, applied in zones or over the entire exterior.71 Most noteworthy are the three cups in London;<sup>72</sup> London D 5, reproduced here, shows the tomb in which the seer Polyidos is restoring Glaukos, son of Minos, to life (Figure 26). The iconography is unusual, as so often in this workshop; moreover, the insubstantial line and pale yellowish glaze contribute to a blurring of subject and background almost unparalleled in white-ground vases. The pictorial, indeed even painterly, execution creates a peculiarly unreal effect, and its influence may be discerned in three cups of Sotadean type associated with

67. ARV<sup>2</sup> p. 741, below.

68. Cabinet des Médailles 603 ( $ARV^{1}$  p. 295, 1 above) has a scene within the white-ground band that surrounds the red-figure tondo. M. Z. Pease Philippides sought to reconstruct Akropolis 431 with two zones of decoration on the outside (*Hesperia* 4 [1935], pp. 235-238).

69. Athens N. M. 2187 (Philippart, p. 61, no. 48).

70. Brussels A 891 (ARV<sup>2</sup> p. 771, 2).

71. None of the white-ground Sotadean cups has figural decoration on the exterior.

72. London D 6 (*ARV*<sup>2</sup> p. 763, 1); London D 5 (*ARV*<sup>2</sup> p. 763, 2); London D 7 (*ARV*<sup>2</sup> p. 763, 3).



## FIGURE 26 Cup with white-ground interior. London D 5 (photo: Courtesy of the Trustees of the British Museum)

the Hesiod Painter.<sup>73</sup> These pieces, and another recalling the Danaë Painter,<sup>74</sup> lead one to question whether they were painted within Sotades' workshop or whether they were inspired by it. Seen as a whole, the Sotadean white-ground cups form a distinctive, self-contained group within the early classic series; the special shape, technical diversity, and iconography combine to make them among the most inventive. It is noteworthy that at least some of the innovations can again be ascribed to a potter.

The main early classic exponent of traditional whiteground decoration was the Pistoxenos Painter. His importance to us lies, first and foremost, in his collaboration with Euphronios. Three cups preserve traces of the latter's signature as potter.<sup>75</sup> The same examples, together with London D 2 (Figure 27),<sup>76</sup> also have the *kalos* name of Glaukon and they may thereby be assigned to the years shortly before and after 470 B.C.<sup>77</sup> The reappearance of Euphronios at this juncture is as significant as it is unexpected; it is proof of an intense and long-lived preoccupation with cups as well as with the white-ground technique. Indeed, Euphronios may well have been responsible for introducing the slipped cup, at least among red-figure artists.

Besides their documentary value, the Pistoxenos Painter's works illustrate the degree of characterization, the impression of movement or rest, and the effects

73. Louvre CA 482 and 483 ( $ARV^2$  p. 774, 2 and 3); also Berlin inv. 3408 ( $ARV^2$  p. 774).

74. ARV<sup>2</sup> p. 772, above.

75. Berlin 2282 (ARV<sup>2</sup> p. 859, 1); Akropolis 439 (ARV<sup>2</sup> p. 860, 2); Taranto (ARV<sup>2</sup> p. 860, 3).

76. ARV<sup>2</sup> p. 862, 22.

77. H. Diepolder, "Der Pistoxenos-Maler," 110. Berliner Winkkelmannsprogramm (1954) pp. 14–15; E. Buschor, Griechische Vasen (Munich, 1969) pp. 158, 186.





of color that an early classic artist could achieve. The Taranto maenad and satyr<sup>78</sup> stand out among the twofigure compositions, while the most accomplished of all is certainly the London Aphrodite, serenely poised on the back of a goose. The preliminary sketch visible beneath the painting reveals that the scene was originally conceived with an exergue and with the goddess facing frontally.<sup>79</sup> The first of these corrected features reinforces the connection of this cup with one of the finest vases that have recently become known.

The new vase is a white-ground cup that came to light in a tomb, presumably of a priest, in Delphi (Figure 28). The interior shows Apollo seated with his lyre and offering a libation while a raven perches above; the exterior is covered with black glaze. The publication by I. Konstantinou<sup>80</sup> cites Bloesch's attribution of the potting to a follower of Euphronios,<sup>81</sup> but it does not settle upon a painter. Miss Konstantinou has presented certain leads, notably by suggesting a date late in the first quarter of the fifth century and by recognizing that the unusual stylization of the lyre's tortoiseshell sound box recurs on the Pistoxenos Painter's namepiece.<sup>82</sup> Although her date seems somewhat too early,

<sup>78.</sup> ARV<sup>2</sup> p. 860, 3.

<sup>79.</sup> Most recently discussed by P. E. Corbett "Preliminary Sketch in Greek Vase-Painting," JHS 85 (1965) pp. 18-19.

<sup>80. &</sup>quot;Lefke Delphike Kylix," Archaiologike Ephemeris (1970) p. 27 ff.

<sup>81.</sup> Konstantinou p. 29 and note 2. It is noteworthy that Bloesch places this cup within the same general class as London D 2.

<sup>82.</sup> Schwerin (ARV<sup>2</sup> p. 862, 30).

the Pistoxenos Painter deserves more serious consideration than he receives. Nine white-ground cups have been attributed to him and his immediate followers. Taken together, these works adequately document collaboration with Euphronios as potter, the occurrence of decoration inside only consisting of a single deity, the use of a tondo, and of a narrow glaze band within the lip. These, as well as the red-figure vases, offer parallels for the shape of the head and the profile,<sup>83</sup> the hairdo,<sup>84</sup> the rendering of the toes,<sup>85</sup> and the soles of the sandals.<sup>86</sup> Altogether, the Delphi cup can best be related to the Pistoxenos Painter's work; a firm attribu-

83. Taranto ( $ARV^2$  p. 860, 3); Florence 75770 ( $ARV^2$  p. 861, 15); London D 2 ( $ARV^2$  p. 862, 22); Schwerin ( $ARV^2$  p. 862, 30); Athens 2192 ( $ARV^2$  p. 863, 32).

84. Berlin 2282 (ARV<sup>2</sup> p. 859, 1).

- 85. Berlin 2282 (ARV<sup>2</sup> p. 859, 1).
- 86. London D 2 (ARV<sup>2</sup> p. 862, 22).

tion, however, still seems premature, for the correspondences are not quite extensive enough.

The relation of Euphronios to the Pistoxenos Painter is virtually unexplored, which makes it seem all the more complex. It draws in many important vases, like the one in Delphi or another in the Louvre. Though never conclusively attributed, Louvre G 109<sup>87</sup> has traditionally been associated with Euphronios, and it shares two distinctive features with the Delphi piece. In the cyma of the exergue, each unit contains a tongue, and between each unit is a dot.<sup>88</sup> Furthermore, at the top of the tondo hangs a cloth whose folds, borders, and

87. The cup has recently been published by Waiblinger (see my note 39), who associates it with much the same pieces as I do. However, while her attribution would tend toward the circle of Onesimos, she also cannot draw a definite conclusion.

88. The dot is drawn upward into a "v" linking one unit of the cyma with the next.



tassels strongly recall the upper part of the Delphic Apollo's chiton.<sup>89</sup> The interior of Akropolis 434,<sup>90</sup> signed *Euphronios epoiesen*, resembles the Delphi cup in the subject, in the treatment of the lip, and in such details as the articulation of the extended right arm and of the drapery. Moreover, while this piece preserves no exergue, the related Akropolis 432 shows a cyma with linking v's, but no tongues within its cyma. An attribution of Louvre G 109 must take into account the Akropolis cups, and all three have a bearing on the piece in Delphi. Even more important, the group of cups brings out the need to investigate further Euphronios' activity as painter and potter as well as the interaction both with his collaborators and among the latter.

With the cups related to the Pistoxenos Painter, the white-ground series nears an end. It is significant that the Penthesilean workshop, which specialized in slipped pyxides, has left nothing more than the fragment of a covered cup.91 And although the appreciable number of unattributed pieces may modify the picture, the broad outlines are clear enough. It would seem that the white-ground cup originated in one or several redfigure workshops from which the innovation spread, also for a time among black-figure artists. Between the late archaic and early classic periods, the pattern of production apparently became more fluid; it shifted from a very few centers to a larger number of individuals who, outside of the Sotades and Pistoxenos workshops, undertook a white-ground cup or two, but little more in that technique.

The reasons for an artist's choice of shape, technique, and subject can never become entirely clear to us. Nonetheless, two factors may have a special bearing on the development of white-ground cups. One is the popularization of slip through the great proliferation of slipped lekythoi, which began late in the first quarter of the fifth century.92 The other factor concerns the purpose of cups and the frequency of special orders or commissions. The probability of the latter is suggested partly by iconographical considerations, partly by the exceptional and consistent quality of the vases. Akropolis 434 is the only white-ground example known to me whose function as a dedication is confirmed by an inscription.93 However, an appreciable number of works comes from places with major religious centers: Athens, the Akropolis, Agora, and Dipylon; Aegina; Eleusis; Brauron; Delphi; the Argive Heraion; Samos.94 Moreover, the subjects often seem to have been determined by the respective cults; in the case of Brauron especially, one can hardly doubt that vases were specially ordered. The commissioning of single vases, or of groups, was certainly not restricted to this one shape;95 nor did the artists who worked on whiteground cups limit themselves to this shape or technique. Nonetheless, the material itself gives every indication that, for a period of about fifty years, slipped cups formed a distinct class of vase, produced by the foremost potters and painters in response to special demands.

#### ACKNOWLEDGMENTS

My first expression of thanks is to Dr. D. von Bothmer for his many valuable comments on this article. I am grateful to Dr. J. Roger for his generous permission to illustrate the whiteground covered cup from Kirrha. Walter Bareiss, Dr. Herbert A. Cahn, and Jan Mitchell have kindly allowed me to reproduce pieces in their collections. For help in procuring photographs, I thank Dr. P. Amandry, B. F. Cook, Dr. B. Petrakos, Dr. B. Philippaki, Dr. E. Rohde, and Dr. B. Schmalz.

89. Waiblinger has compared Bonn 349 ( $ARV^2$  p. 327, 94) and might have added Basel, Cahn 116 ( $ARV^2$  p. 316, 3; 1645).

90. It is interesting that the diameters of the Delphi cup (17.8 cm.) and of Akropolis 434 (about 18 cm.) virtually coincide. 91. Akropolis 589 (*ARV*<sup>2</sup> p. 898, 136).

91. Aktopolis 509 (AKV - p. 090, 130).

92. For a recent discussion of white-ground lekythoi and their function, see D. C. Kurtz and J. Boardman, *Greek Burial Customs* (London, 1971).

93. For other dedications with such inscriptions, Webster, pp. 44-45.

94. Compare Webster, p. 280 ff., especially 280-282; also Waiblinger, p. 240, note 1.

95. Webster provides abundant proof of this point even though his conclusions sometimes seem insufficiently founded. It is regrettable that his concern with potters and patrons has led him to discuss technical considerations so rarely.

# Middle Persian Inscriptions on Sasanian Silverware

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SASANIAN SILVER OBJECTS challenge the art historian to explain and relate questions of materials, techniques, styles, and motifs within an often illusive historical frame. To the social historian, these vessels provide an expression of the culture of the Iranian feudal aristocracy with its dynastic ideology. The epigrapher and philologist, in his turn, is challenged by the inscriptions sometimes found on the silverware. As examples of these have accumulated and been compared, their interpretation has progressed. Y. I. Smirnov gave careful facsimiles of inscriptions on the vessels he published; and E. Herzfeld notably advanced their reading. More recently, V. A. Livshits and V. G. Lukonin have presented revised readings of these; and R. N. Frye has published a further reinterpretation, along with some new examples. W. B. Henning's revisions and his analyses of newly found inscriptions formed a crucial contribution.<sup>2</sup> The assembling of these and additional examples helps to clarify the entire corpus.

The existing body of inscriptions divides into three chronological groups: A, about 300 A.D.; B, about 500-695; C, about 700 and after. The chronology of the inscriptions may, perhaps, not be identical with that of their vessels. The owner's name and/or the object's weight may occasionally be a later addition to an older vessel. R. N. Frye has suggested that such inscriptions could indicate registration of the vessel for taxation;<sup>3</sup> Kawād I's latter reign (499-531) or the periods of Xusrau I and II (531-579, 591-628) would be likely times for such a registration. Group B inscriptions are in harmony with the orthography of the late sixth-century papyri and of the late Sasanian inscriptions. They are distinguished from Group A by paleography and from Group C by the difference in weight standard. The internal sequence of Group B inscriptions may eventually be better established by a more refined paleographic analysis.

1. This article is an expanded version of the paper delivered by the author at the Sasanian Silver Conference held at The Metropolitan Museum of Art in January, 1973.

2. Smirnov, Vostochnoe Serebro (St. Petersburg, 1909). Herzfeld, "Postsasanidische Inschriften," Archaeologische Mitteilungen aus Iran 4 (1932) pp. 147-156. Livshits and Lukonin, "Srednepersidskie i sogdyskie nadpisi na serebryanykh sosudakh," Vestnik Drevnei Istorii (1964) 3, pp. 155-176. Frye, "Sasanian numbers and silver weights," Journal of the Royal Asiatic Society (1973) pp. 2-11. References to the inscriptions in these four works are hereafter given by the abbreviations S., H., L., and F. plus the appropriate designating numbers. See also Lukonin, Persia II (Cleveland/New York, 1967); Henning, "Mitteliranisch," Handbuch der Orientalistik I, iv Iranistik, I (Leiden, 1958) pp. 49-52; "New Pahlavi Inscriptions on Silver Vessels," Bulletin of the School of Oriental and African Studies 22 (1959) pp. 132-134; "A Sassanian Silver Bowl from Georgia," BSOAS 24 (1961) pp. 353-356; with Guitty Azarpay, "A Hunting Scene on an Inscribed Sassanian Silver Vessel," Iranica Antiqua 7 (1967) pp. 145-152.

3. "Sasanian Silver and History," Iran and Islam . . . V. Minorsky (Edinburgh, 1971) pp. 255-262.



#### GROUP A (ABOUT 300 A.D.)

### ו. ניערייי עצעיי ערטאיניש בארין אינש באירי איין געשאיי איין געעיייע ערטאיין איין געשאיין איין איין איין איין איין עראיעי איין געעיייע געעאייע איין געעאיי

p'pky bthšy BRH 'rthštry [BRH?...] '/s y 'rthštry bthšy MN ZWZN 'symy s xx xx x iii ZWZN i

Pābag, bidaxš, son of Ardašīr, [son of] ... Ardašīr, bidaxš. Of drahm-silver, 53 s[tēr], 1 drahm

The well-known portrait-bowl from ancient Armazi, the capital of Georgia, dates from the late third century. Although problems persist in the reading, the inscription does show the general pattern.4 First comes the owner's names and title. Then the object's weight is expressed in ster and drahm, according to the standard of the Sasanian drahm. Perhaps the term "drahm-silver" is still more specific, indicating either that the fineness of the silver used is comparable to that of the Sasanian drahm coin or that actual coins or coin blanks formed the source of the metal. In other inscriptions the unit dang likewise occurs, completing the system of staterdrachma-obol.5 The word order of the weight formula is the most common one: unit + numeral, unit + numeral. Compare, for example, in the papyri: PWN dyn'l xx iii iii W trms ii, "for 26 denār and 2 tarmas."6 Also important, although not surprising, is the abbreviation s for styr. The abbreviating of units of measure before numerals was a frequent Sasanian practice.7

4. Compare C. Amiranashvili, "Une coupe en argent du début de l'époque sassanide provenant des fouilles d'Armasiskhevi (Géorgie)," *Rivista degli Studi Orientali* 34 (1959) pp. 149–162 and Table III; Henning, "Silver Bowl"; Lukonin, *Iran v epokhu peroykh* sasanidov (Leningrad, 1961) pp. 60–61. An abridged facsimile is given in Frye, "Sasanian numbers," p. 2.

5. Note the use of the Greek terms, within the Iranian area, on the Taxila vessel, which is discussed in K. Trever, *Pamyatniki* greko-baktryskogo iskusstva I (Moscow-Leningrad, 1940) p. 101.

6. No. 12, pp. 8–9, in O. Hansen, Die mittelpersischen Papyri der Papyrussamlung der Staatlichen Museen zu Berlin (Berlin, Abhandlungen der Preussischen Akademie der Wissenschaften 1937, 9). When the material measured is specified, the papyri often follow the pattern: material + numeral + unit.

7. Thus "g" for griw ( $=\mu \delta \delta \omega_5$ ) as a measure of grain in the Dura-Europos pay-lists, nos. 22–23 in R. N. Frye, ed., Corpus Inscriptionum Iranicarum III, Part 3, i The Parthian and Middle Persian Inscriptions of Dura-Europos (London, 1968); see also Henning's

Such a scribal convention is attested already in the Parthian period on ostraca and a silver vessel.<sup>8</sup>

2.

tgdwn 'symy xx x iii iii iii MCY W ZWZN iii tgdwn silver, 39 stêr and 3 drahm (F. 17)

The script employed on the fluted bowl in the collection of Mohsen Foroughi in Teheran compares closely with that of the Armazi bowl. MCY, as Frye suggests and as is clear from its occurrence in No. 14 (a), where it parallels "s," functions as the ideogram for *stēr*. When one compares the phrase "*tgdwn*-silver" with the Armazi inscription's "*drahm*-silver," W. B. Henning's emendation to TGLWN, *saxt* (thus "weighed silver") appears quite cogent. The miswriting of "d" for "l" in the inscriptional script would be no more difficult than erroneous "d" for "y"; in Kirdēr's inscription at Naqš-i Rustam, the word YBLWNt, *burd*, is miswritten D[B]L(WN)t.<sup>9</sup>

3. ZWZN xx xx xx xx iii iii ii 88 drahm (F. 15)

A silver bowl adorned with the Seleucid anchor is in the collection of the Musée d'Art et d'Histoire in Geneva. Its numerals are rendered in the inscriptional

comments, Gnomon 26 (1954) pp. 476-480. It occurs again in Šāpūr I's Ka'ba-ye Zardošt inscription, Middle Persian l. 25 (in contrast to Parthian l. 22, where the terms follow the numeral and are spelled out), along with "h" for *xwafn* (one-tenth of a *grīw*) and "p" for *pās*, a liquid measure. See M. Sprengling, *Third Century Iran, Sapor and Kartir* (Chicago, 1953). For "s" in Sogdian, see below, p. 120.

<sup>8.</sup> Hm for HMR mry, "mar of wine," on the Nisa ostraca; see I. M. Dyakonov and V. A. Livshits, *Dokumenty iz Nisy* (Moscow, 1960). Perhaps "m" in Hansen, *Papyri*, 32a recto is this same measure. "Z" occurs for zwzyn (whether read as Aramaic, Parthian, or Armenian) on the Sissian bowl; see A. Perikhanian, "Inscription Araméenne Gravée sur une Coupe d'Argent Trouvée à Sissian (Arménie)," *Revue des Études Arméniennes* 8 (1971) pp. 5-11.

<sup>9.</sup> Line 54; compare the parallel YDBLWN at Sar Mašhad, 1. 31; C. J. Brunner, "The Middle Persian Inscription of the Priest Kirdēr at Naqš-i Rustam," *Near Eastern* . . . *Studies in Honor of George C. Miles* (Beirut, 1974) p. 110.

style. Here the alternative manner of citing a weight occurs; only the measure of the fundamental unit, the *drahm*, is given.<sup>10</sup>

4.

# کیلا مرحمی مرحمی الله مرحمی المالی المالی المالی المالی المالی المالی مرحمی مرحمی مرحمی مرحمی مرحمی مرحمی مرحمی

- ZNH 'bzn (s) . . . . . y NPŠH hnc bzn ZWZN ii c(xx xx xx) xx-x iii iii
- This water-vessel [is] property of S . . . ; . . . 296 drahm

(FIGURE I)

In contrast with the essentially uncial script of Nos. 1-3, the inscription on the Metropolitan Museum of Art's portrait bowl is less lapidary in style and shows frequent ligatures. It corresponds, not with the third-century relief inscriptions, but with the semicursive dipinto writing of the Dura-Europos synagogue inscriptions (252-253 A.D.). The rendering of ZNH,  $\bar{e}n$ , is a notable example. Nevertheless the inscription remains difficult, particularly the possibly abbreviated words.<sup>11</sup>

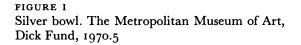
#### GROUP B (ABOUT 500-695)

Group B comprises the majority of examples and of problems. It is particularly important that the units of measure and the numerals in these inscriptions be accurately determined. But a major difficulty has been the reading of a looping sign that occurs in Nos. 5–16 and perhaps in No. 17. (It is the initial sign in No. 5.) Quite importantly, it also occurs in the late Sasanian funerary inscription at Iqlid in Fars. At first, attempts were made to read this sign as part of a word—k'sk, "weight," or s'lk, "ingot." The evident presence of numerals led Livshits and Lukonin to interpret the sign as "200."

10. On numeral signs in the relief inscriptions, see Frye, "Sasanian numbers," pp. 3-6.

11. For discussion of this bowl, see Prudence O. Harper, "Sasanian Medallion Bowls with Human Busts," *Near Eastern... Studies* ... *Miles*, pp. 61–80; a slightly different reading of the inscription is there offered. I am grateful to Professor Walther Hinz of Göttingen for pointing out the term *ābzan*, "water-vessel" (particularly

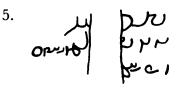




They thus brought the weight readings into a realistic, if erratic, relation to the actual weights of the vessels. But the reading "200" is excluded by the normal conventions of the script, as Frye has pointed out.<sup>12</sup> A similar criticism can be made against Frye's reading, "20." Not only is an unusual numerical orthography posited by this reading, but it also becomes necessary to occasionally disregard one stroke in order to obtain a reasonable weight reading. Thus another explanation must be attempted, one agreeing with Middle Persian orthography and Sasanian conventions for quantitative expressions.

for use in bathing). In the transliteration of this and the following inscriptions, a dash is used to indicate a ligature between distinct numerals or numeral groups. On the interpretation of the Dura-Europos texts, see particularly B. Geiger, "The Middle Iranian Texts," *The Excavations of Dura-Europos, Final Report VIII, Part I: The Synagogue* (New Haven, 1956) pp. 283-317.

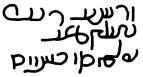
12. "Sasanian numbers," p. 6.



s-xx-x [i] (i) ii ZWZN ii [i ḥw]lm<sup>1</sup>bḥt NPŠH 34 s[tēr], 3 drahm. Property of Xorrambaxt (s. 87, H. 9, L. 6, F. 6)

This inscription occurs on a vase adorned with medallions, each containing a bird. The looping sign is in its least cursive form. The Livshits-Lukonin reading is ii-c-x iii ZWZN'n, "213 drahms." It requires, besides a quite ungrammatical use of the plural, two unlikely ligatures (top of ii + c, c + x) and a surprising reduction of the "100" sign. The natural reading, rather, is  $\dots$ -x  $\dots$  ii ZWZN ii., assuming that the inscription originally continued across the obliterated area. The pattern is clearly unit + numeral; hence the first numeral must designate ster. Frye so regards it; but his reading, xx-x-x iii ZWZN ii, is unsatisfactory. The notation x-x is too extraordinary to be accepted; it is not comprehensible even as an error. The initial, looping sign cannot be "20," since in the Iqlid inscription it precedes the numeral "100." Both readings would require violation of clear norms of Middle Persian notation.

The problem of the beginning of No. 5 is that (a) no unit seems specified, and (b) the sole plausible reading of it as simply numerals, xx-xx-xl-x, is far too large. The solution to both problems is reading the looping sign just as it appears, as "s" for *ster*. An abbreviation in ligature with a numeral is attested by the Dura-Europos pay-lists, the papyri, and other silver vessels (Nos. 14, 36). The Iqlid inscription becomes clarified together with No. 5:



NKSY' KSP s-ii-c mzd plmwt | YHBWNt

Property worth 200 s[ter] was ordered to be given as payment.<sup>13</sup>

13. Lines 19-21; see Frye, "Funerary Inscriptions in Pahlavi from Fars," W. B. Henning Memorial Volume (London, 1970) pp. 155-156 and pl. v.

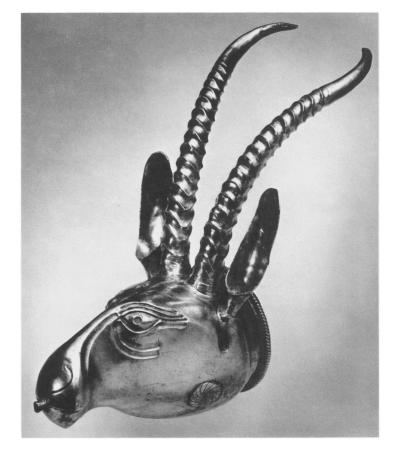


FIGURE 2 Silver rhyton, mercury gilded. Collection of Mrs. Dorothy B. Moore III

This reading not only satisfies the orthography, it also obtains an appropriate value for the Sasanian *drahm*standard. (See table of weights, below, page 120.)

6.

s-xl-x iii ii 55 s[tēr] (F. 9) (FIGURE 2)

One of three further examples of "s" in noncursive form is seen on a rhyton in the shape of an antelope's head, in the collection of Mrs. Dorothy B. Moore III. The inscription is brief but clear.

#### 7. JUULU

s-xl-iiiiii

46 s[tēr]

The elongated bowl in the Schimmel collection<sup>14</sup> carries an inscription underneath. It follows the owner's *tamga* or device, which occurs in place of his name.

sng s-xx-xl-x iii ZWZN ii pylwc'n

By weight, 73 s[tēr], 2 drahm. Belonging to Pērōz

(s. 56, h. 7, l. 1, f. 3)

This inscription occurs on a Hermitage plate depicting a royal antelope hunt from camel-back. Livshits and Lukonin estimate that damage to the plate amounts to a loss of one-tenth the original weight. Thus the plate is still of use in evaluating the Sasanian *drahm*. The abbreviation "s" here seems to be developing toward its more cursive shape, and the next two examples also illustrate this trend.

9. mlt s-xx iii ii iiii sng Mard. 29 s[tēr] by weight (F. 10)

The bowl, adorned with animals, in the Musée d'Art et d'Histoire in Geneva, presents a difficulty. If the numerals are assumed to be correct as they stand, then the words W ZWZN, *ud drahm*, must have been omitted between "25" and "4." But a reading "25 *står* and 4 *drahm*" would give an unusually high value for the *drahm*: 4.36 g. It seems simpler and also more realistic (see table of weights) to assume that the latter numeral signs are miswritten for *iii iii*.

14. Sasanian Silver (Ann Arbor, 1967) no. 28.

15. In the papyri, clusters of the type s-n and d-y-n, basically — in form, may become —: *Papyri* 3, 7; 12, 8; and p. 80; A. Perikhanian, "Pekhlevyskie papirusy sobraniya GMII imeni A. S. Pushkina," *VDI* (1961) 3, pp. 78–93: no. 3, 7. Compare also the stylization of h-n and š-n: *Papyri* 12, 5; 28, 3. 10. kpcyn ZK ZY s-xx-x iii ZWZN iii Kabzēn. This [vessel] of 33 s[tēr] and 3 drahm (F. 11)

A plate in a private collection in New York, which displays a prince lassoing onagers, carries this inscription on its base.

The remaining examples of "s" + numeral are more cursive; but the presence of "s" seems assured. The resulting readings preserve a consistent relationship to the vessel weights. Moreover, the reading is supported by the common occurrence of this cursive ligature in the papyri.<sup>15</sup> The contrast between the more angular and the more cursive "s" as an abbreviation may prove a genuine paleographic feature, useful for sorting out the silverware inscriptions. But it could equally be a mere stylistic difference. In any case, the remaining inscriptions may be clarified.

pylwc'n NPŠH s-xx-xl iiii sng Property of Pērōz. 64 s[tēr] by weight (s. 60, H. 6, L. 2, F. 4)

mtrbwcyt NPŠH s-xx-xl-x i W ZWZN iii sng

Property of Mihrbözēd. 71 s[tēr] and 3 drahm by weight

(H. 8, L. 8)

Inscriptions 11 and 12 are found on bowls in the Hermitage, each bowl decorated with a royal hunt scene.

13.

b'k PN s-xl-iii iii ZWZN i M iii Bāg. At 46 s[tēr], 1 drahm, 3 dāng (s. 80, H. 10, L. 5, F. 9)

The Hermitage vase bearing this inscription has a motif of maidens framed by arches. Since its base is broken, it provides no usable value for the *drahm*. The inscription reproduces a rapid cursive script. One stroke of the preposition PWN is skipped, as so often in the papyri. Apparently, one tooth of the "40" sign is also omitted, perhaps compensated for by the lengthening of the stroke. A reading of "20" would not yield a realistic *drahm*. The vessel presently weighs 611.9 g., and the suggested reading gives a *drahm* of 3.30 + g. If loss through breakage is about 15 per cent, this value would be satisfactory.<sup>16</sup>

wnd'tyn'n pty xx-xx-xl-x iii ii MCY M-iiii s-xx-xx-xl-x iiii iiii W ZWZN i W M-iii

Property of Windādēn. At 95 stēr, 4 dāng 98 s[tēr] and 1 drahm and 3 dāng

The unfigured, beveled ewer in the Cleveland Museum of Art is unusual in carrying two inscriptions, which are separated by a short space.<sup>17</sup> The first begins after the owner's *tamga*; as in No. 2, the ideogram for *stēr* is used. The second inscription perhaps corrects the first or is a later weighing. 15.

- And have

M mltbwt<sup>1</sup> P s-xx-ii W ZWZN iii Of Mardbūd. At 22 s[tēr] and 3 drahm (F. 8)

The Cleveland Museum's ewer (no. 61.200) with the theme of the man-lion contest presents an interesting grammatical variation. MN, "from," is only seldom used to express attribution and hence, here, ownership.<sup>18</sup>

16. מיליא של האך לען על - יעל . bynhwš s-xx-x iiii iii ZWZN iii ... xwaš. 33 s[tēr], 3 drahm (F. 12)

The Freer Gallery's gilded bottle, depicting four nude female dancer-musicians, carries an uncertain proper name, but the weight is clear.<sup>19</sup>

17. s-x W ZWZN *iii* 10 s[tēr] and 3 drahm (F. 14)

A rather simplified form of the abbreviation may perhaps be read on the undecorated bowl in the Staatliche Museen, Museum für Islamische Kunst, in Berlin.

18. Nos. 15 and 18 are studied in Dorothy G. Shepherd, "Sasanian Art in Cleveland," *Bulletin of the Cleveland Museum of Art* 51 (1964) pp. 66–92 with an addendum by Frye, pp. 92–93. This use of MN may be due to a syntactic analogy with the particle of attribution, ZY. Or it may reflect eastern Iranian influence. In Sogdian silverware inscriptions, the preposition cn seems common, e.g., S. 71, L. 19: ZNHZY pt $\gamma$ 'd cn prd'rc  $\gamma$ ypd, "This vessel [is] the property of Fradārč."

19. Esin Atil, Exhibition of 2500 Years of Persian Art (Washington, D.C., 1971) no. 49.

<sup>16.</sup> Nos. 8, 11-13 = Persia II, nos. 141, 140, 142, 183. No. 13 also bears the proper name mork' in Sogdian (S. 80/L. 22).

<sup>17.</sup> No. 66.21, illustrated in Frye, "Sasanian Silver and History," pl. 1-3. F. 13 = 14. (b).

Apart from this ambiguous case, there are twelve reasonably clear examples of the ster being cited as a weight measure (Nos. 1-2, 5-16). On five, and possibly six, other silver vessels, weights are recorded in ster without specifying that unit. It was evidently clear from context that the ster was intended.

gwk'k<sup>1</sup> xx-x ii W ZZN i Gugāy. 32 [stēr] and 1 drahm (**F**. 7)

In the Cleveland Museum (no. 62.150), the plate shows a royal lion hunt.



lmyk xx x ii ZWZN ii Ramīg. 32 [stēr], 2 drahm (s. 58, l. 10)

The Hermitage bowl with this inscription illustrates a royal lion hunt.

20.

Gyān Xusrau, son of Kabag, kay. By weight, 13 [ster], 2 drahm

(**F**. 16)

The drinking bowl in the C. L. David collection is exuberantly adorned with vines wreathing various animals and a cheerful drinker at center bottom. Its script is rather abrupt and difficult.20



FIGURE 3 Silver plate. King killing zebu. Collection of Mrs. Leopold Blumka

21.

xx-x30 [ster] (FIGURE 3)

By contrast with the C. L. David bowl, the clear inscription on a plate in the Blumka collection, showing a king in combat with a bull zebu, indicates a rather light drahm.21

يدرسرسر 22. s-xl-x iiii iiii 58 [ster] (s. 35, l. 9)

21. K. Erdmann, "Eine unbekannte sasanidische Jagdschale," Jahrbuch der Preuss. Kunstsammlungen (1938) p. 209 ff.

<sup>20.</sup> Davids fond og samling IV (Copenhagen, 1970) no. 1. The sign here read as "10" resembles the initial sign of the Sissian bowl inscription.

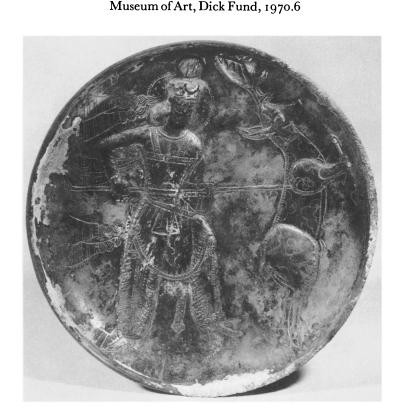
The elaborate scene of a reclining banqueter and an overhanging grapevine strikingly distinguishes this British Museum bowl. In its brief inscription, the first sign is ambiguous. If it is read as "20," giving 78 stēr, then the standard indicated would be the reformed Muslim dirham—2.91+g. (The bowl presently weighs 907 g. but has lost some portions.) It is doubtful that the bowl could be so late. Moreover, the xx-xl ligature in the post-reform inscription No. 35 is the same as in Nos. 8 and 12. The "20" stroke attaches to the bottom of the "40" stroke, not near the top. The alternative explanation is that the first stroke here is not anomalous but, as was suggested for No. 17, represents a simplified "s." The weight standard would thus be a good Sasanian one, 3.91+g. per drahm.

23.

[...]n [.....ZW](ZN?) *i* W [M?] *iiii* ..., son of ...; ... 1 *drahm* and 4 *dāng* (FIGURE 4)

One of the Metropolitan Museum's two inscribed plates with royal hunts (the other is No. 26) depicts a

FIGURE 4 Silver plate, mercury gilded. King Yazdgarid I (399-421) spearing a stag. The Metropolitan



king slaying a deer with his lance. The inscription around the foot of the plate was extensive; it is now worn so smooth that no useful facsimile can be made. But careful inspection reveals traces of a few signs; and these imply that the weight was recorded in *ster*, *drahm*, and *dang*.

Thus, in Group B, Nos. 5-23 compare with Nos. 1-2in Group A by their use of the *ster* unit. But four other silverware inscriptions may be compared with Nos. 3-4, since they record only the total of *drahm*. All four, unfortunately, involve ambiguities.

שישי שי שי אי אי אי יישין יישיאי שי איינייי שישין קרשיד 24.

- ZNH M'NH pwl ZY whm'n<sup>1</sup> plmwt<sup>1</sup> krtn<sup>1</sup> iii-c ii dlmsng
- (s. 61, h. 5, l. 3,<sup>22</sup> f. 2)
- This vessel was ordered to be made by Por, son of Wahman. 302 drahm by weight

25.

*ii-c* [?] xx xl x *iii ii* ZWZN sng 275 drahm by weight
(s. 62, L. 4)

Nos. 24 and 25 occur on bowls carrying royal hunt scenes. No. 24 is somewhat broken, so its weight does not help to evaluate the *drahm*. The weight of No. 25 is unrecorded; the form of the initial sign group in its inscription is unusual.

עלד זיש ניםו 26.

*ii c ii* ZW sng p/c n 202 *drahm* by weight (FIGURE 5)

22. Also Persia II no. 137.



FIGURE 5 Silver plate, mercury gilded. King hunting mountain sheep. The Metropolitan Museum of Art, Bequest of Cora Timken Burnett, 57.51.19

Another plate in the Metropolitan Museum, extensively reworked and repaired, with a motif of a king hunting sheep. The interpretation of the latter part of its inscription remains problematical.

Minde rales 3 27.

zyl..l. 'n *i-c*..*ii iii*Property of Z. [or Z., son of ...] . one hundred ...-five [drahm]

This, the most crudely incised of the inscriptions, occurs on a silver figure of a kneeling goat.<sup>23</sup> Unlike Nos. 24–26, it omits the term *sang*, "by weight."

The weight inscriptions of Group B can be distin-

23. Sasanian Silver no. 28.

guished from those of Group C by the fact that the latter use as their standard the reformed Muslim *dirham* of about 2.9 g. It is less easy to classify inscriptions that carry only a name formula. For convenience, they are here placed together in Group B.

spndrmt y'tkgwb<sup>1</sup> NPŠH Property of Spandarmad the advocate (s. 52, H. 3, L. 12)

d'tbwlcmtr<sup>|</sup> <u>ZY</u> plḥw'n'n <u>ZY</u> gylsl'n ḥwl's'n sp'ḥpt<sup>|</sup> NPŠH

Property of Dādburzmihr, commander of the East, son of Farroxān, the son of Gēlsar [?]

(s. 48, h. 4, l. 11)

At least these two inscriptions on Hermitage bowls can reasonably be assigned to Group B, since they contain Sasanian titles. The second patronymic of No. 29 could be read in several different ways, but not as Livshits and Lukonin's *hwslwbn*. One need only compare Nos. 30 and 37.

30.

ḥwslwb Xusrau (s. 90, н. 2, г. 14)

MININ 31.

'nwšz'd Anōšzād (s. 66, н. 1, г. 13)

Both of these examples could easily be either Sasanian or post-Sasanian in date.



## 32. תפיט אור על ייר וטיץ

wstlcyn<sup>1</sup> <u>ZY</u> 'lt'knp'n Wastarčīn, son of Ardānaf (FIGURE 6)

33.

brsyn'n Belonging to Barsēn (FIGURE 7) FIGURE 6

Silver ewer, mercury gilded. The Metropolitan Museum of Art, Mr. & Mrs. C. Douglas Dillon Gift and Rogers Fund, 67.10a, b



FIGURE 7 Silver wine bowl, mercury gilded. The Metropolitan Museum of Art, Gift of Mrs. Constantine Sidamon-Eristoff, Purchase 1970.7

The final examples are found on objects in the Metropolitan Museum. Inscription No. 32 occurs on a ewer and is similar in style to No. 26.<sup>24</sup> Most probably, it belongs to Group B. No. 33, placed on the bottom of a drinking bowl, seems to have been executed hastily, somewhat distorting the orthography.<sup>25</sup>

GROUP C (700 AND AFTER)

At least four Middle Persian silverware inscriptions postdate Caliph 'Abd al-Malik's reform of the weight standard (694-696).

24. The Metropolitan Museum of Art Bulletin 26 (1967–68) p. 52. 25. The Metropolitan Museum of Art Bulletin 29 (1970–71) p. 63.

- ) در سام ۲۵۵ م ( سام س 34. ) در سام ۲۵۰ می اور اور اور اور می اور می اور می در می
- wnd't 'whrmzd ZY k'ln'n NPŠH MN iii-c iii iii ZWZN sng

Property of Windād Ohrmazd of the Karēns. Of 306 drahm by weight

- 35. ארשישי אאשר שאיין יא יא אישיין 35. אי ערל פרק ברע וו עו
- wnd't 'whrmzd ZY-k'ln' 'n NPŠH MN *ii-c xx-xl x ii ii* ZWZN sng
- Property of Windād Ohrmazd of the Karēns. Of 274 drahm by weight

#### 

- 'clmyk ZY štlwyn'n NPŠH ZY MN ü-c ü-ZWZN M iii-ZY PN sng
- Property of Azarmīg, son of Šahrwēn, which [is] of 202 drahm, 3 dāng by weight

The inscriptions on the three bowls found in Māzanderān, now in the Tehran Museum, were analyzed by W. B. Henning.<sup>26</sup> Like Nos. 24, 25, and probably 26, they indicate their weight in *drahm* only.



bwlcynwlc ZY hwslwbn NPŠH MN xl-x iii iii iii sng

Property of Burzēnwarz, son of Xusrau. From 59 [sitēr] by weight

(s. 88, L. 7,<sup>27</sup> F. I)

27. Also Persia II no. 194.

This final example is inscribed on a Hermitage vase depicting an eagle attacking a gazelle. No unit is mentioned, but the number "by weight" is clearly written. It is far too low to represent either the reformed *dirham* or the Sasanian *drahm*. It is definitely too high to be in Sasanian *stēr*, but it would well suit a value in *sitēr* based on the reformed *dirham*. Hence it seems unlikely that the multiple unit immediately went out of use after the reform.<sup>28</sup> Nos. 21–22 provide the most comparable type of weight formula from the Sasanian period. As one would expect, the *sitēr* here represented is somewhat light:

	weight	weight in			g. per
vessel	in g.	sitēr		= <u>dirham</u>	dirham
35.	<b>7</b> 95		274	274	2.90
34.	<b>88</b> 0		306	306	2.88
36.	544+		202.5	202.5	2.69+
37.	634	59		236	2.69

The total evidence of the silverware shows that it was convenient to indicate large numbers of drahm by use of the multiple unit, the ster. The Iqlid inscription implies that this held true for expressing monetary value as well as weight. But a remaining problem is the value of the Sasanian drahm standard, as it functioned as a unit of weight and of coinage. On the basis of coin evidence, the *drahm* is customarily cited as averaging about 4 g. The drahm coin does tend to fall below this amount. A. Mordtmann's mean value, from a sample of 2,000 coins over the entire Sasanian period, was 3.91 g.29 A selection of 298 drahm coins in the collection of the American Numismatic Society in New York provides, for the period from Ardašīr I to Yazdagird II (224-457 A.D.), a mean of 3.88 g.; the averages per reign vary from 4.12 (Šāpūr I) to 3.72 (in a very small sample of Ardašīr II). In the sixth and seventh centuries, the coin is often still lighter. The 92 whole coins of Xusrau I in the Iraq Museum have a mean of 3.48.30 But the Arab-Sasanian coinage of the Umayyad cali-

28. See Frye's suggestion that it did, "Sasanian numbers," p. 6.

29. Cited in John Walker, A Catalogue of the Muhammadan Coins in the British Museum, I Arab-Sassanian Coins (Oxford, 1941) p. cxlvii. It is, of course, necessary to allow slightly more to the average drahm to compensate for average wear on the coins.

30. S. N. Nakshabandi and F. Rashid, "Sassanian Dirhams in the Iraq Museum," *Sumer* 11 (1955) pp. 154-176 provides the catalog on which this average is based.

<sup>26. &</sup>quot;New Pahlavi Inscriptions"; the bowls were published in Roman Ghirshman, "Argenterie d'un seigneur sassanide," Ars Orientalis 2 (1957) pp. 77–82.

phate is heavier; J. Walker's 292 whole coins of this period average 3.95 g. This last evidence suggests that an attempt was made to remedy the inflation indicated by the progressive lightening of Sasanian coinage. By implication, the coinage was brought back into harmony with a stable, enduring *drahm* weight standard, although, of necessity, the coin weight remained a little below the standard.

The silverware inscriptions should exemplify this stable weight standard, free from the deviations and tendency toward depreciation inherent in the coinage. Of course, the problems of wear and the addition or loss of metal still render the results an approximation. Six reliable examples specify that the measure is "by weight" (sang):

	weight	weight in			g. per
vessel	in g.	stēr	drahm =	drahm	drahm
24.	1265.5+		302	302	4.19+
8.	1070.7+	73	2	294	+4.10
11.	1039.2	64		256	4.06
12.	1155.6	71	3	287	4.02
9.	454	29		116	3.91
26.	770.3		202	202	3.81

The mean value for the weight-drahm thus obtained is 4.02+ g. The larger sample of inscriptions without the term sang shows a comparable range, particularly if the two extreme examples are omitted. Hence the absence of that term need not imply that a different standard drahm is being used:

	weight	weig	ght in		g. per
vessel	in g.	stēr	drahm =	= drahm	drahm
20.	235	13	2	54	<b>4</b> ·35
18.	546	32	I	129	4.23
4.	1225.7		296	296	4.14
19.	532.8	32	2	130	4.10
2.	650	39	I	159	4.08
14.(b)	1589	98	1.5	393.5	4.04
16.	610	37	3	151	4.04
1.	850	53	I	213	3.99
15.	363.5	22	3	91	3.99
5.	551.7+	34	3	139	3.97 +
3.	350		87	87	3.97
6.	860.7	55		220	3.94
7.	725.5	46		184	3.94

	weight	weight in			g. per
vessel	in g.	stēr	drahm =	arahm	drahm
17.	170	10	3	43	3.94
22.	907+	58		232	3.91+
10.	514	33	3	135	3.81
21.	432	<b>3</b> 0		120	3.60

The mean of this group is 4.00+ g. This seems significantly above the coin-*drahm* average, although the range of values for the *drahm* in the silverware is somewhat similar to the range in the coinage. If the twentythree examples tabulated above are considered together, as seems appropriate, the mean value of the *drahm* weight is 4.01+ g, the median 3.99 g.

Sogdian silverware inscriptions provide important comparative evidence. Their patterns agree closely with those of the Middle Persian inscriptions; even the abbreviation "s" is used for  $st\bar{e}r/st\bar{e}rak$ . One is thus encouraged to look for a parallel weight standard of 4+ g. Five fairly clear inscriptions<sup>31</sup> provide only a small sample, and their range of values for the  $\delta raxme$ is considerable. Nevertheless, their mean value of 4.21g. per  $\delta raxme$  supports the idea of a stable Sasanian drahm weight that remained higher than the trend of coin weights. The Sogdian weights are:

a. (S. 71, L. 19) b. (L. 23, <i>Persia</i> 147)	xx xx xx ðrγm'k xx x iii iiii styr	"60 δraxme" "37 stēr"
c. (L. 18, <i>Persia</i> 148)	<i>iii iii iii xx x</i> styrk	"39 stērak"
d. (L. 25)	'yw knpy 'YKZY	"one
	<i>xx</i> s n'krtk	[ðraxme]
		less than
		20 s[tēr]
		of silver"
e. (L. 24, Persia 37)	iii xl x	''53 [stēr]''

	weight	weight in		g. per	
vessel	in g.	stēr	δraxme ==	δraxme	δraxme
a.	282		60	60	4.70
b.	644.5	37		148	<b>4∙3</b> 3
c.	636+	39		156	+4.28
d.	313.5	19	3	79	3· <b>97</b>
e.	800.9	53		212	3.77

31. The interpretation of the two inscriptions that contain sang (L. 16, Persia 184; L. 17) remains to be re-evaluated.

An important complement to these five is the inscription on a drinking bowl in the collection of Mohsen Foroughi in Tehran, which shows a king hunting an onager.<sup>32</sup> Judged by its script, it was meant to be read in Sogdian or perhaps Parthian:

ZNH mtwrwn MN ZWZYN i c iii ii

This drinking-vessel [is] of 105 drahm

The bowl's weight is 430 g. Thus the value for the *drahm* is here 4.09 g., which is closer to the Sasanian average but, significantly, still above it.

#### ADDITIONAL NOTE

A weight-denār for the measurement of gold would have been somewhat under 4.5 g., in close accord with the later denār coin. (On the latter, see R. Göbl, Sasanidische Numismatik [Braunschweig, 1968] pp. 28-29.) It would have represented the late Roman solidus unit, theoretically 4.55 g., and influenced the Arabs' prereform weight-mithqāl. (See W. Hinz, Islamische Masse und Gewichte [Leiden, 1955] pp. 3-4; G. C. Miles, "Dinar," Encyclopaedia of Islam, new edition II [Leiden, 1965] pp. 297-299.) Such a weight-denār may be represented on the golden bowl from the time of Xusrau I in the Bibliothèque Nationale (E. Babélon, Catalogue des Camées antiques et modernes de la Bibliothèque Nationale [Paris, 1897] pp. 213-219; R. Ghirshman, Iran, Parthians and Sassanians [London, 1972] p. 205). The brief inscription may be read:

*iii-c iiii iii* PN s 307 (*dēnār*) by weight.

Since the vessel is adorned with glass and crystal medallions, the value of the metallic unit is not determined. The entire bowl weighs 2,110 g. I am grateful to Dr. Raoul Curiel for supplying the actual weight of this vessel.

32. Henning and Azarpay, "A Hunting Scene." See note 2.

# The White Bronzes of Early Islamic Iran

#### ASSADULLAH SOUREN MELIKIAN-CHIRVANI

THE EMERGENCE OF THE ART and culture of early Islamic Iran remains shrouded in mystery. Few works of art from the first three centuries of Islam have survived to tell us about the process that led from late Sasanian art to the fully developed Islamic art of the Samanid period. And those that exist do not provide the continuous sequences required to study a process of evolution. The discovery of a hitherto unknown school of metalwork that flourished from the early eighth century through the tenth, with a distinctive style as well as a specific technology, is therefore something of an event.

The pieces that form the basis for the identification of this early school of Iranian<sup>2</sup> metalwork are scattered

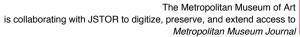
1. This article is the English version of part of my book on Iranian metalwork of which part I, L'argenterie du Tabarestan et de l'Asie Centrale, is to be published in 1977. Except as noted otherwise, the photographs were made by me. Wares with formally stylized patterns will be discussed in a second article. So-called international transliteration has been used for Arabic and Persian words where the original spelling is considered essential. Names of such well-known authors as Biruni, Kashani, and Tusi, and place names such as Khorasan, Neyshabur, and Khotan have been transcribed phonetically into English. Persian nouns frequently used safidruy, naskhi, and others-are also spelled according to current English usage. Both the transcription and transliteration of Persian words record western Iranian pronunciation according to Tehran usage: Gorgan, not Gurgan, Keshm, not Kishm, hokama', not hukamā'. Iranian names are given according to the Persian rather than Arabic form: Biruni, not al-Biruni. Arabic names retain the article according to classic Arabic usage: al-Hajjāj.

I am indebted to many colleagues and friends for their generous help: to Ahmad Ali Mo'tamedi, director of the Kabul Museum, and Ra'uf Wardak, curator of the Islamic Department, who not only gave me permission to publish the objects under their care but assisted me in every possible way during photographic sessions and all over the world. Many have reached the Western art market in recent years. They have turned up at Paris and London auctions, and have drifted into private collections, leaving little or no record. Some have found their way into museums where they are variously labeled "Luristan, 7th–5th century B.C." or "Sasanian," but never "Islamic." Those belonging to museums in Iran and Afghanistan have remained unrecorded in the museum reserves.

Several related groups of these objects may be differentiated, but almost all are characterized by the use of a special alloy that will be here called white bronze. Comparatively rare in the history of metalwork, it has an easily identifiable appearance. The metal takes a

otherwise; to the Herat Museum warden, for his unfailing courtesy to the stranger; to Firuz Bagherzade, superintendent of Persian Museums and advisor to the Minister of Culture and Art, and Parvin Barzin, curator of the Islamic Department, who supplied the information regarding the Neyshabur objects; to Philip Rawson of the Durham museum, who had the unpublished stem-bowl in his museum photographed at my request, and to my Swedish colleagues, among others Aron Anderson and Birgit Arrhenius of the Statens Historiska Museum, who arranged for an analysis of their cup. To Prudence Oliver Harper of the Metropolitan Museum I owe not only the privilege of publishing the analyses of the white bronzes in the Ancient Near East Department but the facilities for photographing and studying these objects. I am indebted also to H. M. W. Hodges of the Institute of Archaeology, London University, whose technical report appears in the Appendix, and to Cyril Stanley Smith of the Massachusetts Institute of Technology, who commented on the technology of white bronze and encouraged me to publish this article.

2. "Iranian" refers here to the areas that were historically part of the various Iranian states and are culturally Iranian. It is not used with its modern restricted meaning, connected with presentday Iran, since it also refers to the modern republic of Afghanistan.





peculiar patina varying from a deep mirror black to an ashy gray, with pale yellowish areas. Often some of the areas become almost white, which partly explains the appellation "white bronze." In several cases its silvery appearance has caused collectors, art historians, and museums to mistake it for silver. The uncorroded surface has a very smooth, almost oily, feel. The corrosion tends to develop in concentric wartlike formations. The alloy is brittle, and its breaks are sharp and clean. All this suggests an alloy with a high tin content.<sup>3</sup>

In the cases where detailed laboratory inspection was possible (see Appendix) the alloy proved to be a copper and tin mixture, the amount of tin usually somewhat in excess of 20 per cent though less than in the white alloy commonly called speculum metal. An alloy of this composition requires specific methods of manufacture, for its properties, like those of steel, are strongly influenced by temperature and temperature changes. When cast into a mold and slowly cooled the alloy is brittle and cannot be deformed even slightly without fracture, but it is soft and malleable at a dull red heat (between 550 and 750° C) and easily forged to shape by the use of blacksmiths' tools. Moreover, if the alloy is quickly cooled from an appropriate temperature, it becomes relatively hard but retains enough malleability to permit some finishing. One of the bowls presented in the Appendix (Figure 38) was probably produced by first casting a thick round cake, heating and forging this to a flat disc, then raising the metal into its present shape by hammering, while still hot. Then it would have been quickly quenched, slightly hammered to rectify small distortions, and finished with a scraping tool while rotating on a simple lathe. If the alloy is not to become embrittled, skillful control of heating and cooling is essential at all stages. Incidentally, the quenched alloy has fine acoustic properties and is widely used throughout East and Southeast Asia for gongs as well as for tools and dies.4

Iranian metalworkers, aware of the fragility of their

material, chose ordinary bronze for the more exposed parts of their pieces, such as the ring handles of cups (Figure 1), the handle of a ewer (Figure 7), the trumpetshaped stem of a bowl (Figure 13), or the lion-shaped handle of a circular mirror from the Heeramaneck collection exhibited at Ann Arbor in 1967.<sup>5</sup>

Is white bronze the metal described in Persian literature as safidruy, literally "white bronze"? A detailed reference is to be found in the treatise of Abo'l Qasem Kashani on "The splendor of minerals and preciousness of perfumes," completed in the early fourteenth century.6 In a section called "On the knowledge of safidruy" Kashani writes "It is called sofr [bronze]. It is an alloy of refined mas [Persian for copper] and white gala'i [a Persian-Arabic word meaning tin]. It is a clean white substance resembling silver. Surprisingly, copper and tin, both of them soft materials, become hard as they mix. Resās [Arabic for tin, also used in Persian] and nohās [Arabic for copper, frequently used by Kashani as a synonym of mas] produce an alloy that will not decompose itself. Its production was initiated by al-Hajjāj, who gave orders that all gold and silver wares be broken, banned any further manufacture, and forbade drinking out of gold and silver vessels in the provinces of Araq and Fars. The doctors [hokamā'] of the time mixed tin and copper for the grandees and rich people and made the required vessels."

If Kashani was accurate in his use of words, safidruy= sofr is simply ordinary bronze. However, his description of šafidruy, said to be white like silver, and "dry" (hošk), that is, hard and brittle, raises the possibility that safidruy may in fact have referred to a special variety such as speculum. This identification might be further supported by Kashani's contention that the alloy was devised in al-Hajjāj's time, that is, in the late seventh century. Kashani and his predecessors must surely have been aware that "ordinary" bronze was not invented after the Sasanian period.

In the Tansūh-Nāme, written half a century before,

mains rare, and the problems of its origin and transmission will only be touched upon in this article.

4. This paragraph is based on a private communication from C. S. Smith.

5. O. Grabar, Sasanian Silver. Late Antique and Early Medieval Arts of Luxury (Ann Arbor, 1967) cat. no. 58, pl. 58, p. 139.

6. Abo'l Qasem Abdollah Kashani, ed. I. Afshar, Aräyes ol-Javäher va Nafäyes ol-Atäyeb (Tehran, 1345 h.s./1967) pp. 244-245. Nasir ad-Din Tusi gives a slightly different account:<sup>7</sup> "... if one smelts copper and pours a certain amount of tin over it, it takes on the color of silver. And that is  $safidr\overline{u}[y]$ ." Further on, in the section entitled "On  $isfidr\overline{u}y$  [note the semi-Arabicized form of the Persian safidruy] and its characteristics," Tusi repeats a somewhat similar story concerning the invention of safidruy, omitting, however, the specific reference to al-Hajjāj's time. Both Tusi and Kashani would appear to draw on an identical earlier source. In the opinion of Mojtaba Minovi (private communication to me) this could be a late twelfth-century work by one Nezāmi, on which Tusi leans heavily.

Reading Kashani and Tusi, one suspects that safidruy was no longer common in their time. The inconsistent spelling of Tusi (safīdrūy, then isfīdrūy) may be due to the diversity of his sources. The word is not found in the Logat-e Fors, an eleventh-century dictionary of "Persian" words (as opposed to Arabic loan words in Persian), or in the seventeenth-century dictionaries with the exception of the Borhān-e Qāte',<sup>8</sup> where safidruy is obviously misunderstood. This may be further evidence that the word goes back to an earlier period.

While no earlier Persian account seems to have survived, there are similar references in Iranian literature written in Arabic in much earlier times. The most significant one is found in Biruni's *Kitāb al-jamāhir fī* ma'rifat al-jamāhir, written in the early eleventh century, which may have been the source for Kashani and Tusi. Isfīdrūy, Biruni tells us, is a Persian noun meaning nuḥās al-abyad, literally "white copper."<sup>9</sup> It is called sufr.

Biruni tells a similar story about the invention of safidruy/isfīdrūy in al-Ḥajjāj's time. When the latter ordered that gold and silver vessels be broken in 'Irāq and Fārs, one Fayrūz, a mawla (he is qualified by a name whose spelling remains uncertain), did not like drinking from glass (zujāj). Silver and copper were therefore mixed for his sake and bowls (jāmāt: Biruni uses the Persian word jām with an Arabic plural ending), were made from the alloy: "After that silver was

7. Nasir ad-Din Tusi, ed. Modarres Razavi, *Tansūkh-Nāme* (Tehran, 1348 h.s./1970) p. 215. Afshar compares the contents of the two works in his edition of the *Arāyes*, p. 362.

8. Borhan-e Tabrizi, Borhan-e Qāte (Tehran, 1330 h.s./1952) II, p. 1094 A. Listed under sapid rūy: "pronounced like safid mūy; this is the name of qala'i (tin); it is the material used to make copper replaced by tin  $[ris\bar{a}s]$ . It is used for vessels  $[al-aw\bar{a}n\bar{n}]$ , drinking utensils  $[mas\bar{a}rib]$ , water jugs  $[k\bar{i}z\bar{a}n \ al-m\bar{a}^{2}:$ note unusual usage of Persian  $k\bar{u}za$  in the Arabic plural],  $ij\bar{a}n\bar{a}t$  [for Persian lajan/lagan="basin"]..."

Biruni's remark on the low-silver alloy in early Islamic times, which is corroborated by factual evidence -coinage, for example-and his indication that silver was later replaced by tin does suggest the intention to imitate silver and therefore the use of a whitish alloy. It is tentatively suggested here that this echoes the early Islamic use of a high-tin alloy-speculum-and that isfidruy was indeed the word used for it rather than just for any kind of bronze (sufr). It is conceivable that, as the alloy was going out of fashion by Biruni's time, the word was used more loosely. Only half a century earlier the word would appear to have still retained its original specific meaning. It occurs at least once in al-Muqaddasi's Ahsan at-taqāsīm fī ma'rifat al-aqālīm, in a passage in which the tenth-century geographer mentions among the products exported from the city of Rabindjan in Transoxiana "tāsāt isbīdrūy," "bowls of isbidrūy."10 One may reasonably assume that al-Muqaddasi, with his careful style, would not have chosen this word had the Arabic sufr been a synonym, as Biruni and Kashani would have us believe. Apparently, too, the product was typical of the area and used especially for bowls, a statement corroborated by archaeological evidence regarding al-Muqaddasi's time. Kashani's and Biruni's equation sufr=safidruy may therefore be questioned, as previously suggested, and safidruy regarded as an alloy of the early Islamic period.

It may have been characterized not only by its special composition—the high tin ratio—but also by special metallurgical treatment: while high-tin alloys were to be used as late as the Safavid period, some peculiar light metallic wares with a remarkably high polish were certainly not used after the year 1000. Biruni's and Kashani's remarks on the "invention" of white bronze need not be taken literally. They may be understood as indicating that *safidruy* was extensively used by the end of the seventh century. Since early

vessels white." Neither Soruri, who was from Kashan like Abo'l Qasem Kashani, nor Nakhdjavani (Sehāh ol-Fors) record the word.

<sup>9.</sup> Abu'r Reyhān al-Bīrunī, Kitāb al-jamāhir fī ma 'rifat aljamāhir (Haydarabad-in-Dakkan, 1355/1937) p. 264.

<sup>10.</sup> Al-Muqaddasi, ed. M. O. de Goeje, Ahsan at-taqāsīm fī ma 'rifat al-aqālīm (Leiden, 1906) p. 324, line 21.

sources as well as actual pieces prove that silver wares continued in use after the time of al-Ḥajjāj, the statements of Biruni and Kashani require some interpretation. They suggest that the alloy became fashionable among the affluent classes that had embraced the Islamic religion; in other words, among those who were less conservative culturally and who patronized modern art and culture.

These inferences all seem to agree with the two groups of objects now to be presented.

#### WARES WITHOUT DECORATION

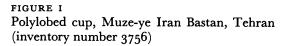
The group includes a large number of cups, bowls, vases, ewers, pitchers, trays, and boxes.

Fairly common is a polylobed cup with a broad, almost flat-in fact slightly convex-base and a ring handle topped by a flaring thumb rest. The number of lobes varies from six to eight, seven being commonest. The Muze-ye Iran Bastan, Tehran, owns an eightlobed cup (Figure 1) (height about 6 cm., diameter at opening, including width of rim, 12.5-12.7 cm.), labeled (in English) in the case as "Sasanian, small bronze bowl from Siyah Darre, Gilan." A seven-lobed cup in the ISMEO Museum, Rome (inventory number 2703), carries a similar attribution. It was acquired from a Tehran dealer in whose shop I photographed two more cups reportedly from the same site, said to be in Deylaman. The interior of one of these cups (Figure 2) (height 5.6, diameter of opening 12.5 cm.) shows the typical sharp breaks of white bronze pieces exposed to shocks. Of rougher make than the ISMEO cup, the two in Tehran suggest that there were degrees of expertise within the same workshop, assuming that the information regarding the common provenance of all three cups is accurate. Other cups appeared at auction in London in 1967<sup>11</sup> and 1970.<sup>12</sup> With one exception, all these cups have handles of ordinary bronze, roughly

11. Sotheby & Co., Egyptian, Western Asiatic, Greek, Etruscan and Roman Antiquities, Islamic Pottery and Metalwork (London, 1 January, 1967) no. 46, p. 12: "a small Sassanian bronze lobed cup with ring handle."

12. Christie's, Fine Islamic Works of Art and a Mamluk glass sweetmeat Jar and Cover (London, 23 June, 1970) no. 30, p. 11: "a fine Parthian bronze lobed wine cup, of deep form with sides shaped in seven petal lobes, a small flanged handle to one side."





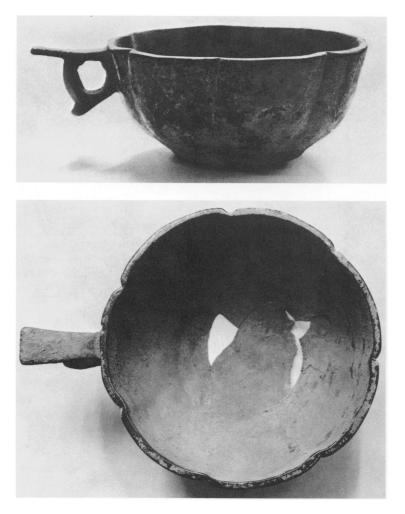


FIGURE 2 Polylobed cup, private collection, Tehran

trimmed and crimped into the central part of one of the lobes. On the first of the London cups traces of scraping could be seen around the handle under a thin layer of oxidation. The second London cup has a handle of white bronze cast hollow, a surprising feature revealed by a break in the metal. The handle appears to have been welded to the cup.

The only close parallels to this model are of the Islamic period. A well-known eight-lobed ceramic cup with the distinctive ring-handle topped by a shorter thumb rest appeared on the German art market, and is now in the Museum für Islamische Kunst, Berlin. It has a molded decoration under a green lead glaze and carries the signature of one Husayn beneath the glaze on the underside.13 The epigraphy points to a date not later than the ninth century, more probably the eighth. Its closely comparable dimensions-height 6.8, maximum diameter of body 11.3 cm.—further strengthen the connection with the metal cups and point to the existence of established sizes whatever the material. This is borne out by a cut-glass cup from Iran recently acquired by the Metropolitan Museum (acc. no. 1970.20).14 Richard Ettinghausen has compared this shape with that of a stone basin in a mansion near Jericho in Palestine that can be dated within the years 724-34.

Another standard model of fairly distinctive shape is a vase with a squat rounded body resting on a broad base and a flaring fluted neck of approximately the same height as the body, topped by a short everted lip of triangular section. There are two basic moduli of this shape. One has a slender neck. A typical example was auctioned in London in 1969 (Figure 3) (height 13.4-13.5, maximum diameter of body 9-9.2, diameter of opening 5.6-5.65 cm.). It is heavily cast. There are remnants of a mirror black patina, with areas of ordinary green oxide. Twenty vertical facets decorate the neck. The body is very subtly faceted: nine pentagonal facets surround the neck, pointing downward, and nine much smaller facets go up from the bottom. In between are three imbricated rows of nine lozenges. Other models, much lighter in weight, with thinner walls, and the deep mirror black patina speckled with ashy dots and areas of a pale yellowish hue, are identical in shape and faceting. Their facets are sometimes more perceptible to the fingers than to the eyes.

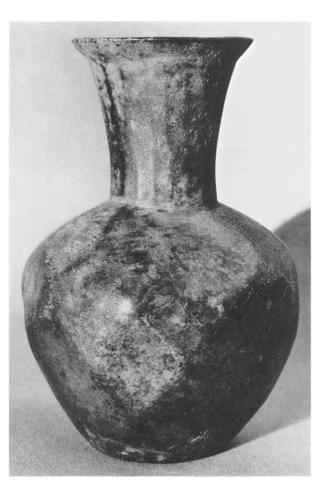


FIGURE 3 Vase with faceted body, private collection

A second variety of this type of vase is characterized by a much broader neck. There are models with facets on the body and others without,<sup>15</sup> but all have fluted necks. The metal used varies from the very light type of white bronze with mirror black patina and crackles

13. F. Sarre, "Frühislamische Keramik aus Mesopotamien," Der Cicerone 22 (1930) pp. 37-43. A. Lane, Early Islamic Pottery (London, 1958) pl. 4B and p. 12, where it is regarded as Egyptian. According to Sarre, the cup appeared on the Berlin market. It is more likely to be Iranian than anything else.

14. R. Ettinghausen, "Islamic Art," The Metropolitan Museum of Art Bulletin 29 (1970) ill. p. 85.

15. A piece with unfaceted body was sold at the Hôtel Drouot in 1969: M. Champetier de Ribes, *Tableaux modernes et objets de* vitrine, Siège et Meubles, *Tapis, Tapisserie* (Paris, 30 May 1969) no. 45: "Petit vase spherique, à col godronné en bronze de patine foncée. Epoque Parthes, III<sup>e</sup>s. av. J.C."

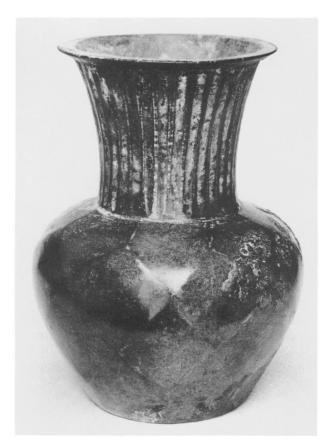


FIGURE 4 Vase with faceted body, private collection

on the surface to the heavier type of white bronze. A heavily cast version with wartlike formations of red oxide corrosion was auctioned in London in 1971 (Figure 4) (height 14.5, maximum diameter of body 10.55-10.7, diameter of opening 8.2-8.3 cm.).<sup>16</sup> The patina, with a high polish, is ashy brown. The faceting of the body is of the usual type: eight pentagonal facets start from the base and neck and two rows of imbricated lozenges are inserted between them. Another heavily cast version with the body fully rounded and the neck fluted (Figure 5) (height 17-17.1, maximum diameter of body 12.5, diameter of opening 8.75-8.8 cm.) was auctioned at the same sale.17 Intermediary versions exist, for example, a lightweight vase without facets on the body is in the Tehran museum (inventory number 19318, height 15.4, maximum diameter of body 11.4, diameter of opening 7.4 cm.). This vase carries a label giving Rashi, Gilan, as its provenance.

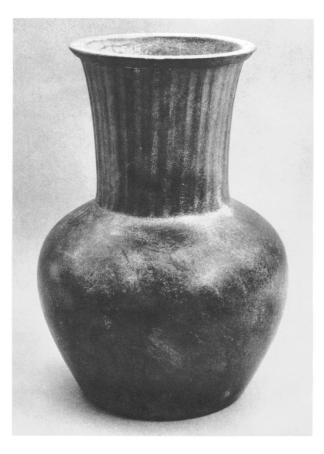


FIGURE 5 Vase with rounded body, private collection

Several parallels may be found for these white bronze vases. The slender-necked variety is matched, in reduced size, by a miniature pottery vase from Khotan.<sup>18</sup> According to Soviet scholars, the Khotan finds are not later than the late seventh or early eighth century. It is interesting to note in passing that the miniature vase has a ring handle on the body. Since it is an improbable addition for a large metal vase, the assumption is that the potter copied it from cups with ring handles.

The slender-necked metal vases and cups were there-

16. Christie's, *Persian and Islamic Works of Art* (London, 1 March, 1971), part of lot 43: "A Parthian bronze vase, with faceted shoulder and tall fluted neck—6 in. (15 cm.) high."

17. Ibid., part of lot 43: "another, similar-7 in. (17.7 cm.) high."

18. N. V. Diakonova, S. S. Sorokin, *Khotanskie Drevnosti* (Leningrad, 1960) p. 37, no. 1958. For general commentary, p. 24 under no. XXVII and text p. 106. fore probably produced at about the same time. The broad-necked vases, on the other hand, may have been favored until much later. A silver broad-necked vase resting on a short slanting foot (a minor addition) carries the name of one amīr Abu'l 'Abbās Hārūn b. Valkīn (or Valgīr ?) in so-called Kufic letters. The script of the nielloed inscription cannot be earlier than the middle of the ninth century and is more probably as late as the mid-tenth century.<sup>19</sup>

A third standard type, of which a great many examples have been circulating on the market, although none appears yet to have been bought by a museum, is a flat tray with a slightly convex bottom, and short, slanting, slightly convex walls (Figure 6) (height 3.7, diameter 23.3-23.5 cm.). The metal of this tray has a tin content of approximately 25-30 per cent (see Appendix). The underside has the usual mirrorlike patina. The inside, thoroughly cleaned, has an almost white appearance with faint yellowish undertones. Concentric traces of spinning are apparent. Several ceramic dishes from Susa usually dated to the eighth or ninth century have a similar profile.<sup>20</sup> This is shared by dishes from Neyshabur,<sup>21</sup> one of which, in the Foroughi collection,<sup>22</sup> is datable to the late ninth or early tenth century on the basis of its epigraphy.

Alongside the three types, represented by a large number of pieces, individual objects equally typical of the early Islamic period complete the repertoire of white bronze shapes.

Related to the small vases through its faceted body is a small ewer on loan to the Metropolitan Museum (Figure 7) (height with knob 15.8, maximum diameter

19. A. U. Pope, ed., *A Survey of Persian Art* (Tokyo, 1964–65) pl. 1345c.

20. One illustrated in M. Pézard, La Céramique archaique de l'Islam et ses origines (Paris, 1920) pl. XI, bottom; text pp. 42-43. Pézard regarded these potteries as Sasanian, a long-discarded theory. Another dish is illustrated by Lane (Early Islamic Pottery, pl. 5B), who calls it Mesopotamian. It is in fact Iranian. It was bought in Iran by Charles Vignier before 1914. A very close model is a dish decorated in green and yellow enamels on a white slip, R. Koechlin, Les Céramiques musulmanes de Suse au Musée du Louvre (Paris, 1928) no. 100, pl. XIII, text p. 63. Note the convex rim and typical edge.

21. W. Hauser, J. M. Upton, and C. K. Wilkinson, "The Iranian Expedition, 1937," *The Metropolitan Museum of Art Bulletin* 33 (1938) fig. 18, p. 20. The fragment is dated to the late ninth or early tenth century on the basis of archaeological evidence.

22. [R. Ghirshman, G. Wiet], 7000 ans d'art en Iran (catalogue) (Paris, 1961) no. 904, pl. cl.

#### FIGURE 7



FIGURE 6 Tray, H. Beres collection, Paris

Ewer, The Metropolitan Museum of Art, Anonymous Loan, L61.74.4



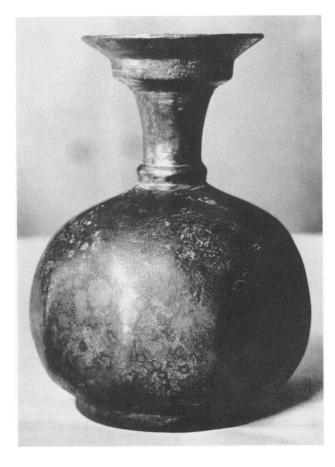


FIGURE 8 Ewer, Kabul Museum

of body 10.5 cm.). (For analysis, see Appendix.) With typical mirror black patina on one side and heavy green oxidation on the other, it has a broad, short foot and a short, vertically faceted neck marked off from the body by a molding-the latter a standard feature in eighth- and ninth-century bronzes from eastern Iran. An important unpublished ewer in the Kabul Museum (Figure 8) (height 17.2, diameter of opening 5.8 cm.) has just a molding at the base of the neck. Of undetermined provenance, it was found in present-day Afghanistan and is therefore of eastern, not western, Iranian origin. The typically Islamic shape has as its closest parallel the much larger ewer found at Abusir al-Malak, now in the Museum für Islamische Kunst. Other well-known pieces not generally identified as eastern Iranian can be cited.23

It should be noted that the molding of the ewer of Figure 7 is not rounded but slightly faceted, a feature so far unparalleled. However, this does not affect its basic analogy with the ordinary nonfaceted moldings.

The closest parallels to the spout of this ewer are to be found on the silver ewers from Djeti-Su (in Russian Semiretchie)<sup>24</sup> and an eighth-century pottery ewer

23. On the Abusir al-Malak ewer, see O. Rubensohn and F. Sarre, "Ein Fund Frühislamischer Bronze Gefässe in Ägypten, vermutlich aus dem Besitz des letzten Omajjaden, Marvan II," Jahrbuch Preussischen Kunstsammlungen 50 (1929) pp. 85-95, pl. 3. This corrects an earlier publication by O. Rubensohn, Zeitschrift für ägyptische Sprache und Altertumskunde 41 (1904) p. 18. Also illustrated in [J. Zick-Nissen] Islamische Kunst (Berlin, 1967) pl. 10, text p. 22. The supposed connection with the Caliph Marwan II is pure speculation. The object was found in the debris left by looters near the edge of a tomb plundered earlier. On the excavators' own admission, the latter was located 600 meters away from a place linked with Caliph Marwan II by local village tradition: dating the ewer on such a basis (which appears to have gained general acceptance since then) would be unsafe. The connection of the Abusir al-Malak ewer with Sogdian shapes and their Chinese counterparts, (B. Gyllensvärd, T'ang Gold and Silver [Stockholm, 1957] pls. 6e, 9c), seems to provide a safer basis. The lower part of the body is the exact reproduction of such shapes.

24. A. Belenitsky, Asie Centrale (Geneva, 1968) pl. 71. Among the typically Islamic features of this ewer is the faceted knob on top of the crozier-shaped handle. See also a ewer (No. 4513, unpublished) in the Freer Gallery of Art.

FIGURE 9 Vase from Gorgan, Tehran market from T'ang China.<sup>25</sup> The handle, made of ordinary bronze like the ring-handles of the lobed cups, is fashioned like the eighth-century handles from Tabarestan and Sogdia:<sup>26</sup> it rises from the neck in a crozierlike movement, then undulates downward until it reaches the middle of the body. There, a thick element develops at a sharp angle to hold the handle away from the body, in keeping with the Islamic tradition in Khorasan.<sup>27</sup> Moreover, the handle is subtly faceted, a feature typical of the early Islamic style. Interestingly, the underside of the short foot is slightly concave, like the underside of the faceted vases. The faceting of the ewer is very close to that of the small vases with trumpet-shaped necks. This in itself is enough to establish a common provenance for both types: the usual pentagonal facets -eleven in this case-appear at the bottom and top of the body, and two rows of imbricated lozenges are inserted between their triangular ends in the central area.

Related to the small vases is an unusual squat vase (Figure 9) (height 12.1 cm.) with a similar broad foot, the squat body being likewise marked off from the neck by a rib. The top of the vase is funnel-shaped. The squat body and general structure are remotely reminiscent of a well-known silver type from T'ang China datable to the first half of the eighth century.<sup>28</sup> The hexagons

25. M. Prodan, La potterie T'ang (Paris, 1960) pl. 25, caption p. 36. The sharp excrescence on this piece may derive from a leather model.

26. Melikian-Chirvani, L'argenterie du Tabarestan. For a Sogdian example, Pope, Survey, pl. 223A, recently discussed by B. I. Marshak, Sogdiskoe Serebro (Moscow, 1971).

27. For eastern Iranian examples of the 8th-11th centuries, I. A. Orbeli, K. V. Trever, Sasanidskii Metall/Orfevrerie Sasanide (Moscow-Leningrad, 1935) pl. 73, and the ewer acquired by Sarre in Tiflis, F. Sane, Erzeugnisse Islamischer Kunst I: Metall (Berlin, 1906) p. 5, pl. II.

28. Gyllensvärd, T'ang Gold and Silver, pl. 20c. Line drawing of profile, fig. 27a. This T'ang shape is not only of eastern Iranian-Sogdian derivation, like almost all T'ang silver shapes, but also built in the same way, i.e., by combining two shapes borrowed from what I call the repertoire of interchangeable basic volumes, in this case a vase plus a truncated conical bowl—here lobed possibly used initially as a funnel. For the Sogdian derivation of T'ang shapes so far mistakenly referred to as being of Sasanian derivation, see my "Iranian silver and its influence in T'ang China," Pottery & Metalwork in T'ang China: their chronology and external relations (Colloquies on Art & Archaeology in Asia No. 1) (London, 1971) pp. 9–13. Sogdian silver is briefly reviewed in my L'argenterie du Tabarestan. In 1971 Marshak (Sogdiiskoe Serebro) independently expressed similar views with regard to the Sogdian nature of the vessels.



FIGURE 10 Pitcher, private collection

on the body are similar to the faceting of the small vases. According to its owner, the vase was acquired in present-day Gorgan, formerly Asterabad. (Between October 1968, when I first saw and photographed the piece, and November 1971 it was unfortunately "embellished" with a tiger-ended spout taken from a Luristan vessel.)

Various small faceted vases belonging to this group are related, although not identical, to the big glazed pottery vases from Iran presumed to be of the eighth to ninth century. These have not yet been studied as a typological group or published in scholarly studies.<sup>29</sup>

An important, and so far unique, pitcher provides a striking example of a simple shape modulated by complex faceting (Figure 10) (height 12, diameter of body

<sup>29.</sup> For a good illustration of the standard type, Parke-Bernet, Antiquities. The Property of the Kevorkian Foundation (New York, 18 December 1970) no. 91, p. 54.

6, diameter of opening 4.8 cm.). It was cast in five separate pieces: the slightly convex bottom and grooved ridge, the cylindrical body cast as a flat thick sheet and later bent and welded, the shoulders and grooved ridge at the bottom of the neck, the neck, and finally the handle. The profile is reminiscent of that of an earthenware pitcher from Samarra<sup>30</sup> and the ewer in the Kabul Museum (Figure 8). The slanting handle rises from the upper part of the body, to which its arrowhead-shaped end is welded, and runs parallel to the tall neck before coming down in a crozierlike curve to be welded to the upper part of the neck. The neck and the profile of the handle are common in early Islamic pottery, but in its details the white bronze handle is more sophisticated than usual. Instead of being perfectly cylindrical, it is slightly flattened, with a finely molded groove within two deeply incised lines at the bottom. The unusual faceting makes the sturdy shape of the ewer look light. On the lower part of the body, grooves emphasized by a deep incision on either side alternate with flat facets, creating a light-and-shadow effect, enhanced by the rows of four punched marks on each facet. The neck is

> FIGURE II Dish, Paris market



fluted and topped by a grooved ridge with a flat, slightly rounded edge. The neck is further emphasized by two deep incisions immediately below it, repeating the two incisions at the bottom and top of the cylindrical body. This grooved ridge appears on some of the lobed cups—for example, the cup cited in note 13—and on several of the more carefully executed shallow bowls. On the underside, three circles carefully engraved with dividers testify to the great care with which this small vessel was produced.

Among the plates and dishes, a dish on the Paris market in 1967 (Figure 11) (diameter 21.3, height 3.2 cm.) deserves notice. It is a version of the flat dish with narrow rim known from Sogdian metalwork<sup>31</sup> as well as its T'ang derivations<sup>32</sup> of the eighth century, and at least one late survival in Islamic pottery of the ninth century.<sup>33</sup> But it has the hallmarks of the artistic tradition followed in the workshops where white bronzes were made: a very slightly convex bottom like that of the pitcher of Figure 10 and of the lobed cups, a slanting rounded edge finishing off the ridge, and circles carefully and lightly incised with dividers on the inner surface.

Reviewing the evidence so far available for determining the period of production of the group, it is obvious that we are dealing in the main with objects relating to the earliest period of Islamic art in Iran. There are parallels for several of them—the lobed cups, the slender-necked vases, the flat dish of a shape already known from Sogdian and Chinese silver—and this points to the eighth century as the most likely period. This does lend some weight to Kashani's statement that the use of white bronze started in the late seventh to early eighth century. One would expect in this case at least a few direct imitations of the supposedly forbidden silver wares. They appear to exist.

Probable examples of such imitation work are some models of a totally different inspiration from the white

30. F. Sarre, Die Keramik von Samarra (Berlin, 1925) pl. 1, 1, p. 6, text p. 5.

31. Found at Churinskaya, formerly Viatka province. See I. I. Smirnoff, *Vostochnoie Serebro* (St. Petersburg, 1909) no. 111, pl. LXVI, caption p. 15.

32. Gyllensvärd, T'ang Gold and Silver, pl. 9a.

33. Iraq Government Department of Antiquities, Excavations at Samarra 1936-1939, II: Objects. (Baghdad, 1940) pl. LXII. Note similarity of slightly curved rim. No dimensions given in either English or Arabic text. bronze shapes studied so far. One is the boat-shaped drinking vessel, well known from silver objects decorated in Sasanian style. There are a great many white bronze versions of this shape, including one in the Mettropolitan Museum; for analysis of this example see Appendix. They could be later than the fall of the Sasanian empire. Certainly some of the silver shapes were created as late as the eighth century. Such is a boat-shaped bowl in the Kettaneh collection, which should be dated to the eighth century, as it is a typical product of a Tabarestan school working in a tradition derived from the imperial style of the Sasanian period.<sup>34</sup> Tabarestan exported silver to the province of Khorasan, a fact of considerable significance that has escaped attention so far.35 It is not unreasonable to assume that the boat-shaped white bronzes are among the first imitations of silver vessels.

Another possible case of white bronze interpretations of silver models are some stem-bowls closely comparable to a type found at Susa.<sup>36</sup> A white bronze version made in separate parts—bowl and stem—as are the silver pieces, was on the Persian art market in 1971 (Figure 12).

Assuming that the tentative identification of high-tin bronze—speculum—with *safidruy* is correct, the boatshaped vessels and stem-bowls made of this alloy may

34. The Kettaneh bowl was published by Ghirshman (7000 ans d'art en Iran, no. 805, p. 140, pl. xCII) as "Sasanian, VI-VII century." The eighth-century date given here as well as the ascription to a school located in Tabarestan are primarily based on the typological characteristics linking the Kettaneh bowl with two of three bowls actually dug up in historical Tabarestan (modern Mazanderan) and furthermore inscribed to the names of a ruler (Isfahbad) of this province (on the inscriptions, see W. B. Henning, Bulletin of the School of Oriental and African Studies XXII, 1 [1959], pp. 132-134), and the well-known bottle formerly in Naser ad-Din Shah's collection. The latter, now in the Muze-ye Iran Bastan, Tehran, is also said to have been excavated in historical Tabarestan (first published by Y. Godard, "Notes. Bouteille d'argent sassanide," Athar-e Iran III, 2 [1938] pp. 291-300). The formal decoration and low-relief carved figures on the Kettaneh bowl, which was reportedly dug up in Deylaman, a modern village located in historical Tabarestan, and those to be seen on the inscribed bowls offer close analogies. The dancer on the Kettaneh bowl is framed by formally stylized vinestalks-two stalks joined together-carrying leaves whose veins, reduced to purely geometrical curves, are identical to those seen on the bowls inscribed to the name of the late eighth-century Isfahbad. The tips of the leaves on the Kettaneh bowl are drawn as pointed arches, as are the leaves at Khirbat al-Mafdjar, the early Islamic site in Palestine. The bunches of grapes, each made of seven grains, are identical to those on the inscribed



FIGURE 12 Stem-bowl, Persian market, 1971

illustrate the beginnings of the school noted by Kashani and Biruni.

It is also to this early period that one might date those white bronzes that have parallels in the early eighthcentury Chinese shapes. Of these, two are of particular interest. One is a stem-bowl in the Gulbenkian Mu-

bowls. The stylization of the face and costume of the dancer finds exact parallels on the figures to be seen on two of the inscribed bowls. There is therefore every reason to consider the Kettaneh bowl as a product from the workshop located in Tabarestan and active at about the same time, the latter half of the eighth century. On the school of Tabarestan, to which many more bowls may be ascribed, see my L'argenterie du Tabarestan.

35. Ibn Isfandiyar tells the story of a prince of Khorasan who came to visit the Isfahbad, Khorshid the son of Dadborzmehr, and asked for trays to display his presents: 500 silver trays were brought, from the Isfahbad's pantry. The Isfahbad then graciously accepted the presents and sent back to Khorassan 2000 silver trays laden with presents. See Ibn Isfandiyar, E. G. Browne, ed., *Ibn Isfandiyar's History of Tabaristan* (Leiden-London, 1905) p. 46. In another passage, according to Clement Huart, Ibn Isfandiyar tells about a treaty between Farrokhan and Yazid B. Muhallab, governor of Khorasan, whereby the Isfahbad pledged himself to send an annual tribute including 400 men each carrying a shield, a silver bowl, and a silk saddle-cloth. Huart singled out this passage, *Encyclopédie de l'Islam* IV (Paris-Leiden, 1934) article "Tabaristan," p. 608 B, but missed its significance.

36. An excellent example is in the Metropolitan Museum (acc. no. 62.46). Another is in the Louvre, see P. Amiet, "Antiquités Parthes et Sassanides," *Revue du Louvre* (Paris, 1967) p. 278, pl. 9.





Stem-bowl, Museum of Oriental Antiquities, Gulbenkian Foundation, Durham (photo: courtesy Museum of Oriental Antiquities)

#### FIGURE 14 Flat dish, Tehran market, ex coll. Clayton, London



seum of Oriental Antiquities, Durham (Figure 13). Bequeathed to the museum as part of Sir Charles Hardinge's collection, formed before World War II, it is not otherwise documented. Though it was regarded as Chinese, an attribution plausible enough as long as the existence of Iranian white bronze was unknown, it has all the characteristics of the group studied so far. The bowl is made of hammered white bronze and has the same round edge as the boat-shaped vessels. Corrosion typical of this metal has eaten a hole through the side. In profile the bowl is close to T'ang metallic shapes<sup>37</sup> and the dome of one of two incense burners found at Bishapur in Fars.<sup>38</sup> The trumpet-shaped stem is of ordinary bronze.

The other "T'ang" shape is a flat dish from the Tehran art market with slanting convex rim topped by a rounded rib (Figure 14) (diameter 28-28.1, height 2.4 cm.). The back shows the characteristic deep mirror black patina with emerald green oxide areas under the rim. The inside has presumably been cleaned, revealing the almost white metal. The network of crackles is typical of the early stage of white bronze corrosion. The shape is well known from T'ang three-colored pottery dishes and also a glass footed dish in the Shosoin at Nara.<sup>39</sup>

Both the series of shapes echoing the Sasanian tradition and these other early types with middle T'ang parallels apparently support Biruni's and Kashani's

37. Gyllensvärd, T'ang Gold and Silver, pl. 10d. The profile of the Durham bowl is exactly that of another early eighth-century stem-bowl, pl. 8d. One has simply to omit the stem and the upper part marked off by the rim, both of which may be regarded as secondary additions to the basic volume.

38. R. Ghirshman, "Les fouilles de Chapour (Iran)," Revue des Arts Asiatiques 12, 1 (1938) pl. IX, fig. 5. The two incense burners were found inside a glazed pottery jar in a cache. From the brief report, one gathers that the cache included luster wares from Rey as well as a glass flask of the Samanid period—objects of various periods presumably regarded by the owner as precious. Ghirshman refers to the house as an "Arab dwelling." No description is given of the incense burner related to the Durham bowl, nor are the dimensions stated. I suspect that it was of white bronze and belongs in my second group, "Wares with Geometric Patterns."

39. Pottery dishes: see W. Willetts, Foundations of Chinese Art (London, 1965) pl. 38. Glass footed dish: Sir Percival David, ed., Chinese Connoisseurship: The Ko Ku Yao Lun (London, 1971) pl. 15 d, caption p. xxxv. The shape, like many others in this group, can be traced back to early Iranian art. A similar profile may be seen on the alabaster footed tray from Persepolis: E. F. Schmidt, Persoplis II, Contents of the treasury and other discoveries (Chicago, 1957) pl. 27, no. 4. contention regarding the sudden vogue of white bronze in the days of al-Hajjāj. Are we to take the old writers literally and assume that white bronze was really "invented" at that time? This seems incompatible with an archaeological find brought to my attention by Prudence Oliver Harper: a shallow bowl excavated by Namio Egami in Gilan and tentatively dated by him to the latter half of the Parthian period.<sup>40</sup> Analysis has shown the alloy to contain 21.4 per cent tin, 1.2 per cent lead, 0.7 per cent iron, the rest being copper. The simple shape of the bowl would lend itself excellently to hot forging. It is, indeed, similar to small bowls of the same alloy that can be bought in the Kerman market today. Metallographic examination of some of them clearly shows that they were hot-forged and quenched.41 Should the Egami bowl be found to possess a similar microstructure, and be confirmed by further archaeological finds, it would be of the utmost importance. For the first time it would be possible to relate a definite metallurgical technique of the early Islamic period to the distant Iranian past.

We cannot, on the other hand, rule out the possibility that the making of undecorated white bronzes may have lasted into the early tenth century. The similarity in shape between the vase of Figure 5 and a vase with a nielloed inscription of the mid-ninth to mid-tenth century was noted earlier (page 129). Polylobed shapes persisted long after the eighth century. A splendid polylobed bronze cup in the Herat Museum (Figure 15)

FIGURE 15 Lobed cup with inscription, Herat Museum



(diameter 11.2-11.4 cm.) is inscribed in a variety of the so-called Kufic script:

"Divine grace/bliss/joy/felicity/God's favor/g[ood fortune]."

The lettering, with its combination of triangular apices, as on the  $y\bar{a}^{t}$  of *yumn* (visible in the illustration), and its foliated endings of the curved tails of the  $w\bar{a}w$  (also visible), dates it to the tenth century, if not even to the early eleventh. It is therefore not inconceivable that several of the undecorated white bronzes of similar shape may have been manufactured as late as the tenth century. For the time being, considering the broad span covered by the white bronzes, the group must be dated late seventh to early or middle tenth century.

Determining their place of manufacture raises similar problems. The Caspian area is a possibility. Only one object of those discussed so far was personally bought by any of the dealers making statements regarding provenance, and that one came from the modern city of Gorgan-that is, from the cultural borderland between the Caspian area and Khorasan, the great eastern province, leaning more toward the East than the Caspian area. This does not settle the question. On the other hand, several undecorated white bronzes may be seen in Afghanistan, including lobed bowls, though I could not photograph or study any of these closely. Another indirect argument supporting an eastern location is the number of parallels provided by Chinese silver shapes. As all of the T'ang shapes derived from socalled Sasanian shapes are in fact related to a group of Sogdian origin, datable to the seventh and eighth centuries,<sup>42</sup> it is not unreasonable to assume that early Islamic shapes that have equivalents in the T'ang repertoire of shapes were also manufactured in the eastern

41. C. S. Smith, private communication.

42. Melikian-Chirvani, "Iranian silver," pp. 9-15.

<sup>40.</sup> Namio Egami, Shinji Fukai, and Seichi Masuda, The Tokyo University Iraq-Iran Archaeological Expedition Report 7: Dailaman II. The excavations at Noruzmahale and Khoramrud (Tokyo, 1966) line drawing of profile, pl. XLIII, 5; analysis, p. 9; date, p. 18. A photograph and chemical analysis, unfortunately without microphotographs, appear in Tsurumatsu Dono, Kodai Kinzoku Bunka-Shi ["Chemical Investigation of the Ancient Metallic Culture"] (Tokyo, 1967) fig. 66, pp. 112, 217.



FIGURE 16 Fragmentary bowl from Neyshabur, Muze-ye Iran Bastan, Tehran

FIGURE 17 Bowl from Neyshabur, Muze-ye Iran Bastan, Tehran (inventory number 9797)

Iranian world. None of this, however, allows any definite statement, and the question of geographic provenance cannot be solved at present.

#### WARES WITH GEOMETRIC PATTERNS

It is possible to reach more positive conclusions with the second group of white bronzes, characterized by geometric patterns in which the dotted circle was used either in continuous chains or as a matting device. The group is primarily represented thus far by bowls, trays, and spoons. There are examples in the reserves of Iranian and Afghan museums, and on the bazaars of Khorasan. Many more are to be found on the Western art market.

Although none of the objects studied in the East was

available for laboratory analysis, several of them are obviously made from the same alloy as the preceding group. The wartlike corrosion in neatly defined concentric circles, the black patina, the shallow parallel grooves left by rough scraping on the underside of trays and bowls, the marks left by turning on the lathe—all establish the identity of the alloy and the technical methods its use implies. Other objects in this group probably should not be classified with white bronzes. They may have been made from a different alloy or have undergone a different treatment, or both, for their patina takes on a rich deep olive color. However, their decoration is executed with the same tools—dividers and punches—as the white bronzes with geometric patterns.

Moving from west to east, the first large group comes from commercial excavations at Neyshabur. Several bowls in the Muze-ye Iran Bastan were seized, Parvin Barzin of the Islamic Department informed me, as illicit finds from commercial diggings many years ago. A good example is an unnumbered fragmentary bowl (Figure 16) (diameter 23.9 cm.) with mirror black patina and the typical corrosion that has destroyed more than half the metal. The grooving at the top is a frequent feature in the series. Underneath, two deep incisions serve to emphasize it. The rounded profile is equally common. Two rows of punched dotted circles bordering a central row of cavities, also punched, mark off the main decoration from the rim. The lozenge pattern with its broad bands carelessly indicated by double parallels and the punched dot filling used to mat the surface are typical of the repertoire. So is the stamping of three cavities at the top of each lozenge and seven cavities at the intersection of two lozenges. The rough incisions and somewhat shoddy punching characterize what may be tentatively called the rustic style.

A more sophisticated type of bowl in the Muze-ye Iran Bastan (Figure 17) (diameter 18.7, height 8.7 cm.) is in a heavier yellow alloy mostly covered by a dull red patina with faint traces of small wartlike corrosion. The bowl was cast, the decoration executed with dividers, punches, a gouge, and chisel. On the outer walls, the bottom is marked off by a continuous band of circular cavities framed by incised parallels. A gadroonlike motif appears on the lower part topped by another band of cavities. Dotted circles punched at the bottom of each incised arc make a highly stylized capital, and other dotted circles appearing above the arcs are reminiscences of the lotus-bud or flower normally represented between consecutive architectural arches on Sasanian, Sogdian, and early Islamic arcades. The central area is occupied by twenty large roundelsdotted circles surrounded by a cut-out ring, the whole framed by three incised circles. The intervals are filled by a circular cavity with three dotted circles on the outside, a common motif in the series. Finally, two chains of dotted circles within thinly incised fillets frame a band of smaller roundels consisting of the same dotted circle surrounded by a cut-out ring.

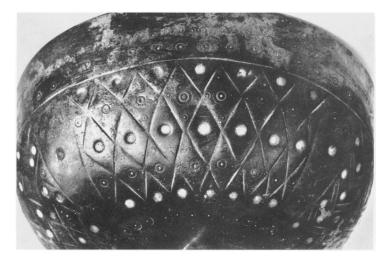
Although the inner decoration (Figure 18) need not be described in detail, one should note the two compartments enclosing the stylized hastae of the letter *alif* between rows of dotted circles. There are twelve *alifs* in one and fourteen in the other. These are standard numbers that govern the elements of any kind used in Iranian metalwork according to what I call the aesthetics of number.

One large, nearly hemispherical bowl acquired by a Tehran dealer in Neyshabur (Figure 19) (diameter 23.5-24 cm.) is cast in an olive yellow alloy with a fine brown and red patina and a few patches of green oxide. The walls are marked off from the bottom by forty-two



FIGURE 18 Interior of bowl, Figure 17

FIGURE 19 Bowl from Neyshabur, private collection



dotted circles punched within a second circle of greater diameter. A similar motif appears at the top between deeply incised lines with one last chain of small dotted circles before the bare area that may be regarded as the rim. The walls are divided into four compartments by incised gadroons. Each one has a different decoration alternately based on the lozenge and the herringbone gadroon with an abundant use of cavities and dotted circles arranged according to well-defined numbers.

Further east, at Herat, several white bronzes with geometric patterns belong to the city museum. One, typically corroded, has a decoration in the beveled style well known from carved wood and marble revetments found at Samarra. In profile (Figure 20) (diameter 17.25 cm.) the shallow bowl has a flat bottom and slanting, slightly convex sides. In feel and lightness the metal is exactly like that of the small faceted vases. Whatever inside decoration may have existed can no longer be seen under the corrosion. The underside (Figure 21) is very subtly faceted. Eleven lotus-budshaped facets point toward the center. In the middle of each facet, a smaller lotus-bud motif is cut out in low relief and in the center of this appears a third motif, a depressed circular area with a ring cut out in relief. Starting from the flat central area eleven lotusbud facets, now almost obliterated by corrosion, radiate outward. The flat central area is marked off from the lotus-bud decoration by two concentric grooves. Over the upper lotus-bud motifs arched bands, slightly concave, form a festoon with large shallow circular cavities appearing in the intervals. Above, a band of molded cavities inserted between deeply incised fillets separates the festoon and cavities from the final motif at the top: a succession of trapezoidal compartments created by deep incisions with a punched hemispherical cavity in the middle.

Another large bowl (Figure 22) (diameter 28.8, height 10.8-11, width of rim 0.45-0.55 cm.) illustrates the rougher version of the beveled style. The mirror black patina appears on the outer walls. Sharp breaks typical of the brittle alloy crack the surface, and small concentric corrosion bubbles are to be seen on the underside. The decoration is based on geometric figures chiseled after the casting, emphasized by the usual hemispherical cavities and chains of dotted circles. Thirty-four hexagonal facets were carved on the outer FIGURE 20 Bowl, Herat Museum





FIGURE 21 Underside of bowl, Figure 20

walls, and the main feature is a complicated pattern of the Star of Solomon (*Setare-ye Soleyman*, as the Hebrew Star of David is called in Persian). This was an important esoteric symbol in early Islamic art down to the fourteenth century. The badly worn pattern indicates prolonged use before the bowl was buried, as was the case with the bowl of Figure 19. Inside, on the bottom, is a rosette similar to that seen in a bowl reputedly from the Ghor district (Figure 26).

A third bowl in the Herat Museum (Figure 23) (diameter 23.3-23.35, height 11.7-12.15 cm.), first cast then apparently hammered and spun, is decorated with twenty-five roughly incised lozenges on the walls and the Star of Solomon on the underside (almost erased by wear). It is of the same style as several bowls from Neyshabur in the reserves of the Tehran museum. The perfunctorily punched dotted circles with a second circle around each one inserted between two deeply incised fillets, also the sham groove simulated at the top by another incised fillet, are borrowed from the same repertoire. In profile, too, this bowl is identical to several of the Neyshabur bowls.

Finally, a white bronze ladle with the same pattern (Figure 24) (length 33.4 cm.) can be closely compared to a ladle and spoon in the Tehran museum (Figure 25) (length 28.6). No record could be found of the actual provenance of the white bronzes in the Herat Museum; for the time being they must be considered to come from the Herat district in the broadest sense.

Hence the interest of a finely cast hemispherical bowl

FIGURE 24 Ladle, Herat Museum

FIGURE 25 Combined ladle and spoon from Neyshabur, Muze-ye Iran Bastan, Tehran (inventory number 9834)

FIGURE 22 Bowl (underside), Herat Museum



FIGURE 23 Bowl, Herat Museum



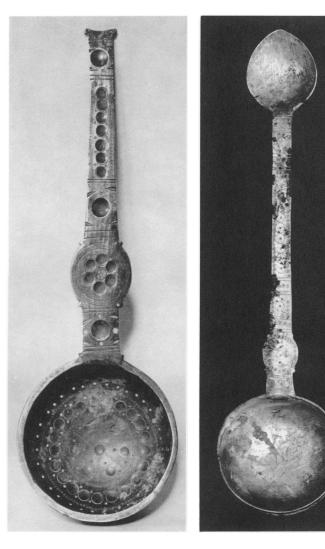


FIGURE 26 Bowl reputedly from the Ghor district, private collection, Herat





FIGURE 27 Interior of bowl, Figure 26



FIGURE 28 Tray, Muza-i Rawza, Ghazni

in a Herat private collection (Figure 26) (diameter 24, height 10.3 cm.), reportedly found in the Ghor district. Tiny red corrosion specks dot the inner surface, which otherwise has only slight traces of green oxidation. The decorative scheme, with the chain of molded dotted circles at the top of the pattern and its division into four compartments separated from one another by flat gadroons, recalls the Neyshabur bowl of Figure 19. Here, too, each compartment has a different motif executed in typical beveled style. The bottom is marked off from the walls by a groove emphasized by two incised fillets framing a pattern based on the Star of Solomon. The latter is identical to the pattern noted on the second Herat Museum bowl, but is executed with far greater precision. Inside the bowl, the only decoration is a fine rosette (Figure 27), a device that ultimately goes back to the Achaemenid motif represented inside shallow bowls as well as on the underside.

Further east, the district of Balkh, the easternmost "quarter" of Khorasan, has yielded a series of flat white bronze trays. Brought to the Ghazni bazaar, these were eventually acquired by the Muza-i Rawza, in Ghazni. Some are decorated in the geometric style (Figure 28) (diameter 50.4, height 5.7-6.4 cm.), others (Figure 29) (diameter 48-48.2, height 5.3-5.8 cm.) in the figurative style of the twelfth century, a dating borne out by the style of the naskhi inscriptions.

An important find was made on the eastern marches of Afghan Khorasan, at Toškān, a few miles from Keshm in Badakhshan. Fourteen white bronzes now

FIGURE 29 Tray, Muza-i Rawza, Ghazni



in the reserves of the Kabul Museum were reportedly dug up together, according to Ra'uf Wardak, curator of the Islamic Department. A large tray (Figure 30) (diameter 30.2, height 5.1-5.3 cm.) and a bowl (Figure 31) (diameter 17.6-17.7 cm.), both hammered and spun, are typical examples. In the case of this find, too, four items of apparently identical workmanship are decorated in twelfth-century style, with naskhi inscriptions. A tray with this script (Figure 32) (diameter 46.3, height 6.7 cm.), having a pale yellowish patina with tiny wartlike red oxide formations and remains of an ashy patina, is closely related to the Ghazni tray (Figure 29). The same peculiar wavy incisions meant to set off the lettering are seen on both; the tall letters have one or two incisions at the top of their hastae; the fivelobed palmettes between these tall hastae are identical, and so on. It would thus seem that on the fringes of Khorasan at least, white bronzes decorated both in the geometric style and with patterns incorporating epigraphy were still being made well into the twelfth century.

One more bowl should be mentioned for its provenance, since it was acquired by a Mashhad dealer in present-day Zabol—that is, in Sistan, not Zabolestan centered around Ghazni.<sup>43</sup> Heavily cast and having an ashy olive patina, the bowl (Figure 33) (diameter 25.5-

43. See anonymous geographer, V. Minorsky, tr., Hudud al-Alam, 2nd ed. (London, 1970) p. 112.



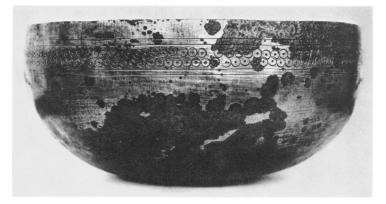


FIGURE 31 Bowl from Toškān

25.75, height 11.45 cm.) has a deep groove at the top and a succession of sixty-one circular depressed areas with a flat pierced disc in the center that recall the bowl of Figure 26. Eleven hexagons have been hollowed out on the walls. Within each hexagon, circles incised with dividers frame seven punched dotted circles. The decoration on the underside is marked off from the walls by a chain of dotted circles inserted between two circles incised with dividers. This decoration (almost worn away) seems to have been based on a hexagonal frame with shallow circular cavities marking out geometrical figures. Inside the bowl there appears a fine rosette like that of Figure 27.

> FIGURE 30 Tray from Toškān, Kabul Museum

> FIGURE 32 Tray from Toškān, Kabul Museum





FIGURE 33 Bowl from Zabol, Sistan, private collection

This survey could be considerably extended, since many more white bronzes are to be seen in the museums of Tehran, Kabul, Herat, and Ghazni, and in private collections. The number alone shows that the white bronzes decorated in the geometric style were fashionable over the entire area of eastern Iran. This includes not only Khorasan with Neyshabur to the west, the Herat district in the eastern central area, and the Balkh district in the east—but also its cultural dependencies, so to speak, with Badakhshan to the far east and Sistan to the south. There is no doubt, in view of the large amount of material, that it was produced in these areas, but only properly conducted excavations will tell us eventually which were the major centers. Neyshabur and Herat are likely to have been the leaders.

On the other hand, there is some reason to assume that bronzes decorated in the geometric style were not confined to eastern Iran. True, for the time being metal pieces are almost entirely lacking in the west. The two incense burners found at Bishapur (note 37) are hardly significant. They were discovered in a cache with objects of various periods presumably regarded as precious, and they may therefore have been imports. This may also be the case with a bowl recently found at Siraf on an excavation level not earlier than 1263.44 Siraf was the most active of the Iranian seaports, and it had constant exchanges with China in the Umayyad and early Abbasid periods.<sup>45</sup> The bowl may be nothing but a leftover of the white bronze export trade, which was very active, especially toward China. But two western sites have yielded pottery sherds decorated with similar patterns. At Susa a fragmentary vase, the

lower part of which was illustrated by Koechlin,<sup>46</sup> shows the combined use of punched dotted circles as chains or as matting ground, and the beveled style. At al-Hīra, an Arab city belonging culturally to the Iranian sphere, several sherds have exact parallels in the decorated metalwares.<sup>47</sup> Numismatic evidence suggests an eighty-century date for them: two coins struck in 769/70 and 774/75 were found in the debris with the sherds. The terra-cotta imitations may indicate the existence of metallic pieces in the area. This raises the problem of chronology.

Establishing a chronological chart for the white bronzes with geometric patterns based on the use of punched dotted circles and incisions is still hazardous.

The earliest evidence for the use of chains of punched dotted circles inserted between incised fillets on vessels comes from Turkestan, namely the Khotan area. A number of terra-cotta vases bearing these motifs on their handles and on the shoulder of the body were found at the end of the last century. They do not appear to be later than the late seventh century, possibly the beginning of the eighth century by comparison with related material.<sup>48</sup> The dating of these objects is too

44. D. Whitehouse, "Excavations at Siraf. Second Interim Report," *Iran* VII (1969) pl. v (a). A tear in the wall and a hole suggest that this is a white bronze.

45. D. Whitehouse, "Excavations at Siraf. Third Interim Report," *Iran* VIII (1970) pl. XII c and p. 5; "Fifth Interim Report," *Iran* X (1972) pl. x and p. 74.

46. Koechlin, *Les Céramiques musulmanes*, pl. 25. Note the parallel rows of chains of dotted circles, halfway up, and dotted circles punched within compartments between the almond-shaped motifs in the beveled style.

47. D. Talbot Rice, "The Oxford Excavations at Hira," Ars Islamica I (1934) pp. 51-73. See fig. 18 facing p. 65 top left for pleated lozenges framing rosettes consisting of dotted circles. These are in low relief. Bottom right, a piece may be seen with punched chains of dotted circles.

48. Diakonova, Sorokin, *Khotanskie Drevnosti*, pl. 4, no. 14, a continuous chain with use of smaller dotted circles in intervals, and pl. 4, no. 33. Both pieces belong in the same category as nos. 15 and 18 with precisely molded Sogdian figures. Note the threeeared cap in the frescoes from Pandjikand: A. Belenitsky, B. B. Piotrovsky, ed., *Skulptura i Zhivopis Drevnego Piandzhikenta* (Moscow, 1959) pl. XIII, left-hand figure to be compared with *Khotanskie Drevnosti* pl. 4, no. 18, and on an unquestionably Sogdian silver bowl found at Malaya Anikova; for colored ill. of the latter, Belenitsky, *Asie Centrale*, pl. 74. Note the triangular shape coming down on the breast, typical of both Sogdian and Bactrian Buddhist costume. This group of terra cottas clearly reflects the iconographic tradition of northeastern Iranian lands in the seventh century. See further interesting examples, *Asie Centrale* pl. 13, nos. 295, 302; pl. 17, no. 474.





Glazed cup, T'ang period, British Museum (photo: courtesy Trustees of the British Museum)

uncertain to provide per se a firm chronological basis. But the terra cottas are of some consequence in connection with the first group of wares directly related to the white bronzes with geometric patterns. These consist, oddly enough, of Chinese glazed cups (Figure 34), with which the Khotan terra-cotta patterns establish a logical geographical link. To the best of my belief, the group has not yet been typologically defined. The cups are shaped like the T'ang silver model derived from Sogdian silver and in use during the first half of the eighth century.<sup>49</sup> The only difference is the simpler, faceted ring handle, which follows an age-old Iranian tradition. Instead of the usual T'ang silver floriated design, the glazed cups are decorated with superposed rows of dotted circles inserted between fillets. They are incised under the glaze. As this motif was not indigenous to China, and, as we know by now, was widely used in Iran, it follows that the Chinese group of T'ang pottery reflects lost Iranian prototypes of the same period, that is, the first half of the eighth century.

It is of some interest to note in this connection that white bronzes with geometric patterns have actually been found along the Silk Road. Sir Aurel Stein, who discovered them at Kara-Khodja in the Turfan area, did not identify them as such, which he could not possibly do, but his careful descriptions of one of the bowls accompanied by a small-size illustration can leave no doubt as to the nature of the object—a bowl from Khorasan.<sup>50</sup> While this bowl cannot be dated, it establishes the existence of a white bronze trade via Turkestan.

B. Laufer remarked long ago that the Chinese term *pai-t'un*, literally "white bronze," renders the Persian/ Arabic *isfidruj*.<sup>51</sup> If my identification of white bronze with *safidruy* is correct, the Chinese borrowed the word as well as the metal. They definitely used the metal by the early T'ang period. The Freer Gallery owns an unpublished pair of scissors and matching blade (Figure 35) decorated in the pure T'ang style of the first

50. Aurel Stein, Innermost Asia II (Oxford, 1928) pp. 592-593, on the chronological data of the cache, which included coins as late as 1102-07. The cache appears to have been that of a coppersmith. The bowl (Kao. III 0106), with traces of ancient repair and wear (see caption in vol. II, p. 605) must have been a discarded antiquity, Innermost Asia III, pl. LXX. Other of Stein's objects appear to be of white bronze too—he thought them of very thin iron-sheet, but his careful description suggests the alloy: Kao. III 099, 0100, 0101, 0102. A six-lobed bowl—0102—and a plain dish with flat bottom and low curved walls—099—might well be of Iranian make.

51. B. Laufer, Sino-Iranica (Chicago, 1919), p. 555. He mistakenly understood the word as meaning "whitish in face." Indeed "white-surfaced" would read in Persian "safidruy," but Kashani's description makes it clear that here  $r\bar{u}y$  is the homonym meaning "bronze." As Edward H. Schafer remarks (The Golden Peaches of Samarkand [Berkeley-Los Angeles, 1963] note 90, p. 339 B), the same word may apply to different realities through the centuries. So the fact that modern pai-t'un applies, according to Laufer, to a copper-zinc-nickel alloy with a small amount of iron does not lessen the significance of the linguistic correspondence. Laufer adds that Japanese "sabari or sahari . . . denotes the white copper of the Chinese." He assumes it is derived from the Persian word sepidrūi (=safidruy) and points out (p. 555, note 6) that the Japanese spelling points to the foreign origin of the product. The Japanese apparently retained the Persian word, which may have reached Japan via Korea.

> FIGURE 35 Blade, T'ang period, Freer Gallery of Art, Washington, D.C.



<sup>49.</sup> On the Chinese silver cups with ring handles and thumb rests, and other basic shapes of Sogdian derivation, see my "Iranian silver," note 28.



FIGURE 36 Pouring vessel, stone ware, from Neyshabur, Muze-ye Iran Bastan, Tehran

half of the eighth century as seen on silver wares. The metal has the patina and corrosion of white bronze.

None of this proves that the metallic models imitated by the glazed pottery cups were made of white bronze, but it makes it very plausible. It establishes the earliest date of the geometric patterns based on punched dotted circles and therefore, presumably, of white bronzes with such patterns as the first half of the eighth century.

The next chronological evidence comes not from Sogdia via its Chinese derivations, but from the other end of the Iranian world. As already mentioned, al-Hīra, on the Persian gulf, a few kilometers from the modern Iraqi-Iranian border, has yielded terra-cotta sherds with geometric patterns based on punched dotted circles. Fragments of stone wares with similar patterns were also found at the site. The excavator, David Talbot Rice, does not precisely locate the terra cottas relevant to the chronological problem of white bronze. He merely states that the general group of terra cottas they belong to was mainly found with filling debris datable by coins to the third quarter of the eighth century.<sup>52</sup>

At a slightly later date the vast amount of stone

52. D. Talbot Rice, "The Oxford excavations at Hira," pp. 51-73. Regarding terra cottas, see among others fig. 18 facing p. 65, top left; chronological data on filling debris, p. 66. Concerning stone wares see G. T. Scanlon, "Ancillary dating materials from Fustat," Ars Orientalis 7 (1968) pl. 4, fig. 5, text fig. 7 a, p. 15, text p. 8A. Scanlon's excavation is important because some of the material is datable. Although not identical—they lack the dotted circles—the stone wares appear to support the tentative dating ascribed to the al-Hira find.

wares excavated at Neyshabur offers close parallels to the geometric patterns executed with punches, dividers, and a gouge, as found on white bronzes (Figure 36). In 1944 Charles K. Wilkinson gave these stone wares a late eighth- or early ninth-century date.<sup>53</sup> Stylistic evidence, however, suggests that stone wares with geometric patterns executed with dividers, rulers, and punches were still being made after the ninth century. Moreover, the Museum für Islamische Kunst, Berlin, owns a gray stone funerary tablet dated Dī'l Qa'ada 421/October–November 1030,<sup>54</sup> the handle of which, the only decorated part, has a geometric pattern of dotted circles, some of them framed by a second circle.

The last piece of evidence regarding the date of white bronze with patterns based on punched dotted circles hails from western Siberia: a cup (Figure 37) found by the Swedish collector Fredrik Martin in the course of a perfunctory excavation at Barsoff-Gorodok, ten kilometers from Surgut on the river Ob.<sup>55</sup> It was exhibited in London as a "silver cup with bronze handle, eleventh

53. A passing reference in C. K. Wilkinson, "Heating and cooking in Nishapur," *The Metropolitan Museum of Art Bulletin* 10 (1944) p. 290: "The stone and pottery vessels illustrated are from ninth century houses." I understand that Wilkinson is now inclined to bring his dating down to the tenth century.

54. Museum für Islamische Kunst, Berlin. Katalog, 1971, no. 233, p. 68.

55. T. J. Arne, "Barsoff-Gorodok," Kungl. Vitterhets Historie Och Antikvitets Akademiens Handlingar Del 39:5 (Stockholm, 1935) fig. 49a, p. 104, inscription fig. 49b, p. 104, commentary or related text, pp. 26, 58, 76, 77. First publication by Smirnoff, Vostochnoie Serebro, no. 145, pl. LXXX.

> FIGURE 37 Cup from Barsoff-Gorodok, Statens Historiska Museum, Stockholm



century,"56 an identification similar to Arne's, but it is in fact white bronze. Analysis (see Appendix) shows that the alloy is distinctly different from that of the Metropolitan Museum's pieces. The handle, cast in ordinary bronze, is exactly the same as that of the polylobed cups discussed earlier. Even the dimensions (diameter 10.3, height 5.7 cm.) are those of the small cups. The body carries an epigraphic frieze on a ground matted with a continuous series of dotted circles. A continuous band of the same dotted circles runs down from the rim along the handle, breaks off horizontally at a right angle to underline the epigraphic frieze, and goes up again at the end. The crudely made inscription was published in a line drawing by Smirnoff, who did not attempt to give a transcription in cursive script or comment on its period. It includes five words:

بركة و نعمة و سلامة و سعادة و [ت]امـّة

"Divine grace, God's gifts, salvation, bliss, fulfillment, A!" Features of this inscription point to the first half of the eleventh century. The pointed  $m\bar{n}m$  combined with the very special type of tā'marbūța-one tall hasta against which the tā' marbūta is leaning-are not found before the middle Samanid period. The pointed 'ayn with the lower part drawn as an arch can hardly be earlier than the early eleventh century. Apart from the interesting evidence regarding the export of Khorasan white bronzes to western Siberia, the cup proves that white bronzes with punched decoration were still being made well into the late Buyid period. It further suggests that the combination of two alloys, white bronze or speculum plus ordinary bronze, was still known--unless one assumes that the inscription was added after the cup itself was completed, a possibility that can neither be accepted nor discarded until additional white bronzes are found.

Important questions such as when the beveled style first appeared in metalwork from eastern Iran must remain unanswered. There is at present no way of telling which appeared first, the Samarran wood and marble decoration or the bowls of Figures 20, 22, and 26.

It is striking that both in the case of the undecorated shapes and the vessels with geometric patterns, chronological evidence, however loose, independently points to an early start somewhere around the late seventh or early eighth century, a continuation through the ninth into the tenth, and a dying out some time in the eleventh century. There are indications that the geometric style may still have been active in the twelfth century in outlying territories—for example, Badakhshan, as discussed above.

The long period of production as well as the wide area which it covered probably account for the many stylistic as well as physical differences, including variations in the thickness of the metal and possibly the composition of the alloy. It is to be hoped that future investigations in which laboratory analyses might play an important part will help sort out what is at present a fascinating but somewhat confused body of material. This material, despite all the unanswered questions, is a major addition to our knowledge of early Iranian art. It reveals an extraordinary interest in pure geometry. Such objects in the first group as the faceted vases (Figures 3, 4), the faceted ewer (Figure 7), and the vase found at Gorgan (Figure 9) may be considered exercises in solid geometry. The designs of the second group represent similar exercises limited to two-dimensional space. Not only does the bronze-maker draw geometric figures, he uses the very instruments required in geometry-rulers and dividers. The urge to wield these instruments was such that he could not resist incising circles on the underside of certain pieces even though they would normally not be seen (Figure 10). Actually, these same instruments were used even when the artisan represented animal figures.57

In basic components, the patterns on the white bronzes were not new in Iran. The dotted circle appeared as early as about 3000 B.C. in Fars,<sup>58</sup> and was handed down to the northwestern potters<sup>59</sup> and bronzemakers. Geometric patterns were already executed with dividers, and a pointille was used to mat the ground on the underside of gold beakers from Gilan.<sup>60</sup> Such patterns appeared in Urartu on stone and

56. Exhibition of Persian Art (catalogue) (London, 1931) p. 13, pl. bottom right.

57. A good example of this style was published at a time when it was a totally isolated object: R. Ettinghausen, "The 'Wade Cup' in the Cleveland Museum of Art, its origin and decorations," Ars Orientalis 2 (1957) pp. 341, 342, pl. 6. Ettinghausen dates the bowl to the Samanid period.

58. R. Ghirshman, "Notes iraniennes XII," Artibus Asiae 26 (1963) p. 157, fig. 9.

59. [M.-L. Vollenweider, F. Brüschweiler, R. Stucky] Trésors de l'Iran Ancien (Geneva, 1966) pl. 41 no. 563, p. 109. bronze.<sup>61</sup> The simpler geometric patterns such as lozenges with a dotted circle in the middle were painted on prehistoric pottery. Some were known as early as the third millennium B.C., as may be seen on a bowl from Termez in Khorasan,<sup>62</sup> precisely where the geometric patterns were to appear on white bronzes. Throughout Iranian history the dotted circle stamped with a punch (which also spread far and wide outside Iran) recurs. From the Achaemenid silversmiths who used it to render stylized festoons on their silver<sup>63</sup> to Sogdian silversmiths who punched dotted circles on the low-relief arches they hammered on jugs,<sup>64</sup> the dotted circle never went out of the decorative repertoire. Its extensive use in the early eighth century was the resurgence of a familiar motif.

The shapes of the white bronzes likewise echo forms already familiar in ancient Iran.<sup>65</sup> Rather than inventing new patterns and shapes, the bronze-makers selected models and ideas that already existed, exploiting to the utmost the possibilities they afforded. What is new is the systematic use of geometry to an extent unparalleled in Iran and elsewhere.

It seems, at this stage of our knowledge, that the northeastern area—Sogdia and presumably Bactria must have played a major role. There, the tendency to break up round volumes into facets, and to multiply compartments and frame each of them heavily, was particularly strong.<sup>66</sup> Generally speaking, the trend toward abstraction appears to have been more marked in the northeastern area than in the contemporary Tabarestan workshops. Apparently the Islamicized area further emphasized pre-existing trends. This may explain why Khorasan was to be the place where the geometric style attained such pre-eminence. The east, rather than the west, was the primary source of modern art when Islamic Iran came into being.

60. H. Samadi, Les découvertes fortuites (Teheran, 1959) fig. 14, p. 16.

61. B. Piotrovsky, *Ourartou* (Geneva, 1969) pls. 115–116. Could these objects be Iranian? Similar objects are on the Iranian market.

62. Belenitsky, Asie Centrale, pl. 9, caption p. 241.

63. Smirnoff, Vostochnoie Serebro, pl. IV, no. 15.

64. Orbeli and Trever, *Sasanidskii Metall*, pl. 47, bottom left, where pyramids of three dotted circles are visible on the right-hand arch.

65. The origins and developments of these forms through the ages are a separate subject. A few early prototypes of typical white bronze shapes may be mentioned here. The flat dish with short

convex slanting walls goes as far back in time as the pottery excavated at Tall-e Shogha (Vanden Berghe, Archéologie de l'Iran Ancien [Leiden, 1959] pl. 54 c, center—omitting the stem, which can be treated as a separate element). The Durham stem-bowl is descended from the alabaster mortars, shaped like stem-bowls, found at Persepolis (Schmidt, Persepolis II). The stem-bowl copying the Susa silver form goes back to very early models, of which a stembowl found at Qal'e-ye Dasht is an example. And so on. Our sketchy knowledge of common pottery from the Achaemenid period down to late Sasanian times prevents the drawing of a precise chart. Future excavations will perhaps make this possible.

66. Melikian-Chirvani, L'Argenterie du Tabarestan.

## Appendix

## Analysis of the Cup from Barsoff-Gorodok (FIGURE 37)

Made at the author's request, the analysis was carried out by Birgit Arrhenius of the Statens Historiska Museum, Stockholm, using a Perkin-Elmer Atomic Absorption Spectrophotometer. A 2 mg. sample taken from the edge of the rim showed:

COPPER	TIN	SILVER	ZINC
64.5%	31.2%	3.3%	0.5%

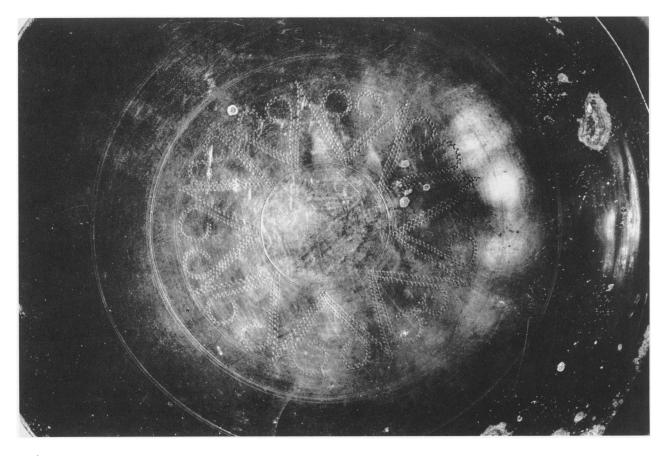
Mrs. Arrhenius expresses surprise (communication of 25 February 1974) that the tin content is higher than that of similar bowls reported on in this Appendix. In her view, the difference may "be due to the corrosion which affects the tin-copper."

## Technical report on fragmentary bowl, ex coll. Jean Pozzi (FIGURE 38)

Composition: Micro-chemical tests with rubeanic acid and cacotheline solutions showed the composition to be a copper alloy with a high proportion of tin, certainly in excess of 25%. The material is, thus, a speculum. This finding agrees well with other observable features, namely the rectilinear natures of the fractures, and the strictly localised areas of wart-like corrosion.

Method of manufacture: The complexity of the rim deco-

FIGURE 38 Shallow bowl (diameter 19 cm.) ex coll. Pozzi. Bowl presents the mirror black patina also seen on bowls in the Metropolitan Museum (Figures 39-41)



ration, and the fact that it shows no evident signs of having been shaped by the use of hammers or punches, must imply that this bowl was first cast. At this point it would have been rather shallower than the final form, but the rim and its decoration would have presented the shape in which they are today. The bowl was then placed on an anvil and the metal in the central area, diameter roughly 5 cm., was stretched by hammering. The evidence for this is quite clear, for on both inner and outer surfaces the parallel lines of many series of hammer-blows are plainly visible. The purpose of this operation was to thin down the metal in the central area which would be out of reach in the subsequent process. The bowl was finally mounted in a lathe, presumably with a mastic material since there is no sign of a centre-point perforation, and the metal was further stretched with burnishing tools, so making the vessel thinner and deeper. The evidence for this process exists in the form of a great number of horizontal striations on the surface of the metal. It is difficult to be emphatic on this point since it is possible that the bowl may also have been shaved down (turned) rather than thinned down by spinning, or even by a combination of the two processes, since the final appearance would have been identical in either case.

One may reasonably speculate as to why this rather unusual procedure was followed. In the first place it would have been very difficult to have produced a vessel as thin as this simply by casting. On the other hand, speculum is a far more brittle metal than, say, a 10%tin bronze, and hence requires frequent annealing. To have spun a bowl of this shape from a flat disc of metal would thus have involved repeated removal from the lathe. In this case the craftsman appears to have avoided this tedium and achieved his aim by an ingenious combination of techniques.

Decoration: The decoration on the interior surface was executed with a punch, the working end of which was roughly V-shaped, one side of the V being curvilinear rather than straight. In operation the punch was struck in series along the line of decoration while being rotated clockwise and counterclockwise between alternate blows.

> H. W. M. HODGES Institute of Archaeology University of London 2 July 1971

## Spectrographical analysis of tray, H. Beres collection, Paris (FIGURE 6)

This analysis was carried out at the author's request by the Laboratoire de Recherches des Musées de France (Institut Mainini) in February 1970, through the kindness of Henri Marchal and Marthe Bernus, keepers of the Département des Antiquités Orientales. Findings: "The alloy primarily consists of copper and tin, in cluding other elements as impurities only.

		ANTI-			
COPPER	TIN	LEAD	MONY	IRON	ARSENIC
Х	approx. 25-30%	0.6%	0.3%	0.7%	0.1%

Zinc, aluminum, nickel, manganese were less than 0.01 per cent. Silver and magnesium traces were too negligible to be assessed. The tin content is high, about 25 to 30 percent. This is an approximation since it is difficult to evaluate such quantities by emission spectography. Examination of the patina and corrosion will not answer the question: "Was the tray tinned or not?"

## Technical Notes on Seven High-tin Bronzes in The Metropolitan Museum of Art

AUTHOR'S NOTE: Objects 6 and 7 in this report have stylized floral or semifigurative patterns inside, so they do not belong in either group presented in the article; however, the results of their analysis confirm the virtually constant composition of the high-tin alloy in the bronzes, the tin content never going under 20 per cent. Objects 2-3 are bowls with simple, atypical shapes that cannot be dated on the basis of typological data. Objects 1-5 are all made of light sheet metal that takes on a deep mirror black patina and easily corrodes from within. I suspect that this patina, far commoner in the group of undecorated wares than the decorated, must reflect special methods of manufacture: either the surface treatment of the metal or a particular method of producing the alloy. My present assumption is that these special methods characterize the earlier period, since the patina is found on the wares with shapes known from the repertoire of Sasanian-style silver ware, e.g., Object 3.

Report by Lambertus van Zelst and Pieter Meyers of the Research Laboratory of The Metropolitan Museum of Art, 18 October 1973:

The elemental composition was determined by dispersive X-ray fluorescence spectrometry on solutions of 5 milligram samples dissolved in 1 milliliter 6N HCL and 3 per cent  $H_2O_2$ . The results are in the following table. Metal of this composition is known as bell metal. Although the group of objects is too small to be considered as true representations of the two types of high-tin bronzes (plain and decorated), it appears that there is no difference in composition between the plain (Objects 1-5) and the decorated (Objects 6-7). It seems that for all the objects a deliberate attempt was made by the metalworkers to achieve a constant tin content.

овјест	per cent Cu	per cent Sn	per cent Pb
I	76	21.9	0.4
2	8o	22.9	0.4
3	8o	21.6	0.5
4	81	23.6	0.3
5	77	22.1	o.6
6	82	22.6	0.5
7	81	21.6	<b>≤</b> 0.7
ACCURACY:			
Copper percentages		$\pm$ 3% relative	:
Tin percentages		$\pm$ 4% relative	
Lead percentages		$\pm$ 50% relative	<b>;</b>

The method of manufacture could be determined with the aid of X-ray radiographs. These radiographs, together with visual and microscopic examination, provide in general a reliable indication of whether an object of this type was cast, hammered out, or spun.

- OBJECT 1. Boat-shaped bowl, 23.2 × 9.1, height 4-5 cm. (Figure 39). Clearly hammered; radiograph shows variations in density that could be hammer marks. Moreover, bowl is thinner in areas with maximum curvature. This is consistent with hammering, since in order to obtain its present shape, hammering would be required in these areas. Because of the oval shape, spinning on a lathe is ruled out.
- OBJECT 2. Round bowl, diameter 13, height 5 cm. (Figure 40). Same evidence for hammering as Object 1; visible evidence of scraping on the outside.
- OBJECT 3. Round dish, diameter 18.5, height 4 cm. (Figure 41). Same evidence for hammering as Object 1. Although no centering mark is visible, a lathe may have been used for polishing the outer surface.

- OBJECT 4. Ewer (Anonymous Loan, L61.74.4), height 15 cm. (Figure 7). Radiograph shows no thickness variation as a function of diameter of body, a strong indication of casting. Moreover, the radiograph shows a horizontal ring of increased thickness in the middle of the body, where diameter is greatest. Since no evidence is visible of joining the two halves, the body was most likely cast in one piece in a twopiece mold. The inside of the neck shows traces of scraping and possibly hammering, probably to remove excess metal and correct deformations.
- OBJECT 5. Jug, height 13 cm. (Figure 42). Radiographs show evidence of hammering: thickness of metal decreases with increasing diameter of body. Hammering marks are also visible.
- OBJECT 6. Large bowl (Anonymous Gift, 1973.338.9), diameter 27.5, height 12 cm. Had this been cast, one would expect it to be thicker in areas of greatest curvature, and would expect also to find casting flaws or voids in the metal structure. However, radiographs show the metal to be thinner in the areas of greatest curvature, and no casting flaws or voids are to be seen. This evidence is consistent with the object's being extensively hammered. In addition, vaguely defined concentric rings in the X-ray radiographs may indicate raising courses or possibly scraping.
- OBJECT 7. Bowl (Anonymous Gift, 1973.338.8), diameter 21.5, height 8.7 cm. Same evidence as for Object 6.

It is likely that some of these objects were initially cast in a shape approximately like the final product. However, the major part of the shaping (except for Object 4) was done by hammering. Because of the brittleness of this alloy at room temperature, hammering probably took place at elevated temperatures. The forging must have taken place at a dull red heat, followed by quenching. This process was confirmed by a metallographical study of cross sections obtained from Objects 1 and 3. The brittleness of the alloy at room temperature makes the use of spinning as a method of manufacture very unlikely.

(Note: Lambertus van Zelst and Pieter Meyers are grateful to Cyril S. Smith for his interest in this study and his valuable suggestions and advice.)





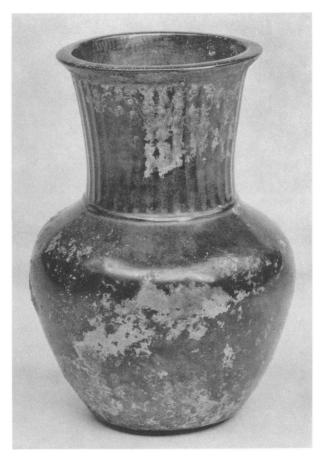
FIGURE 39 Boat-shaped bowl, The Metropolitan Museum of Art, Rogers Fund, 49.112.1

FIGURE 40 Round bowl, The Metropolitan Museum of Art, Rogers Fund, 49.112.2



FIGURE 41 Round dish, The Metropolitan Museum of Art, Rogers Fund, 58.101

FIGURE 42 Jug, The Metropolitan Museum of Art, Anonymous Gift, 1973.338.10



## Hades Stabbed by the Cross of Christ

## MARGARET ENGLISH FRAZER

Associate Curator, Department of Medieval Art, The Metropolitan Museum of Art

A BYZANTINE IVORY carved with the crucifixion of Christ (Figure 1) has long been considered one of the treasures of the medieval collection at The Metropolitan Museum of Art. Adolph Goldschmidt and Kurt Weitzmann published it as the central plaque of a triptych of the tenth century and characterized its lively narrative style as "painterly."<sup>1</sup> In its masterly execution it is similar to the ivories of the Koimesis in Munich, the Entry into Jerusalem in Berlin, and the Nativity in the British Museum.<sup>2</sup> The plaque's iconography is unique among surviving Byzantine representations of the Crucifixion. While the mourning Virgin, St. John, the two angels, and the three soldiers dividing Christ's garment are frequent witnesses to Christ's sacrifice for mankind, the bearded reclining man stabbed by the cross (Figure 2) is found only on this ivory. He was identified in the late nineteenth century by Gustave Schlumberger as Hades, unfortunately without documentation; but modern scholars, for example Kurt Weitzmann, believe him to be Adam.<sup>3</sup> This article will present evidence to support Schlumberger's earlier identification and to show that Hades' presence transforms this representation of Christ's crucifixion into a celebration of the triumph of his cross and his victory over Death.

The difference in the identification of the reclining figure stems from various sources. The inscription flanking the figure is ambiguous: O  $\sigma\tau(\alpha u)\rho\delta\varsigma$  $\dot{\epsilon}\nu\pi\dot{\alpha}\gamma\eta\varsigma$   $\dot{\epsilon}\nu$   $\tau\tilde{\iota}$  xoilia  $\tau\sigma\tilde{u}$  Adou (the cross implanted in the stomach of Adou). Addu can be read either as 'Atdou (Hades or Hell) or 'Adduou (Adam). Weitzmann's preference for the latter probably stems from the well-established imagery of the skull of Adam depicted buried in the Hill of Golgotha, the place of the skull, beneath the cross.<sup>4</sup> The legend that Christ was crucified over the grave of Adam was early promulgated by Christian theologians. Athanasius describes Christ as being "crucified in no other place but the Place of the Skull where Jewish doctors say was the tomb of Adam. For it is fitting that the Savior, wanting to renew the first Adam, suffered precisely in that place, in order that, atoning for his sin, he removes it from all his race."<sup>5</sup>

An artistic expression of this idea was slow in devel-

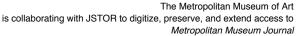
1. A. Goldschmidt and K. Weitzmann, Die byzantinischen Elfenbeinskulpturen des X. -XIII. Jahrhunderts II (Berlin, 1934) no. 6, p. 26, pl. 11.

2. Goldschmidt and Weitzmann, *Die byz. Elfenbein.*, nos. 1, 3, 5. 3. G. Schlumberger, "Ivoire byzantin de l'ancienne collection

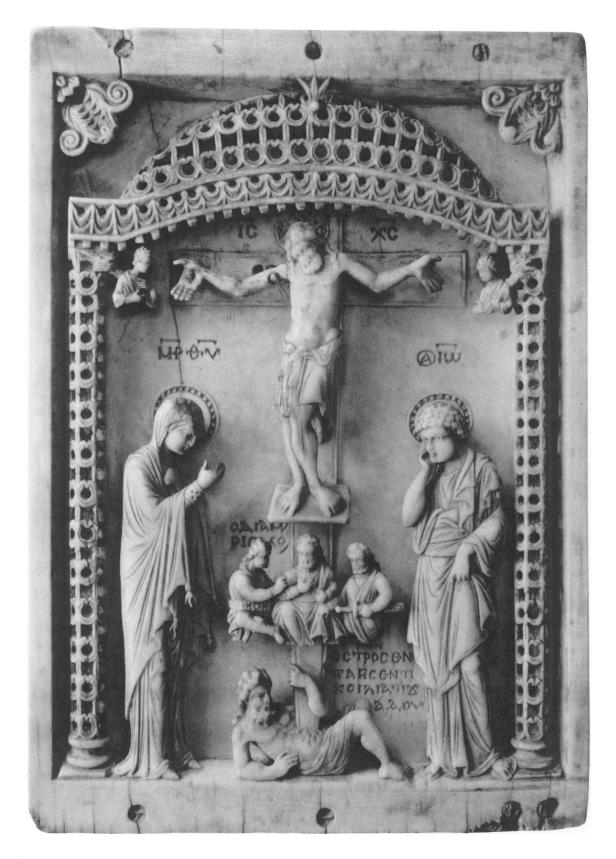
Bonnaffé," Monuments Piot 6 (1899) pp. 91-93; Goldschmidt and Weitzmann, Die byz. Elfenbein., p. 26; K. Weitzmann, "A 10th Century Lectionary. A Lost Masterpiece of the Macedonian Renaissance," Revue des études sud-est européennes IX (1971) p. 628.

4. L. H. Grondijs, L'iconographie byzantine du crucifié mort sur la croix, sec. ed. (Utrecht, 1949) pp. 134–137; R. Haussherr, Der tote Christus am Kreuz (Bonn, 1963) p. 169; K. Wessel, Die Kreuzigung (Recklinghausen, 1966) pp. 24–34.

5. "De passione et cruce domini," Patrologia Graeca 28, col. 208A. Grondijs, L'iconographie byzantine, pp. 135-136. Compare also 1 Cor. 15:21-22.







oping; only a few examples are known before the Iconoclastic Controversy.<sup>6</sup> But by the Middle Byzantine period it was a common theme (Figure 3).7 The portrayal of the live Adam at the foot of the cross, however, never occurs in the art of Byzantium. To find him there, one must turn to the art of Western Europe. A Beatus manuscript of 975 at Gerona, the earliest surviving example, shows him still in winding cloth laid out in a sarcophagus beneath the cross (Figure 4).8 In a thirteenth-century missal from Mt. St. Eloi, he rises from his coffin and lifts a chalice to catch Christ's blood, illustrating the belief that the blood and water that flowed from Christ's side cleansed Adam of his sin.9 A more sophisticated treatment of this subject occurs on the thirteenth-century rood screen in the Schlosskirche at Wechselburg, where Adam reclines gracefully at Christ's feet (Figure 5).

#### FIGURE I

Crucifixion. Byzantine ivory, tenth century. The Metropolitan Museum of Art, Gift of J. Pierpont Morgan, 17.190.44

### FIGURE 2 Detail of Figure 1

The initial resemblance between the pose of the Adam at Wechselburg and the figure on the Museum's ivory is striking. Kurt Weitzmann proposed that the figure on the ivory derived from a classical river or mountain god.<sup>10</sup> While the Adam at Wechselburg may depend on such classical personifications, the Byzantine figure suffers a fate more appropriate to a vanquished enemy. The cross transfixes his stomach; his blood is graphically portrayed welling up from the wound. Since Christ's crucifixion redeemed Adam, why should he be portrayed as disemboweled by the instrument of his salvation?

6. For example, a silver nielloed cross in the Museum of Art, Rhode Island School of Design: R. Berliner, "A Palestinian Reliquary Cross of about 590," *Museum Notes* 9 (1952); Wessel, *Die Kreuzigung*, pp. 24-34.

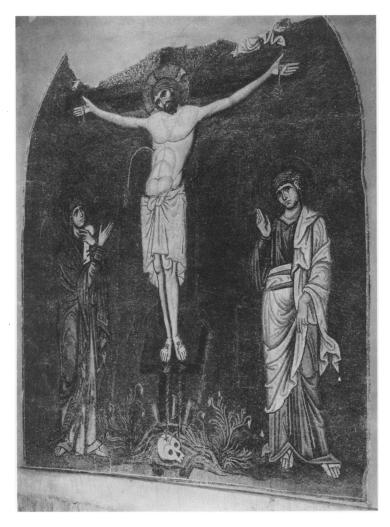
7. G. Schiller, Ikonographie der christlichen Kunst II (Gütersloh, 1968), pp. 124-125, figs. 340-343.

8. MS Beatus A-0 975, fol. 16v., in Treasury of the Cathedral of Gerona, Spain: Grondijs, L'iconographie byzantine, p. 134.

9. Arras, Bibliothèque Municipale, MS no. 38: P. Thoby, Le crucifix des origines au Concile de Trente (Nantes, 1959) fig. 210.

10. Weitzmann, "A 10th Century Lectionary," p. 628. The author suggested to me that the Wechselburg Adam was perhaps influenced by a Byzantine model; compare A. Goldschmidt, "Die Stilentwickelung der romanischen Skulpture in Sachsen," Jahrbuch der königlich Preussischen Kunstsammlungen 21(1900) pp. 233–237.





#### FIGURE 3

Crucifixion. Byzantine mosaic, late eleventh century, Church of the Koimesis, nave. Daphni, Greece (photo: Alinari)

Hades would appear to be a more likely candidate for such rude treatment. He is chained, trampled, and speared during Christ's descent into Hell. In the Anastasis mosaic at Daphni, he is sprawled beneath Christ's feet, crushed and helpless, amidst the wreckage of his formerly invincible kingdom (Figure 6). He is as much the defeated and subdued warrior as are the barbarians trampled and speared by victorious emperors on late Roman triumphal art that was surely the source for this imagery.<sup>11</sup> A gold solidus of Honorius (395–423), for example, issued at the mint in Milan after 402, shows the emperor placing his foot on the



#### FIGURE 4

Crucifixion. Commentary on the Apocalypse by Beatus. Tavara, 975. Cathedral Treasury, Gerona, Spain, folio 16 verso (photo: Hirmer)

enemy's prone body while holding a victory and the labarum in his hands (Figure 7). Christ's standard at his descent into Hell is his cross. It is also the weapon with which at Daphni he threatens Hades at the throat. In

11. J. Babelon, "Le thème iconographique de la violence," Studies Presented to David Moore Robinson (St. Louis, Mo., 1953) pp. 280–284. Babelon traces the theme of a ruler trampling his enemy back to the literature and art of the ancient Near East. I am grateful to Katharine Brown for bringing this article and her research on the solidus of Honorius to my attention. See also A. Grabar, L'empereur dans l'art byzantin (Paris, 1936) pp. 43-44, 245-249.

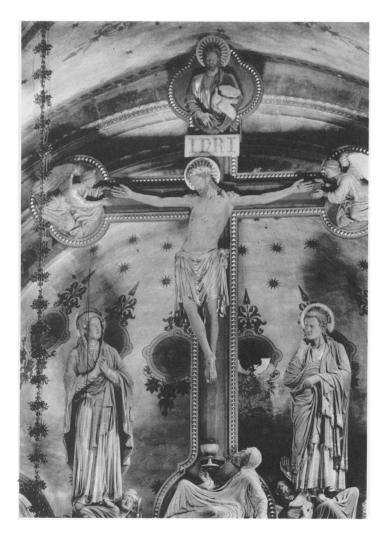


FIGURE 5

Crucifixion. Wood. German, thirteenth century. Schlosskirche, Wechselburg, Germany (photo: Marburg)

a more gruesome representation in an eleventh-century Exultet Roll at Velletri, Christ thrusts his cross into the mouth of Hades, again an image derived from ancient portrayals of conquered and conqueror (Figure 8).<sup>12</sup> On an ivory in Lyon and in a twelfth-century manuscript illumination in the Vatican (Figure 9), Hades assumes a more languorous pose, like that on the Metropolitan Museum's ivory, but his helpless state is still clearly perceived.<sup>13</sup>

Several descriptions of Christ's conquest of Hades by the early church Fathers strengthen the connection between the figure on the ivory and Hades in the An-

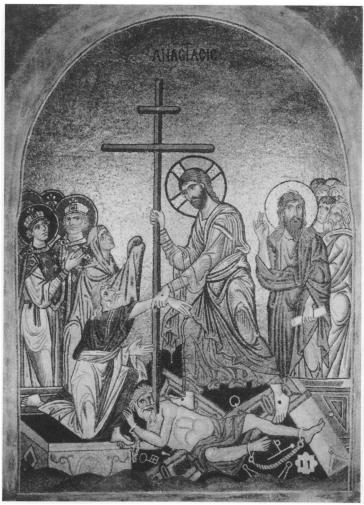


figure 6

Anastasis. Byzantine mosaic, late eleventh century, Church of the Koimesis, nave. Daphni (photo: J. Powell, Rome)

astasis. According to Ephraem the Syrian (d. 378), in his sermon on the Precious and Life-giving Cross,

12. M. Avery, The Exultet Rolls of South Italy (Princeton, 1934) p. 40. The cross was early considered Christ's sword and standard with which he overthrew the Devil. In the second century, Justin, relating it to forms in everyday life, compares it to the standards and trophies that precede armies ("Apologia I pro Christianis," Patrologia Graeca 6, cols. 412C-413A); J. Daniélou, Théologie du judeo-christianisme (Tournai, 1957) pp. 290-299; Haussherr, Der tote Christus, pp. 178-182, 202-207.

13. Lyon, Musées du Palais des Arts, Goldschmidt and Weitzmann, *Die byz. Elfenbein.*, no. 218, p. 77; Weitzmann, "A 10th Century Lectionary," p. 628; Bib. Apost. Vat. Urb. gr. 2, fol. 260v.



FIGURE 7 Solidus of Honorius (395–423). Milan, after 402. Diameter 7/6". The Metropolitan Museum of Art, Gift of C. Ruxton Love, 67.265.25

Christ thrust his cross into Hades' stomach: "With this precious weapon Christ tore apart the voracious stomach of Hades and blocked the treacherous fully opened jaws of Satan. Seeing this, Death quaked and was terrified, and released all whom he held beginning with the first man."<sup>14</sup>

A similar theme appears in the popular dialogue between Hades and Satan in the apocryphal accounts of Christ's descent into Hell. In the Acts of Pilate, Hades, fearing the consequence of Christ's crucifixion, reminds Satan of Lazarus, who was "by force snatched ... out of mine entrails by a word alone," and fears more may happen: "Behold, I perceive that they [all whom he has swallowed up] are unquiet, and my belly

14. "Sermo in pretiosam et vivificam crucem," Sancti patris nostri Ephraem Syri, opera omnia II (Rome, 1743) p. 249: "Ev robrę r $\hat{\psi}$  àγίψ δπλφ διέρρηξε Χριστός την παμφάγον roû ''Λιδου γαστέρα, και τό πολυμήχανον roû Διαβόλου ἐνέφραξεν στόμα. Τοῦrον ἰδὼν ό Θάνατος προμάξας και φρίξας, πάντας, οῦς εἶχε ἀπό roû πρωτοπάστον, ἀπέλυσε. I am grateful to Alice-Mary Talbot for her help with this passage. For commentary, see F. J. Dölger, "Beiträge zur Geschichte des Kreuzzeichens IX," Jahrbuch für Antike und Christentum 10 (1967) pp. 14–15. Compare C. Bonner, "The Homily by Melito, Bishop of Sardis," Studies and Documents XII (1940) p. 163. paineth me."<sup>15</sup> In the Gospel of Bartholomew Satan says: "Be not troubled, make safe thy gates and strengthen thy bars: consider, God cometh not down upon the earth. Hades saith unto him: These be no good words that I hear from thee: my belly is rent, and mine inward parts are pained: it cannot be but that God cometh hither."<sup>16</sup>

A sermon among the spuria of St. John Chrysostom of the fifth to seventh century is more explicit. The infernal serpent laments that a nail is implanted

## 15. M. R. James, The Apocryphal New Testament (Oxford, 1924) p. 131.

16. James, Apocryphal New Testament, p. 168. For the popularity of the dialogue between Satan and Hades, see J. Kroll; Gott und Hölle (Berlin, 1932) pp. 163–182; G. La Piana, Le rappresentazioni sacre nella letteratura bizantina dalle origini al sec. IX con rapporti al teatro sacro d'occidente (Grottaferrata, 1912) pp. 79–98; S. Der Nersessian, "An Armenian Version of the Homilies on the Harrowing of Hell," Dumbarton Oaks Papers 8 (1955) pp. 202–224.

#### FIGURE 8

Descent into Limbo. Exultet Roll. Italian, eleventh century (retouched). Velletri, Italy (photo: courtesy Penelope Mayo)



(έμπήξας, the same verb used on the ivory, ένπάγης) in his heart and a wooden lance pierces him, tearing him apart.<sup>17</sup>

These are short passages in otherwise lengthy discussions between the protagonists. Romanos the Melodist in the sixth century, however, took full advantage of the dramatic implications of Hades' gastric troubles. In his fourth hymn of the Resurrection sung on Easter Sunday, he has Hades lament:

"O snake, evil counselor, three-headed dragon, what have you done?

For I heard you, and I am myself worsted," Hades answered the wily one. "Let us both bitterly lament,

Since in His descent He has attacked my stomach, So that I vomit forth those whom I formerly devoured. But now lament with me for we are despoiled of our common glory."<sup>18</sup>

Again in Romanos' fifth hymn on the same theme:

And Hades, lamenting, cried out:

- "I am pierced in the stomach; I do not digest the One whom I devoured;
- "Just so, on the third day, the whale disgorged Jonas.
- Now I disgorge Christ and all of those who are Christ's;

Because of the race of Adam I am being chastised."

Hades here is pierced in the stomach,  $x \epsilon v \tau \tilde{\omega} \mu \alpha \iota \tau \eta v$ xoιλίαν, like the figure on the Museum's ivory, ένπάγης έν τῖ xoιλία.<sup>19</sup>

17. "In adorationem venerandae crucis, "Patrologia Graeca, 62, col. 748:

τίς δ έμπήξας ήλον τῆ καρδία μου; ξυλίνη με λόγχη ἐκέντησε, καὶ διαφρήσσομαι, τὰ σπλάγχνα πονῶ, τὴν καρδίαν μου ἀλγῶ, τὰ αἰσθητήριά μου διαφθείρονται, τὸ πνεῦμά μου μαιμάσσει.

Compare also col. 752. On the authorship of this sermon, see J. Grosdidier de Matons, *Romanos le Mélode*, *Hymnes*, Sources chrétiennes, 128 (Paris, 1967) p. 270. See also note 24.

18. Grosdidier de Matons, Romanos, p. 524:

— ['Ιο]βούλευτε ὄφι, τί ἕδρασας, ѽ τρικέφαλε δράκον; "Ήκουσα γάρ σου καὶ ἠττήθην ἑγώ»,

πρός τόν πλάνον ό "Αιδης άντέλεγε «θρηνφδοῦμεν πικρῶς οἰ [άμφότεροι,

ότι κατελθών της γαστρός μου καθήψατο

δθεν έξεμέσω ούσπερ κατέπιον πρώην

άλλά θρήνησον νῦν σὺν ἐμοί· τῆς γὰρ δόξης κοινῶς ἐστερή-[θημεν·

The translation is taken from M. Carpenter, Kontakia of Romanos, Byzantine Melodist (Columbia, Mo., 1970) p. 304.



#### figure 9

Anastasis. Gospel Book, about 1122. Vatican ms. Urb. graec. 2, folio 260 verso (photo: Vatican)

19. Grosdidier de Matons, Romanos, pp. 558-560:

'Ο 'Αιδης δὲ όδυνηρὰς ἀνεβόησε φωνάς·

«Κεντῶμαι τὴν κοιλίαν, δν κατέπιον οὐ πέπτω....

Ούτως Ίωναν τριταίον το κήτος έξέμεσε.

νῦν κάγὼ ἐμέσω Χριστὸν καὶ πάντας τοὺς ὅντασ Χριστοῦ· ἔνεκεν γὰρ τοῦ γένους τοῦ 'Αδὰμ τιμωροῦμαι.»

Carpenter, Kontakia of Romanos, pp. 277–278. Illustration of the dialogue between Satan and Hades is rare despite its widespread literary popularity. The only representation in Eastern Christendom occurs in a fifteenth-century Russian icon of the Anastasis at the Hermitage, Leningrad (V. N. Lazarev, Storia della pittura bizantina [Turin, 1967] p. 376, fig. 532). Satan and Hades appear more frequently together in such Italian representations of the Descent into Hell, as in those in the eleventh-century Exultet Roll at Velletri (Figure 8) and the twelfth-century ciborium columns in San Marco in Venice (E. Lucchesi-Palli, Die Passions- und Endszenen auf der Ciboriumsäule von San Marco in Venedig (Prague, 1942) pp. 105–111; Lucchesi-Palli, "Hades," Lexikon der christlichen Ikonographie (Freiburg, 1970) II, cols. 205–206). So far these texts have centered on the actual descent of Christ into Hell after his crucifixion. Another hymn by Romanos, however, relates the theme of the piercing of Hades' stomach to the events of Good Friday. His hymn on the Triumph of the Cross begins:

Pilate fixed three crosses on Golgotha,

Two for the robbers, and one for the Giver of life.

When Hades saw Him, he said to those below:

- "O my priests and forces, who has fixed the nail in my heart?
- A wooden spear has pierced me suddenly and I am torn apart.
- I am in pain-internal pain; I have a bellyache;

My senses make my spirit quiver,

And I am forced to vomit forth

Adam and those descended from Adam, given to me by a tree.

The tree leads them back Again into Paradise."<sup>20</sup>

In the second verse, Satan tries to calm Hades by saying that he had the wood fashioned to kill the second Adam. Hades replies:

"Run and uncover your eyes, and see The root of the tree within my spirit; It has gone down into my vitals, So that like iron it will draw up Adam. Elisha once painted in advance its likeness When he raised up the axe from the river.<sup>21</sup>

The hymn continues in the same vein until it becomes apparent to Satan that he has made a fatal mistake.

Romanos draws his imagery from the work of his predecessors like Ephraem the Syrian, but he specifies that the cross pierces Hades' stomach at the actual time of the crucifixion.<sup>22</sup> In his hymn on the Triumph of the Cross, Romanos clearly sets the stage with the planting of the three crosses on Golgotha. Hades' immediate reaction was to cry out "A wooden spear has pierced me suddenly and I am torn apart."<sup>23</sup> Romanos' Hymn on the Triumph of the Cross, according to Grosdidier de Matons, was sung on Good Friday in the Byzantine church, and this is the feast that the Museum's ivory illustrates.<sup>24</sup> His hymns on the Resurrection, which have no specific reference to the cross piercing the stomach of Hades on Golgotha, on the other hand, were sung at Easter, the illustration for which in the Byzantine feast cycle is the Anastasis. It seems most likely that Romanos' hymn for Good Friday was the inspiration of the Museum's ivory or of its pictorial prototype, and that the figure stabbed by the cross is not Adam but Hades.<sup>25</sup>

The sources cited for the descriptions of Hades suffering by the "weapon" of the cross were all written before the Iconoclastic Controversy. It is difficult to

20. Grosdidier de Matons, Romanos, pp. 286–287: Τρεῖs σταυροὺs ἐπήξατο ἐν Γολγοθὰ ὁ Πιλᾶτοs, δύο τοῖs ληστεύσασι καὶ ἔνα τῷ ζωοδότη· δν εἶδεν ὁ "Αιδης καὶ εἶπε τοῖs κάτω·
«ˁΩ λειτουργοί μου καὶ δυνάμεις μου, τίς ὁ ἐμπήξας ἦλον τῆ καρδία μου;
Ξυλίνη με λόγχη ἐκέντησεν ἄφνω καὶ διαρρήσσομαι· τὰ ἔνδον πονῶ, τὴν κοιλίαν μου ἀλγῶ· τὰ αἰσθητήριά μου· μαιμάσσει τὸ πνεῦμά μου, καὶ ἀναγκάζομαι ἐξερεύξασθαι τὸν 'Αδὰμ καὶ τοὺs 'Αδὰμ ξύλφ δοθέντας μοι· ξύλον τούτους εἰσάγει πάλιν εἰς τὸν παράδεισον.»

Carpenter, Kontakia of Romanos, pp. 230-231.

21. Grosdidier de Matons, Romanos, pp. 288-290:

δράμε, ἀποκάλυψον τοὺς ὀφθαλμούς σου, καὶ ἴδε τοῦ ξύλου τὴν ῥίζαν ἐντὸς τῆς ψυχῆς μου κάτω κατῆλθεν εἰς τὰ βάθη μου

ίν' άνασπάση τὸν 'Αδὰμ ὡς σίδηρον.

Τὴν τούτου εἰκόνα ποτὲ Ἐλισσαῖος προεζωγράφησεν ἐκ τοῦ ποταμοῦ τὴν ἀξίνην ἀνελών·

Carpenter, Kontakia of Romanos, p. 231.

22. On Romanos' sources see Grosdidier de Matons, Romanos, pp. 267-278.

23. See note 20. St. Helena, mother of the emperor Constantine, envisioned Golgotha as the site of the epic struggle, according to St. Ambrose: "Here is the place of the battle," she said, "Where is the victory? I seek the standard of salvation." ("De obitu Theodosii oratio," *Patrologia Latina* 16, col. 1400A); Haussher, *Der* tote Christus, p. 202.

24. Grosdidier de Matons, *Romanos*, pp. 263–269. The spurious sermon of St. John Chrysostom may also have been delivered on Good Friday (La Piana, *Le rappresentazioni sacre*, p. 87). The wording of the passage on Hades' stomach-ache is almost identical to that of Romanos' hymn on the Triumph of the Cross (see note 17).

25. Kurt Weitzmann has shown that one of Romanos' hymns on the Virgin, among other Early Christian sources, was the basis for the noncanonical appearance of the Virgin in some eastern illustrations of the Chairete ("Eine vorikonoklastische Ikone des Sinai mit der Darstellung des Chairete," *Tortulae. Studien zu altchristlichen und byzantinischen Monumenten* (Rome, Freiburg, Vienna, 1966) pp. 317–325). He also suggests that a hymn was the source for the river in a twelfth-century icon of the Annunciation at Mt. Sinai ("Eine spätkomnenische Verkündigungsikone des Sinai und die zweite byzantinische Welle des 12 Jahrhunderts," *Festschrift für Herbert von Einem* [Berlin, 1968] p. 302). say whether this theme occurred in the illustration of the Crucifixion in the Early Christian period. The more general interpretation of the Crucifixion as Christ's victory over Death and the Devil was an important element in early patristic literature.<sup>26</sup> Surviving early illustrations of the event, however, express this idea implicitly with the portrayal of Christ alive on the cross: Hades or Death are never physically present. Only the skull of Adam appears in the Hill of Golgotha, as it does throughout later Byzantine representations.

The presence of Hades occurs only on the Museum's ivory among surviving monuments.27 Although, as Weitzmann proposes, the ivory probably depends on a pictorial model, a manuscript illustration, Hades' depiction must have been rare.28 It probably developed from the search by artists and scholars in the late ninth and tenth centuries for earlier pictorial and literary sources to recreate a corpus of Christian imagery after the devastations of the Iconoclastic Controversy. The new images often contained elements that added drama and significance to important feast pictures. The classical model of Hercules drawing Cerberus from the Underworld, for example, was adapted for Christ pulling Adam from Hell in the Anastasis (compare Figure 6).<sup>29</sup> The inclusion of Hades in the Crucifixion, recreating the epic victory of Christ over Death and the forces of Evil, probably also was created at this

time. Judging from its brief appearance, however, compared to the long-lived popularity of Hercules-Christ in the Anastasis, it was not able to break through the basically conservative tradition of Byzantine Crucifixion illustrations.

One wonders whether the inclusion of Hades in scenes of the Crucifixion was caused by the immediate post-iconoclastic enthusiasm of the iconodules. Many illustrations in the so-called "monastic" psalters bear witness to the important role of polemics in their imagery. A most telling example shows the patriarch Nicephoros treading on the iconoclastic patriarch John the Grammarian in the same way that St. Peter triumphs over Simon Magus in the Chludov Psalter.<sup>30</sup> Perhaps when the creator of the composition of the Museum's ivory had Hades speared by Christ's cross of victory he was thinking of the triumph of Orthodoxy over the heresies of the iconoclasts.

Whatever the explanation of the brief flowering of the theme of Hades pierced in the stomach by the cross, it was inspired by literary sources, particularly the hymn of Romanos the Melodist sung on the feast of Good Friday. The Byzantine ivory in the Museum's collection, as a rare surviving illustration of this unusual subject, is a most important example of the imaginative recreation of imagery in the period immediately following the Iconoclastic Controversy.

26. Haussherr, Der tote Christus, pp. 178-182.

27. An ivory plaque of the Crucifixion in the Hermitage, Leningrad, shows Adam and Eve and Solomon and David rising out of sarcophagi on either side of the three seated soldiers (Goldschmidt and Weitzmann, *Die byz. Elfenbein.*, no. 201). Like the illustration of the Crucifixion in a late eleventh-century gospel book in Paris (Bib. Nat. gr. 74, fol. 59r; H. Omont, *Evangiles avec peintures byzantines du XIe siècle* I [Paris, n.d.], pl. 51), the presence of the resurrecting dead, adapted from the Anastasis, shows the immediate consequences of Christ's triumph on the cross, as does Hades on the Metropolitan Museum's ivory.

28. Weitzmann, "A 10th Century Lectionary," p. 628. He suggests that this manuscript model was the illustration of the Crucifixion in the original feast cycle developed for a lectionary. Such a prototype would probably have spawned many more copies than this one ivory.

29. K. Weitzmann, "Das Evangelion im Skevophylakion zu Lawra," Seminarium Kondakovianum VIII (1936) pp. 88-89.

30. A. Grabar, L'iconoclasme byzantin (Paris, 1957) pp. 216-218, fig. 152.

# A School of Romanesque Ivory Carving in Amalfi

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ALMOST FIFTY YEARS have passed since Adolph Goldschmidt assembled the core of the group of ivory carvings that is the subject of this study. Centered about the series known as the Salerno ivories (Figure 14), some nineteen additional plaques were collected by Goldschmidt, and the origin of the whole group was immediately recognized as south Italian, eleventh century.<sup>2</sup> In the context of his monumental corpus of ivories Goldschmidt was able to confront only a limited number of the problems connected with these Italian works and never precisely defined the differences evident among the various pieces, nor the nature of their relationships. Furthermore, it has only been in the years since the publication of the corpus that discoveries have been made in terms both of monuments and methodology which allow a great many more facts to be brought to bear on these problems. I hope to reassess the south Italian ivories by integrating what new information we have and by utilizing more recently devel-

1. The substance of this paper was presented in a lecture delivered at the Metropolitan Museum in January 1973 as part of the annual meeting of the College Art Association of America. Much of the material derives from my unpublished Ph.D. dissertation, *The Salerno Ivories*, Princeton University, 1972, prepared under the direction of Professor Kurt Weitzmann. My work has benefited greatly from Professor Weitzmann's criticisms and from those of Professor Ernst Kitzinger. I am presently preparing for publication a comprehensive treatment of the Salerno ivories and related works.

2. A. Goldschmidt, Die Elfenbeinskulpturen aus der romanischen

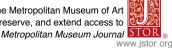
oped analytical approaches. Nevertheless, it should be clear from the outset that Goldschmidt's work still provides the foundation for any such research.

The primary idea I should like to introduce is this: Within the large body of ivories there may be distinguished three distinct subgroups, each manifesting a particular artistic character, both stylistically and iconographically. These subgroups represent successive stages in the life of a single workshop, a rather short life at that, but one which I think we will come to recognize as rich and varied in its contacts, associations, and achievements. The appearance of this study in the *Metropolitan Museum Journal* is particularly appropriate since the Metropolitan Museum is one of the two places (the other is the Staatliches Museum in Berlin) where works produced during each of the three stages of the workshop's development may be viewed side by side.

The first stylistic phase is represented by a very small number of survivors, five to be exact.<sup>3</sup> The centerpiece

Zeit IV (Berlin, 1926) pp. 2–4, 36–42, nos. 127–146, pls. XLII-LII. The four volumes of the corpus will hereafter be referred to as Goldschmidt I, II, III, or IV.

3. Aside from the Farfa Casket, the group includes a plaque in Berlin with the Crucifixion on the front and scenes from Genesis on the rear (Goldschmidt IV, p. 146; H. Kessler, "An Eleventh Century Ivory Plaque from Southern Italy and the Cassinese Revival," *Jahrbuch der Berliner Museen* 8 [1966] pp. 67–95); a Crucifixion panel in the Metropolitan Museum (Figure 10) (Goldschmidt IV, no. 144); and two fragments from a casket (unpublished) in private collections.



of this collection is a casket about 33 cm. long, 7 cm. wide, and 21 cm. high, not known to Goldschmidt at the time of the publication of the corpus and presently kept in the treasury of the abbey of Farfa, in the Sabine hills not far north of Rome (Figure 1).<sup>4</sup> The body and lid, made of solid pieces of ivory, rather than of plaques applied to a wooden core as in the famous Byzantine rosette caskets,<sup>5</sup> are elaborately decorated with scenes of Christ's Infancy (on the lid), his Passion and Resurrection, and the Dormition of the Virgin. This last scene occupies a whole side of the casket's body, the only episode to do so.

The Latin inscription that runs around the sides of the figurative portions identifies the donor of the casket as a certain Maurus, merchant of Amalfi.<sup>6</sup> Maurus, active as a patron of the arts in the third quarter of the eleventh century, in 1071 took his vows and entered the monastery at Monte Cassino. The casket has often been associated with that occasion and that center since one of the lines of the inscription—*Iure vocor Maurus quoniam sum nigra secutus*—has been interpreted to refer to Maurus' donning the "black garb" of the

4. P. Toesca, "Un cimelio amalfitano," *Bollettino d'arte* 27 (1933-34) pp. 537-543. The casket, for many years in the possession of the monks of San Paolo fuori le mura in Rome, was returned to Farfa in 1969.

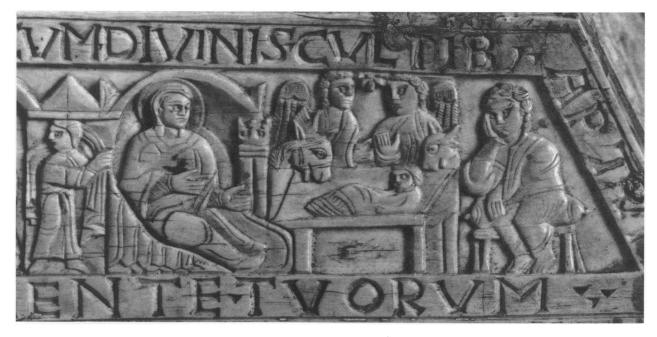
5. Many examples in A. Goldschmidt and K. Weitzmann, Die byzantinischen Elfenbeinskulpturen I (Berlin, 1936).

 Suscipe vas modicum divinis cultib[us] aptum. Ac tibi directum devota mente tuorum. Nomina nostra tibi quesumus sint cognita passim. Haec tamen hic scribi voluit cautela salubris. Iure vocor Maurus quoniam sum nigra secutus Me sequitur proles cum Pantaleone Iohannes Sergius et Manso Maurus Frater quoque Pardo. Da scelerum vaniam celestem prebe coronam.

#### FIGURE I

Dormition, Adoration of the Magi, Presentation, and Flight into Egypt. Ivory casket (back view), Farfa, Abbey Treasury (photo: Dom B. Mollari, Rome)





Benedictines. Herbert Bloch, in his brilliant early study on Monte Cassino,7 accepted this then-current theory but has since discovered that the crucial phrase had not assumed that meaning in the eleventh century, but only became used as such by the followers of St. Bernard in the following century as a perjorative reference to their Benedictine rivals. In the present context sum nigra secutus has nothing to do with the Benedictines but is simply an admission that Maurus was a sinner, that is, he followed sin.8 This discovery serves to sever the traditional connection between the casket and Monte Cassino and, as well, renders the date 1071 practically meaningless. Since one of Maurus' sons was killed in battle in 1072 and all six of his offspring are mentioned in the inscription, we can at least be sure of that date as a terminus ante quem. Traditionally, the casket belonged to the abbey of Farfa, probably the most important Cluniac foundation in Italy in the eleventh century.9 Since the box

7. H. Bloch, "Monte Cassino, Byzantium and the West in the Earlier Middle Ages," *Dumbarton Oaks Papers* 3 (1946) pp. 207-212.

8. I am indebted to Professor Bloch for sharing this information with me prior to its publication in his long-awaited book on Monte Cassino.

9. It is recorded as being seen among the possessions of the abbey about 1800 by the abbot Giuseppe di Costanzo (Toesca, "Un cimelio," p. 537).

FIGURE 2 Nativity. Detail of Farfa Casket (photo: Mollari)

#### FIGURE 3

Nativity. Byzantine ivory plaque. British Mu-





#### FIGURE 4

Nativity. Carolingian ivory plaque (detail). Manchester, John Rylands Library

#### FIGURE 5

Crucifixion, Anastasis, Ascension. Front view of Farfa Casket (photo: Mollari)

was clearly a gift (this is evident from the inscription), it seems quite possible that it may have originally been offered to that abbey rather than to Monte Cassino. An occasion for such a donation was provided in the year 1060 by the dedication of the monastery's new basilica, a grand event attended by the Pope and a host of the nobility.<sup>10</sup> The emphasis on the Virgin in the casket's iconography would be particularly fitting for Farfa since she was held in special veneration there. A Byzantinizing fresco of the Dormition, in a fragmentary state, may still be seen at the monastery.<sup>11</sup>

Although the shape of the casket, with its truncated lid, is similar to a whole genre of Byzantine works, neither its solid ivory structure nor its general iconographic program of Christological and Marianic themes can be paralleled in Byzantine examples.<sup>12</sup> A

10. I. Schuster, L'Imperiale abbazia di Farfa (Rome, 1921) p. 197. 11. A. B. Schuchart, "Eine unbekannte Elfenbeinkassette aus dem 11. Jahrhundert," Römische Quartalschrift 40 (1932) pl. v.

12. Not one of the many caskets illustrated in Goldschmidt and Weitzmann I displays such subject matter.





FIGURE 6 Ascension. Carolingian ivory plaque. Minden, Cathedral Treasury

detailed analysis of the iconography will not be given here, but it is necessary to indicate at least its general nature so as to have some idea of the casket's sources. In fact, this iconography is quite mixed. On the whole it is notable for its Western (non-Byzantine) aspects, such as the Nativity (Figure 2), which, instead of reflecting the complex type of mid-Byzantine scheme, which includes the bath of the Child and usually the announcement of the birth to the shepherds (Figure 3),<sup>13</sup> here takes on the much more simplified form that was part of the Western European tradition at least as far back as Carolingian times (Figure 4).<sup>14</sup> Similarly, the Ascension (Figure 5), where Christ is shown being pulled up and to the side by the hand of God in the sky, adheres to a very old Western version (Figure 6)<sup>15</sup>

- 13. Goldschmidt and Weitzmann II, p. 26, no. 5, pl. 11.
- 14. Goldschmidt I, pp. 18–19, no. 27, pl. xIV.
- 15. Goldschmidt I, pp. 34-35, no. 65, pl. xxvII.

that differs from the almost equally venerable Byzantine type (Figure 7).<sup>16</sup> This is not to say that there is no impact of the mid-Byzantine iconographic tradition. In fact, the Dormition is clearly inspired by Byzantine prototypes (Figure 31),<sup>17</sup> although not rigidly adhered to, and the particular type of the Washing of the Feet, although it may already be found in Ottonian manuscripts, is a specifically post-iconoclastic Byzantine invention.<sup>18</sup>

On the whole, though, the iconography of the Farfa Casket is connected with earlier Western traditions, and the same is true, to an even greater extent, of the style. It is evident that the casket is the product of more than one hand and that its different scenes are stylistic-

16. Goldschmidt and Weitzmann II, p. 42, no. 58, pl. xxIII.

17. Goldschmidt and Weitzmann II, p. 70, no. 174, pl. LIX.

18. Goldschmidt and Weitzmann II, p. 28, no. 13, pl. IV. Compare H. Giess, *Die Darstellung der Fusswaschung Christi in den Kunstwerken des 4.-12. Jahrhunderts* (Rome, 1962) p. 107, no. 51. On the meaning of the various gestures and of the scene in general see E. Kantorowicz, "The Baptism of the Apostles," *Dumbarton Oaks Papers* 9-10 (1956) esp. p. 234 ff.

#### FIGURE 7

Ascension. Byzantine ivory plaque. Florence, Museo Nazionale







FIGURE 8 Christ in Majesty. Altar of Duke Ratchis. Cividale, Museo del Duomo

ally heterogeneous.<sup>19</sup> Nevertheless, all stylistic indicators point generally in the same direction.

The somewhat awkward figures who populate the Dormition appear to speak a language different from the sophisticated, classically inspired one of much of early Christian and Byzantine art. Indeed, in certain passages one gets the feeling that we are dealing with carvers to whom the problem of the human figure represents a relatively new concern. The figures of the angels in the sky, for instance, are unusually formed of

FIGURE 9 St. John the Evangelist. Fresco. Calvi, Grotta dei Santi (photo: Frick Art Reference Library)

almost independent horizontal and vertical portions joined to create almost a right angle. This same tendency, in an even more outspoken form, is present in numerous works emanating from the Lombard artistic milieu.<sup>20</sup> This tradition provided the dominant stylistic mode, a basically nonfigurative one, for pre-Romanesque Italian sculpture, not only in the north but also in the south of the peninsula where the Lombard princes had established colonies in the early Middle Ages.<sup>21</sup> The altar of Duke Ratchis in Cividale

20. The literature on Lombard art remains sparse. See A. Haseloff, Pre-Romanesque Sculpture in Italy (Florence, 1930); N. Gray, "Dark Age Sculpture in Italy," Burlington Magazine 107 (1935) pp. 191-202; E. Shaffran, Die Kunst der Langobarden in Italien (Jena, 1941); H. Fillitz, "Die Spätphase des "langobardischen" Stiles," Jahrbuch der kunsthistorischen Sammlungen in Wien, new series 18 (1958) pp. 7-72; H. Belting, "Beobachtungen an vorromanischen Figurenreliefs aus Stein," Kolloquium über frühmittelalterliche Skulptur, Vortragstexte 1968 (Mainz, 1969) pp. 47-63.

21. On the Lombards in the South see, most recently, N. Cilento, Italia meridionale longobarda (Milan, 1966).

<sup>19.</sup> Toesca, "Un cimelio," pp. 539–540, assigns to one artist the Dormition, Adoration of the Magi, Presentation, and Flight into Egypt; to a second the Crucifixion, Anastasis, Ascension, Visitation, Nativity, and Pentecost. A follower of this second master would have executed the Washing of the Feet while "lesser artists" would have been responsible for the Annunciation to the Shepherds and the Baptism. Although I would agree with Toesca's attributions in general, it seems to me that there are but two hands at work: the Annunciation to the Shepherds appears to be by the Dormition Master while the Washing of the Feet and the Baptism I would ascribe to the Crucifixion Master. It seems unlikely that more than two carvers may have worked on such a relatively small commission.

(in the north), especially in its Maiestas Domini panel (Figure 8),<sup>22</sup> provides types comparable to those in the Farfa Dormition. A basically flat and rigid form predominates, whose surface is defined by a host of parallel or semi-parallel lines. The long, vertical drapery sections, stiff and repetitive, that define the lower portions of the angels' tunics in the Ratchis altar are reminiscent of those found on the Apostle figures of the Farfa Dormition. In this regard, perhaps even closer to the figures on the casket is the fresco of St. John the Evangelist in the Grotto of the Saints at Calvi (Figure 9), an important south Italian site.<sup>23</sup> Although the work might date toward the end of the eleventh century, it maintains much older stylistic traditions native to the region. The simplified planes of the faces, general stiffness of form, and, of course, especially the drapery type in the lower body with the repetitious parallel lines separated into rectangular sections, all serve to relate the fresco to the style of the Farfa Dormition. Significant connections have been recognized, then, between this part of the casket and the native traditions of Italian (Lombard) art.

In fact, though, this style is limited to the Dormition scene and one or two other small scenes of the casket. Virtually all the other figures, for example those in the Crucifixion (Figure 5), show stockier proportions and drapery of a very different type. As opposed to the network of parallel lines in the garments of the Apostles in the Dormition, we find a far simpler articulation of drapery, employing what might even be characterized as a sparing use of line. This second style may be seen as well, and perhaps to even better advantage, on a related plaque in the Metropolitan Museum depicting the Crucifixion (Figure 10), which must have originally formed the central panel of a small triptych.24 This piece is so close in style to the Crucifixion on the Farfa Casket that one is almost tempted to see the same hand at work. The style of these pieces also shows remarkable affinities with earlier Italian works. The

22. M. Brozzi and A. Tagliaferri, Arte Longobarda (Cividale, 1961) pp. 27-34, pl. II. The basic source for the Ratchis altar remains C. Cecchelli, Arte barbarica cividalese, pt. I (Udine, 1917) pp. 1-28 (originally published in Memoirie storiche forogiuliesi XIII [1917]).

23. Hans Belting, Studien zur beneventanischen Malerei (Wiesbaden, 1968) pp. 105-111, figs. 120-122.

24. Goldschmidt IV, 42, no. 144, pl. LI.

general outline of the composition and the smooth torso of Christ are foreshadowed in the ninth-century Rambona Diptych (Figure 11), an ivory made for a north Italian foundation but perhaps of Roman workmanship, whose connection with the Lombard tradition is obvious.<sup>25</sup> Far more intriguing, however, is the relationship between our second style and works that are more surely localized in ninth-century Rome. Cen-

25. Goldschmidt I, pp. 86–87, no. 181, pl. LXXXIV; C. R. Morey, *Catalogo del Museo Sacro Vaticano : Gli oggetti di avorio e di osso* (Vatican City, 1936) pp. 60–62, no. A62, pl. 9. A similarity between the Crucifixions on the Farfa Casket and the Rambona Diptych was already recognized by Kessler, "An Eleventh Century Ivory," pp. 73-74.

#### FIGURE IO

Crucifixion. Ivory plaque. The Metropolitan Museum of Art, Gift of J. Pierpont Morgan, 17.190.37



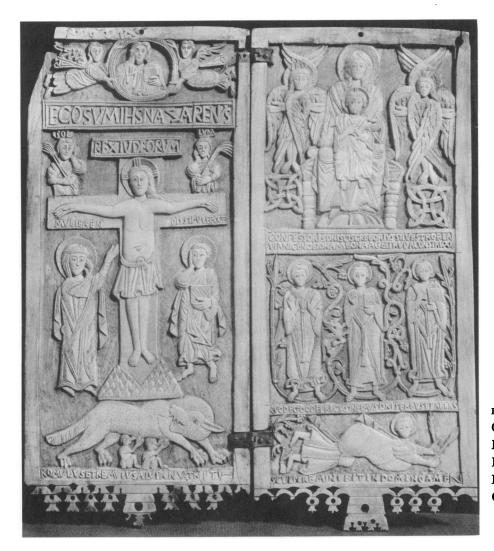


FIGURE 11 Crucifixion, Virgin Enthroned, and Saints. The Rambona Diptych. Ivory. Rome, Vatican, Museo Cristiano (photo: Alinari)

tral among these is the silver and gilt casket, now in the Vatican, that was probably made for Paschal I at the beginning of the century.<sup>26</sup> It represents scenes concerned with Christ's appearance before and after the Resurrection. The characteristically simplified hair of Christ in the Metropolitan Museum's Crucifixion several curving, deeply cut incisions—is closely paralleled in the silver casket (Figure 12). The proportions of the figures in the two works, where they appear with rather small heads and stocky bodies, is strikingly similar. Most significant, however, is the drapery style. In each case the bottom hemline of the tunics, a straight one, is defined by two parallel lines. The drapery folds in general are rather sketchily delineated and are often articulated by what might be called a "double-stroke motif": two short, parallel strokes, usually slightly curving, used to indicate folds and creases. These are generally found on the arms and legs of the figures so as to indicate the pull of the garment caused by the motion of the body. The Virgin in the Metropolitan Museum's plaque and the woman at the front in the scene of the Women Meeting the Apostles on the Paschal Casket (Figure 13) illustrate this relationship.

All this is not to say that our ivories look exactly like this ninth-century Roman work. On the contrary, other artistic traditions have contributed to their style.

<sup>26.</sup> C. Cecchelli, "Il Tesoro del Laterano," *Dedalo* 7 (1936-37) pp. 155-160. A color reproduction of the casket (general view) is in L. von Matt, *Art Treasures of the Vatican Library* (New York, n.d. [1971]).

Although Byzantine forms have not had a tremendous influence on this first group of ivories, nonetheless some sign of their effect may perhaps be detected in details such as the caplike coiffures of certain figures in the Farfa Casket.<sup>27</sup> In addition, I would suggest that the art of a group of Islamic ivory carvers active in south Italy at just about this time was not without its impact on these Christian works.<sup>28</sup> In the final analysis, though, as I have already suggested, this first series of ivories appears most strongly to reflect iconographic and stylistic traditions that we can discover in the West

27. Compare Goldschmidt and Weitzmann I, pp. 31-32, no. 21, pls. IX-X. The curly-haired types in the Veroli Casket were compared to figures on the Berlin Crucifixion-Genesis plaque (see note 3) by Kessler, "An Eleventh Century Ivory," p. 74.

28. There are certain similarities in the spindly figure style of the Farfa Casket and some of the Islamic pieces attributed to eleventh-century southern Italy, particularly a rectangular casket now in Berlin (E. Kühnel, *Die islamischen Elfenbeinskulpturen* [Berlin, 1971] p. 63, no. 82, pls. LXXXII-LXXXIV).

#### FIGURE 12

Christological scenes. Silver casket of Pope Paschal I. Rome, Vatican, Museo Cristiano





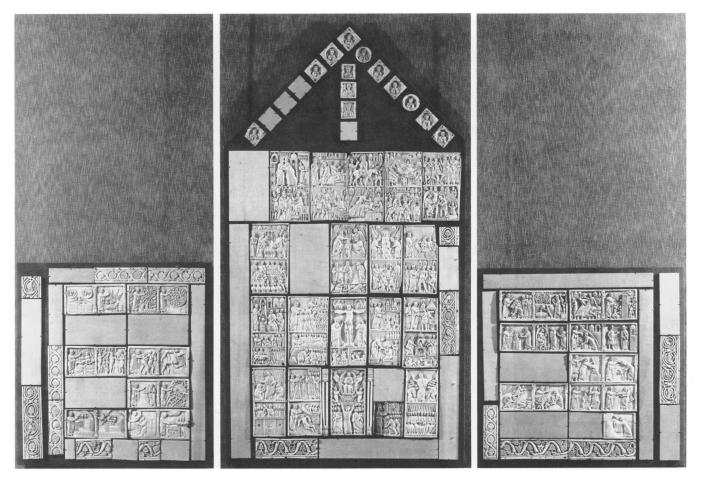


and, to a great extent, in earlier Italian art, in the socalled Lombard tradition and in the art of "Carolingian" Rome. The relationship of the Farfa Casket to the dedication of that monastery's new basilica suggests a date about 1060 for the group.

A rather different situation exists when we turn to the second phase in our workshop's production, the phase that produced the Salerno ivories themselves. These panels, preserved for the most part in the museum of the Cathedral of Salerno, constitute the largest unified series of carvings in ivory that survives from the pre-Gothic Middle Ages.<sup>29</sup> The more than forty major figurative plaques—originally there were more—represent cycles of the Old Testament from the Creation to Moses Receiving the Law and of the Life of Christ from the Incarnation to the Pentecost (Figure 14).

The nature of the iconographic program as a whole, in its juxtaposition of these particular cycles, is in itself an important indication of particular new directions being pursued by the workshop, for it is exactly such a scheme that was revived in fresco in the atrium of the

<sup>29.</sup> Goldschmidt IV, pp. 36–39, no. 126, pls. XLII-XLVIII; A. Carucci, *Gli avori salernitani del secolo XII* (Salerno, 1965; second edition, 1971).



#### FIGURE 14

The Salerno ivories (ensemble). Salerno, Museo del Duomo (photo: Gabinetto Fotografico Nazionale, Rome)

new basilica of St. Benedict built by the abbot Desiderius at Monte Cassino and dedicated in 1071.<sup>30</sup> Although these frescoes have long been destroyed—we know of them only through literary testimony—the little church of Sant'Angelo in Formis near Capua, owned by Monte Cassino and redecorated by Desiderius after 1072, preserves a similar program in its nave (New Testament) and side aisles.<sup>31</sup> There can be little doubt that the overall design of this scheme derived ultimately from an early Christian model such as the fresco cycles (often dated in the fifth century) that decorated the nave of Old St. Peter's in Rome, the very church on whose architectural form Desiderius' basilica was conspicuously modeled.<sup>32</sup> The extent

31. Among the several more recent publications on Sant'Angelo in Formis see J. Wettstein, Sant'Angelo in Formis et la peinture médiévale en Campanie (Geneva, 1960); O. Morisani, Gli affreschi di S. Angelo in Formis (Cava dei Tirreni, 1962).

32. The scheme of the nave decoration in Old St. Peter's is preserved in some seventeenth-century drawings in the Vatican (Archivio della basilica vaticana, Album; Vat. Lib., Barb. Lat. 2733, drawings by J. Grimaldi). The most important of these are illustrated in S. Waetzoldt, *Die Kopien des 17. Jahrhunderts nach Mosaiken und Wandmalereien in Rom* (Vienna, 1964) figs. 484-486. For the relationship between the architecture of Desiderius' church and Old St. Peter's, see H. M. Willard and K. J. Conant,

<sup>30.</sup> Leo Ostiensis, Chronica Monasterii Casinensis, III, 28 (Migne, Pat. Lat., 173, col. 750; MGH, Scriptores, VII, 719; O. Lehmann-Brockhaus, Schriftquellen zur Kunstgeschichte des 11. und 12. Jahrhunderts für Deutschland, Lothringen und Italien [Berlin, 1938] p. 479): "Vestibulum autem ecclesiae desuper quidem fecit musivo pulcherrimo cum superlimineis arcubus decorari; abinde vero usque ad imum pavimenti, totum basilicae faciem gipso vestiri. Arcus etiam eiusdem vestibuli deforis musivo nicholominus vestiens versus inibi Marci poetae aureis litteris scripsit. Reliquas vero tres atrii partes, diversis tam veteris quam novi testamenti historiis abintus ac deforis depingi praecipiens, marmoreo totum in giro pavimento constravit..."

FIGURE 15

Creation of the Animals. From the Salerno ivories. The Metropolitan Museum of Art, Gift of J. Pierpont Morgan, 17.190.156

and nature of the renascence of early Christian, specifically Roman, art at Desiderian Monte Cassino and within its sphere of influence remains to be thoroughly explored.<sup>33</sup>

We may recognize the overall program at Salerno as part of this revival of early Christian formulae that occurred at Desiderian Monte Cassino. The impact of such an early source may probably still be recognized in certain specifics of the iconography, at least in the Old Testament cycle, for much, if not all, of this cycle appears to relate to a tradition that can be traced back to early Christian times. The Creation of the Animals, for instance, on a fragment preserved in the Metropolitan Museum (Figure 15), <sup>34</sup> is remarkably similar to the mosaic of the same subject in the narthex of San Marco in Venice (Figure 16), part of a Genesis cycle



FIGURE 16 Creation of the Animals. Mosaic. Venice, San Marco



"A Project for the Graphic Reconstruction of the Romanesque Abbey at Monte Cassino," *Speculum* 10 (1935) pp. 144-146; Bloch, "Monte Cassino, Byzantium and the West," p. 196; K. J. Conant, *Carolingian and Romanesque Architecture 800-1200* (second edition) (Baltimore, 1966) pp. 222-223.

33. The probability that the lost mosaics of Monte Cassino were derived from early Christian prototypes was already suggested by E. Bertaux, *L'art dans l'Italie méridionale* (Paris, 1904) p. 188 ff. A most fruitful means of approach to the whole problem, and one that will surely be most influential in the future, is that offered by Ernst Kitzinger, "The Gregorian Reform and the Visual Arts: A Problem of Method," Transactions of the Royal Historical Society fifth series, 22 (1972) pp. 87–102. A second recent study by Kitzinger analyzes one of the most important monuments of the revival ("The First Mosaic Decoration of Salerno Cathedral," Jahrbuch der Österreichischen Byzantinistik 21 (1972) [Festschrift Otto Demus] pp. 149–162. On the subsequent revival (continuation?) of early Christian forms in Rome itself see H. Toubert, "Le renouveau paléochrétien à Rome au début du XII<sup>e</sup> siècle," Cahiers archéologique 20 (1970) pp. 99–154.

34. Goldschmidt IV, p. 38, no. 126(6), pl. XLII.

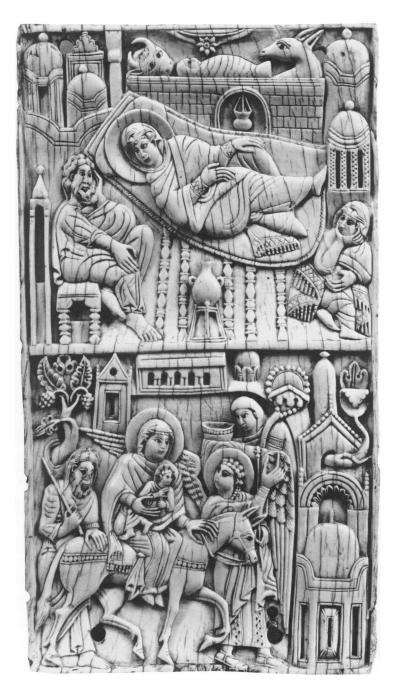


FIGURE 18 Nativity. Syro-Palestinian ivory plaque. Washington, Dumbarton Oaks Collection

FIGURE 19 Raising of Lazarus. The Salerno ivories (detail). Salerno (photo: GFN) known to have been copied after a fifth- or sixthcentury manuscript model.<sup>35</sup> In fact, the cycles at Salerno and San Marco, though far from being identical, seem to represent variant strains of a single tradition. For the present, however, it will suffice simply to have indicated the early origins of the Old Testament scenes.

The New Testament cycle, on the other hand, relates to rather different sources, and widely divergent ones at that. It is an unusual but happy circumstance that in the case of several of the Salerno panels we can point not just to some general tradition to which they might

35. The relationship between the San Marco mosaics and the Cotton Genesis manuscript is most succinctly discussed in K. Weitzmann, "Observations on the Cotton Genesis fragments," *Late Classical and Mediaeval Studies in Honor of Albert Mathias Friend, Jr.* (Princeton, 1955) pp. 112–131 (the connection between these works and the Salerno series is also discussed). These relationships were first recognized by J. J. Tikkanen, "Die Genesismosaiken von San Marco in Venedig und ihr Verhältnis zu den Miniaturen der Cotton-Bibel," *Acta Societatis Scientarium Fennicae* XVII (1889) p. 99 ff.

FIGURE 17

Nativity and Flight into Egypt. The Salerno ivories. Salerno (photo: GFN)





relate, but to the actual models the carvers must have held before their eyes. The Nativity (Figure 17), for example, is cast in a unique form, most of the details of which-such as the characteristic figures of Joseph and Salome, or the bottle beneath the bed-cannot be found elsewhere. Nowhere, that is, except in a plaque with the Nativity at Dumbarton Oaks (Figure 18),<sup>36</sup> one of a series of panels known as the Grado Chair ivories, most recently ascribed to a Syrian atelier working in the seventh-eighth century.<sup>37</sup> Although the vast stylistic changes between model and copy, involving the shift from a lingering late antique to an emerging Romanesque aesthetic, are evident, equally clear is the direct correspondence between the general and specific iconography of the two works. The only other scene derived from this source that we shall consider is the Raising of Lazarus (Figure 19), the Grado Chair version of which is found in the British Museum (Figure 20).<sup>38</sup> In this case the unique aspect of Christ shown with a staff instead of a roll and accompanied by a single Apostle is clearly related in the two versions. But the figures of the women and of the attendant at Salerno are obviously taken from some second source. Although these figures may be found in any number of places, perhaps it is in mid-Byzantine examples that we can find the closest parallel, for example, in a tenthcentury ivory in Berlin (Figure 21).39 Although there

36. Goldschmidt IV, p. 35, no. 124, pl. XLI; K. Weitzmann, Catalogue of the Byzantine and Early Mediaeval Antiquities in the Dumbarton Oaks Collection III: Ivories and Steatites (Washington, 1972) pp. 37-42, no. 20, colorplate 3.

37. K. Weitzmann, "The Ivories of the So-Called Grado Chair," Dumbarton Oaks Papers 26 (1972) especially pp. 73-85. The date and localization of these panels has been a controversial subject over the years and has ranged from Alexandria, about 600 (H. Graeven, "Der heilige Markus in Rom und in der Pentapolis," *Römische Quartalschrift* 13 (1899) p. 109 ff.; Goldschmidt IV, 3) to Italy, eleventh-twelfth century (A. Venturi, Storia dell'arte italiana II [Milan, 1902] p. 615 ff.; W. F. Volbach, Elfenbeinarbeiten der Spätantike und des frühen Mittelalters [Mainz, 1952] p. 251).

38. Goldschmidt IV, p. 34, no. 118, pl. XL. The third scene with a parallel in the Grado Chair series is the Miracle at Cana. The lower portion of the Salerno version is very close to a fragment in the Victoria and Albert Museum (Goldschmidt IV, no. 312, pl. LXXIX; M. Longhurst, *Victoria and Albert Museum, Catalogue of Carvings in Ivory* [London, 1927] p. 33). The Salerno carver combined this model with a Middle Byzantine source much as he did in the case of the Raising of Lazarus. The relationships between the Salerno scenes and their models in the Grado Chair series are analyzed in some detail in Weitzmann, "The Ivories of the So-Called Grado Chair," pp. 58-63.

39. Goldschmidt and Weitzmann II, p. 28, no. 14, pl. IV.



FIGURE 20 Raising of Lazarus. Syro-Palestinian ivory plaque. British Museum. Crown copyright

FIGURE 21 Raising of Lazarus, Byzantine ivory plaque. Berlin, Stiftung Preussischer Kulturbesitz, Staatliche Museen, Skulpturenabteilung (photo: W. Steinkopf, Berlin)





FIGURE 22

Crucifixion and Entombment. The Salerno ivories. Salerno (photo: GFN)

are only three extant panels from the Grado group that may be compared with scenes at Salerno, we can be sure, for various reasons, that the impact of these early Eastern ivories was far greater than in just these instances. Surely other scenes now lost in the Grado series were copied as well, and the characteristic domical architecture of the backgrounds can be seen to have infiltrated into most parts of the Salerno ivories.

Iconography associated with a specifically Italian tradition may also be recognized as having had a significant impact in the Salerno New Testament cycle. Of the several examples that might be discussed in this regard I shall cite but one, the Entombment. At Salerno the scene (Figure 22), appended to the Crucifixion, takes place under a baldachin where Christ is seen being lowered into a sarcophagus by Nicodemus and Joseph of Arimathaea. The composition is significantly different from the traditional Byzantine version where Christ is shown being pushed into a cave.<sup>40</sup> The type with the sarcophagus is a specifically Western version and may be found as early as the late tenth century in the Codex Egberti (Figure 23).41 Although here we do find the two figures lowering the body into a sarcophagus, the scene is not situated under a canopy nor is the sarcophagus of the particular strigilated type seen in the ivory. Exactly such details may be found, however, not only in the Entombment fresco in Sant'Angelo in Formis (Figure 24),<sup>42</sup> but also in the illustration for the chapter De Sepulchro in the De Universo of Hrabanus Maurus illuminated at Monte Cassino in 1023 (Figure 25).43 It becomes clear, then, that these details are indigenous to Italy, really to southern Italy, and indicate a traditional local aspect of the iconography at Salerno. The fact that these monu-

40. Compare, for example, the illustration in the eleventhcentury Psalter in the British Museum (S. der Nersessian, L'Illustration des psautiers grecs du moyen age II: London, Add. 19.352 [Paris, 1970] fig. 192) and see in general K. Weitzmann, "The Origin of the Threnos," De Artibus Opuscula XL: Essays in Honor of Erwin Panofsky, ed. M. Meiss (New York, 1961) pp. 476-450.

41. Trier, Stadtsbibliothek, cod. 24, fol. 85v (H. Schiel, Codex Egberti der Stadtbibliothek Trier [Basel, 1960] facsimile volume, fol. 85v).

42. Morisani, Gli affreschi di S. Angelo in Formis, pp. 46-47, fig. 48. 43. Monte Cassino, Library, Ms. 132, p. 367. A. Amelli, Miniature sacre e profane dell'anno 1023 illustranti l'enciclopedia medioevale di Rabano Mauro (Monte Cassino, 1896) pl. xcvIII. See F. Saxl, "Illustrated Mediaeval Encyclopedias I," in Lectures (London, 1957) pp. 228-241.

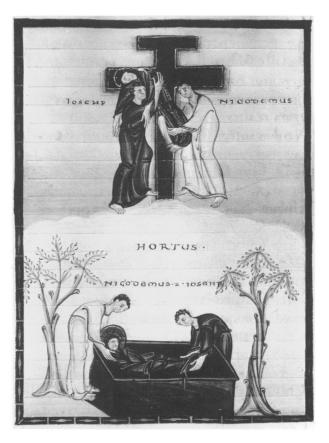


FIGURE 24 Entombment. Fresco. Sant'Angelo in Formis (photo: Anderson)



#### FIGURE 23

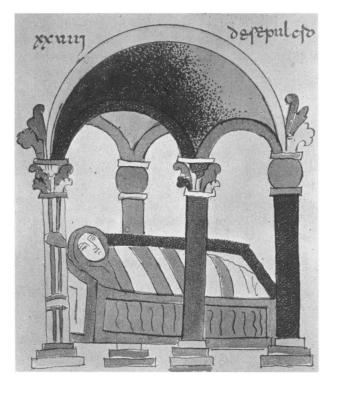
Deposition and Entombment. From the Codex Egberti. Trier, Staatsbibliothek, cod. 24, fol. 85 verso

#### FIGURE 25

De sepulchro. From Hrabanus Maurus' De Universo. Monte Cassino, Library, Ms. 132, p. 367

ments which best compare with Salerno come from the orbit of Monte Cassino is neither accidental nor unimportant. We have already seen that the program of the ivories in general seems to have been inspired from that source, and we shall see shortly that other, intimate connections exist between the abbey and the Salerno group.

In many ways, however, the most profound influence on the Salerno ivories came from neither of these sources but from Middle Byzantine art. As representative examples we might consider the scenes of the Baptism and Transfiguration (Figure 26), which con-



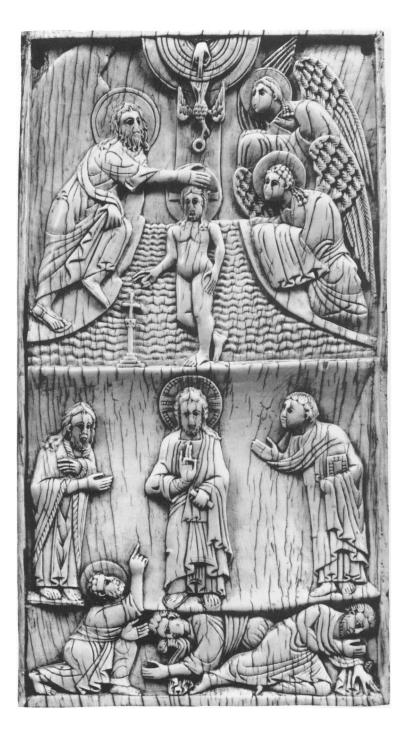
veniently share the same plaque. The iconography of the Baptism is rather standard and follows a general form known since early Christian times. However, the details of the cross in the water and, especially, of Christ blessing the waters, cannot be found before the tenth century. In fact, the earliest examples of the coming together of both of these devices date in the eleventh century, at about the same time as the representation in a lectionary manuscript on Mount Athos (Figure 27).44 The version here is very similar save for the narrative addition of the two Apostles in the background. Another difference is that at Salerno we find the dove descending with a crown or wreath in his beak, something absent in the Byzantine manuscript. In fact, this little detail, a rare one, is never found in middle Byzantine art but may be seen more than once in examples generally associated with early Christian art in Syria-Palestine.<sup>45</sup> It could be that the Grado Chair ivories had a Baptism scene from which this element was taken over and combined with an up-to-date Byzantine version. After all, we have already seen our carvers making exactly this type of amalgamation.

In the case of the Transfiguration, the Dionysiou manuscript again may serve for comparison (Figure 28).<sup>46</sup> The type of composition that divides the scene into an upper level with Christ flanked by Moses and Elias and a lower zone with Peter, James, and John has no parallel in pre-iconoclastic art but becomes almost canonical from the ninth century on. Not only the general composition but even the specific postures of the three figures below are clearly related in the two works: Peter kneels on one knee and points to the three figures above as he looks toward them; John, curled up

44. K. Weitzmann, "Byzantine Miniature and Icon Painting in the Eleventh Century," *Proceedings of the XIIIth International Congress of Byzantine Studies* (Oxford, 1966) p. 209, pl. 3 (reprinted in *Studies in Classical and Byzantine Manuscript Illumination*, edited by H. Kessler [Chicago, 1971] p. 274, fig. 263).

45. Compare the fifth-century ivory in the British Museum (W. F. Volbach, *Elfenbeinarbeiten*, p. 70, no. 141, pl. 46) and the sixth-century gold medallion in the Dumbarton Oaks Collection (M. C. Ross, *Catalogue of the Byzantine and Early Mediaeval Antiquities in the Dumbarton Oaks Collection*, II: Jewelry, Enamels and Art of the Migration Period [Washington, 1965] pp. 35-37, no. 37, pl. xxx). On the motif's meaning see K. Hoffmann, *Taufsymbolik in mittel-alterlichen Herrscherbildern* (Düsseldorf, 1968) p. 11.

46. See K. Weitzmann, "A Metamorphosis Icon or Miniature on Mt. Sinai," *Starinar* 20 (1969) (*Mélanges Djurdje Bósković*) p. 420, fig. 4 (fol. 161v).



in the center, looks down toward the ground; James, rising on one knee, faces to the right and down. The suggestion has been made that this compositional type had its origin in the post-iconoclastic monumental decoration of the Church of the Holy Apostles in Constantinople, of which a description exists in the twelfthFIGURE 26 Baptism and Transfiguration. The Salerno ivories. Salerno (photo: GFN)

century *ekphrasis* of Nicholas Mesarites.<sup>47</sup> Whether or not this is the ultimate source of the type, we can be sure that the Transfiguration at Salerno represents a Middle Byzantine invention that became the fixed formula for centuries to come.

It is more than coincidental that the scenes we have recognized as related to Middle Byzantine art fall into the category of "feast pictures," those images which in the Eastern church are associated with the important days in the liturgical calendar, as a rule considered to be twelve in number. It is exactly in this realm of the liturgical cycles that post-iconoclastic Byzantine art made some of its major innovative contributions to pictorial tradition.<sup>48</sup>

If relatively contemporary Byzantine art provided iconographic models for a number of the Salerno panels, it also presented the stylistic ideal to which our ivory carvers aspired. One could go on at length concerning the derivation from Byzantine sources of such details as nimbus types and hair styles,<sup>49</sup> but here we

47. G. Downey, "Nicolaos Mesarites: Description of the Church of the Holy Apostles at Constantinople," *Transactions of the American Philosophical Society* 47 (1957) especially pp. 871–873. The relationship between this standard Middle Byzantine iconography of the Transfiguration and the representation in the Apostles' Church was pointed out by K. Weitzmann, "The Narrative and Liturgical Gospel Illustrations," in *New Testament Studies*, edited by M. Parvis and A. Wikgren (Chicago, 1950) p. 164 (reprinted in *Studies*, pp. 260–261).

48. A thorough study of the effect of the twelve-feast cycle on Byzantine art has yet to be written. The subject has been treated by G. Millet, *Recherches sur l'iconographie de l'Evangile* (Paris, 1916) p. 16 ff.; O. Demus, *Byzantine Mosaic Decoration* (Boston, 1955) pp. 22-26; K. Weitzmann, "Narrative and Liturgical," passim; K. Weitzmann, "A 10th-Century Lectionary. A Lost Masterpiece of the Macedonian Renaissance," *Revue des études sud-est européennes*, (1971) pp. 617-640.

49. With regard to the hair types, compare those of the Apostles in the Salerno Doubting of Thomas with that of the figure of St. John on a tenth-century Byzantine ivory Crucifixion (Goldschmidt and Weitzmann II, p. 55, no. 99, pl. XXXVIII). Both works render the hair almost as a cap composed of several rounded sections, each composed of a number of incised lines used to indicate separate waves. The cross-nimbus with a pearl border around its periphery and with a row of pearls extending down the center of each of the cross arms, the normal type in the Salerno series, may be paralleled in a number of Byzantine examples (Goldschmidt and Weitzmann II, p. 70, nos. 175, 176, 177, pl. LIX).



#### FIGURE 27

Baptism. From a Byzantine lectionary. Mount Athos, Dionysiou, Ms. 587, fol. 141 verso

#### FIGURE 28

Transfiguration. Ms. 587, fol. 161 verso



will restrict ourselves to a consideration of the problem in the broadest fashion. In comparing the figure of Christ from the Mission of the Apostles at Salerno (Figure 29) with his counterpart in the same scene in a tenth-century Byzantine ivory of the Nicephorus



FIGURE 29 Mission of the Apostles and Pentecost. The Salerno ivories. Salerno (photo: GFN)

group (Figure 30),<sup>50</sup> it becomes clear immediately that the tradition which produced the latter is the source for the drapery types at Salerno, types different from those found in the Farfa Casket and its relatives. Not only is the classically inspired dress similar in type, but even such details as the rendering of the folds between the legs as a series of V-shaped lines may be found in both examples. Although the plastic rendering of the folds in the Byzantine example differs from the incised lines of the Salerno version, even this aspect of the Salerno drapery can be paralleled in Byzantine ivory carving, particularly in examples from the Triptych group where the surface is enlivened with similar incisions (Figure 31).<sup>51</sup>

This Byzantinizing style, it will be noticed, is not restricted to scenes derived from Byzantine iconographic models but is spread throughout the series. There can be no doubt that the south Italian carvers, despite other stylistic tendencies in their work and despite their variety of models, intended to cast their entire series of ivories in a deliberately Byzantinizing style.

The fact of the preponderant influence of Middle Byzantine art on the Salerno invories can fortunately be placed in some sort of historical context. The *Chronicle of Monte Cassino* written by Leo of Ostia toward the end of the eleventh century records how Desiderius imported artists from Constantinople at the time of his rebuilding of Monte Cassino. Aside from the mosaicists to adorn the basilica he must have imported a whole corps of artisans not only to work but to teach, for the *Chronicle* continues: "And the most eager artists selected from his monks he trained not only in these arts but in all the arts which employ silver, bronze, iron, glass, ivory, wood, alabaster, and stone."<sup>52</sup> We have here a

50. Goldschmidt and Weitzmann II, p. 55, no. 100, pl. XXXVIII. 51. Goldschmidt and Weitzmann II, p. 70, no. 174, pl. LIX. Weitzmann, "The Ivories of the So-Called Grado Chair," already pointed to the relationship between the Salerno style and the Triptych group.

52. Leo Ostiensis, Chronica monasterii Casinensis, III, 27 (see footnote 30): "Legatos interea Constantinopolim ad locandos artifices destinat, peritos utique in arte musiaria et quadrataria, ex quibus videlicet alii absidem et arcum atque vestibulum maioris basilicae musivo comerent, alii vero totius ecclesiae pavimentum diversorum lapidum varietate consternerent . . . . Non tamen de his tantum, sed et de omnibus artificius quaecumque ex auro vel argento, aere, ferro, vitro, ebore, ligno, gipso, vel lapide patrari possunt, studiosissimos prorsus artifices de suis sibi paravit." forthright statement to the effect that ivory carving was taught to Italian artists by Byzantine masters at Monte Cassino between 1066 and 1071. It is my contention that the Salerno ivories, which I would date around the time of the consecration of the Cathedral of Salerno in 1084, reflect the impact of this education and were carved by artists closely associated with the Byzantine lessons taught at Monte Cassino. Considering the various relationships we can point to between the ivories and art emanating from the circle of the great abbey, this revelation should come as no surprise.

The arrival of Byzantine artists at Monte Cassino, then, emerges as an important event in our considera-



tions, since it provides some historical rationale for the transformation from the early group with its strong associations with older Italian traditions to the Salerno series with its Byzantine connections. In fact, this same development may be paralleled in fresco painting where the style that produced the Calvi frescoes (Figure 9) gives way to that seen in Sant'Angelo in Formis (Figure 32), and in manuscript illumination where one can see the Byzantinizing style of the Desiderian period (Figure 33)<sup>53</sup> against the backdrop of such

53. Rome, Vatican Library ms. lat. 1202, fol. 2r. P. Baldass, "Disegni della scuola cassinese del tempo di Desiderio," *Bollettino* d'arte 37 (1952) pp. 102-114.

#### FIGURE 30

Mission of the Apostles. Byzantine ivory plaque. Paris, Musée du Louvre

#### FIGURE 31

Dormition. Byzantine ivory plaque. Paris, Musée de Cluny





FIGURE 32 Noah Ordered to Build the Ark. Fresco. Sant'Angelo in Formis (photo: Anderson)

FIGURE 34 Abbot John Presents the Codex to St. Benedict. *Regula St. Benedicti*. Monte Cassino, Library, Ms. 175, p. 3

#### FIGURE 33

Desiderius Presents the Codex to St. Benedict. Lives of Ss. Benedict, Maurus, and Scholastica. Rome, Vatican Library, Ms. lat. 1202, fol. 2 recto





FIGURE 35 Flight into Egypt. Ivory plaque. Bologna, Museo Civico

earlier Cassinese works as Monte Cassino ms. 175 (Figure 34), created in the Cassinese scriptorium during the period of its exile in Capua in the tenth century.<sup>54</sup> Although details may vary, the point is clear that major artistic allegiances were changing, and generally in a common direction, in all of these media during the time of Desiderius.

With regard to the third and final phase in our workshop's production we can be brief. Most of the pieces produced are iconographically dependent on a particular source: the Salerno ivories themselves. Thus, the plaque in Bologna with the Flight into Egypt (Figure 35)55 shows a composition basically derived from the corresponding scene at Salerno (Figure 17), but incorporating certain details such as the young man leading the ass from the Salerno Journey to Bethlehem (Figure 36). Of course, the relationship between the Bologna plaque and the Salerno scenes is more than simply a matter of general composition, and many minute details may be compared. An equally intimate relationship exists between the Salerno Crucifixion (Figure 22) and the plaque from a triptych in the Metropolitan Museum (Figure 37).56 Christ's position, his characteristic drapery, the Virgin's stance and drapery, John's drapery, the appended scene of the Entombment below-all clearly show their derivation from the Salerno panel. There are some divergences as well, of course, but in the present context these are less significant than the similarities. In terms of style this latest group is cast in a simplified and schematized manner far more "Romanesque" than the Salerno ivories themselves. Once again we must look to native traditions for correspondences; this time not to a tra-

54. H. Belting, "Der Codex 73 in Monte Cassino und die cassinesische Kunst vor Desiderius," Zeitschrift für Kunstgeschichte 25 (1962) p. 203, fig. 10, p. 3.

- 55. Goldschmidt IV, p. 41, no. 133, pl. XLIX.
- 56. Goldschmidt IV, p. 42, no. 143, pl. LI.

FIGURE 36 Journey to Bethlehem. The Salerno ivories (detail). Salerno (photo: GFN)





FIGURE 37

Crucifixion and Entombment. Ivory plaque. The Metropolitan Museum of Art, Gift of J. Pierpont Morgan, 17.190.43

dition of the past but to the emerging Romanesque style of the beginning of the twelfth century. Although sculpture of this period is difficult to find in southern Italy, the figure of a prophet from the Cathedral of Modena in the north (Figure 38), executed about 1100,<sup>57</sup> offers similar kinds of compressed and repetitious drapery folds that appear in the St. John on the Metropolitan Museum's plaque. In both, the "parallelline" method of rendering certain details of the mantle is also in evidence.

In addition, the tendency to create static and almost symmetrical compositions, so evident in this late group, is exactly the trend that comes to the fore in the following century. A similar kind of "hardening" of a Byzantine inspired style may be seen in the frescoes of Rome and the surrounding area, about 1100, that are the successors of Sant'Angelo in Formis.<sup>58</sup> It is to these years soon after 1100 that I would date this final phase of our workshop's creative life.

The question still remains as to the location of the workshop. Everything seems to point toward a single answer: Amalfi. Among all the active commercial republics of Italy only Amalfi always remained on good terms with the Arabs, the source of ivory as well as of silk and spices.<sup>59</sup> More importantly, the identification of Maurus as the donor of the Farfa Casket further places Amalfi in the forefront of consideration. While the casket was still associated with Maurus' entry into Monte Cassino in 1071 there was always the opinion which held that he had the work made there. However, with the separation of the casket from any connection with Monte Cassino it becomes more likely that Maurus would have had his donation made at home, in Amalfi, and taken perhaps to Farfa at the appropri-

57. See R. Salvini, Wiligelmo e le origine della scultura romanica (Milan, 1956) pp. 66-68.

58. For example, Santa Pudenziana Rome, and Castel Sant' Elia (C. R. Dodwell, *Painting in Europe 800–1200* [Baltimore, 1971] figs. 156–158).

59. A. O. Citarella, "The Relations of Amalfi with the Arab World Before the Crusades," Speculum 42 (1967) p. 312.



ate time. That ivory carving was practiced in Amalfi around this time is indicated by an unusual object in the Metropolitan Museum, a casket for writing implements, decorated with animals of the type found on numerous Islamic works that have been attributed to southern Italy (Figure 39).60 Ernst Kühnel, who published the piece, ascribes the whole group to Amalfi. On the ends of the casket (Figure 40) are the letters of an inscription, an abbreviated form of Taurus Filius Mansonis. Can it be coincidental that the Mansone family, after that of Maurus himself, was the most prominent noble family of Amalfi in the tenth and eleventh centuries, and that we can even find points of contact between this genre of Islamic carving and certain details in the Farfa Casket itself?<sup>61</sup> I think not. In addition, the Salerno ivories offer yet further corroborative evidence for an Amalfitan origin. Among the Grado Chair ivories, which we saw being copied by the Salerno carvers, the only panel for which there is any hint of a provenance is the one in the British Museum (Figure 20). There is eighteenth-century

60. Kühnel, Die islamischen Elfenbeinskulpturen, p. 67, no. 86, pl. xci.

61. Ibid., p. 18-19.



FIGURE 38 The Prophet Micah. Detail of the façade. Modena, Cathedral



FIGURE 39 The Tauro Casket. Islamic ivory. The Metropolitan Museum of Art, Gift of J. Pierpont Morgan, 17.190.236



FIGURE 40 Endpieces of the Tauro Casket testimony to the effect that it had come from the Chiesa di Sant'Andrea (that is, the Duomo) at Amalfi.<sup>62</sup> Furthermore, it is worth noting that in representations of the Apostles in the Salerno series only one man besides Peter and Paul is singled out by the inclusion of his attribute: Andrew, patron saint of Amalfi. He is shown holding the cross both in the series of Apostle busts (Figure 41), and, as well, in the scene of the Pentecost (Figure 29). It is in just such a small way

62. A Gori, Thesaurus veterum diptychorum (Florence, 1759) III, p. 110.

that the carvers of the Salerno panels may have chosen to leave some mark indicative of their place of origin. According to ibn-Hawqal, a merchant of Baghdad who visited the city in 972, Amalfi was "the most prosperous city of Langobardia, the noblest, the most illustriously situated, the most commodious, and richest."<sup>63</sup> To this description of Amalfi I think we might add, at least for the eleventh century, "and possessing a workshop most accomplished in the art of carving in ivory."

63. As quoted by Citarella, "The Relations of Amalfii," p. 299



FIGURE 41 Apostle busts. The Salerno ivories. Salerno (photo: GFN)

# An Altarpiece by Lippo Memmi Reconsidered

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Some YEARS AGO, Gertrude Coor and I, each unaware of the other's efforts, reconstructed in two separate studies a polyptych we both believed to be in large part by Lippo Memmi.<sup>1</sup> Regrettably, Coor's subsequent untimely death prevented us from discussing together this important work; to date, though, her published theories concerning it are frequently cited.<sup>2</sup> My purposes here are first to corroborate and supplement some of her opinions concerning aspects of the altarpiece's reconstruction, and second to present my own alternative views of its make-up and origin, which differ from hers in important ways.

Coor and I agree that the body of the polyptych comprised a central Madonna and Child (Figure 1), flanked by six laterals: St. John the Evangelist (Figure 2), St. Peter (Figure 3), St. Paul (Figure 4), St. John the Baptist (Figure 5), St. Louis of Toulouse (Figure 6), and St. Francis (Figure 7). My conclusions (as in many cases Coor's) are based on the following evidence: the overall and internal measurements of all these panels closely coincide (Figure 8). Here we must consider the fact that although the picture surfaces of these panels

1. G. Coor, "Two Unknown Paintings by the Master of the Glorification of St. Thomas and Some Closely Related Works," *Pantheon* XIX (May-June, 1961) pp. 126-135; M. Mallory, *The Partial Reconstruction of an Altarpiece by Lippo Memmi*, M.A. Thesis, Columbia University, 1962 (research largely carried out at Yale University, 1959). Both studies cite earlier attributions and partial reconstructions.

2. Recent bibliography concerning parts of the altarpiece includes: C. Volpe, "Precisiazioni sul 'Barna' e sul 'Maestro di Palazzo Venezia," *Arte antica e moderna* X (1960) pp. 150, 157 are all in quite good condition, the shapes of the panels themselves, three excepted, have been disconcertingly altered. Only John the Evangelist, Louis of Toulouse, and Francis retain what must have been originally the shape of all; Peter, Paul, and John the Baptist are similarly cut down-in each case the area beneath the picture field and the decorated spandrels have been lostand modern frames adorn the lower part of the Peter and Paul panels (the ogival moldings and cusps in all of the panels are original). The Madonna panel's shape has been even more radically altered; the original arched top was truncated (an ogival top has been approximated in modern restorations,3 although its proportions, as Coor points out, are somewhat too squat), and the bottom of the panel has been extensively cropped. All of the figures' punchwork and drapery border designs, in addition, are interrelated. The punchwork and drapery border designs are sometimes exactly repeated in two or more of the panels-examples: the "butterfly" design surrounded by a quatrefoil in the halos of John the Evangelist and Paul (Figures 9, 10); the rosette in the halos of the Infant, John the

(Peter, Paul, and John the Baptist as Lippo Memmi); R. Oertel, Frühe Italienisches Malerei in Altenburg (Berlin, 1961) p. 76; F. R. Shapley, Paintings from the Samuel H. Kress Collection, Italian Schools, XIII-XV Century (London, 1966) p. 49 (John the Baptist as Lippo Memmi); and C. Seymour, Jr., Early Italian Paintings in the Yale University Art Gallery (New Haven, 1970) p. 90 (John the Evangelist as Barna [?]).

3. See I. Kunze, Berichte aus den Preussischen Kunstsammlungen 59, (1938) pp. 26-33; the author illustrates the painting before restoration.

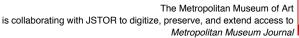






FIGURE I Madonna and Child, Lippo Memmi. Berlin-Dahlem Museum, West Berlin FIGURE 2

St. John the Evangelist, Lippo Memmi. Yale University Art Gallery, New Haven





# FIGURE 3

St. Peter, Lippo Memmi and assistant. Louvre (photo: Archives Photographiques)

FIGURE 4 St. Paul, Lippo Memmi. The Metropolitan Museum of Art, Gift of Coudert Brothers, 88.3.99





Evangelist, Louis, and Francis (Figures 1, 2, 6, 7); the decorated border of John the Evangelist's cloak and Peter's collar (Figures 2, 3).

Coor and I also agree that the majority of the polyptych's panels are by Lippo Memmi; I believe John the Evangelist, John the Baptist, Paul, the Madonna, and the head of Peter to be among Memmi's finest productions. These panels' style is characterized by a blend of line and volume that together creates a delicate balance between surface and depth, a gentle pastel coloring, and a fine mixture of naturalistic and abstract effects. Only the lesser degree of physical and mental animation in these superbly painted figures separates them from comparable works by Memmi's genial brother-in-law, Simone Martini. I further conclude that Memmi's polyptych was executed at the high point of his career, around 1330 (Coor dates it toward the "middle or during the later part" of the third decade of the century), some years later than his earliest and most severe paintings but before the departure of Simone Martini for Avignon, after which we lose track of Memmi's activities. For me, the Madonna strongly recalls Memmi's early signed Madonna and Child of about 1319 in the church of the Servi in Siena,4 but the slightly looser organization of forms, the more relaxed poses, and the freer treatment of the drapery in the Berlin Madonna and Child indicate a more evolved style and suggest that about a decade separates the two works. A parallel stylistic evolution is to be seen in other of Memmi's later works, such as the small portable diptych whose signed Madonna is also in Berlin<sup>5</sup> and whose pendant, a John the Baptist, has turned up recently and bears the date 1333.6 Again, the tight, abstract curves and the severity of the early Servi Madonna have in the small Berlin Madonna become less pronounced, and the latter's companion, John the Baptist, although severely rubbed, corresponds closely in facial type and treatment of drapery and decorative design to the saints of our altar-

4. R. Van Marle, *The Development of the Italian Schools*... (The Hague, 1924) II, pl. facing p. 260. Coor, "Two Unknown Paintings," p. 130, dates the Servi Madonna in the early 1320s; H. Hager, *Die Anfänge des Italienischen Altarbildes* (Munich, 1962) p. 199, note 157, cities a document stating that Memmi's painting was put in place in 1319.

5. Van Marle, Development II, fig. 168.

6. Wadsworth Atheneum, catalogue: An Exhibition of Italian Panels and Manuscripts from the Thirteenth and Fourteenth Centuries in Honor of Richard Offner (Hartford, 1965), no. 24.

## figure 6

St. Louis of Toulouse, shop of Lippo Memmi. Gallery, Siena (photo: Frick Art Reference Library)



### FIGURE 7

St. Francis, shop of Lippo Memmi. Gallery, Siena (photo: Frick Art Reference Library)



	JOHN THE			JOHN THE			
	EVANGELIST	PAUL	PETER	BAPTIST	LOUIS	FRANCIS	MADONNA
A–B	37.5	39	39	37.9	39	38.5	
A–C	40	41	41	40.5	41	41	
CB	40	41.5	41.5	40.5	4 <sup>1</sup>	41	
C–D	88.8	89	88	89.5	90.9	91	77 (original portion)
E-F	42.7	42	43	42	<b>44</b> •5	44.2	55
Top of Panel	22.9				23	23	
Width of decorated band of halo	4.5	4.5	4	4.5	4	4	
X–D					- 98.5	- 98.5	
X–Y	1.05 meter				1.05 meter	1.05 meter	

FIGURE 8 Key to polyptych's dimensions (in centimeters)



piece. Memmi's most elaborately decorative Madonna, in Altenburg, is by this reasoning a still later work than our polyptych. Some caution must be exercised when comparing the figures on our polyptych to those of Memmi's other autograph dated works; his collaborative role in the Uffizi Annunciation (1333) has not, and perhaps cannot, be isolated, and the documented participation of his father, Memmo di Filipuccio, in the San Gimignano Maestà (1317) complicates our judgment of this important painting. Even taking into account the problematic nature of these two works, our panels more closely relate to the style of the Annunciation (compare the two flanking saints, Ansanus and Giulita) than to the Maestà, where the standing saints seem far more archaic in treatment.

Considering only Memmi's polyptych panels that we have so far discussed, I draw certain conclusions concerning the polyptych as a whole. Its design and iconography were dependent on two of Simone's important altarpieces, the polyptychs at Pisa (1319?) and Orvieto (1320).<sup>7</sup> Both of Simone's altarpieces were

<sup>7.</sup> Illus., G. Paccagnini, Simone Martini (Milan, n.d.) pp. 106, 119-121.

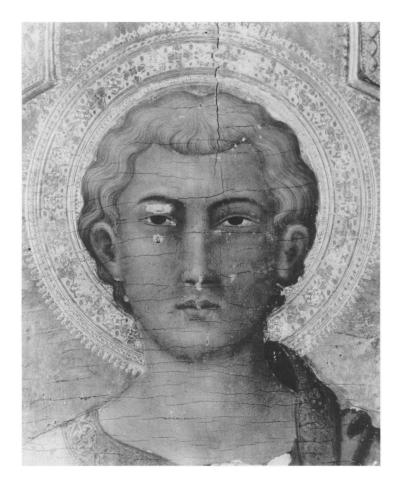


FIGURE 9 St. John the Evangelist, detail of Figure 2

heptaptychs,<sup>8</sup> as was Memmi's, and the Gothic ogival arches with cusps that Simone introduced in the Orvieto polyptych were repeated. Memmi's figures are more naturalistic in appearance and more richly ornamental in dress than those in Simone's two altarpieces (this relationship is particularly apparent among their Madonnas), an indication that though by different hands, the former work is somewhat later than the other two.<sup>9</sup> Simone's two polyptychs were commissioned by the Dominicans, and although both have at one time been dismantled, at least the Pisa altarpiece seems to be complete and accurately reconstructed. In

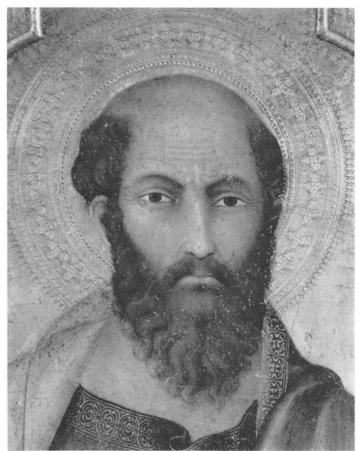


FIGURE 10 St. Paul, detail of Figure 4

this work the major saints are disposed in pairs around the Virgin in the center—John the Baptist and John the Evangelist closest to her, Mary Magdalen and Catherine (the titular saint) next, and, as terminals, Dominic and Peter Martyr, who firmly fix the work's Dominican context. This arrangement of the main panels appears to be closely related to the scheme in the Orvieto polyptych where Peter and Paul, frequent pendants like the two Johns, probably appeared at either side of the altarpiece while the surviving panels of Mary Magdalen and Dominic were in all likelihood correspondingly balanced by representations of a fe-

<sup>8.</sup> That two panels are missing from the Orvieto polyptych is indicated by the poses of the extant saints; Peter, Mary Magdalen, and Dominic face the Virgin to the right while only Paul looks to he left.

<sup>9.</sup> Similarly, Memmi's polyptych is undoubtedly somewhat later than his own (recently cleaned) polyptych from San Casciana Alta near Pisa (*Mostra del restauro* [Pisa, 1971] pp. 22–25), whose design and style are closely related to Simone's Pisa polyptych.

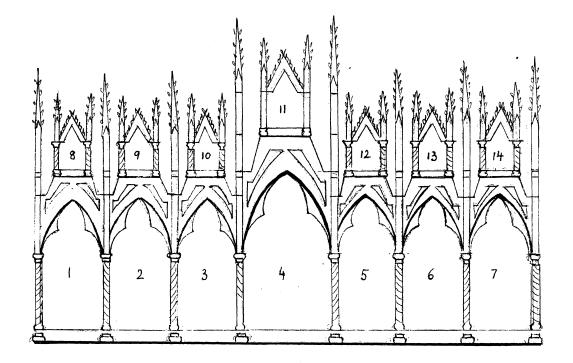


FIGURE 11 Reconstruction of polyptych:

- 1. St. Louis of Toulouse (Figure 6)
- 2. St. Paul (Figure 4)
- 3. St. John the Baptist (Figure 5)
- 4. Madonna and Child (Figure 1)
- 5. St. John the Evangelist (Figure 2)
- 6. St. Peter (Figure 3)
- 7. St. Francis (Figure 7)

male saint (Catherine?) and Peter Martyr or another important Dominican.<sup>10</sup> The figures of Memmi's altarpiece were in all likelihood disposed in a similar way, with John the Baptist and John the Evangelist to the left and right of the Virgin, Paul and Peter as the adjacent panels, and finally Louis of Toulouse and Francis at the extremities, corresponding to Dominic and Peter Martyr in the Pisa polyptych (Figure 10).<sup>11</sup>

Thus far, my remarks concerning Memmi's polyp-

10. Trasmundo Monaldeschi, Bishop of Sovana and commissioner of the altarpiece (P. Bacci, *Fonti e commenti per la storia dell' arte senese* [Siena, 1944] p. 119), appears with the Magdalen; this may indicate that this panel and its missing pendant flanked the Virgin in the original ordering of the polyptych.

- 8. St. Elizabeth (Figure 19)
  9. St. Mary Magdalen (Figure 17)
  10. St. Clare (Figure 18)
  11. Crucifixion (?), Redeemer (?)
  12. Male saint
- 13. St. Anthony of Padua (Figure 15)
- 14. St. Agnes (Figure 16)

tych do not differ in any essential points from Coor's more summary discussion of the work. However, I find unconvincing her reconstruction of the subsidiary parts of the altarpiece and misleading her conclusions concerning the polyptych as a whole. The original shapes of the main panels indicate that pinnacles rested directly over each, as must have been the case in Simone Orvieto's polyptych. Coor believed that she had discovered three of these pinnacles: a Blessing Christ in

<sup>11.</sup> Coor, "Two Unknown Paintings," p. 131, sees an identical arrangement and while she does not refer specifically to Simone's polyptychs as models for Memmi's work, there can be little doubt that she too considered this relationship. Shapley, *Samuel H. Kress Collection*, p. 49, gives the same arrangement.

Douai (Figure 12) and two Hermit Saints in Altenburg (Figures 13, 14).<sup>12</sup> She recognized that these works were not by Memmi himself and, following Millard Meiss in the case of the Douai Christ, correctly attributed them all to the so-called "Master of the Glorification of St. Thomas," a thus-far nameless painter whose masterpiece—whence his designation—is a large panel in the church of Santa Caterina in Pisa, and whose career and style are known largely through

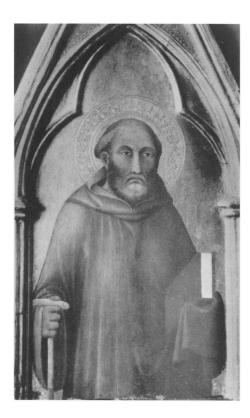
12. The dimensions of the panels: Blessing Christ, picture surface 52 x 33 cm.; Hermit Saint facing left, panel 57.8 x 26 cm., picture surface 39 x 20.2 cm.; Hermit Saint facing right, panel 57.5 x 26 cm., picture surface 38.8 x 20 cm.

> FIGURE 12 Blessing Christ, St. Thomas Master. Gallery, Douai, France

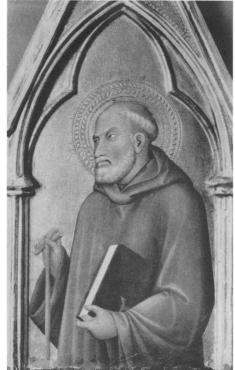
FIGURE 13

Hermit Saint, St. Thomas Master. Lindenau Museum, Altenburg, German Democratic Republic

FIGURE 14 Hermit Saint, St. Thomas Master. Lindenau Museum







Meiss's scholarship.<sup>13</sup> Coor concluded that this master was a member of Memmi's shop at the time our polyptych was painted and adduced evidence that our work, with the Douai Christ and Altenburg hermits as pinnacles, was the altarpiece, now lost but mentioned by Vasari and others, for San Paolo a Ripa d'Arno in Pisa. Coor's theory tallies with Meiss's view of the presumed Pisan St. Thomas Master; his stylistic ties to the art of Lippo Memmi and Simone Martini (Meiss and Coor both stressed this relationship) could be plausibly explained if he actually worked in Memmi's shop, and even Memmi's conjectured activities in Pisa, based on Vasari's report of a rather extensive list of works by him, including frescoes, to be seen in that city, would be in part documented.<sup>14</sup>

My own view as to what constitutes the St. Thomas Master's oeuvre and what is the nature and development of his style and his chronology will be dealt with more extensively elsewhere. Here let me state in advance my conclusions pertinent to the present study, for they provide the basis on which I reject Coor's reconstruction and ingenious theory concerning the supposed joint authorship of Memmi's polyptych. In my opinion, three major works, datable on stylistic grounds, can be attributed to the St. Thomas Master: a Madonna of Mercy in the Cathedral of Orvieto of 1325–30, not previously ascribed to him;<sup>15</sup> a dispersed polyptych of 1335–40, about which there are still reconstruction problems; and the panel depicting the Glorification

13. M. Meiss, "The Problem of Francesco Traini," The Art Bulletin XV (1933) pp. 97-173, in particular 106-116; "Primatifs italiens à l'orangerie," La revue des arts VI, p. 148; Illustrated Manuscripts of the Divine Comedy I (Princeton, 1969) p. 69.

14. A few recent critics have seen Memmi's hand in Simone's Pisa polyptych, and Memmi's small Madonna and Child in Berlin is inscribed on the back "Insegni Campo Santo di Pisa," which may indicate that he worked there. More instructive for establishing Memmi's activity in Pisa is his San Niccolo polyptych.

15. Illus., Van Marle, *Development*, fig. 165 (as Lippo Memmi). The Orvieto Madonna's inscription informs us that a "Lippus de Sena" was its painter. Understandably, this Lippus has been most often identified as Lippo Memmi, Siena's best known painter of this name (Lippo Vanni has also been considered). Lippo Memmi's hand, however, is nowhere to be seen in the Orvieto Madonna, and the painting is demonstrably a work by the St. Thomas Master and shop. I conclude, then, that the "Lippus" of the Orvieto Madonna and the St. Thomas Master, heretofore anonymous, are one, an identification that has implications for the oeuvre of the St. Thomas Master and Lippo Memmi that go beyond the scope of this paper. of St. Thomas of 1340-45, until now the St. Thomas Master's most famous painting. How then could the St. Thomas Master's pinnacles in Douai and Altenburg have belonged with Memmi's polyptych? For one thing, Memmi was painting his polyptych at about the same time that the St. Thomas Master was an independent master with his own shop, working on the Orvieto Madonna. For another, the pinnacles in question would appear to originate with the St. Thomas Master's own dispersed polyptych of 1335-40.

Returning to our present task of reconstructing Lippo Memmi's polyptych, stylistic considerations indicate to me that the St. Thomas Master's and Memmi's fragments do not have a common origin. The St. Thomas Master's treatment of the features and hands of his pinnacle figures surpasses Memmi's in sensitivity; a flicker of movement animates the manicured blessing hand of the otherwise static Douai Christ whereas the hands of Memmi's saints tend toward formula and are generally inexpressive. Also, the impact of the St. Thomas Master's three stern pinnacle figures is quite different from Memmi's images, which, with the exception of Peter, appear less severe. This relationship of pinnacles to laterals is the opposite from what we might expect, for often in trecento altarpieces subsidiary figures are not only relatively the freest in treatment but the lightest in sentiment as well. The St. Thomas Master's three pinnacles, with their consummate skill of execution and highly developed, independent aesthetic, would not seem to be the products of a lesser artist in Memmi's shop, nor even those of an extremely gifted but youthful apprentice, as Coor would have us believe; in either case we would expect to find a style more subservient to Memmi's. The St. Thomas Master would have to have been at the very least a collaborator-an artist of equal or even superior ability and vision. While such a relationship is possible, it is difficult to imagine. One wonders, for example, why the St. Thomas Master, with his clearly demonstrated gifts, would have carried out only the pinnacles of the altarpiece, assuming that he was the author of the remainder of the series that would be called for in such a large polyptych. More damaging to Coor's argument is the fact that among known collaborative works of the period from leading shops, none shows so clearly divergent hands and aesthetic preferences as do the small and large panels of this supposed ensemble.

Simone Martini's and Lippo Memmi's Annunciation of 1333, and Niccolo di Ser Sozzo Tegliacci's and Luca di Tommè's polyptych of 1362, the most famous and pertinent examples, exhibit no comparable variance of style; in at least the former case otherwise distinguishable hands seem impossible to disentangle when joined in a single project.

It is true that Memmi had the help of at least one assistant in the execution of this altarpiece. The somewhat wooden Francis and Louis are distinguishable from the other large figures, and their uninspired and occasionally heavy-handed painter cannot be the artist of the finely drawn Douai Christ and Altenburg hermits, as Coor seems to imply (compare the hands of Francis and Christ or the heads of Louis and the hermits). The composition and characterization of Francis and Louis resemble Memmi's figures far more closely than the pinnacles do (Coor suggests, probably correctly, that they were designed by Memmi), and their execution reveals a less skilled and distinctive hand than that of the St. Thomas Master. (Peter's drapery also seems to have been left entirely to an assistant for, as Coor again points out, it is flat and weak compared with the other figures.) This sort of intervention of assistants' hands in a large commission like Memmi's is not surprising-it was a common practice of the timeand the results are quite different from those we would expect from a collaborative effort by two skilled masters.

Another objection to Coor's theory of joint authorship arises when we examine the decorative features of Memmi's and the St. Thomas Master's panels. The whole polyptych as she envisioned it would have had to be painted and assembled in the same shop within a short period of time,<sup>16</sup> so that we would expect to find the decorative embellishments and tooling to be consistent throughout. This is not the case. A number of inconsistencies can be cited: the cusps of the small panels are decorated with a flower and leaf design surrounded by four rosettes, while the corresponding areas in the larger works are decorated by more extensive and finely wrought punched designs of a different pattern; a small, punchwork pattern decorates the upper arched borders of the picture surface in the laterals and a corresponding pattern is repeated around the outer circumference of the halos of the large saints, and these designs are absent in the pinnacles-the juncture of frame and panel, when decorated at all in the small panels, is punched with a rosette pattern while the halos terminate with a sequence of rings and dots; a pattern of five colored dots embellishes the three visible areas of the cross-nimbus of the blessing Christ while there is no color at all in the profuse decoration of the Infant's halo in Memmi's Berlin Madonna, nor does the floral pattern that is lightly peened into the gold surface of the triangular gable in the Douai Christ panel appear on the large works. All these differences are minor, but it should be noted that such inconsistencies in assembled or reconstructable polyptychs by Simone Martini or his circle do not exist. On the contrary, embellishments secondary to the painted images are repeated with little change from panel to panel, large and small.

Having presented the evidence against associating the Douai Christ and the Altenburg hermits with Memmi's polyptych, I would like to propose as the missing pinnacles a series of six small panels of halflength saints: St. Anthony of Padua (Figure 15), St. Agnes (Figure 16), St. Mary Magdalen (Figure 17), St. Clare (Figure 18), St. Elizabeth of Hungary (Figure 19), and a male saint whose location is unknown to me. <sup>17</sup> These panels of similar dimensions would fit over the six large saints in our altarpiece, leaving only a figure to crown the Madonna in the center—in all

<sup>16.</sup> Coor, "Two Unknown Paintings," p. 132, allows for "more than a year" to have elapsed between the execution of the body of the polyptych and the pinnacles, but she offers no explanation for this surprisingly long period.

<sup>17.</sup> Dimensions of the pinnacles: Anthony, with frame  $63.3 \times 24.6 \text{ cm.}$ , without frame  $40.9 \times 19.8 \text{ cm.}$ ; Agnes, with frame  $63.3 \times 24 \text{ cm.}$ , without frame  $40.8 \times 19.1 \text{ cm.}$ ; Mary Magdalen, with frame  $51 \times 24.6 \text{ cm.}$ , without frame  $40.9 \times 19.8 \text{ cm.}$ ; Clare with frame  $63.3 \times 24 \text{ cm.}$ , without frame  $38 \times 19 \text{ cm.}$ ; Elizabeth, with frame  $50 \times 19.5 \text{ cm.}$ , without frame  $41 \times 17.5 \text{ cm.}$  For the male saint, as identified by F. Zeri, see Wadsworth Atheneum catalogue, nos.

<sup>25, 26.</sup> The six panels were cited prior to the Wadsworth Atheneum exhibition: Van Marle, *Development* II, pp. 260 (Elizabeth as Lippo Memmi); B. Berenson, *Italian Pictures of the Renaissance* (London. 1932) pp. 359 ("Dorothy" [Elizabeth] as Lippo Memmi), 360 (Mary Magdalen as Lippo Memmi), 588 (Agnes and Anthony as Lippo Vanni), all as Lippo Vanni in the 1968 edition (Anthony and Agnes incorrectly as in New Haven); F. M. Perkins, *Rassegna d'arte senese* XIII (1920) pp. 115-116 (Elizabeth as Lippo Memmi). A record of Richard Offner's attributions of some of these works is in the Frick Art Reference Library (Anthony and Agnes as School of Simone Martini; Mary Magdalen as Simone Martini;

FIGURE 15 St. Anthony of Padua, Lippo Memmi. Helen Clay Frick Foundation, Pittsburgh (photo: Frick Art Reference Library)







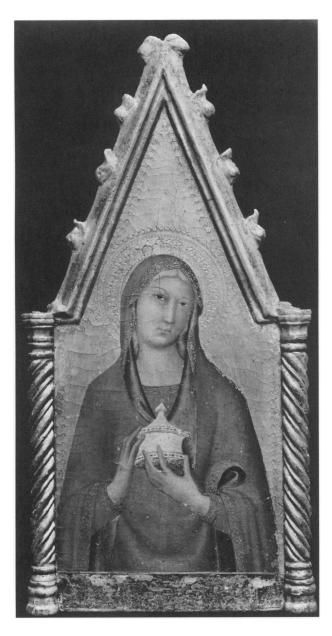
FIGURE 16 St. Agnes, shop of Lippo Memmi. Helen Clay Frick Foundation (photo: Frick Art Reference Library)

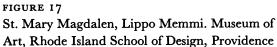
likelihood a blessing Christ. The identified pinnacles vary both in condition and with regard to the degree

Mary Magdalen as Simone Martini; Clare as Simone Martini or Lippo Memmi). The Wadsworth Atheneum catalogue which inexplicably attributes five of the panels to Lippo Vanni and one (Clare) to Lippo Memmi, asserts that Federico Zeri has reassembled them all as wings of a "small travelling altarpiece." Such an arrangement would be unusual in Sienese works of the period, and there is no indication from the panels that I have inspected that they were joined in any way.

FIGURE 18 St. Clare, shop of Lippo Memmi. The Metropolitan Museum of Art, Gift of Irwin Straus, 64.189.2

of participation of assistants, but the creative mind of Lippo Memmi is seen in all of them. They are composed in broad, curving patterns, resembling the structure of the large saints of the polyptych, while their pastel tonality recalls the latter as well as other works by Memmi. The finest pinnacle—Anthony of Padua can be attributed to Memmi himself and, even in its somewhat rubbed condition, it shows marked similarities in both general conception and particular features (especially the eyes, ears, and hands) to the best crea-





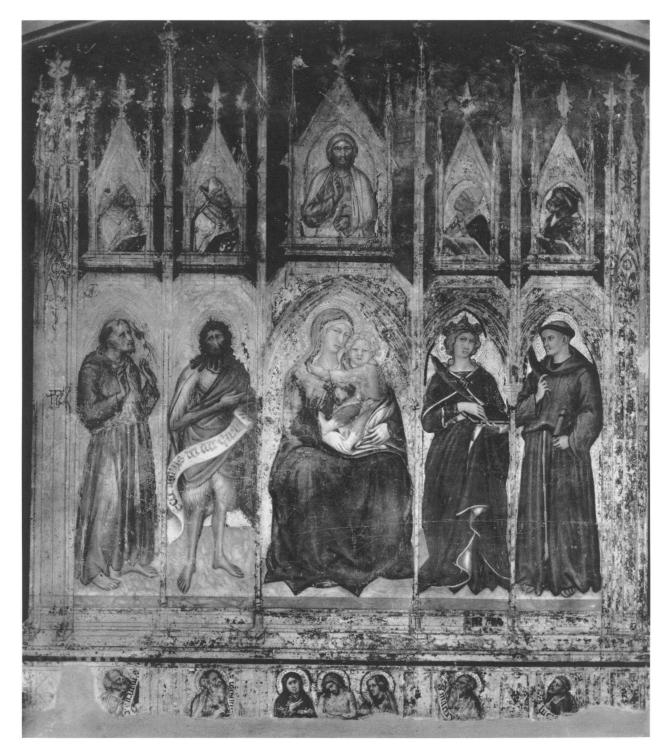
tions of Memmi's altarpiece, particularly to John the Evangelist, Paul, and the Madonna; even the weaker lateral of Francis, while surpassed in sensitivity of treatment by the Anthony pinnacle, compares closely to it compositionally and in general handling of the drapery. Mary Magdalen is only slightly less striking; her finely expressive, almost oriental features are complementary in beauty and feeling to the Madonna's, and



FIGURE 19 St. Elizabeth of Hungary, shop of Lippo Memmi. G. Devoto Falk collection, Milan

she balances her ointment jar with the same ease and grace of the larger figure of Paul bearing his epistles to the Romans. The three other pinnacles illustrated— Agnes, Clare, and Elizabeth—are by assistants whose harder and more exaggerated treatment, however, does not obscure the fact that their compositions are consonant with the others in our altarpiece. Agnes, though more rubbed, seems to be by the painter of

FIGURE 20 Fresco of a polyptych, Lippo Vanni. San Francesco, Siena (photo: Alinari)



Louis of Toulouse and Francis (compare Figures 6, 7, 16).

Nonstylistic evidence is persuasive in identifying these six small panels as our pinnacles. The punchwork designs around the periphery of the large panels are repeated exactly in the small panels, and similarly the halo patterns of the pinnacles and the large figures of the altarpiece resemble each other very closely; in many cases the same punches seem to have been employed in both small and large works (compare Anthony and John the Baptist), and the decorated drapery borders of Agnes and Mary Magdalen resemble schemes used in the larger figures (compare especially the collar and robe of Paul and the collar of John the Evangelist).

Identifying these panels as the missing pinnacles of Memmi's polyptych gives us a clearer picture of its design. Judging from Mary Magdalen, whose frame seems to be for the most part original, 18 both larger and smaller panels were flanked by matching spiral columns, approximating the scheme in Simone's Pisa polyptych where, however, it is the laterals and predellas that are flanked by columns. Over each of these columns, large and small, would have soared decorative finials resembling in design and placement those of the fresco-polyptych of standing saints in San Francesco in Siena, attributed to Lippo Vanni (compare Figures 16, 20). While the size and design of Memmi's polyptych would easily have allowed for a predella, none can be linked to it with certainty at this time.19

Finally, we must consider the provenance of our reconstructed polyptych. There is no documentation for it, but secondary sources indicate at least two possible origins for the commission. Vasari records an altarpiece on the high altar of San Paolo a Ripa d'Arno in Pisa, which he claims was signed by Lippo Memmi and which, according to his description, contained along with a Madonna three of the saints depicted on our altarpiece. Coor, and originally I, believed that San Paolo was the source of our dispersed polyptych; Coor confirmed this identification by tracing the iconography and provenance of the Altenburg hermits and the Douai Christ, which she believed to be its pinnacles, to San Paolo. However, as I earlier summarized, I now believe that the Altenburg hermits and the Douai Christ were the pinnacles of the St. Thomas Master's

dispersed polyptych. Because it depicted the same three saints described by Vasari, and for other reasons, it is probable that it was the altarpiece for San Paolo.

Now let us consider the other likely source for Memmi's altarpiece. In the nineteenth century, Brogi inventoried Louis and Francis, our terminal panels, in the large thirteenth-century church of San Francesco in Colle di Val d'Elsa, whence they were later transferred to the Siena Gallery.<sup>20</sup> This evidence, considered with the Franciscan program of our polyptych, which becomes all the more apparent with the addition of its proper pinnacles (Anthony, Elizabeth, and Clare are important Franciscans), makes San Francesco a very

18. According to Anne Booth, curatorial assistant at the Rhode Island School of Design Museum, the columns that flank the Magdalen are of gilded gesso and may be modern while the rest of the frame is original. In any case, the present scheme must reflect very closely the original design.

19. A series of ten apostles, today divided among the Lehman Collection, the Washington National Gallery, and the former Stocklet collection, are possible candidates for the predella of which they would have made up the major part. The dimensions of each extant panel (29.3 x 21.5 cm.) would allow two apostles to fit beneath each of the laterals, assuming that some of the latter have been slightly shaved down and that only a narrow frame originally separated each of the predella panels. The fact that Peter, the principal apostle, and Paul and John the Evangelist, who are often included as apostles, are missing from this series of small figures could be seen as evidence to link them to our altarpiece, for these saints already appear as laterals, and the repetition of figures in the same altarpiece is rare (compare Duccio's Maestà, whose apostle series includes the same figures as these and is completed by Peter and Paul or John the Evangelist in the body of the altarpiece). In any case we would have to assume that part of the predella is lost, in all probability the central area under the Madonna and possibly a flanking panel in either wing. Although there is a notable similarity in the punchwork of these small panels and the rest of Memmi's polyptych, and stylistic comparisons of a convincing sort can be drawn, I hesitate to claim that these figures were once a part of our altarpiece. Decorative detailing in works by Simone and his shop such as the polyptych in the Gardner collection, the fragments of the polyptych in Cambridge, or especially the polyptych in Orvieto, also compare very closely to the small apostles (the dimensions of the wing panels in Orvieto, 94 x 48.5 cm., and the iconography of the polyptych as we know it suggest that it may be the altarpiece to which this predella belongs). Most important, the very Simonesque character of the apostles makes them difficult to reconcile with the other parts of Memmi's altarpiece.

20. F. Brogi, Inventario generale degli ogetti d'arte della provincia di Siena (Siena, 1897) p. 158 (the inventory of San Francesco was made in 1865). Also see C. Brandi, La regia pinacoteca di Siena (Rome, 1933) pp. 198-200. The other panels of the polyptych have been in private collections for many years. likely source for the commission. Circumstances under which the brothers of that church would look to a leading painter of nearby Siena for their altarpiece are not difficult to envision, nor is it surprising that Lippo Memmi would turn for inspiration to the large heptaptychs that his brother-in-law, Simone, had painted nearly a decade earlier at Pisa and Orvieto, for the other great mendicant order, the Dominicans.

### ACKNOWLEDGMENTS

I am indebted to Charles Seymour, Jr., formerly my professor and presently my esteemed friend, for first suggesting that I investigate Memmi's polyptych. Also, my thanks to Stephen Margolies for his helpful editorial suggestions.

# Der Dritte Apocalyptische Reiter

# ANNA MARIA CETTO

Et cum aperuisset sigillum tertium, audivi tertium animal dicens: Veni et vide. Et ecce equus niger; et qui sedebat super illum, habebat stateram in manu sua. Et audivi tamquam vocem in medio quatuor animalium dicentium: Bilibris tritici denario, et tres bilibres hordei denario; et vinum et oleum ne laeseris.

арос. 6, 5-6

ALBRECHT DÜRER HAT—erst 27 Jahre alt—*Die* heimlich offenbarung johannis 1498 in Nürnberg als Grossfoliobuch herausgebracht. Fünfzehn ganzseitige Holzschnitte von unerhörter Grossartigkeit hatte er dafür auf die Holzstöcke gezeichnet, vermutlich sogar, mindestens teilweise, auch selber geschnitten. Er lässt alle vier Reiter nebeneinander daherstürmen (Abb. 1), die dem Seher Johannes einzeln nacheinander jeweils dann erscheinen, wenn das mystische Gotteslamm eines der vier ersten Siegel eröffnet.<sup>2</sup> Den johanneischen Text bringt ein Teil der Auflage in lateinischer Uebersetzung (Vulgata), der andere Teil in deutscher Fassung, beide aber, ohne erläuternden Kommentar auf der linken Buchseite, gegenüber einem Holzschnitt. Des vierten Reiters "nam was der tod." Wie

1. First published in *Der kleine Bund, Beilage für Literatur and Kunst*, Sunday supplement of *Der Bund*, Bern, 124, number 22 (January 28, 1973).

2. Abb. 1 mit freundlicher Genehmigung des Prestel-Verlags, München, nach dessen Publikation: Albrecht Dürer, Die Apokalypse. Faksimile der deutschen Urausgabe 1498: Die heimlich offenbarung johannis. Hrg. von L. Grote, München 1970. Dürer hat die deutsche Übersetzung der Vulgata übernommen aus jener Bibel, die sein Pate Anton Koberger 1483 herausgebracht hatte.

ABB I

Die vier Reiter. Dürers Holzschnitt  $(394 \times 281 \text{ mm})$  in: Die heimlich offenbarung johannis, 1498



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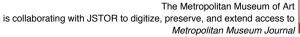






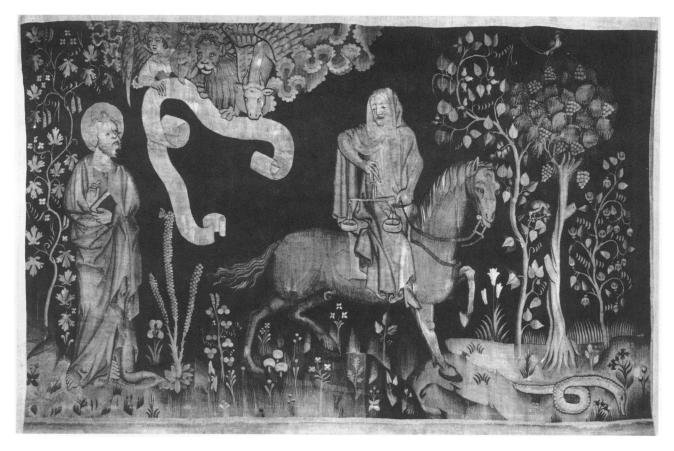
ABB. 2 Der dritte Reiter. Miniatur in der *Cloisters Apokalypse*, um 1320 in der Normandie enstanden

Dürer selbst die ersten drei genannt hätte, entzieht sich unserem Wissen. Ueberwältigt von dem Anblick seiner finsteren Gottesgeisseln pflegen wir diese Krieg (1 und 2), Hunger (3), und Tod (4) zu nennen.<sup>3</sup>

Ganz anders die illustrierten Apocalypse-Handschriften der vorangegangenen Jahrhunderte, die einem jeden der vier Reiter ein eigenes Bild zuteilen, wie dies auch die Teppichfolge in Angers tut. Ein gekrönter Bogenschütze auf weissem Ross exivit vincens ut vinceret (Apoc. 6, 2), zieht sieghaft aus, um zu siegen. Als Zweiter folgt ein Ritter in Rüstung, der ein grosses Schwert schwingt, auf fuchsrotem Pferd. Der dritte Reiter erscheint auf schwarzem Ross und hält mit der Rechten eine Waage im Gleichgewicht (Abb. 2, 3). Einen Falben reitet der Tod, gefolgt von der Hölle (*infernus*). Ihm ist, wie Johannes sagt, Macht gegeben über alle vier Teile der Erde, zu vernichten durch Schwert, Hunger und Tod und wilde Tierre (Off. 6, 8).

Unsere Betrachtung gilt insbesondere dem dritten Reiter in zwei Apocalypse-Zyklen, die ohne Kommentar auf uns gekommen sind: in dem hervorragenden Manuskript der Cloisters, New York (Abb. 2) und der berühmten Tapisserienfolge in Angers (Abb. 3). Die Handschrift, die um 1320 in einem normannischen

<sup>3.</sup> Schon für Andreas von Caesarea (563–637) waren alle vier Reiter unheilvoll: sie verkörperten ihm das Zeitalter der Verfolgungen, Gedanken, die Joachim von Fiore (um 1130–1202) aufgegriffen hat. Einige Kommentatoren stimmen darin überein, dass sie in dem ersten Reiter das Wort des Evangeliums erblicken, das in die Welt gesandt ist, in den drei übrigen aber Boten des göttlichen Zornes. So z.B. Victorin von Pettau (+304), der soweit ich sehe—als erster abendländischer Theologe die drei anderen Pferde Krieg, Hunger, und Pest und den, der auf dem letzten sitzt, den Tod nannte (*Patrologia Latina*, Vol. 49, 68, 70). Ihm folgte Hieronymus (ebda. 69, 71).



#### **АВВ.** 3

Der dritte Reiter. Tapisserie nach Entwurf des Jean de Bondol, in Paris gewirkt von Nicolas Bataille, nach 1373/83. Angers, Musée du Château

Scriptorium entstanden sein wird,4 bringt unter der Miniatur den zugehörigen Text des Johannes in lateinischer Uebersetzung. Die Teppiche in Angers zeigten ursprünglich unter jedem Bilderstreifen einen gewirkten Textstreifen: braunschwarze Buchstaben mit roten Initialen vor weissem Grund. Von diesen Schriftstreifen hat sich aber unglücklicherweise nicht das Geringste erhalten, offenbar weil der Farbstoff die Wollfäden zerfressen hat, so dass wir nicht einmal wissen, ob da nur Johannestexte oder auch Glossen standen, geschweige denn, ob alles in lateinischer oder französischer Sprache abgefasst war. Es wäre eher an Latein zu denken-so folgere ich aus dem einzigen in ein Bild selbst eingewirkten Wort, dem Wehe-Schrei ve.ve.ve. des Adlers (Apoc. 8, 13), das der Vulgata entnommen ist.

Weniger schlimm als den Schriftstreifen erging es

dem "schwarzen" Pferd, das heute in einem etwas rotstichigen Hellbraun erscheint, wohl weil die ursprünglich dunkelbraune Farbe verblichen ist.

Wen verkörpern nun diese beiden "dritten" Reiter (Abb. 2, 3)? Stellen sie wirklich den Hunger dar, ist ihre Waage ein Symbol der Teuerung, der Rationierung, wie moderne Publikationen sie deuten, ohne eine nähere Erklärung abzugeben? Die vier Reiter der New Yorker Handschrift werden nämlich: War (Krieg), Strife (Bürgerkrieg), Famine (Hungersnot), und Pestilence (Pest) genannt.<sup>5</sup> In Angers interpretiert

<sup>4.</sup> Dies hat François Avril, Paris, erkannt. Siehe F. Deuchler, *Cloisters Apocalypse* II, S. 14 (Florens Deuchler, Jeffrey M. Hoffeld, and Helmut Nickel, *The Cloisters Apocalypse*, 2 vols. [New York, 1971]).

<sup>5.</sup> Cloisters Apocalypse II, S. 44-46.

Planchenault den Gekrönten auf weissem Ross, der mit einem Bogen bewaffnet ist, als La volonté de puissance d'où procèdent les trois fléaux: la guerre, la famine, la mort, als den Willen zur Macht, dem die drei anderen Reiter: Krieg, Hungersnot, und Tod entsprängen.

Ist denn in beiden Werken die Hungersnot irgendwie sichtbar dargestellt? Keineswegs. Weder sind die Rosse elende Klepper noch die Reiter ausgemergelte Hungerleider. Hingegen strahlt mindestens der Reiter auf der Miniatur eine Schönheit, einen Adel aus, der tiefer begründet scheint als nur durch das vornehme Gewand.

Beide Reiter tragen die Kleidung, die einem Magister artium etwa der Pariser Universität im 14. Jahrhundert zukam, oder einem Doctor juris oder einem Magistraten. Die "longue robe" des Reiters in New York ist ein knöchellanger roter Rock mit schlanken Aermeln, den eine hellviolette, ärmellose Robe überdeckt, zu der eine gleichfarbene Reiterpelerine mit grüngefütterter Kapuze gehört. Die Farben seiner Kleidung stimmen mit denjenigen der Gewänder Christi überein, der oben thronend erscheint, wohl als Verkörperung jener Stimme inmitten der vier Tiere, die zu ihm spricht: Zwei Pfund Weizen zu einem Denar... und Wein und Oel versehre nicht.

Auf dem Teppich trabt der Reiter sogar durch eine blühende, fruchtbare Landschaft. Rechts erblickt man einen Weinstock, an dem grosse Trauben hängen. Nicht unmöglich, dass die beiden Pflanzen daneben Oelbäume andeuten sollen. Der Reiter trägt hier einen langen hellgrauen Rock, dessen enge Aermel bis zur Handmitte reichen, darüber eine lange rosa Robe nebst rosa Kapuzenmantel, der mit weissem Pelz gefüttert ist.

Die Waage in der Gleiche haltend, wenden sich beide Reiter im Sattel zurück, um der Stimme von oben zu lauschen.

Wen meinten die Künstler, die beide Werke schufen,

8. Der lateinische Wortlaut bei Delisle, L'Apocalypse, en français

mit diesen vornehmen Gestalten? Wie können wir das erfahren?

Es gibt drei anglo-normannische Apocalypse-Handschriften, in deren Bilder kurze Erklärungen eingeschrieben sind.<sup>7</sup> Beim dritten Reiter lesen wir als Deutung des Ganzen:<sup>8</sup> Die Oeffnung des dritten Siegels bezieht sich auf das Gesetz und auf jene, die unter dem Gesetze lebten. Bei den einzelnen Figuren: Das dritte Tier: "Komm und sieh, das heisst, erkenne im Geiste die Schrift des Gesetzes." Das schwarze Pferd. Der Reiter dieses Pferdes ist der Herr. Die Waage bedeutet die Gerechtigkeit des gesetzlichen Urteils, das da lautet: "Leben um Leben, Auge um Auge, Zahn um Zahn."

Das Manuskript der Bodleian Library in Oxford, dem diese Legenden entnommen sind, weist ausserhalb der Bildfelder keinerlei Text auf. Die Tituli in den Bildern der vier Reiter sind-wie mir scheint-nichts anderes als knappe Auszüge aus der Expositio in Apocalypsin des Berengaudus (9. Jh.?).9 Dieser Autor ist, im Vergleich zu anderen Kommentatoren der Apocalypse, recht selbständig vorgegangen. Die vier Apocalyptischen Reiter sind ihm nicht Verkörperungen eines Unheils-nein, der Reiter auf dem weissen, dem roten, dem schwarzen und dem falben Ross ist jedesmal der Herr. Deshalb in der Cloisters Apocalypse der Adel nicht nur des dritten Reiters und die Uebereinstimmung seiner Gewandfarben mit denen Christi (Abb. 2): die drei anderen Reiter sind ebenso edle Gestalten-sogar der vierte, dem der Johannestext den Namen Tod gibt, ähnelt einem Christus, dessen Leichentuch sein Haupt umhüllt.

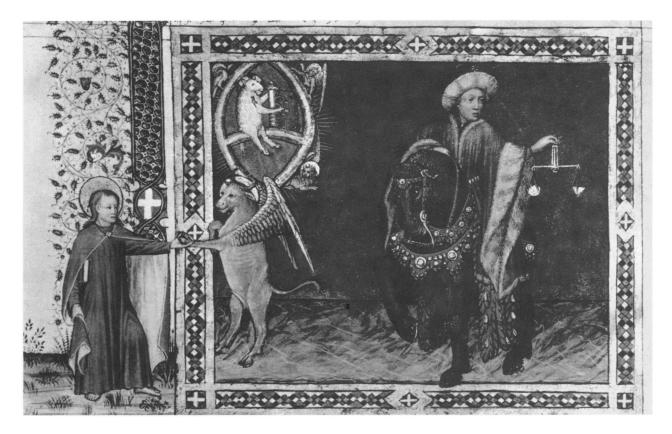
Ein solches Manuskript entstand im Mittelalter immer aufgrund von früheren Handschriften, von Vorlagen also, aus denen Text und Bilder wörtlich oder modifiziert übernommem wurden. Die Cloisters-Apocalypse, die keine Glossen enthält, welche den Text deuten und damit einen Wegweiser zum Verständnis der einzelnen Bilder bieten könnten, muss-

9. Patrologia Latina, Vol. 17, 893-921.

<sup>6.</sup> R. Planchenault, L'Apocalypse d'Angers (Paris, 1966) Text zu Taf. 9. Seine obenerwähnte Deutung hält der Autor für die wahrscheinlichste, gibt aber den Zusatz: Certains commentateurs ont vu dans ce premier cavalier le symbole du Christianisme.

<sup>7.</sup> Oxford, Bodleian Library, D. 4.17. New York, Pierpont Morgan Library, Ms. 524 (früher Blin de Bourdon). Manchester, The John Rylands Library, Ms. 19 (früher Lord Crawford). J. Delisle et P. Meyer, L'Apocalypse en français au XIII<sup>e</sup> siècle II (Paris, 1901) Nr. 2-4, S. LXXII-LXXVIII.

S. XVII-XVIII: Apertio tercii sigilli ad legem et ad eos qui sub lege fuerunt pertinet. Sanctus Johannes. Tercium animal: "Veni et vide, id est, spiritualiter intellege scripturam legis." Equus niger. Sessor hujus equi Dominus est. Statera significat equitatem judicii legalis, ut est illud: animam pro anima, oculum pro oculo, dentem pro dente." Auch beim ersten und vierten Reiter ist der Sessor als der Herr erklärt.



#### ABB. 4

Der dritte Reiter. Miniatur in der Apokalypse der Ducs de Savoie von Jean Bapteur aus Fribourg, in Thonon gemalt, 1428/34. Madrid, Escorial

so möchten wir folgern—in der Tradition von Handschriften mit Berengaudus-Kommentar stehen. Dieser Schluss wird durch die Tatsache bestätigt, dass sich unter den drei Manuskripten, die der Cloister-Apocalypse als nahe verwandt genannt werden,<sup>10</sup> eine mit Kommentar befindet, und zwar eben mit Berengaudus-Kommentar.

Berengaudus hat die vier ersten Siegel als die vier frühesten Epochen der biblischen Menschheit ausgelegt. Die Eröffnung des ersten Siegels, da der erste Reiter erscheint, betrifft die Zeit von Adam bis zur Sintflut. Die Epoche des zweiten Reiters ist die des gerechten Noe und der Patriarchen, welche der Herr rettete, während er gegen die Menschheit sein "grosses Schwert" erhob: die Sintflut und später Schwefel und Feuer, die Sodom und Gomorrha vernichteten. Als drittes Zeitalter nennt Berengaudus dasjenige des Moses, der Gottes Gesetze dem Volke Israel gegeben hat, als viertes die Zeit der Propheten, die Christus, seinen Opfertod und seine Auferstehung vorausgesagt haben.

Der dritte Reiter, mit der Waage, ist-wir wir sahen-in New York und Angers<sup>11</sup> im Sinne des Berengaudus als Gesetzgeber zu verstehen, der Christus selber symbolisieren soll. Etwa 50 Jahre nach den Tapisserien von Angers ist eine sehr schöne Apoca-

<sup>10.</sup> Laut Deuchler, *Cloisters Apocalypse*, II, S.10, hat Harvey Stahl als engverwandte MSS zusammengestellt: 1. Cloisters Apocalypse (= Delisle Nr. 15), 2. London, Brit. Museum, Add. Ms. 17 333, (= D. 13), 3. Paris, Bibl. Nat., ms. lat. 14 410 (= D.12). Alle drei basierten auf einem Manuskript der Art von London, Lambeth Palace Library, Ms. 209. Dieses enthält aber—so sei betont—einen Berengaudus-Kommentar.

<sup>11.</sup> In Angers fehlt der zweite Reiter. Der erste und vierte können im Sinne des Berengaudus verstanden werden, wenn die Darstellung auch nicht so unbedingt überzeugend ist wie in der Cloister Apocalypse. Planchenault, L'Apocalypse d'Angers, S. 25-30, zieht von den 12 Handschriften der "zweiten Familie," die Delisle L'Apocalypse français (Nr. 5-16, worunter 3 Berengaudus-Kommentare nachweisbar) zum Vergleich mit den Tapisserien zu-

lypse-Handschrift ausgemalt worden, die den dritten Reiter in gleicher Auffassung darstellt (Abb. 4). Er ist nach der Mode des 15. Jahrhunderts in eine vorn schliessende, rote Robe mit weiten, pelzgefütterten Aermeln gekleidet und trägt einen Pelzhut mit aufgeschlagenem Rand.

Jean Bapteur aus Fribourg, savoyischer Hofmaler, hat 1428–1434 für Herzog Amadeus VIII. die Miniaturen (bis einschliesslich der apocalyptischen Reiter), Péronet Lamy indessen die Randleisten gemalt, und ein gewisser Gardino, herzoglicher Schreiber, Texte geschrieben. Vollendet wurde das kostbare Werk, das heute der Escorial bewahrt, von Jean Colombe 1485– 1490 für Herzog Charles I. Der Text, der in Rot und Schwarz gehalten ist, bringt zu jeder Miniatur die zugehörigen Verse der Apocalypse in lateinisch sowie den gekürzten Berengaudus-Commentar.

In der Glosse steht zu lesen, das schwarze Ross entspreche der Dunkelheit der mosaischen Gesetze und ihrer Strenge. Der Glanz, der auf dem Antlitz des Moses lag, wenn er mit Gott gesprochen hatte, findet eine grossartige Deutung: *splendor vultus eius, id est spiritalis intelligentia in lege*: das Strahlen seines Angesichts, das ist die geistige Einsicht in das Gesetz.<sup>12</sup>

Was uns an den drei verschiedenen Darstellungen des dritten Reiters in New York, Angers und im Escorial so sehr beeindruckt, ist die hoheitsvolle Haltung, die Eleganz der Erscheinung und Bewegung und—besonders in den beiden Miniaturen—die Schönheit des Antlitzes, der *splendor vultus*.

Es würde zu weit führen, hier noch von der Deutung der Einzelheiten zu sprechen, die Berengaudus zum

sammenstellte, als besonders nahe verwandt heran: Cambrai, Bibl., ms. 422 (= D. 5); Metz, Bibl. ms. 38 (= D. 6); Namur, Bibl. du Séminaire, ms. 77 (= D. 8); Paris, Bibl. Nat. ms. lat. 14 410 (siehe oben, Anm. 10, 3). Metz enthält den Berengaudus-Commentar. In Cambrai, dessen Bilder mit Metz fast identisch, wurde später der Kommentar eines nicht identifizierten Autors nachgetragen. E. G. Millar, La miniature anglaise du X<sup>e</sup> au XII<sup>e</sup> siècle (Paris, 1926) S. 72, nennt eine Gruppe engverwandter Apocalypse-Manuskripte: Lambeth 209, Metz, Cambrai; Oxford, Bodleian Library, Canonici 62 (= D. 46), Thompson 55 (= D. 16, jetzt Gulbenkian) und London, Add. 17 333 (siehe oben Anm. 10, 2). Die Miniaturen in Lambeth 209, Metz und Cambrai seien absolument semblables. Das Oxford Ms. suit de près le ms. de Lambeth. Lambeth, Metz, und Oxford bringen alle drei-so ist ausdrücklich festzustellen-den Berengaudus-Kommentar. Die Zusammenstellung bei Delisle, Millar, Planchenault, und Deuchler führt dazu, bei allen dort und in Anm. 10 genannten Apokalypse-HandBeispiel dem Denar, dem Oel und Wein gibt. Es sei nur angedeutet, dass er den Weizen mit der Hl. Schrift gleichsetzt, die Zwei Pfund mit dem Altem und Neuen Testament—Auslegungen also, die im Bilde nicht in Erscheinung treten.

Wenn Theologen und guten Bibelkennern auch immer bekannt war, dass in Christi Gleichnis von den Arbeitern im Weinberg ein Taglohn zu einem Denar vereinbart wird, so stellte doch für die Maler und Wirker, welche die hier betrachteten Werke schufen, ein Denar, ein denier, in ihrem Alltagsleben keineswegs mehr einen Taglohn dar, sondern einen sehr niedrigen Wert, die kleinste ihrer Münzen. Der Denar, der ursprünglich als römische Silbermünze recht hohe Kaufkraft besass, zur Zeit Christi und des Johannes einem Taglohn gleichkam, verlor aber danach, in der Spätantike, gewaltig an Wert. Im merovingisch-karolingischen Reich blieb er erhalten als niedrigste Geldeinheit, und im Spätmittelalter war er in Frankreich als denier, in England als penny, in Deutschland als Pfennig, die kleinste Münze (1 franc = 20 sous; 1 sou = 12 deniers; I pound = 20 shilling; I shilling = 12 pennies). Der Künstler des Mittelalters, der in der Apocalypse las: Zwei Pfund Weizen zu einem Denar musstesofern er dies aus seiner eigenen Zeit heraus auffasste, den Preis für sehr billig halten, also nicht an Teuerung, sondern an ein "goldenes Zeitalter" denken.13

Wer je die Sixtinische Kapelle besuchte, erinnert sich an die schönen Gestalten der Sybillen, die vereint mit den Propheten, Michelangelo dort an die Decke gemalt hat. Die Sybillinischen Weissagungen waren im Mittelalter weit verbreitet, um so mehr, als sie den

schriften eine starke Berengaudus-Tradition anzunehmen, die einen Schlüssel zur Deutung mancher Bilder liefern kann. Bisher wurde aber eine Gruppierung der MS. nach Kommentar- "Familien" nicht versucht.

<sup>12.</sup> Cl. Gardet, L'Apocalypse figurée des Ducs de Savoie (Annecy, 1969) (ms. Excorial E. Vitr. V) Der Kommentar unter der Miniatur lautet zu Apoc. 6, 5; Per equum nigrum doctores legis possumus intelligere. Nigredo enim equi sive obscuritatem legis quam docuerunt sive duritiam designat. Nam et Moyses velamen habebat super faciem suam eo quod splendor vultus eius id est spiritalis intelligentia in lege a lippientibus oculis non posset videri.

<sup>13.</sup> Jean d'Orléans, der 1365–1407 in Paris *peintre du roi* gewesen war—in welchem Amte ihn sein Sohn François ablöste erhielt noch 1420 eine Pension von 6 sous pro Tag. Das wären da der Pariser denier etwas weniger wert war (weil dort 1 sou = 15 deniers) dann 90 deniers pro Tag. B. Prost, *Gaz. des Beaux-Arts* (1892) I, 352.

apocalyptischen Visionen des Johannes in manchem verwandt erschienen. Die Tiburtinische Sybille hatte im 4. Jahrhundert n. Chr. in ihren prophetischen Sprüchen ein gutes Regiment unter einem künftigen König mit solchen Worten angekündigt: Und dann erhebt sich ein Griechenkönig. . . Dieser wird gross sein an Gestalt, herrlich anzusehen, strahlenden Angesichts und in der Linienführung der einzelnen Gliedmassen zierlich gebaut. . . . In jenen Tagen nun wird viel Reichtum herrschen, und die Erde wird im Ueberfluss Frucht geben, so dass ein Scheffel Weizen um einen Denar verkauft wird, ebenso ein Mass Wein oder Oel um einen Denar.<sup>14</sup>

Hier war—wie man sieht—bereits eine Umwertung der Werte eingetreten. Und es war der Sybille selbstverständlich, dass Brotgetreide, Wein und Oel in Fülle bei niedrig bemessenem Preise zu den Segnungen eines guten Regimentes gehören.<sup>15</sup>

Fassen wir zusammen. Die geheimnisvollen prophetischen Visionen, die Johannes in seiner Apocalypse, dem letzten Buch des Neuen Testamentes, niedergelegt hat, fanden im Lauf der Jahrhunderte, wie wir hörten, recht unterschiedliche, ja gegensätzliche Deutungen. Demgemäss bezeugen die bildlichen Darstellungen verschiedenartige Bedeutungsgehalte, das heisst also Unterschiede, die nicht etwa nur formaler oder stilistischer Natur sind.

In der Trierer Apocalypse<sup>16</sup> sieht man die Reiter zwar alle vier auf einer ganzseitigen Miniatur, aber jeden einzeln. Oben trabt der erste, dem ein Engel mit dem Kranz entgegenfliegt, unten kommen die drei übrigen hintereinander. Der Nimbus kennzeichnet jeden von ihnen als den göttlichen Reiter. Etwa 500 Jahre später lässt Dürer alle vier nebeneinander daherbrausen als Weltvernichter, die wir Krieg, Hunger und Tod nennen. Er folgte damit der Tradition jener Kommentatoren, welche die vier Reiter als Unheilbringer und als Inkarnation jener Mächte auffassten, die nach Johannes dem letzten Reiter innewohnen.<sup>17</sup>

Die prächtigen Manuskripte der Cloisters und des Escorial verbergen in den vier herrlichen Reitern unsern Herrn, wie dies vermutlich auch die unvollständig erhaltene Tapisseriefolge in Angers tat, die jedenfalls beim dritten Reiter keinen Zweifel zulässt.

Dürers dritter Reiter erscheint nicht etwa als Personifikation des Hungers, sondern in der Gestalt eines Wucherers, der die Waage der Teuerung schwingt, während er blindlings gemeinsam mit dem Tod die Menschheit überreitet.<sup>18</sup> Demnach hat Dürer den Denar entsprechend dem Gleichnis von den Arbeitern im Weinberg (Matth. 20,2) als hohen Wert, als den eines Taglohns aufgefasst.

Die mittelalterlichen Künstler, die einen Auftraggeber zufriedenstellen mussten, der zuvor Text- und Bildvorlage ausmachte, hatten gebundene Marschroute. Albrecht Dürer aber ging im wahren Sinne selbstherrlich vor, als er die Apocalypse mit Holzschnitten illustrierte, druckte und als Buch verlegte das erste Buch übrigens, das ein Maler selber "unternahm," mit dem Risiko des Druckers und Verlegers. Sein grossartiges Werk wirkte so überwältigend, dass es für die Folgezeit das Vorbild wurde, von dem sich kein Künstler mehr unabhängig machen konnte.

Dürers Holzschnitt hat unsere Vorstellung von den vier Reitern geprägt. Hören wir von ihnen, lesen wir von ihnen, so schwebt uns ihr Bild vor, wie er es geschaffen hat. Auf seiner faszinierenden Wirkung beruht wohl auch das seltsame Phänomen, dass vordürerische Darstellungen der apocalyptischen Reiter so oft in seinem Geiste gedeutet werden, selbst wenn sie wesentlich anders gestaltet sind.

14. E. A. Kurfess, Sybellinische Weissagungen, Urtext und Uebersetzung, s. 1., 1951, 276–277: ita ut tritici modium denario uno venundetur, modium vini denario uno, modium olei denario uno. Vergl. Apoc. 6, 6. Ein Scheffel gleich zwei Pfund.

15. Die Waage der Justitia als Kennzeichen des Guten Regiments ist das Hauptmotiv in dem grossen Fresko (1335/38) von Ambrogio Lorenzetti im Palazzo Pubblico zu Siena. Es geht dort ausdrücklich-gemäss der Unterscheidung des Aristoteles in seiner Nikomachischen Ethik—um zwei Arten der Gerechtigkeit: um Justitia distributiva, die Strafe und Lohn austeilt, sowie um Justitia commutativa, die für gerechte Zuteilung der Güter besorgt ist.

16. Trier, Stadtbibliothek, Ms. 31, fol. 19 v. Siehe F. van der Meer, Majestas Domini. Théophanies de l'Apocalypse dans l'art chrétien (Rom/Paris 1938) Abb. 92.

17. Siehe oben, Anm. 3.

18. L. Grote, Die heimlich offenbarung johannis, p. 7.

# The Third Horseman of the Apocalypse

EVER SINCE THE publication of Dürer's monumental woodcut series of the Apocalypse, in 1498, the Four Horsemen have been called War, Strife, Hunger, and Death. However, in earlier Apocalypse illustrations the interpretation was totally different. The Third Horseman in particular was distinguished by his noble appearance (in The Cloisters Apocalypse the color scheme of his dress even mirrors that of Christ's robes in the same miniature). Based upon the Commentaries of Berengaudus, the Horsemen were seen as aspects of Christ, the Third Horseman as the Lord as Law-giver with the Scales of Justice. One of the reasons for this interpretation is the cry of the Voice: "Bilibris tritici denario, et tres bilibres hordei denario, et vinum et oleum ne laeseris" (Rev. 6:6). The denarius, as in Christ's parable of the workers in the vineyard, was once the payment for a day's work, but had deteriorated to the denier, the smallest coin (penny, Pfennig) by Carolingian times. Therefore, the price of one denarius for two pounds of wheat must have appeared as a blessing of good government, a Golden Age, to medieval miniaturists or tapestry designers. Dürer, however, having in mind the Biblical denarius as the value of a day's payment, presented the Third Horseman as a usurer with the scales of inflation, and thus shaped our image of the Horsemen. This in turn strangely influences our interpretation of pre-Dürer Apocalypse representations. In view of the extraordinary quality of the Cloisters Apocalypse it would be desirable to check the entire set of illustrations against the Berengaudus Commentaries, in order to eliminate further misinterpretations and thus to arrive at a clearer understanding.

Summary by VERA K. OSTOIA

# Romans and Sabines: A Sixteenth-Century Set of Flemish Tapestries

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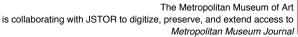
IN 1942 THE METROPOLITAN MUSEUM bought two tapestries at the sale of the contents of 871 Fifth Avenue, then owned by the estate of Harry Payne Whitney.<sup>1</sup> They were described as having been made in Brussels in the late sixteenth century; coats of arms in the upper borders were identified as those of the Barbo family of Venice and a weaver's mark as that of Jan van den Hecke (died 1633/4). One went under the title of The Wealth of Rome: an Allegory (Figure 1); the other clearly shows the Sabine women stopping the battle between their Roman husbands and their Sabine fathers and brothers (Figure 2). The designer wanted to make sure that the viewer knew which side was which; a shield on the left has a two-headed eagle for the Romans and a banner on the right is inscribed "Sabinen" (Figure 3). The materials are wool and silk, with no metal thread. The weave is quite fine, with 19 to 21 warps per inch (7 to 9 per centimeter). Though the colors are predominantly blue, green, and yellow, there is a fairly extensive use of the expensive color, red. The outer guard border is dark blue.

Both tapestries had appeared in a 1910 sale of the same house, 871 Fifth Avenue, and its contents, when the owner was named as the late James Henry Smith.<sup>2</sup> The house had been entirely rebuilt in the late nineteenth century for William C. Whitney by McKim, Mead and White, with the interior decoration carried out by Stanford White.<sup>3</sup> There were many tapestries in the house, probably all acquired by White for his client.

Both sale catalogues state that the Battle tapestry has "been purchased from the Collection of Antiques and Retrospective Arts, exhibited in the Paris Exposition, 1900," but it is in fact the companion piece that can be identified with an item in the tapestry section of the Catalogue Official illustré de l'Exposition Rétrospective de l'Art français, part of the Exposition Universelle of 1900: "no. 3207. Circé, XVI<sup>e</sup> siècle. M. Pierre Chavannes." No. 3208 was "L'enlèvement des Sabines, XVI<sup>e</sup> siècle. M. Marcel Chavannes." The so-called Circé had previously been shown at the Exposition de l'Histoire du Costume of 1874, organized at the Palais de l'Industrie by the Union Central des Beaux-Arts appliqués à l'Industrie. It was listed in the catalogues of this exhibition as lent by M. Chavannes and described as:

Longue et étroite tapisserie de Bruxelles, XVI<sup>e</sup> siècle, représentant des personnages en costume mythologique dans un grand paysage: Ulysse et Circé. La bordure, composée de figures alternant avec des bouquets de fleurs et de fruits séparés par des pilastres, porte des écussons armoirés.

3. Channing Blake, "Stanford White's New York interiors," Antiques 102 (1972) pp. 1060–1067.





<sup>1.</sup> Sale catalogue, Parke-Bernet Galleries, New York, April 29, 1942, nos. 151, 152, illus.

<sup>2.</sup> Sale catalogue, American Art Association, New York, January 18–22, 1910, nos. 390, 391, illus.



#### FIGURE I

The Romans with Their Sabine Wives. Wool and silk tapestry, Flemish (Brussels), 1570–90. The Metropolitan Museum of Art, Rogers Fund, 42.56.1

The description is sufficiently detailed so that the piece can be identified with the so-called Wealth of Rome. Its companion in the 1874 exhibition, also owned by M. Chavannes, was, however, not the Rape of the Sabines of the 1900 show, but "le combat des Romains et des Sabins," certainly the second tapestry now in the Metropolitan Museum.

Any doubt that this history of French ownership and

FIGURE 3 Inscription: Sabinen. Detail of Figure 2

exhibitions is that of the two Metropolitan Museum tapestries, as well as a Rape of the Sabines belonging to the same set, is resolved by a paragraph in Jules Jacquemart, *Histoire du Mobilier* (Paris, 1876), p. 179. The author writes of the difficulty of identifying Italian tapestries and says:

L'embarras augmente encore lorsqu'il s'agit de déterminer l'origine des tapisseries qui ont pû être faites

FIGURE 4 Monogram NvO. Detail of Figure 2

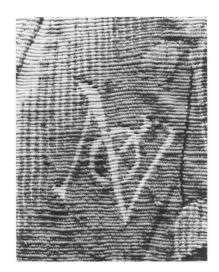




FIGURE 2 The Battle between the Romans and the Sabines. Wool and silk tapestry, Flemish (Brussels), 1570–90. The Metropolitan Museum of Art, Rogers Fund, 42.56.2

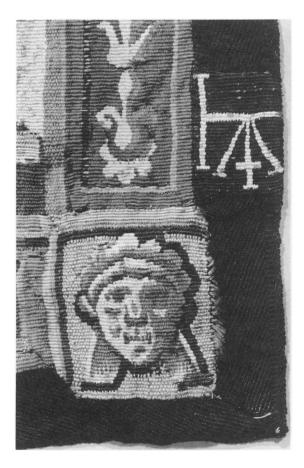
en Italie par les artistes flamands. Celles exposées à l'histoire du costume par M. Chavannes en ont fourni la preuve: les bordures offraient une disposition analogue à ce que nous avons décrit dans l'histoire de Diane,<sup>4</sup> avec certains écarts corroborés par diverses armoires, toutes italiennes. Dans "les Plaisirs champêtres," les groupes dénotaient aussi le gout italien; enfin dans le "Combat des Romains et des Sabines," outre ces indications plus frappantes pour l'esprit que pour les yeux, un guerrier montrait son bouclier inscrit d'un chiffre ou monogramme (Figure 4) tout à fait voisin de ceux des majoliques et dans lequel, un jour, on reconnaîtra la signature d'un artiste. Du reste, le propriétaire protestait vivement contre l'attribution faite à Bruxelles, par quelques personnes, de ces curieuses pièces; il affirmait qu'elles n'avaient jamais porté la marque habituelle aux deux B5 et il nous fournit le calque de ce signe (Figure 5) brodé sur les marges des tentures exposées et mieux conservées encore sur une troisiéme, non envoyée : l'Enlèvement des Sabines.

The study of tapestries was in its infancy in 1876,

4. A set woven by Frans Spierings of Delft, dated 1610. Three pieces are in the Rijksmuseum, Amsterdam. A.M.L.E. Mulder-Erkelens, *Wandtapijten 2* (Amsterdam, 1971) pls. 8–14. The borders are not closely related to those of the Romans and Sabines.

5. The city mark was not obligatory for pieces less than six ells large ("onder de sesse ellen groot") or 13 feet 6 inches. If "large" means "height," the Romans and Sabines tapestries, being only about seven feet high, would not necessarily have had Brussels marks.

FIGURE 5 Weaver's mark: IVH. Detail of Figure 1



and Jacquemart cannot be blamed for considering the set Italian or for describing the weaver's mark as embroidered. He reproduces accurate drawings of it and of the monogram found in the Battle. The Rape of the Sabines, which he said had the best version of the weaver's mark, has not appeared again. Quite possibly its composition resembles a tapestry of the subject in the Rudolph von Fluegge collection (Figure 6), the border of which is so like that of the Battle that it must have been made in the same workshop.<sup>6</sup>

A tapestry in the Cleveland Museum of Art (Figure 7) can be associated with the missing Rape, the Battle, and the so-called Wealth of Rome; it is the same height as the two pieces in the Metropolitan Museum, though

it is not quite as wide, and it has very similar borders, including one of the same coats of arms. It goes under the title of the Garden of the Hesperides,<sup>7</sup> but presum-

6. The same composition with a different border is found on a tapestry sold at Parke-Bernet, January 4, 1951, no. 187, illus. B. C. Kreplin, author of the article on the van den Heckes in Thieme-Becker, *Allgemeines Lexikon der bildenden Künstler* XVII (Leipzig, 1923) p. 203, mentions a Rape of the Sabines in the Chavannes collection as the work of Jan van den Hecke (died 1633/4).

7. Gertrude Underhill and Jean Mailey, "Tapestries," in Catalogue of the John L. Severance Collection (Cleveland, 1942) pp. 50, 59, no. 119. The relationship of this tapestry to the Metropolitan Museum's pieces was pointed out to me by the late Jean-Paul Asselberghs.

#### figure 6

The Rape of the Sabines. Tapestry, Flemish (Brussels), second half xv1 century. Rudolph von Fluegge collection, New York





#### FIGURE 7

The Romans Admiring the Sabine Maidens. Tapestry, Flemish (Brussels), 1570–90. The Cleveland Museum of Art, Bequest of John L. Severance, 1936

ably both it and the Wealth of Rome must represent episodes in the story of the Romans and the Sabines. I believe that the Cleveland tapestry shows the young Roman bachelors gazing longingly at the Sabine maidens and that the New York piece illustrates the happy ending, the Roman husbands lavishing riches upon their Sabine wives, the mothers of their children.

Quite possibly these four tapestries make up a complete set. Their dimensions indicate that they were made to be hung high in a room, probably above wainscoting.<sup>8</sup> The coats of arms in the upper borders suggest that the set was commissioned. The coat that appears on all three identified pieces (Figure 8) shows what is now a gray lion with red tongue and claws holding three white flowers or fruits; the background is red, pink or orange, and blue. These colors are hard

8. Tapestries of the same proportions still hang in the Drawing Room (Lady Shrewsbury's Withdrawing Chamber) at Hardwick Hall; in a 1601 inventory they are described as "six peeces of tapestrie hanginges with personages and my Ladies Armes in them, wayscott under the haininges rownde about, the hanginges Six foote deep." Lindsay Boynton, "The Hardwick Hall Inventory of 1601," *Furniture History* 7 (1971) p. 31.

FIGURE 8 Coat of arms. Detail of Figure 1



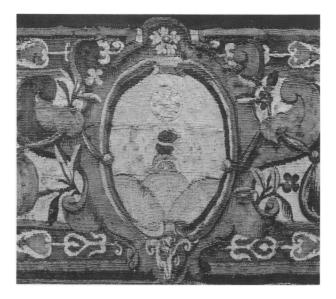


FIGURE 9 Coat of Arms. Detail of Figure 2

FIGURE 10 Boy playing with dog. Detail of Figure 2



to interpret heraldically, but in any case the arms are not those of the Venetian family of Barbo, whose silver lion on a blue ground does not carry anything.<sup>9</sup> They are much closer to those adopted by Pope Sixtus V (1521–90) when he was made a cardinal in 1570. To his family arms of a gold lion on blue, crossed by a red band, he added a branch with three gold pears, held by the lion, in accordance with his father's name, Peretti, and on the band, a three-peaked mountain and a gold star, the arms of his town, Montalto.<sup>10</sup> The almost illegible coat in the center of the upper border of the Battle (Figure 9) may be an attempt to render the mountain and star. The tapestries were certainly not made for Sixtus, as they have no symbols of his rank, but they may have been commissioned by a relative.

The decoration of the borders is in the usual general style of the second half of the sixteenth century in Flanders and has no relation to the central scenes. The children of the Battle, teasing animals (Figure 10), wrestling, riding piggyback and playing hot cockles (Figure 11), might be thought to be the infants who accompany the Sabine women, were it not that they appear on a number of other tapestries; these tapestries

usually also have the same little patterns in compartments on the narrow bands framing the main borders. These patterns are so distinctive that they might be taken as a trademark of the weaver's workshop. They are seen on the Fluegge Rape of the Sabines, which also has the boys riding piggyback, and on a set of five landscapes, some with hunting scenes, in the Victoria and Albert Museum.<sup>11</sup> The latter have the arms of the Contarini family. The dog in the foreground of the Boar Hunt (Figure 12) is not unlike one in the Romans with Their Sabine Wives (Figure 22), and some of the hunters can be compared to figures in the Battle. The weaver's mark is also very close to that on the Battle. Three hunting-scenes with the same borders, but without arms or marks, were in the Mrs. Benjamin Stern sale, American Art Association-Anderson Galleries, New York, April 4-7, 1934, nos. 945-957, one of which was sold again at Parke-Bernet Galleries, January 13, 14, 1950, no. 406, and a similar Bull Hunt was in the Sir John Ramsden sale, Christie's, May 23, 1932, no. 116. Much the same borders appear on a Moses set, of which two pieces were in the Prince Centurione sale, Rome, April 27-29, 1903, nos. 123, 124,12 and a third

<sup>9. &</sup>quot;Barbo o Barbi di Venezia, Baroni dal 1629, e Conti del S.R.I, dal 10 Apr. 1674. Arma: D'azzurro, al leone d'argento, lampassato di rosso; colla banda, o fascia, d'oro, attraversante sul tutto." G. B. di Crollalanza, *Dizionario storico-blasonico delle famiglie* nobili e notabili italiane I (Pisa, 1886) p. 93.

<sup>10.</sup> F. de Broilo, "La patria e la famiglia de Sisto V," Rivista Araldica 3 (1905) p. 390.

<sup>11.</sup> A. F. Kendrick, Catalogue of Tapestries (London, 1920) nos. 31-35.

<sup>12.</sup> The first of these, a Crossing of the Red Sea, is probably the tapestry described by Göbel as in the collection of the Freiherrn von Stumm; he identifies the mark as that of Jan van den Hecke. Heinrich Göbel, *Wandteppiche*, *I. Teil*, *Die Niederlande* I (Leipzig, 1923) p. 355.

FIGURE 11 Boys playing hot cockles. Detail of Figure 2



was on the Paris art market in 1967.<sup>13</sup> Less closely related borders that nevertheless include a small boy pulling a cat's tail, but here nude and in a different pose, are found on a tapestry from a Hannibal set owned by Dario Boccara, Paris, in 1973.

What workshop turned out these competent, though not outstanding or very rich, tapestries? The London Hunts and the Centurione Moses have the Brussels city mark; the Hunts also show versions of the same maker's mark as the Romans with Their Sabine Wives. This mark, though upside down, is certainly to be read: I (for J) VH.<sup>14</sup> The best-known VH among sixteenth-

13. Owned by Vidal. No information about the present location of this tapestry is available.

14. The outer guard border on this tapestry has been replaced by a modern twill fabric, but the mark appears to have been left in its original position.

## FIGURE I2

The Boar Hunt. Tapestry, Flemish (Brussels), second half xv1 century. Victoria and Albert Museum (photo: Crown copyright)



<ul> <li>Marines milief prisées le boffange en banklins le ming andred, et be stonded et bood et find the the prisée le boffange le ming indriver as banklins le source de botoes this be prisée le figures le bond de banklins le ming andred this for prisee le figures ledbarge.</li> <li>A quatre andred is bankleine contest ledbarge.</li> </ul>
apportonneles a don von forte of four maingrood anon

#### FIGURE 13

Page from the list of tapestries stolen from the Antwerp "pand" in 1576. Certificatiebock 38 (1577-78), Stadsarchief, Antwerp

century Brussels weavers is Leo van den Hecke; he was one of the sufferers in the sack of Antwerp by the Spaniards in 1576, losing an Abraham set of seven pieces when the "pand," or sales gallery for tapestries, was looted.<sup>15</sup> These had two marks, one of which was a form of VH (Figure 13). Precisely this mark appears on one of two tapestries of an Abraham set in the castle of Náměšt' in Czechoslovakia<sup>16</sup> and on another Abraham piece, with a similar but not identical border, owned by Dario Boccara, Paris, in 1973.

Later Van den Heckes are known from documents. Jan was head of his guild when he died in 1633/4 and Frans held this position in 1640 and '57; a mark with a large F rising from the VH, found on a number of mid-seventeenth century Brussels tapestries, is undoubtedly his. There is less certainty about other marks on sixteenth-century tapestries that include a large H and a V. The earliest are probably the two pergola tapestries with Ceres and Perseus in the Quirinale Palace, Rome, which are dated 1559; the V is here a large letter below the H and there is a small cross between the arms of the H above the horizontal line.<sup>17</sup> Perhaps this monogram should be read HV, in which case Hector Vueyns, known from a document of 1550 in Salamanca,<sup>18</sup> could be considered. Then there are the tapestries with the IVH mark. This is found on three pieces of an Alexander set of eight in the Austrian National Collection (Series LXXIII);<sup>19</sup> these tapestries are not of high quality, and though the compositions and borders are still in the sixteenth-century style, they may well date from after 1600. Perhaps they were made by the Jan van den Hecke who died in 1633/4, though they do not have the Brussels mark.

There are, however, several IVH tapestries that must have been made in the sixteenth century and so are less likely to be from Jan's workshop. Though the London Hunts have the Brussels mark, there are two grotesques in Azay-le-Rideau and one in the Rijksmuseum, Amsterdam, that have BA (Brabant-Antwerp) as a city mark. A weaver who worked both in Brussels and in Antwerp was Joost van Herzeele; it seems highly probable that the early IVH tapestries are all from his manufactory.<sup>20</sup>

But by far the most interesting feature of the Romans and Sabines set is the monogram on the shield hung on a tree at the far right of the Battle (Figure 4). As Jules Jacquemart foretold almost a hundred years ago, "un jour, on reconnaîtra la signature d'un artiste." I believe that the initials should be read NvO, and that they stand for Nicolas van Orley. A good deal is known of this artist's career, though very little of his work has been positively identified. His father was Gomar van

15. Fernand Donnet, "Les tapisseries de Bruxelles, Enghien et Audenaarde pendant la Furie espagnole (1576)," Annales de la Société d'Archéologie de Bruxelles 8 (1894) p. 451.

16. Jarmila Blažková, "Les marques et signatures trouvées sur les tapisseries flamandes du 16<sup>e</sup> siècle en Tchécoslovaquie," *L'Age d'Or de la Tapisserie flamande, Colloque international* (Brussels, 1969) p. 50. I am indebted to Dr. Blažková for sending me a drawing of this mark.

17. Elisabeth Dhanens, "Twee tapijtwerken uit het bezit van Margareta van Parma," Belgisch Tijdschrift voor Oudheidkunde en Kunstgeschiedenis 20 (1951) p. 235. The author is uncertain whether the mark should be considered that of Leo or of a mid-sixteenthcentury Jan van den Hecke.

18. Göbel, Wandteppiche, p. 329.

19. Ernst Ritter von Birk, "Inventar der im Besitze des allerhöchsten Kaiserhauses befindlicher niederländer Tapeten und Gobelins," Jahrbuch der kunsthistorischen Sammlungen des Allerhöchsten Kaiserhauses 2 (1884) p. 186.

20. Antwerpse Wandtapijten, exhibition catalogue, Het Sterckshof, Deurne, near Antwerp, June-September 1973, nos. 20-22. Dr. Erik Duverger, in his introduction to the catalogue (pp. 21, 27) makes this attribution and includes the Vienna Alexander set among the works of this weaver. Another IVH tapestry, without a city mark, is a Moses and the Burning Bush in the Polish National Collection, exhibited at Pieskowa Skola. "Joost van Herselle tapissier de Bruxelles" sold a set of the Months to the duke of Lorraine in 1574. Dr. Elisabeth Scheicher believes that the mark on two pieces of the Grotesque Months in Vienna can be read as JA and can refer to this weaver, whose family name has been thought to be identical with Arsetiis. Elisabeth Scheicher, "Die Groteskenmonate, eine Tapisserienserie des Kunsthistorischen Museums in Wien," Jahrbuch der Kunsthistorischen Sammlungen in Wien, 69 (1973) pp. 66, 68, 80, 82, 83, fig. 80. Weavers could use more than one mark, even on the same set (Figure 13).

Orley, brother of Bernard, Everard, and Philip, who, with their sons, apparently carried on a tapestry-designing business in Brussels from early in the century until the 1560s; religious persecution then broke up the family. Nicolas went to Stuttgart in 1566 and made cartoons for the weaver Jacob de Carmes, also originally from Brussels, under the patronage of the Duke of Württemberg. Much documentary evidence of his work there has survived, and the birth of a daughter in 1569 is recorded; he moved to Strasbourg in 1570 and died between 1586 and '91. The receipts for his payments in Stuttgart are signed "orNlay." Jacob de Carmes is thought to have brought some cartoons with him from Brussels, especially those for borders; others were made for him and the Duke of Württemberg by Nicolas van Orley, with designs for coats of arms contributed by local artists. The workshop produced thousands of square yards of tapestry, including 139 scenes from the Old Testament; one of these has been identified, a Death of Saul with the Württemberg arms that was on the German art market in 1918 and later in a Swedish private collection.<sup>21</sup> The same composition, without the inscription identifying the subject and without the Württemberg arms, is found in a tapestry in the Kunsthistorisches Museum, Vienna (Figure 14). This is from a set of five pieces with scenes from Exodus and I Samuel (Vienna Series LXXIV); they have a weaver's monogram, BOM, but no city mark. The coat of arms of the Duke of Austria is in the right border and that of the Count of Tyrol in the left. The subject of the piece that repeats the design of the Württemberg Death of Saul is thought to be the battle of

21. Göbel, Wandteppiche, pp. 406, 418, pl. 380; Wandteppiche III. Teil, Die germanischen und slawischen Länder I (Berlin, 1933) pp. 226-232. The tapestry is not included in John Böttiger, Tapisseries à Figures des XVI<sup>e</sup> et XVII<sup>e</sup> Siècles appartenant à des Collections privées de la Suède (Stockholm, 1928) and it is not now known to be in Sweden.

FIGURE 14

The Battle of the Israelites and the Amalekites. Tapestry, Flemish, second half xv1 century, Kunsthistorisches Museum, Vienna (photo: Bildarchiv. d. Öst Nationalbibliothek)





### FIGURE 15

The Death of Goliath. Tapestry, Flemish (Brussels), second half xv1 century. Kunsthistorisches Museum, Vienna (photo: Bildarchiv. d. Öst. Nationalbibliothek)

the Israelites under Saul against the Amalekites (I Samuel 15).<sup>22</sup> A helmeted figure in the middle distance, arrows piercing his shoulder and hip as he plunges forward, has been given a crown in the Württemberg tapestry to identify him as Saul, and his sword has been lengthened so that he appears to be falling on it (I Samuel 31).<sup>23</sup> The weaver's monogram on this Vienna set has been published as that of Jacob de Carmes.<sup>24</sup> This weaver died in 1574; the two coats of arms on the Vienna set indicate that it was made between 1564 and '94, when the Duchy of Austria and the County of Tyrol were held by the same man.

The Battle of the Israelites and the Amalekites, the nearly identical Death of Saul with the Württemberg arms, and the Battle between the Romans and the Sabines have stylistic similarities, strengthening the attribution of both designs to Nicolas van Orley. Even more obvious resemblances can be found between a Death of Goliath in Vienna (Figure 15) and the Battle

22. Von Birk, "Inventar," pp. 186, 187, no. LXXIV, 4. Elisabeth Mahl, "Die Romulus und Remus-Folgen der Tapisseriensammlung des Kunsthistorischen Museums," Jahrbuch der Kunsthistorischen Sammlungen in Wien 61 (1965) p. 29, fig. 23. The latter author accepts the attribution of the design to Nicolas van Orley, first made by Heinrich Göbel, "Jacob und Moritz de Carmes," Monatshefte für Kunstwissenschaft 12 (1919) pp. 226-236.

23. Saul was "sore wounded of the archers" in a battle against the Philistines and asked his armor-bearer to kill him; the armorbearer refused and "Saul took a sword, and fell upon it." It is clear that this could not have happened in the heat of the battle, as shown on the Württemberg tapestry; the Vienna piece must represent the earlier version of the design.

24. Göbel, *Wandteppiche*, p. 5 of reproductions of weavers' marks. The identification seems unlikely.

scenes.<sup>25</sup> The Death of Goliath is from a set of twentyfive pieces with scenes from the Old Testament (Vienna Series LXVII, LXVIII, LXIX, CXIII). The borders are the same as those of the Death of Saul, except that there are no coats of arms. They have the Brussels city-mark and a weaver's monogram, usually read as NDW.<sup>26</sup>

Many other Brussels tapestries with battle scenes use

25. This relationship was first noticed and the attribution of the Battle of the Romans and Sabines to Nicolas van Orley was first suggested by Dr. Scheicher-Mahl in a private communication, for which I express my thanks.

26. Marthe Crick-Kuntziger in a review of Marjan Morelowski, Nieznany karton do arosow "Potopu" a Coxyen i Tons (Kracow, 1930), Bulletin des Musées royaux d'Art et d'Histoire, 3rd series, 2 (1930) pp. 167–171, first described all the four Vienna Series as a single set and identified a cartoon for one of them, then owned by the king of Spain; she suggested that it was possibly by Raphaël Coxcie (1540–1616), son of Michiel. The monogram NDW has been much discussed; E. Duverger, "Tapijtwerk uit het atelier van Frans Geubels," L'Age d'Or de la Tapisserie flamande, Colloque international (Brussels, 1969) pp. 98, 99, 142 gives a list of the tapestries on what might be called the same vocabulary.<sup>27</sup> Scipio Rescuing his Father at the Battle of the Ticinus, in the Museum of Fine Arts, Boston (Figure 16),<sup>28</sup> includes the supine man who lies in the lower left corner of the Battle between the Romans and the Sabines, as well as the man seen from behind, rushing forward just above him on the same tapestry, and the horse throwing up its head that also appears on the left in the

which it is found, sometimes combined with the mark of Frans Geubels. A.M.L.E. Mulder-Erkelens, *Wandtapijten* 2, p. 4, suggests that it should be read WND and that it stands for Weduwe van den eNDe, a female member of the Geubels family. The huge Vienna set is believed by Elisabeth Scheicher-Mahl to be later Brussels weavings of Jacob de Carmes' Stuttgart tapestries of 1566-70 (Elisabeth Mahl, "Die Romulus und Remus-Folgen," p. 29). If this is correct, all the designs might well be by Nicolas van Orley.

27. Göbel, *Wandteppiche* p. 418, speaking of the Württemberg Death of Saul, says, "Es fällt durchaus nicht schwer, Behänge dutzendweise zu benennen, die den gleichen Stilcharacter tragen."

28. Adolph S. Cavallo, Tapestries of Europe and of Colonial Peru in the Museum of Fine Arts, Boston (Boston, 1967) no. 29.

### FIGURE 16

Scipio Rescuing His Father at the Battle of Ticinus. Tapestry, Flemish (Brussels), 1550–1625. Courtesy Museum of Fine Arts, Boston, Richard Black Sewall Fund



FIGURE 17 The Battle of Philippi. Tapestry, Flemish (Brussels), second half xv1 century. Almudaina Palace, Palma de Majorca (photo: Patrimonio Nacional, Laboratorio Fotografico)



Death of Goliath. The horse and the supine man, now its fallen rider, occur in the Battle of Philippi (Figure 17) from a set of the History of Octavius in the Almudaina Palace, Palma de Majorca.<sup>29</sup> Similar figures

29. Paulina Junquera, "Tapices espagñoles y flamencos del Palacio de la Almudaina," *Reales Sitios* 7 (1970) p. 29. These tapestries have a weaver's mark H.

30. Michael Settler, "Das Trojanische Pferd: ein Brüsseler Wandteppich," Artes Minores, Festschirft für Werner Abegg (Bern, 1973) pp. 229–262, figs. 1–6. Five tapestries with scenes from the Trojan War related to the piece in the Abegg Foundation are described and illustrated; several stylistically similar pieces with other subjects are also discussed, including the Battle of the Israelites and the Amalekites, and the whole group is associated with Nicolas van Orley. The Abegg tapestry has the word "Grecia" are found on some Trojan War scenes from several sets, such as a Trojan Horse in the Abegg Foundation, Bern (Figure 18),<sup>30</sup> a Rape of Helen in the collection of Count Magnus Brahe, Sweden, in 1924,<sup>31</sup> and a

inscribed on a banner, like the "Sabinen" in Figure 2. Dr. Stettler suggests (p. 257) that the WND monogram on some pieces of the Vienna David set should be read as NVO and refers to the artist. It appears, however, on the outer guard borders of the tapestries, the usual place for a weaver's mark, not a designer's.

31. Böttiger, *Tapisseries*, pp. 27, 28, no. 20. With the same weaver's mark (reversed) as Vienna series LXVII, LXVIII, LXIX and CXIII. The design of an Alexander tapestry with an inscription in German in the same collection (no. 10) is tentatively attributed to Nicolas van Orley.

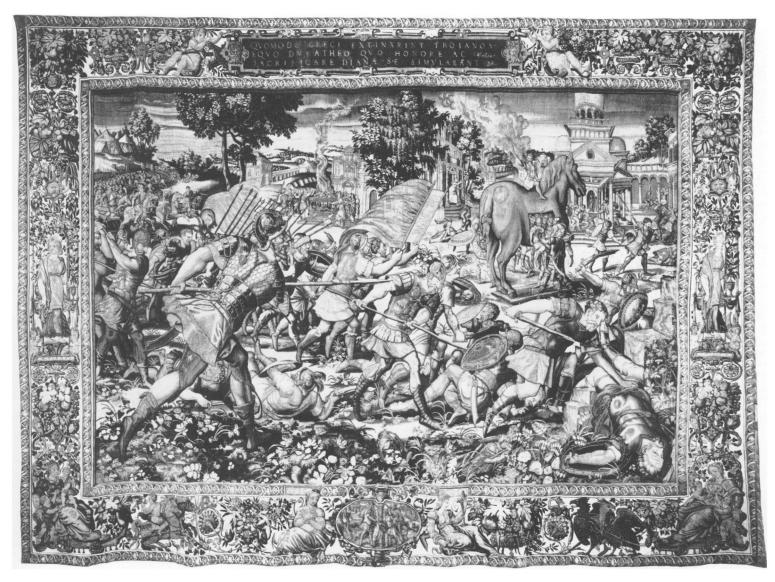


FIGURE 18 The Trojan Horse. Tapestry, Flemish (Brussels), 1550–75. Abegg-Stiftung, Bern

Battle of the Ships from the Barberini and Ffoulke collections (one of a set of four) sold at Parke-Bernet with the Emil Winter collection, January 15–17, 1942, and again at the Galerie Charpentier, Paris, March 9, 1954, no. 119. This last tapestry has the mark of the

#### 32. Göbel, Wandteppiche, p. 364.

33. Stettler, "Trojanische Pferd," fig. 18, right. Many of these gestures and attitudes are reflections of older works, presumably adapted from prints. Thus, the horse would seem to be derived eventually from a classical statue on the Piazza Quirinale (Hessel Miedema, "Het voorbeeldt niet te by te hebben," *Miscellanea I.Q.*  weaver Jan Raes, who is known to have made a Troy set in 1614.<sup>32</sup> Another early seventeenth-century echo of the style (including the advancing man and the horse with raised head) is found in a piece of the already mentioned Alexander set in Vienna (Figure 19).<sup>33</sup>

van Regteren Altena [Amsterdam, 1969] p. 291, fig. 5). The poses of the warriors can be compared with figures in the ceiling of the Sala di Troia of the Palazzo Ducale, Mantua, designed by Giulio Romano, and with Raphael's *Battle at the Milvian Bridge* in the Vatican. A particularly conspicuous recurring motif is the warrior with legs apart, who grasps his spear with both hands and swings his arms to one side, as if he were about to drive off from the first tee while keeping his eye on the ball; his intended victim lies on the ground at his feet and is usually seen from behind, raising himself on one arm, and with one leg twisted under him.<sup>34</sup> The two figures appear in the Battle between the Ro-

34. For the source of the latter figure, see Helmut Nickel, "The Battle of the Crescent," *The Metropolitan Museum of Art Bulletin* 24 (1965–66) pp. 123, 124, figs. 19–21.

mans and Sabines, slightly to the right of the center, on the Death of Saul and the Battle of the Israelites and the Amalekites (Figure 14), and on a print illustrating one of the virtues of Scipio Africanus (Figure 20).<sup>35</sup> The inscription on this print includes the words "Gerar d. Jode excud." Gerard de Jode, who may have been only the publisher, not the engraver, died in 1591. Several other figures in the print, such as the supine

35. Catálogo de la Colleción de Grabados de la Biblioteca de El Escorial," Anales y Boletín de los Museos de Arte de Barcelona 16 (1963-64) p. 194, no. 50.

### FIGURE 19

The Battle of Alexander and Porus. Tapestry, Flemish (Brussels), late xv1 century. Kunsthistorisches Museum, Vienna (photo: Bildarchiv d. Öst. Nationalbibliothek)



man on the far right, are also close to participants in the Battle between the Romans and Sabines. Possibly Nicolas van Orley was copying the print or he may himself have made the drawing from which the print was executed; in this case, he was not a painstaking draftsman, as there are several left-handed warriors.

Can the design of the gentler incidents in the Romans and Sabines set also be attributed to Nicolas van Orley? The scenes are so vapid and lacking in character that significant parallels are hard to find. The man standing to the right of the open chest in the Romans with Their Sabine Wives, and the one closest to the Sabine girls in the Cleveland tapestry (Figure 7) might be compared to Octavius in the Almudaina tapestry (Figure 21). Three Alexander tapestries owned by Radiotelevisione Italiana, Rome, include a battle scene of the Nicolas van Orley type and two peaceful subjects with much the same bland insipidity as the quiet scenes of the Romans and Sabines.<sup>36</sup> The de-

36. Mercedes Ferrero Viale, "Tapisseries Flamandes inédites en Italie," Artes Textiles 7 (1971) pp. 47-51.

FIGURE 20

Strenuitas. Print by Gerard de Jode. Library of the Escorial, Spain





### FIGURE 2I

Octavius Refusing the Insignia of Royalty. Tapestry, Flemish (Brussels), second half xv1 century. Almudaina Palace, Palma de Majorca (photo: Patrimonio Nacional, Laboratorio Fotografico)

signer of the latter has made one outright steal, taking the large building and formal garden in the background of the Romans with their Sabine Wives (Figure 22) from a print by Vredeman de Vries (Figure 23), first published in 1560. The music-making trio is found again in a tapestry from a History of Romulus set in the Cinquantenaire Museum, Brussels (Figure 24);<sup>37</sup> the battlescenes from this set show the characteristics associated with Nicolas van Orley.

37. Marthe Crick-Kuntziger, "La Tenture de l'Histoire de Romulus d'Antoine Leyniers," *Bulletin des Musées Royaux d'Art et d'Histoire*, 4th series, 20 (1948) p. 61, fig. 7. The weaver was active between 1552 and '71. A replica of this tapestry with a different border was in the Henry W. Poor sale, American Art Association, New York, April 21-24, 1909, no. 201.

FIGURE 22 Palace, musicians, and dogs. Detail of Figure 1





### FIGURE 23

Palace. Engraving, plate 47 of Vredeman de Vries, Variae Architecturae Formae, Antwerp, 1601. The Metropolitan Museum of Art, Harris Brisbane Dick Fund, 1946



### FIGURE 24

Romulus and Hersilia. Tapestry, Flemish (Brussels), third quarter xv1 century. Musées Royaux d'Art et d'Histoire, Brussels (photo: ACL, Bruxelles) But how much of this fairly extensive oeuvre can be legitimately attributed to this designer? The van Orleys were a family of artists, only one of whom, Bernard (about 1488–1541), achieved any prominence. Of his brothers, sons, and nephews scarcely anything is known unless they appear in the records of foreign cities, as Nicolas does in Stuttgart and another nephew, Everard, in Frankenthal.<sup>38</sup> The subjects of the tapestries Nicolas designed for the Duke of Württemberg, all scenes from the Old Testament, include, of course, many peaceful incidents, but unless their compositions are reflected in the Vienna Old Testament series, there is no way of knowing what they looked like. The date

38. Göbel, Wandteppiche III, p. 8.

of the design of the Battle between the Romans and the Sabines must be before 1566, when Nicolas van Orley left Brussels; the date of the weaving of the set must be after 1570, when Sixtus V adopted the arms that are so similar to those on the tapestry. Joos van Herzeele, called on to provide four tapestries with the story of the Romans and Sabines, may have used a cartoon of the battle that he had on hand and commissioned designs for the other subjects from another artist. In any case, we can be grateful that the weaver was conscientious enough to reproduce Nicolas' monogram to provide the name of an artist for at least one of the tapestry designs.

# NOTES

# Two Falcon Devices of the Strozzi: An Attempt at Interpretation

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AMONG THE VARIOUS PIECES of Florentine furniture in the Museum's collections credited with having come from the Palazzo Strozzi, two—a three-legged stool, *sgabello* (Figure 1),<sup>1</sup> and a painted marriage chest, *cassone*<sup>2</sup>—bear exceptionally intriguing heraldic devices.

The sgabello bears on top of its backrest a circular medallion carved in relief with the Strozzi arms—or, a fesse gules charged with three crescents argent<sup>3</sup>—on a tournament targe, surmounted by a jousting helm crested with a wreath on which is standing a falcon preening its right wing (Figure 2). The punch-dotted background of the medallion is enlivened by the richly dagged helmet mantlings and by scattered small feathers plucked out in the preening. The frame of the medallion is encircled by a row of close-set crescents—

1. The sgabello was bought from the Palazzo Strozzi by the Viennese collector Albert Figdor, from whose collection it came to the Metropolitan Museum in 1930. Joseph Breck, "Two Chairs from the Figdor Collection," *The Metropolitan Museum of Art Bulletin* 25 (1930) pp. 239–242, ill.; sales catalogue, "*Die Sammlung Dr. Albert Figdor, Wien*" (Vienna, 1930) II, pt. 1, no. 657, ill. It has been published in practically all the standard works on Renaissance furniture.

2. The cassone was acquired from the Palazzo Strozzi by Stefano Bardini, Florence, from whose collection it came to the Metropolitan Museum in 1913. Paul Schubring, *Cassoni* (Leipzig, 1915) Tafelband, pls. LXV-LXVII, Textband, p. 283 (lists it as still in the Bardini collection). Elizabeth Gardner and Federico Zeri, *Italian Paintings: Florentine School* (New York, 1971) pp. 100-103, ill. The cassone is attributed to the workshop of Marco del Buono Giamberti (1042-89) and Apollonio di Giovanni (1417-65).

3. G. B. di Crollalanza, Dizionario storico-blasonico (Pisa, 1886)

originally twenty on either side—adapted from the main charge of the shield. On the reverse of the medallion the Strozzi shield is repeated, but it is here of chanfron shape, a heraldic form much favored in Italy (Figure 3).

The cassone (Figure 4) has painted on its front panel a many-figured representation of the conquest of Trebizond by Sultan Muhammed II (1461),<sup>4</sup> but on either side panel there is an *impresa* incised with great flourish into the gilded gesso and surrounded by a dark painted background. This impresa consists of a curled scroll, inscribed with the nearly obliterated letters M.E.Z.Z.E, arranged around a large caltrap turned upside down, on which is perched a jessed and belled falcon (Figure 5).

II, p. 568. Johann Siebmachers Grosses und Allgemeines Wappenbuch (Nürnberg, 1894), "Die Europäischen Fürstengeschlechter," I, 3. Abt C, pl. 361, p. 254. Howel Wills, Florentine Heraldry (London, 1900) p. 176, gives the charges as "three half-moons increscent argent," Vittorio Spreti, Enciclopedia Storico-Nobiliare Italiana (Bologna, 1928-35) VI, pp. 491-497, ill.

4. It is not known why this event was chosen for the decoration of the chest and its presumed (lost) companion piece. The account book of Marco del Buono and Apollonio di Giovanni (Florence, Biblioteca nazionale, Mss. 37.305 Strozziano), covering the period 1446–63, lists for the years 1462–63 a commission of one pair of cassoni as dowry chests for Caterina, daughter of Benedetto di Marco degli Strozzi, who was to marry Jacopo degli Spini in 1465. The price—37 florins—is mentioned, but the subject matter of the decoration is not. (Information regarding the commission comes from a letter, 1967, by E. Callmann to the Museum's Department of European Paintings.)

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FIGURE 1 Sgabello from the Palazzo Strozzi, Florence, before 1491. Fletcher Fund, 30.93.2

FIGURE 2 Medallion with arms of Filippo Strozzion sgabello

FIGURE 3 Reverse of medallion



FIGURE 4 Cassone from the Palazzo Strozzi, after 1461. Kennedy Fund, 14.39

FIGURE 5 Impresa on side panel of cassone

The arms on the sgabello are similar to those on the reverse of a medal of Filippo Strozzi (1426–91), attributed to Niccolo Fiorentino and thought to have been made on the occasion of the foundation of the Palazzo Strozzi (1489),<sup>5</sup> where it is recorded that certain medals were buried on August 6, 1489. On the medal, however, the bird is sitting on the branch of a tree from which the armorial shield—a targe of the same shape as that on the sgabello—is suspended.<sup>6</sup> In both these representations the falcons are shown as preening, with

5. Pompeo Litta, Famiglie Celebri Italiane (Milan, 1819–61) XI, Dispensa 68, fig. 8. George Francis Hill, Corpus of Italian Medals of the Renaissance (London, 1930) no. 1018, ill.

6. Terisio Pignatti, Nobili Italiani del Rinascimento (Milan, 1961) p. 57, illustrates a similar chair, wrongly described as belonging to the Metropolitan Museum, which shows a medallion with the falcon sitting in the tree from which the shield is hanging.



feathers flying all around them. These flying feathers, strikingly decorative as they are, are actually a violation of the heraldic rule that a crest should be of a shape that could be worn firmly affixed to an actual helmet. For this reason the crest in the sagabello's medallion should be more properly called an impresa adapted as a crest.

An impresa was a personal badge, chosen by its owner-often deliberately obscure in its meaning, but always with deeper significance-to be used whenever the hereditary family arms were felt to be not distinctive enough or too ceremonious. Preferably, an impresa should contain a pictorial symbol and a word device, the motto. Sometimes the latter could be expressed as a rebus, as was the case with the impresa of Pietro de' Medici (d. 1470), which consisted of a scroll with the word SEMPER and a falcon grasping a diamond ring, to be read as "Sempre fa-l-con Di(o) amante," or that of Lorenzo il Magnifico (d. 1492), which combined a diamond ring, a scroll with the word SEMPER, and three ostrich feathers of white, green, and red to indicate that, where the love of God is present, the virtues Faith, Hope, and Charity were always to be found.7

It seems that there was a rebus hidden in Filippo Strozzi's falcon device. Not only is the falcon itself a canting device<sup>8</sup>—strozziere meaning "falconer"—but the words for "feather"—penna—and for "to molt, to mew"—mudare—are close enough to pena (sorrow, misfortune) and mutare (to change, to remove) to afford acceptable plays upon words. An impresa suggesting the changing or removing of sorrow or misfortune would have been very appropriate for Filippo Strozzi, who, as a political enemy of the Medici, had been banished from Florence, but was later permitted to return.

A similar rebus may be represented by the impresa on the cassone, since the word for caltrap—*tribolo*—is ambiguous too, and can mean "tribulations, trouble." Taking into account that the tribolo is reversed, the pictorial device could express tribulations changed and rendered harmless.<sup>9</sup>

The letters MEZZE on the scroll are most likely a slogan, similar to the "Palle, palle" shouted in the streets by the partisans of the Medici faction. "Palle" (balls) referred to the six roundels of the Medici arms, and "mezze" is clearly derived from the three crescents or half-moons—mezzelune—in the Strozzi arms. Since "palle" had the same second meaning that "balls" would have in English, it can be suspected that "mezze" also had a second meaning, derived from mezzare (to wither, to grow flaggy), when yelled at political opponents.

7. Bury Palliser, Historic Devices, Badges, and War-Cries (London, 1870) pp. 169–171, ill., pp. 356–368, ill. Ostrich feathers were an endurance symbol (that is, a virtue symbol) similar to the diamond ring, because they stay unruffled, no matter how hard the wind blows. W. R. Staehelin "Der Vogel Strauss in der Heraldik," Archives Héraldiques Suisses 39 (1925) pp. 49–57. Helmut Nickel "Böhmische Prunkpfeilspitzen," Acta Musei Nationalis Pragae, Series A.—Historia, XXIII (1969) no. 3, pp. 159–160. Helmut Nickel, "Addenda to 'Ceremonial Arrowheads from Bohemia,'" Metropolitan Museum Journal 4 (1971) pp. 180–181.

8. Crollalanza gives the Strozzi crest as a falcon "al naturale." Litta illustrates the tombs of Carlo Strozzi (S. Giovanni de' Fiorentini, Naples) and of Leone and Lorenzo Strozzi (S. Andrea della Valle, Rome) both of which display arms with falcon crests, but at the head of the entry "Strozzi di Firenze" he illustrates the Strozzi arms with a helmet bearing as a crest a white dog, crested with black and yellow plumes and with a golden collar inscribed *Lealtà*. Spreti gives the collared dog as the crest of the Strozzis. Both crests were canting devices, the falcon referring to *strozziere*, the falconer, and the collared dog to *strozza*, throat or gullet.

9. It is tempting to see a suggestion of this cassone being one of the pair made for the wedding of Caterina Strozzi and Jacopo degli Spini in the appearance of the reversed caltrap, the spikes of which might be interpreted as *spine*, thorns, to be construed as a pun on the groom's name.

## Grétry Encore: A Portrait Drawing by François Dumont

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OF THE FOREIGN COMPOSERS who dominated French opera throughout the later eighteenth century, the Belgian Grétry was one of the most celebrated. An indication of the high success he enjoyed is the number of his portraits, ranging from Moreau le Jeune to Isabey.<sup>1</sup> The grandest image of Grétry is the statue by Jean-Baptiste Stouf made for the Opéra-Comique in Paris between 1804 and 1809, and acquired by the Metropolitan Museum in 1969.<sup>2</sup> The Drawings Department has lately acquired a small, handsome likeness of exactly the same period, a charcoal portrait by the miniaturist François Dumont, signed and dated 1808 (Figure 1).<sup>3</sup>

The circular portrait of the aging composer (he was sixty-seven in 1808) leans against a stone wall, on the

1. See Ch. Radoux-Rogier, *La maison de Grétry: Suivez le guide!* (Liège, 1946) p. 4, for a list of portraits. Grétry's birthplace in Liège houses an enormous iconography of the composer.

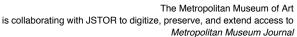
2. James David Draper, "A Statue of the Composer Grétry by Jean-Baptiste Stouf," The Metropolitan Museum of Art Bulletin (May 1970) pp. 377-387. Whereas I noted there (p. 386) that Grétry's nephew, Louis-Victor Flamand, "related that the composer had sent him to the sculptor's studio in the Sorbonne with a bust by 'Quanon,' from which Stouf could capture the features, but there is no trace of this 'Quanon,' " it is clear to me now, thanks to a recent article, that he was certainly Jean-Louis Couasnon, a follower of Houdon active between 1777 and 1802, whose name was spelled phonetically by the Flemish nephew. See Michèle Beaulieu, "Le buste d'Emilie Brongniart par J.-L. Couasnon," La revue du Louvre et des Musées de France XXIV (1974), pp. 105-108. Stouf's reliance on a bust by another sculptor was not unusual artistic procedure and does not lessen our sense of the immediacy of Stouf's head, even when we know further from Grétry himself that Stouf was satisfied with a single sitting. To be exact, Grétry's

corner of a stone ledge. On the right are a mask and a rifle. Tucked under the portrait at left are a sheet of music and a list whose legible titles are "Isabelle" (just discernible in the top line), "Silvain," and "Lucile." Most amusingly, the signature at left in the shadow of the wall is cut off by the edge of the portrait, so that it reads "F Dumo," the rest being implied.

The paper was folded over a piece of board, recently removed. On the board is a later inscription in pencil, with the query: "Portrait de Grétry ? ou Monsigny ? Sedaine ?" In fact, the list under the portrait leaves no room for doubt. *Isabelle et Gertrude* (1767), *Lucile* (1769), and *Silvain* (1770) are early operas by Grétry. The rifle is the only puzzling attribute. It may refer to the pleasures of the hunt and thus to Grétry's retire-

nephew collected, rather than delivered, the bust and afterward got it as a present. His description may fascinate those interested in the uses of portraits: "Stouff, sculpteur, . . . était chargé, par M. le chevalier de Livry, d'exécuter en marbre la statue de l'auteur de *Sylvain*; à cet effet, Grétry lui confia un de ses bustes (celui de Quanon), qui, avec ses traits, rappelle la bonté qui y regnait. Un jour qu'il vint me demander à dîner, il me dit: 'Mon fils, je vais te charger d'une commission; tu iras avec un porteur chez Stouff, à la Sorbonne; tu le prieras de ma part de te remettre le buste que je lui ai prêté pour lui servir de modèle.' Je lui demandai s'il fallait le faire porter chez lui, 'non, me dit-il, tu le garderas chez toi, je te dirai ce que j'en ferai.' Dès le lendemain ma commission fut faite, le porteur plaça le buste sur une colonne dans mon salon." (From the *Mémoires* of Louis-Victor Flamand, cited in Edouard G. J. Gregoir, *Grétry* [Antwerp, 1883] p. 214.)

3. Charcoal, stumped and heightened with white chalk, inscriptions in brown ink, on white wove paper,  $5\frac{1}{4} \times 3\frac{1}{6}$  inches (13.3 x 9.8 cm.).





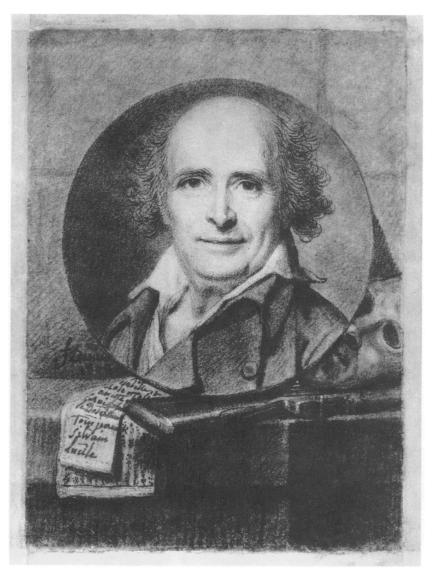


FIGURE 1 André-Ernest-Modeste Grétry (1741–1813) by François Dumont (1751–1831). Drawing, signed and dated 1808. The Metropolitan Museum of Art, gift of Mr. and Mrs. Carl Selden, 1972.227

ment to the country. Around 1798, he had bought the Hermitage of Jean-Jacques Rousseau and devoted himself to philosophy and musical theory.

It could be thought surprising that the precisely contemporary portraits by Dumont and Stouf (Figure 2) represent the same man. Dumont melts Stouf's hawklike stare into a genial, relaxed smile. Dumont's sitter is clearly balding, whereas Stouf shows Grétry with the full head of hair seen in all his official portraits. Both wear the same open shirt, a conventional intimation of artistic inspiration.

In their very different ways, the two artists responded to the charm of the composer-philosopher. In an essay, "Sur les portraits," of his *Réflexions d'un solitaire*, Grétry pondered the recognizability of portraits and told the following story:

... un assez mauvais peintre, qui louchoit, a peint toute ma famille, et nous louchons tous; mais ce qu'il y a de plaisant, c'est que moi, le seul qui ai un oeil qui tire un peu à droite, je suis celui de tous qui louche le moins dans ces peintures. Seroit-ce que deux louches qui se regardent se rectifient? Non, car j'ai vu que le peintre louchoit; c'est le common mérite des peintres médiocres.<sup>4</sup>

4. A.-E.-M. Grétry, *Réflexions d'un solitaire* (Paris-Brussels, 1922) IV, p. 55.

Neither eye in the head of Stouf's statue pulls to the right, but it is perhaps reasonable to see a squint in the close-knit brows. Dumont, at once more flattering and more intimate, as becomes the miniaturist, creates a mood that is friendly and still quite *dix-huitième*, much in keeping with the personality of the sitter and, one might guess, that of the artist.

It was standard for miniaturists, the portrait photographers of their day, to focus on heads strictly frontally, showing the eyes wide open. During the *ancien régime*, Dumont knew real favor as the court miniaturist of Marie-Antoinette. A watercolor in the Louvre of Marie-Antoinette with her children is a stylish example of his wide-eyed manner at that time. His watercolor of Cherubini (1792) in the Louvre, while more elegant, is less successful compositionally.<sup>5</sup>

In 1793, Dumont was imprisoned in the Abbaye for supposed royalist sympathies. He exhibited regularly at the Salon, however, and resumed his position as court miniaturist during the Restoration. But like that of many other artists who were highly favored in the ancien régime, his later work, from the Revolution to his death in 1831, is not well known. The portrait aux trois crayons of M. Parmentier, dated 1812,6 where Dumont used the same feathery strokes in the hair as in the Grétry, is nevertheless a hard work. The spirited characterization of Grétry is more reminiscent of certain of Dumont's miniatures of the 1790s.7 It is an altogether happy exception to that hardness in the late style, described by Henri Bouchot: "Ses portraits auront dorénavant un compassé, une raideur pénible, qui ira s'accentuant d'une journée à l'autre."8

### FIGURE 2

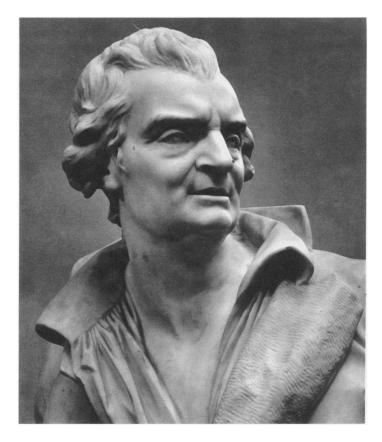
Statue of Grétry (detail) by Jean-Baptiste Stouf. Marble, 1804–09. The Metropolitan Museum of Art, purchase, funds given by The Josephine Bay Paul and C. Michael Paul Foundation, Inc., and Charles Ulrick and Josephine Bay Foundation, Inc., 69.77

5. Catalogue of the exhibition Das Aquarell, 1400-1950 (Munich, Haus der Kunst, 1972-73) nos. 98, 99.

6. Henry de Chennevières, "François Dumont miniaturiste de la reine Marie-Antoinette," *Gazette des Beaux-Arts*, XXIX (1903) p. 189. It belonged to Dr. Henry Gillet of Melun, most of whose important Dumont collection was given to the Louvre.

7. For example, the fine one of General Gobert, dated "l'an 3ème" (1795), sold at Christie's, November 5, 1968, no. 105.

8. Henri Bouchot, La miniature française, 1750–1825 (Paris, 1907) p. 101.



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