

A DECORATED BREASTPLATE FROM HASANLU, IRAN

UNIVERSITY MUSEUM MONOGRAPHS

This first volume of the Hasanlu Special Studies from the Near Eastern Section of the University Museum, University of Pennsylvania, continues the museum's program of scholarly publication. Monographs, papers and catalogues in preparation are included in the list at the back of this volume.

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The breastplate, HAS 74-241

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HASANLU SPECIAL STUDIES Robert H. Dyson, Jr., General Editor

VOLUME I

A DECORATED BREASTPLATE FROM HASANLU, IRAN

Type, Style, and Context of an Equestrian Ornament



Irene J. Winter

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for

EDITH PORADA

without whose work on the gold bowl from Hasanlu and on ancient Iranian art in general the present study could not have been written

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ABBREVIATIONS

AJA: American Journal of Archaeology AMI: Archäologische Mitteilungen aus Iran BMFA: Bulletin of the Museum of Fine Arts BMMA: The Metropolitan Museum of Art Bulletin ILN: Illustrated London News JCS: Journal of Cuneiform Studies JNES: Journal of Near Eastern Studies MDAI: Mitteilungen des deutschen archäologischen Instituts MMJ: The Metropolitan Museum Journal PPK: Propyläen Kunstgeschichte

FOREWORD

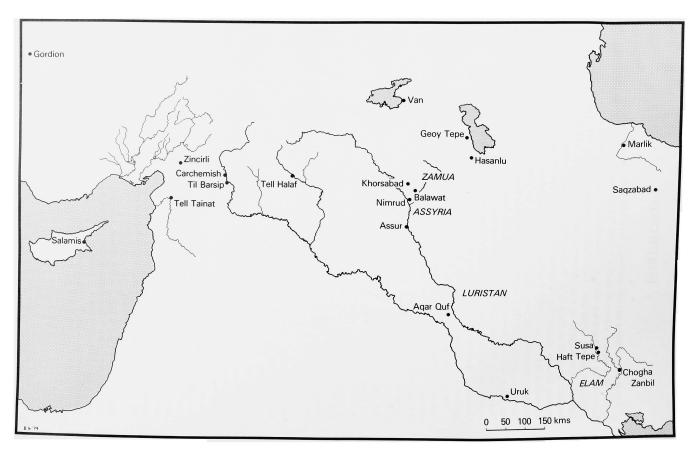
The Hasanlu Project was initiated following a brief visit to Azerbaijan in 1956 in the course of a general survey of northern Iran. We selected the Solduz valley as the location for a long-range study of chronological sequence, cultural change and settlement pattern, trade and technological development. The largest settlement, Hasanlu, was intended as a major control over the sequence, with excavations in smaller sites (such as Hajji Firuz, Dalma, Pisdeli, Agrab, Dinkha and Se Girdan) to provide broader samples for the earlier periods. The sequence developed runs from about 6000 B.C. to about 250 B.C. with scattered information on later historic periods. Work at Hasanlu itself was carried out through ten seasons from 1957 to 1977. Initiated as a project of The University Museum of the University of Pennsylvania and the Archaeological Service of Iran, The Hasanlu Project was joined in 1959 by The Metropolitan Museum of Art. Additional and significant financial support has come from the Kevorkian Fund and the Ford Foundation (through its training grant to the University Museum). These and other details of the Project will be presented in the introductory volume of the *Hasanlu Excavation Reports*.

The present volume represents the first in a series of Hasanlu Special Studies. The materials recovered are so varied and of such interest that their presentation in detail cannot be accomplished in the context of site reports alone. Therefore, in order to provide additional opportunity for their presentation and analysis by specialists, we are initiating this open-ended series. Since the most complex items and the largest volume come largely from period IV at the site, these studies will primarily focus on that material.

Period IV itself is complex stratigraphically and architecturally and involves a destructive fire early in the period followed by a major reconstruction (IVB) and a major destruction, probably at the hands of the Urartian King Menna, just prior to 800 B.C. The suddenness of this attack with the accompanying fire caused the rapid collapse of buildings that still contained a wealth of objects. Although a few squattersurvivors used the mound for a short time after the fire. little was disturbed and the ruins gradually consolidated over the buried materials. Thus, the abrupt end of the occupation, which preserved an unusual range of objects and materials, provided as well a clear-cut end to their history. Such is not the case in regard to their origin. The general cultural pattern of the Iron Age inhabitants was introduced shortly after 1500 B.C. and represented a complete break with the preceding occupation. From that time to the sacking of 800 B.C. we are confronted with an evolving community as seen both in the ceramics and in the architecture. In the case of the more elaborate artifacts, therefore, a problem arises not only as to their place of origin and source of inspiration, but also as to their correct chronological position. At least three inscribed objects indicate that heirlooms of three or more centuries are included with the materials of ninth century date buried by the destruction. Since many of these items are unique, the most appropriate approach to their study is art historical. The present monograph is devoted to one of these extraordinary pieces and presents an analysis of its background and significance from that point of view. It forms one element in a large assemblage of horse trappings found at the site, which will be discussed elsewhere.

The Project is greatly indebted to Irene Winter for undertaking this study and to Ingrid Reindell whose skill in conservation and whose patience brought the piece described here back from a perilous state of decay to the splendid condition it now enjoys. The Hasanlu Project is proud to have added this unique breastplate to the treasures housed in the Iran Bastan Museum.

> ROBERT H. DYSON, JR. Director, Hasanlu Project



Map of relevant sites in the ancient Near East

INTRODUCTION



During the 1974 season at Hasanlu in northwest Iran, a large, copper/bronze plaque was discovered which by virtue of its striking decoration must take its place among the major works found thus far at the site. Through its unique style, the piece raises questions of foreign contact, stimulus and local production that warrant special study in the light of the complex network of interconnections existing among the states of the ancient Near East in the early first millennium B.C.¹ (see Map).

The plaque (HAS 74-241; Fig. 1 and Folding Plate), now in the Musée Iran Bastan, Tehran, was found in a room between Burned Building IVE and Burned Building V on the citadel of Hasanlu. It was discovered within the collapse of level IVB, the period of major construction that has been systematically excavated under the direction of Robert H. Dyson, Jr. and the University Museum of the University of Pennsylvania since 1957. The destruction of this level is thought to have occurred near the end of the ninth century B.C., in the wake of Urartean expansion into the Solduz Valley of Northwest Iran at that time.²

The room in which the plaque was found (designated Room 4, Burned Building IV-V, on the plan, Fig. 2, and detail, Fig. 3) was part of a structure set into the narrow space between the two adjacent buildings at some time subsequent to their initial construction. This is clearly indicated by the new skin of walls, unbonded to those of Burned Building V, that formed the southern side of the complex. It is further indicated by the added staircase (Room 3 on plan) which gives into Room 4, and which is definitely separate from Burned Building V against which it abuts. The pilasters and post holes at the western side of Room 4 are a standard form of construction for major doorways at Hasanlu. Because of its long east-west axis, the architectural structure of which Room 4 seems to have been a part has come to be identified as the "Corridor Building," although the full configuration of the building still lies hidden beneath the baulk that marks the present eastern limit of excavation on the citadel.

The plaque was found among a mass of copper/bronze objects in the northwest corner of the room which were lying not directly on the floor, but rather some 35-40 cm. above. The floor itself was relatively clear of objects. Between the accumulation of metal objects and the floor lay

^{1.} I should like to acknowledge the generosity of Robert H. Dyson, Jr. in providing the opportunity for me to follow this piece from its discovery in the field to a broader context; I am deeply grateful. I am also much in debt to the excavators of the breastplate, Anita Koh and particularly Ilene Nicholas, who have patiently gone over with me the circumstances of its discovery, and who kept such good notes at the time. In addition, I would like to thank Robert Dyson, Mary A. Littauer, P. R. S. Moorey, Oscar White Muscarella, Ilene Nicholas, Edith Porada, Gregory L. Possehl and Maude de Schauensee for valuable comments upon an early draft of this manuscript. Finally, special thanks are due to Bill Clough, Maria de J. Ellis, Betti Goren, Erle Leichty, Martha Roth and Linda Safran for help in the various stages of production; and to Pierre Amiet and Julian Reade for their kindness in providing photographs and information.

Cf. mention in a brief account of the 1974 season by R.H. Dyson, Jr. and V. C. Pigott: "Report of Current Excavations," *Iran XIII* (1975) 161. For a discussion of the destruction of the citadel in Period IVB, see below, note 54.

debris consisting of fallen brick, charred beams and burned reeds. We may therefore presume that the collection fell either from the roof or from a second storey. Beams and reed matting are standard roof construction materials;3 however the bricks in the fill suggest wall collapse as well. As the excavated walls of Room 4 presently stand some 2.5 to 3 m. high, it would seem most likely that the fallen bricks represent upper storey walls. It is unlikely that a cache of metal objects would have been stored on a roof: just as it is also unlikely that the associated sherds from collapsed storage vessels found in the same context would have stood exposed on the roof. Therefore the evidence argues in favor of the existence of a second storey to at least the entrance of the Corridor Building-an architectural form attested for several other buildings on the citadel at Hasanlu.⁴

A considerable deposit of assorted openwork bells, flat plaques with loops for suspension, tube pendants, buttons, studs and coils lay immediately above the plaque, and an even larger collection of similar objects was discovered beneath it, totaling some 500 pieces (see Fig. 4, breastplate in situ, and sketches from field plans, Fig. 15a and b). Assemblages of this sort had been known from previous seasons and from other contexts at Hasanlu, and were associated with equestrian objects such as snaffle bits, rein rings and harnesses. In addition, during the season of 1972, in the adjoining Room 1 of the Corridor Building, a group of undecorated bib-like collars and lunate plaques with simple bronze studs had been found, both types of a shape not unlike our piece (Figs. 5 - 7). Because of their size and shape as well as their association with other equestrian objects, these had been designated as horses' pectoral ornaments.⁵ Consequently, the plaque presently under discussion became immediately known as "The Breastplate"-an identification which subsequent research has served to confirm.

^{3.} The practice of constructing a roof by overlaying large beams with smaller branches, then covering the whole with reed matting before plastering is still followed in Iranian village houses today.

^{4.} Dyson and Pigott, Iran XIII, 162; T. C. Young, Jr., "Some Thoughts on the Architecture of Hasanlu IV," Iranica Antiqua VI (1966) 48-71. Indeed, the majority of objects found in Burned Building II were also from second storey collapse.

^{5.} Examples of each of these types are in the collection of the University Museum, University of Pennsylvania, Philadelphia (HAS 72-143b and 147b and c). Other identical pieces are in the collection of the Musée Iran Bastan, Tehran (HAS 72-143a, 144a and b and 147a). There were therefore at least four of the collar-type breastplates found, and with the inclusion of several corroded and fused fragments registered as HAS 72-148, at least five and possibly six of the lunate type with studs.

DESCRIPTION



TYPOLOGY AND FUNCTION

The Hasanlu breastplate is a sub-triangular plaque of copper/bronze, measuring 42.8 by 20.2 cm., with an average thickness of ca. 5 mm. The upper edge is essentially straight, the corners rounded, and the lower curved edge actually slightly elliptical. In addition to the decoration, which will be discussed below, there is a low raised band hammered in relief between incised lines that outlines the entire plaque more or less regularly at about 1 cm. from the edge. Between the edge and this border, and sometimes cutting into the raised band, is a series of irregularly spaced holes measuring not more than 3.5 mm. in diameter. It is presumed that these holes served to attach the breastplate to a backing, probably of leather, although no organic traces were found adhering to the reverse of the plaque.⁶

Similarly shaped objects are clearly represented among the trappings worn by riding horses on the reliefs of ninth century kings of Assyria, Assurnasirpal II (883-859 B.C.) and Shalmaneser III (858-824 B.C.), where they hang on short straps that go up over the neck and mane.⁷ When decorated, the Assyrian breastplates are shown with only simple geometric designs, occasionally resembling the circular bosses on some of the 1972 breastplates from Hasanlu (Fig. 8a and b); however, admittedly, anything more elaborate would be difficult to indicate in the profile view in which the Assyrian horses are shown. In some cases, the upper edges of the Assyrian breastplates are more curved than ours. and in others, the breastplates are more of the or "collar" types of undecorated "boss" breastplates found at Hasanlu in 1972 (compare Figs. 7 and 9, for example). In one instance on Shalmaneser's Balawat Gates, the inner portion of the breastplate is lunate, very much like ours, although the overall piece is broader and higher, with the neck-strap of a continuous piece with the outer edge (Fig. 10). One wonders if this is not an illustration of the way the Hasanlu breastplate may have been mounted as well, on a broad collar of leather.

Most significant is that on one relief of Assurnasirpal from Nimrud, which Barnett has argued represents mounted Iranians in combat

According to M. Tosi, who examined the specimen. However, there was decomposed leather inside one of the hollow rods found in the same general area (object registered as HAS 74-N359, the leather taken as Scientific Sample HAS 74-S51A).

Cf. H. R. Hall, Babylonian and Assyrian Sculpture in the British Museum, Paris, 1928, Pls. XV, XVI, XVIII; A. H. Layard, Monuments of Nineveh, London, 1849, Pls. 26, 32, 49:1, 54; L. W. King, Bronze Reliefs from the Gates of Shalmaneser, King of Assyria, London, 1915, Pls. XII, XVIII,

LN, LNXIII, etc. Although every riding horse is not provided with a breastplate, they were apparently such a characteristic feature that even on an incised garment decoration from a relief of Assumasirpal II at Nimrud, one of the horses wears a breastplate (Layard, Monuments, Pl. 49:1). Indeed, evidence from the Royal Cemetery at Ur-in which narrow copper collars of lunate shape decorated with a repoussé pattern of compartments containing "eyes" were worn by a pair of oxen drawing Pu-Abi's wooden sledge—suggests that this is a tradition of long standing, despite the fact that no intermediary pieces have yet been discovered (cf. P. R. S. Moorey, "What do we know about the people buried in the Royal Cemetery?" *Expedition* 20,1 (1977) p. 31 and Fig. 13).

with Assyrians,⁸ both the Assyrian and the "Iranian" horses are wearing breastplates (Fig.11). What is more, the breastplates of the "Iranian" mounts are slightly different from the Assyrian examples: smaller, more lunate in shape; in fact, very close indeed to the Hasanlu breastplate. It is therefore possible that the Assyrian artist was faithfully reproducing a distinct typological variant specific to Iran.

On all of the Assyrian representations (including the example cited above), the breastplates are shown with from three to eight pendent tassels. It is therefore all the more noteworthy that remains of a tassel were preserved in the same Room 4 of the Corridor Building at Hasanlu, just to the south of the bronzes (see drawing, Fig.12). Additional bits of tassel remains were found associated with horse trappings in Burned Building IVE. Of course, tassels are among the most common of equestrian ornaments in Assyrian reliefs,9 and are often worn in great chains quite independent of breastplates. However, these rarely-preserved finds from Hasanlu help to bring alive the material context in which the breastplate existed and to reinforce its relation to Assyrian representations.

Bells are likewise worn by Assyrian horses as depicted on reliefs of the eighth and seventh centuries B.C., although the Assyrian bells are all of the "closed" type, with visible clappers,¹⁰ while the Hasanlu bells have fretted sides, closed at the bottom, with pellets or stones inside in lieu of clappers, and are of a type known as "open-cage" bells, found from the Caucasus to Europe (Fig.13).¹¹ The Assyrian bells are most frequently indicated singly, under the jaw of the horse; occasionally, however, a narrow strap hung with numerous small bells is represented around the horse's neck, as seen on one of Assurbanipal's lionhunt panels (Fig.14).¹² Since these bell-straps are represented only on late Assyrian reliefs of the seventh century B.C. and, according to Hrouda, replace the breastplate on riding horses,¹³ it is not impossible that in the ninth century bells had been associated with breastplate straps, although not represented on the reliefs.¹⁴

The large number of bells, plaques and tubular pendants associated with the Hasanlu breastplate naturally leads to speculation whether they might all have been part of a single phenomenon-for example, the smaller objects as ornaments on traces leading to left and right from the leather mounting of the breastplate. In the field records for July 29, the day after the discovery of the breastplate, the excavators noted that a number of the plaques below the breastplate seemed to have been arranged in a line as if possibly strung together.15 Unfortunately, with the exception of a few such associated plaques or bells, it is not possible to determine any discernible pattern in the distribution of objects above and below the plaque (cf. Fig. 15a and b). However, while the breastplates in Assyrian representations generally hang from a short strap over the horse's neck, in one case there is a strap with decorative markings identical to the breastplate neck-strap which goes all along the length of the horse's body from his

^{8.} R. D. Barnett, "Assyria and Iran: The Earliest Representation of Persians," in A. U. Pope, ed., Survey of Persian Art, Vol. XIV, London, 1967, pp. 2997-3007 and Fig. 1055 (British Museum 124559; first published in E. A. Wallis Budge, Assyrian Sculpture in the British Museum, London, 1914, Pl. XXIV, 6).

^{9.} Cf. schematic drawing of ornaments in B. Hrouda, Die Kulturgeschichte des assyrischen Flachbildes, Bonn, 1965, Pl. 29:2, and discussion, pp. 97-98.

^{10.} Actual examples have been found: cf. J. Potratz, Die Pferdetrensen des Alten Orient, Rome, 1966, Pl. LXIV:151a.

^{11.} Cf. J. Bouzek, "Openwork 'bird-cage' bronzes," in J. Boardman et al., eds., The European Community in Later Prehistory: Studies in Honor of C. F. C. Hawkes, London, 1971, pp. 77-104. (I am grateful to Mrs. M. A. Littauer for providing me with this reference.) Bells identical in type to the Hasanlu examples are among the collection of the Ashmolean Museum, Oxford and in the Adam Collection (cf. P. R. S.

Moorey, Catalogue of the Ancient Persian Bronzes in the Ashmolean Museum, Oxford, 1971, Pl. 18:154 and pp. 137-138; same author, Ancient Persian Bronzes in the Adam Collection, London, 1974, Nos. 65-66, pp. 98-99 and No. 73, p. 101). A single example from Hasanlu has been published in R. H. Dyson, Jr., "Hasanlu and the Solduz and Ushnu Valleys: Twelve Years of Exploration," Archaeologia Viva I:I (1968) 90.

Sennacherib: A. H. Layard, A Second Series of the Monuments of Nineveh, London, 1953, Pl. 41; Assurbanipal: Potratz, Pferdetrensen, Pl. XLV:98 (=R. D. Barnett, Assyrian Palace Reliefs, London, n.d., Pl. 59), and Pl. XLIV:99 (=Barnett, Pl. 89; cf. also Pl. 84).

^{13.} Hrouda, Kulturgeschichte, pp. 100-101.

^{14.} Particularly as there is a great increase in the amount of detail shown on the later reliefs, especially those of Assurbanipal (cf. E. Akurgal, *The Art of Greece: Its Origins*, New York, 1968, p. 22).

^{15.} In addition, a row of contiguous "open-cage" bells was found in Room 4 just to the southeast of the breastplate assemblage, in association with a piece of twisted rope, although the bells and rope appear to have been separate phenomena. The rope was taken as Scientific Sample HAS 74-S36A (see field notes to Operation W32, 27 July 1974).

hind-quarters to pass under the breastplate.¹⁶ Furthermore, it is precisely on the representation of Assurnasirpal's "Iranian" opponents cited above (Fig.11) that we see a distinctive arrangement of saddle-blanket with straps below the belly, over the rump and across the horses' forequarters that is quite different from characteristic Assyrian gear. I would suggest that it is highly likely, therefore, given the disposition of the smaller objects around the breastplate at Hasanlu, that the large plaque was mounted in association with such body traces hung with ornaments.

On the reliefs of Assurnasirpal II and Shalmaneser III, only cavalry horses wear breastplates, while chariot horses are shown with an elaborate series of bands that must represent their leather chest harnesses.¹⁷ One cannot exclude the use of breastplates for chariot horses in the ninth century, however, as this is very clearly indicated on a glazed ceramic tile found at Assur and associated with the reign of Tukulti-Ninurta II, father of Assurnasirpal.¹⁸ The use of breastplates for chariot horses becomes common on later Assyrian reliefs, when, curiously enough, riding horses no longer wear them. However, these seem to be of the "collar" type, worn very much like a bib directly under the jaw of the horse, rather than lying flat on the chest.19

No Assyrian breastplates or collars have been excavated to my knowledge. However, a series of bronze breastplates of the "bib" type, some with a projection of the upper edge to conform to the horse's jaw, have been excavated in eighthseventh century tombs at Salamis on Cyprus (cf. Fig. 16a and b). Consistent with the later Assyrian reliefs, these were also associated with horses pulling chariots and wagons, presumably the hearses for the deceased. Some of the Salamis breastplates were simply decorated, with a lunate central boss and raised circles around the edge, and included holes around the edge for backing.²⁰

20. Cf. V. Karageorghis, Salamis, Vol. 5: Excavations in the

Others bore elaborate repoussé decoration consisting of several figures in two registers, of a style quite different from the Hasanlu breastplate, and do not include holes for attachment.²¹ These are considered to have been made in Cyprus in the second half of the eighth century B.C.²²

The Salamis breastplates were of course worn by horses in a particular "funerary" context. However, votive models of military chariots where breastplates are part of the horses' regular equipment have also been found on Cyprus, in the shrine of Aghia Irini, dated to the seventh-sixth century B.C.²³ On one chariot model from Aghia Irini, the horses wear full side and front coverings,²⁴ as do the horses of Assurbanipal in his reliefs of the battle against the Elamites, where the horses wear a complete body suit of leather from the ears to the tail, with the separate pieces attached by thongs or clamps passed through holes.²⁵

This raises the question whether the breastplates might not have been worn for protection as well as decoration. The holes around the edge of the Hasanlu breastplates, implying a leather backing, seem to argue in favor of such a view, as it has been demonstrated that bronze alone is quite vulnerable to arrows and spears, and it is actually the leather backing of metal armor which affords protection.²⁶

It would certainly seem logical that the vulnerable forequarters of the horse's body

^{16.} Layard, Monuments, Pl. 32.

^{17.} Ibid., Pl. 13.

Hrouda, Kulturgeschichte, Pl. 45:4 (=B.M. 115705).
 Again, I thank Mrs. Littauer for this reference, and for permitting me to read her article, "New Light on the Assyrian Chariot," Orientalia 45 (1976) 217-226, prior to publication.

^{19.} Cf. e.g., a relief of Tiglath Pileser III from Arslan Tash (F. Thureau-Dangin, *Arslan Tash*, Paris, 1931, Pl. VII), and another of Sennacherib from Nineveh (Layard, *Second Series*, Pl. 24).

Necropolis of Salamis III, Nicosia, 1973, Tomb 79: Pls. XC-XCVII, and discussion pp. 12, 68, 73, 78, 84 and 86.

^{21.} Ibid., e.g., Pl. CXXII.

^{22.} Cf. comments by Porada, cited, Ibid., pp. 84-86 with regard to Nos. 164, 180, 184 and 194.

^{23.} E. Gjerstad, "Supplementary Notes on Finds from Ajia Irini in Cyprus," *Medehaus Museet Bolletin 3* (1963) Figs. 10-13 and 15, and pp. 4, 10, and 34.

^{24.} Ibid., Figs. 9 and 14.

^{25.} Layard, Second Series, Pl. 45 (=Barnett, Assyrian Reliefs, Pl. 12). According to Oppenheim (Review of H. H. Figulla, Business Documents of the Neo-Babylonian Period, in JCS IV [1950] 194), horse armor is attested in texts as early as the mid-second millennium B.C., although it is not represented in art until the Neo-Assyrian period.

^{26.} Cf. J. Coles, Archaeology by Experiment, New York, 1973, pp. 143-147 and especially pp. 164-167, in which its clear that leather resists blows and penetration better than bronze; that purely bronze armor and shields were likely to have been for display rather than for body protection. It is also conceivable, of course, that the backing could serve to prevent chafing, but as discussed below, the iconography as well as the tradition of horse-armor suggests protection, as opposed to mere decoration.

should be given some form of extra protection, and the plain breastplates of Hasanlu and Salamis would suggest that their function may not have been primarily decorative. However, there is less corroborating evidence from ancient sources than one might expect. Xenophon described the Persian cavalry of the fifth-fourth century B.C. as employing armor for the horses' heads and breastplates wide enough to also protect the riders' thighs, although no representation of such Persian armor survives.²⁷ In the later Parthian and Sassanian periods of Near Eastern art, horses are sometimes covered with mail or lamellar "housings", including blankets or armor designed to wrap around and meet across the horse's breast.28 but there are no indications of separate breastplates. They do recur in the Islamic Period, as for example in a battle scene on a Persian miniature of the fifteenth century A.D., where throat armor is shown tied across the top of the horse's neck much as on the Sennacherib relief cited above; and of course the use of breastplates, or pectorals, in medieval European horse armor is well attested.29

Thus, with the range of descriptive material at our disposal, we may say that it seems not unlikely the breastplates of the early first millennium B.C. were also worn in battle and the hunt for protection of the horse's neck and forequarters. In fact, as it will be suggested below, such a function would be quite consistent with the nature of the decoration on the Hasanlu breastplate, both in its style and its iconography.

DECORATION

When removed from the earth, the plaque was found to be badly corroded, although a certain amount of detail was clearly visible (Fig.17 and details, Figs. 18-20). Once it was ascertained that a sufficient quantity of true metal remained, the surface corrosion was removed by mechanical means. The present state of the plaque is due to the painstaking and tireless efforts of Ingrid Reindell, of the Istituto Centrale del Restauro, Rome, whom we had the good fortune to have as conservator during the 1974 season.³⁰

The main motif consists of a kneeling man between two bulls whose inside forelegs he grasps in outstretched hands. In the field above, to the left and right of the man's head and facing toward the center, are two birds of prey (cf. Fig.1 and drawing, Folding Plate).

Decoration on the breastplate is both chased and repoussé.³¹ The heads of the three principal figures are executed fully in the round; that of the central figure projecting 6.5 cm. from the surface of the plaque, while the bulls' heads project ca. 5.5 cm. (Fig. 21). To date, the breastplate has not been subjected to high-intensity radiography, but as far as can be determined with the naked eye, the figures seem to have actually been hammered out of a single piece, unlike, for example, the Kalardasht bowl from northwest Iran, where the animals' protome heads were executed separately and secured by rivets to the vessel.32 There are clearly no rivets on the Hasanlu breastplate, nor are there any visible soldering seams, which should be evident from the reverse if such a technique had been applied (Fig. 22 and detail, Fig.23).

Animal heads have been fully hammered out from the original metal on at least two of the gold vessels found at Marlik Tepe in Gilan province

^{27.} Xenophon, Anabasis I, 8:6-7. However, the one more or less contemporary representation we do have, in relief on the Sarcophagus of Payava, shows a simple thigh and leg covering for the rider and does not go across the forequarters of the horse (cf. P. Bernard, "Une pièce d'armure perse sur un monument Lycien," Syria XLI [1964] 195-212).

H. R. Robinson, Oriental Armor, New York, 1967, Figs.
 8 and 9; and M. I. Rostovzeff et al., eds., The Excavations at Dura-Europos: Preliminary Report of the Sixth Season of Work, New Haven, 1936, Pls. XXI and XXII, and pp. 440ff.

^{29.} Cf. Robinson, Oriental Armor, p. 48, and C. Ffoulkes, "Some Aspects of the Craft of the Armorer," Archaeologia 79

^{(1929) 13-28,} where elaborate breast- and rear-plates used as protection for the horse are illustrated (esp. Fig. 20, p. 26). Furthermore, in a woodcut showing "ideal" horse armor of the 15th century, there are bells appended all around the lower edge of the breastplate (ibid., Fig. 19).

^{30.} An account of the processes employed in the cleaning and restoration of the plaque is appended to the present study, as Appendix: "Treatment of the Copper/Bronze Horse's Breastplate, HAS 74-241, in the Field," by I. Reindell (cf. p. 33).

^{31.} For the precise use of technical terms, the writer has referred to H. Hodges, Artifacts: An Introduction to Early Materials and Technology, London, 1964 (esp. pp. 64-79) and O. Untracht, Metal Techniques for Craftsmen, Garden City, New York, 1968 (esp. pp. 55, 93 and 105).

^{32.} Cf. Porada, Ancient Iran, New York, 1969, Fig. 61 (line drawing) and C. K. Wilkinson, "Art of the Marlik Culture," BMMA 24 (1965) Fig. 5 (photograph).

(cf. Figs. 53 and 54, discussed below).³³ Although gold is a very malleable metal and thus relatively easy to work in this technique, it is not at all beyond the properties of either copper or bronze.34 The quantity of metal that would have been displaced in the hammering out of the heads on the breastplate raises the question whether additional thickness of gauge (i.e., quantity of metal) may have been added at the places where the heads were to project, to compensate in the stretching process, but only radiographic analysis will determine for certain the relative thickness of metal in the figures and at the edges of the plaque. Certainly, the radiating pattern of cracks in the surface corrosion of the breastplate prior to conservation suggest strongly that there was a great deal of stretching in the area of the central figure's neck, chest and head, and in the bulls' heads (cf. Fig.18).

It seems an incredible technical achievement that even the ears and horns should have been done extensions of the original as plaque-particularly as on the Marlik vessel of Fig. 54, the bulls' ears and horns have been added the seams readily apparent. separately, Nevertheless, this process is not at all outside the realm of possibility given a complex tool kit and the requisite level of technical skill.35 Indeed, the breastplate is not unique among the objects from Hasanlu to demonstrate this technique (cf. HAS 58-239b, a copper/bronze bowl with protome bulls' heads, discussed below and illustrated, Figs. 64-67). It may well be that with radiographic analysis, now-invisible seams will become apparent to indicate that the heads were in fact done separately and joined to the plaque. However, in either case, it is clear that the work is a masterpiece of technical achievement, whether in the care with which the seams were obliterated, or in the virtuosity of the relief work.

The central figure wears a pointed helmet with a median rib and two curved bands on either side which extend from the base of the rib to the brim of the helmet (Fig. 24 and drawing, Folding Plate). The headgear sits very low on the man's brow, so that nothing is seen of his forehead. He has large, wide, almond-shaped eyes, with the upper line of the eve extended well out toward the temple, very full cheeks and a relatively thick lower lip. The broad, flat nose has been restored, as it turned to powder soon after removal from the ground (cf. Appendix); however, photographs taken before cleaning provided excellent models for reconstruction. The only problem is that the piece was found face-down in the earth, and the nose could have been flattened in falling.

The upper lip is covered by a long full mustache, indicated by wavy lines that flow down to blend with the full beard, similarly rendered and terminating in a horizontal cut-off line midway down the chest. The hairs that grow from below the lower lip are delineated separately as a short pointed clump extending to just over the chin. From a frontal view-as undoubtedly the breastplate was meant to be seen-the figure's hair is indicated as six curls: one small curl emerging from under the helmet at either temple, while two large curls consisting of from five to six parallel lines terminating in a spiral hang down in two registers on either side, the uppermost about level with the lower lip, the lower set extending approximately halfway down the length of the beard. As the head of the figure is executed not in relief but in the round, the hair continues around the back in a series of parallel wavy lines falling onto the shoulder just below the nape.

No neck is visible; the head seems to merge with the massive chest and sloping shoulders. The chest is rendered frontally and both arms are extended horizontally, terminating in huge hands which grasp the relatively thin inside foreleg of each bull. No elbow joint is indicated, however the arms are segmented by irregularly curving lines which form two tear-like shapes and end in small spiral curls at the wrists. These may be meant to indicate arm musculature and possibly also hair, but are extremely stylized and appear more as patterns than as indicators of physical reality.

Porada, Ancient Iran, Pl. 22a and E. O. Negahban, Marlik, Tehran, 1974, Figs. 112 and 114; see also discussion of the technique in E. O. Negahban, "Notes on some objects from Marlik," *JNES* 24 (1965) 323.

^{34.} I am grateful to Larry Fane, Queens College of the City University of New York, Cary A. Johnson, Columbia University, Rachel Maxwell-Hyslop, Institute of Archaeology, University of London, Holly Pittman, Metropolitan Museum of Art, and Robert Maddin, University of Pennsylvania, who were most generous in providing technical expertise in the working of metals, particularly bronze.

^{35.} A description of the required process is provided in Hodges, *Artifacts*, p. 78, with regard to the use of a snarling iron—a Z-shaped tool used principally in working from the inside on vessels with narrow necks into which a normal hammering tool could not be inserted.

Horizontal bands divide the arms from the hands. The lines may be meant to indicate bracelets, but as no terminals are apparent, they are more likely there to emphasize the joint, as is the case on the legs of the bulls (cf. below). The hands are indicated in such a way that the thumbs extend to the side and curve slightly upward, while the rest of the fingers wrap around the bulls' legs so that the tips and first joints are visible (Fig. 25). Nail areas are indicated by a single incised line, joints by three wavy lines on each finger.

While the upper portion of the figure is viewed frontally, as is the symmetrically centered skirt panel, the legs-rendered entirely as incision-are seen in profile. The right knee rests on the ground, touching the lower border of the plaque, with the foot extended to the side (Fig. 26). The heel then falls between the hind legs of the left-hand bull, with the toe pointing straight down toward the rim. The entire leg is outlined by a double incised line, as is the left leg, which is extended from the man's side, the calf and foot appearing between the hind legs of the right-hand bull (Fig. 27). The figure is therefore down on only one knee, in the typical "knielauf" posture, with the other leg bent, foot on the ground. He seems to be shod; in any event, the ankle of the right foot is marked by a double line across the leg's width, the left by a similar band across the instep. Both feet come to a point, and there is no indication of toes, as is frequently the case in Neo-Assyrian cylinder seals and other representations of kneeling figures. There is a pattern on the right thigh of small pendent semicircles along the outer edges and two curving lines that start at the outside of the upper thigh and meet just above the center of the knee, which may be meant to indicate greaves of some sort or high leggings such as those worn by the soldiers of Tiglath Pileser III in the paintings of Til Barsip.³⁶ This interpretation is particularly attractive as a copper/bronze legging edged with round studs has been found at Hasanlu-apparently meant to sheathe a wooden statue (HAS 62-968).

Clothing consists of a short-sleeved tunic, elaborately decorated by incised bands of geometric design (Fig. 28). The entire garment including sleeves and shoulders is outlined by a

narrow hatched band, while broader bands of hatching, lozenges and small circles cross the chest and descend down either side of the midriff. Although no belt is visible, there is a discontinuity in design from the chest area to the skirt, the transition being interrupted by the two bulls' tails which meet across the body at that point. The skirt panel, with its single vertical band of contiguous lozenges and similarly patterned hem appears to be of a single piece when viewed frontally; however, there is a narrow band of hatching just above the man's left calf and below the bull's leg which suggests an attempt to indicate the hem of the garment covering the extended leg. In that case, we may assume that the garment had a divided skirt such as is clearly shown in Assyrian examples and on the so-called "Elamite" beakers (cf. Fig. 52, below).

The two bulls at either side of the kneeling central figure are essentially mirror images, although the horns of the right-hand bull have been bent out of shape, presumably by the impact of the fall of the breastplate, which also caused the break in the right side of the plaque now restored at the angle to which it was bent before breakage (see Appendix).

The bulls are massive creatures, their bodies standing out in very high relief with the heads entirely in the round (Fig. 29). Although the bodies are splayed out to the side, the heads turn in so that one is seeing them almost frontally. The bulls' heads thus flank the head of the central figure. As they project in slightly lower relief, however, they spatially reinforce the physical domination of the "hero" in conformity with the significance of the motif.

The proportions of the bulls are very heavy: short legs, thick bodies. The heads, too, are thick, with virtually no necks, thereby adding to a sense of block-like solidity. Ears protrude to the side, slightly upward from the head, while the horns, not much longer than the ears, extend forward. An undulating double line across the forehead dips down toward the muzzle and marks the area of the bull's usual forelock; the tip of the muzzle also is outlined with the same double line; and the eyes are outlined circles in relief, with a thick brow ridge curving above each eye. Like the man's garment edge, the back, belly and legs of the bulls are all outlined by narrow hatched bands within double lines. Major parts of the body, like the legs. have been hammered out as separate sub-units.

^{36.} A. Parrot, *The Arts of Assyria*, New York, 1961, Figs. 115-116.

and are in slightly less high relief (the body ranges from 1.5 to 2 cm. above the background; the legs from .50 to .75). All of the joints are articulated by two or more parallel lines. The shoulders are clearly delineated, marked by an unusual double segmentation. One of these segments in the lefthand bull is outlined by hatches. A curious double band of undulating lines creates a separation between the mid-section of the body and the rear. At the base of this line, two standing semicircles may mark the genitalia, although the line from thigh to belly continues uninterrupted. The leg joints are segmented as are the forelegs, and the fetlock joint above the hoof is schematized as a spiral on the right-hand bull, a dotted circle on the left. The hooves are set off from the rest of the leg by the ubiquitous double line which varies from slightly curved to undulating.

Down the bulls' backs and covering the hindquarters are delicately incised rows of spiral hair-locks (see drawing, Folding Plate). These are better preserved on the right-hand bull, although both seem to have the same design. Where there is more than one row of curls, the registers alternate in direction and give an impression of loose flowing locks. The bases of the tails are separated from the hindquarters by a series of parallel hatched lines, while single hatched lines begin to issue along the length of the tails for a short distance to suggest the solid portion before the tail turns to hair. The amount of hair on the tails of these particular bulls is unusually abundant. Bulls' tails are generally shown as quite narrow, leading to a short tufted end, and ours would seem rather to belong more to horses. What is more, the two tails join and flow into one another without demarcation, their union enhanced by the overall continuous pattern of short concentric arc segments.

Equally schematic is the way the two birds of prey are represented in the upper field (Figs. 30 and 31). Again, details are better preserved on the right-hand bird, where we see once again that the entire body is outlined by double lines, as are the articulated shoulders and joints, shown as a figureeight. The beak is very large and shown open; the eye is a double incised circle, with an odd Xmarked patch behind the eye. The body is covered with hatching, sometimes within triangular locks to indicate body feathering, and the tail terminates in a short brush of lines flaring slightly to right and left. Claws, particularly the forward talons, are very prominent. The single visible wing on each bird seems awkwardly attached to the body (more so on the left bird than on the right), and is oddly marked, with pendent loops from the upper edges and vertical herringbone bands that flare only slightly toward the tips to indicate wing-feathers.

Still, awkward as they may seem, and despite the fact that they are rendered only by incision and so reduced to the background, the open beaks and prominent talons of the birds contribute to a sense of predation and power clearly in keeping with the mighty bulls and their even mightier subduer.

As one looks at the principal motif, one sees in the breastplate an unusual conception of spatial relationships. Because the skirt and legs of the kneeling figure are only incised, with the left leg passing behind the repoussé leg of the right-hand bull, and because the bulls' tails cross the figure's chest, the central hero appears farther back in space than the bulls, while at the same time leaning forward over their bodies to grasp the forelegs.

The bulls' bodies are set at an angle, diagonally out to the side. Yet with their relatively compact bodies in relation to the prominent forequarters and heads, the animals seem foreshortened, as if the artist were making tentative steps toward a totally frontal view.³⁷ This is a spatial problem usually carefully avoided in Near Eastern art, where animal bodies at least are seen in profile, and all figures exist more or less parallel to the picture plane.³⁸

Here, however, spatial depth is immediately, if not totally successfully, brought into one's perception of the whole. When one tries to picture the activity on the breastplate in real space, one is forced to translate the scene into one in which the hero is between parallel bulls on either side of him, and in that case, the tails that overlap across his waist are vaguely disquieting.

Although pulling on the foreleg does have a basis in reality, and is the means by which modern handlers throw calves and steers, it is of course a purely conceptual representation of power to suggest that this might be done to two animals at

^{37.} See further discussion below, p. 27.

^{38.} The breastplate is not the only find from Hasanlu which suggests concern with the problem (cf. below, pp. 27-28)

once. The choice of a kneeling posture for the central figure as he looms out over the bulls further enhances this sense of power, as it makes of him a giant in relation to the bulls when he is projected to full height. To have had a standing figure in the available space would have greatly reduced the impact of the central figure; a corresponding adjustment in the size of the bulls would have greatly reduced the impact of the entire piece.

Thus one is left with the sense of being in the presence of the work of a master—one who has fully understood the technical potential of his material and the important relationship between decoration and the intended use to which the decorated object would be put (in this case, the necessity to invoke powerful protection for the

horse, and by extension for its rider, which the metal breastplate on leather would provide physically, while the efficacious motif worked on a more mystic level); and one who has been able to deal innovatively with complex problems of space and composition in order to maximize the desired effect. Indeed, one approaches the Hasanlu breastplate today, as it must have been approached in antiquity, with a degree of awe and respect-both for the power of the motif and for the hand that made it. We are thus brought closer to the work not merely as a composite of motifs and styles useful as diagnostic attributes for tracing chronological development and historical contacts, but also as an expression of its own time, in which from a broad range of possibilities a high degree of selection has been exercised.

STYLE AND ICONOGRAPHY



MESOPOTAMIA AND NORTH SYRIA

To determine in what cultural tradition the Hasanlu breastplate should be viewed, however, is not an easy matter. It will be seen in the course of the ensuing discussion that ultimately, although it cannot be demonstrated the piece was made at Hasanlu itself, there seems to be good reason to suggest that it was produced in a workshop within northwest Iran at a time consistent with the occupation associated with its findspot in Hasanlu level IVB.

The antecedents of the principal motif, a figure dominating two animals, go back well into the early history of Mesopotamian art. Noteworthy among known works is a stone vase of the Uruk period on which a frontal-faced hero, bearded and with large spiral hair-curls, holds a bull under each arm (Fig. 32a). What is more, in the field above the hero's head is a bird on either side (cf. Fig. 32b).³⁹ Thus it is apparent that the composition on the Hasanlu breastplate is not a function of the inventive juxtaposition of independent elements, but rather represents a standard iconographic theme which had a long life in the ancient Near East.

The motif of the "master of animals," implying both dominance and protection, has been documented by Kantor from the Uruk period through the early first millennium B.C.40 According to her, the first kneeling figures appear in the glyptic of the Early Dynastic II period, however she suggests that there "seems to be no particular meaning to the posture; it is rather a variant pose," motivated by compositional needs.41 It is in the Akkadian period that we can recognize a personage who must be related to ours, in the appearance of a kneeling "hero" whose face is shown frontally, and whose hair is indicated as three pairs of symmetrical spiral curls.42 This hairdo clearly signified something particular to the ancients, as it is consistently associated only with certain figures, and remains constant through two and a half millennia, to the lion-bearing gateway figures from Sargon II's palace at Khorsabad of the late eighth century B.C.43 Because of the curls, this frontal figure has often been associated in Mesopotamia with

^{39.} E. Strommenger, 5000 Years of the Art of Mesopotamia, New York, 1964, Figs. 24, 25 (B.M. 118465). Similarly dated to the Uruk period are several stone vessels which show profile animal bodies-lion and bull-carved in high relief, with the heads turned at right angles and protruding fully in the round (ibid., Figs. 26, 27 [Iraq Museum, Baghdad] and E. Porada, "Problems of Style and Iconography in Early Sculptures of Mesopotamia and Iran," in Essays in Archaeology and the Humanities: In Memoriam Otto J. Brendel, J. J. Pollitt, ed., Mainz, 1976, pp. 1-4 and Pl. 2 [Museum of Fine Arts, Boston, No. 63.1258]). Nevertheless, despite the fact that at least one of these vessels was actually excavated at Uruk, Porada has noted that stylistically they rather recall Proto-Elamite work, and may well be products of the Susiana plain as opposed to Mesopotamia proper. Therefore, until this question is resolved, one cannot postulate a tradition in Mesopotamia antecedent to the technique represented by the breastplate.

^{40.} H. J. Kantor, "A Bronze Plaque with Relief Decoration from Tell Tainat," JNES 21 (1962) 93-117, esp. pp. 101f.

^{41.} Ibid., p. 104. This would make sense in terms of our analysis of the compositional role that the kneeling figure plays in the overall effect of the breastplate.

^{42.} P. Amiet, Glyptique mesopotamienne archaïque, Paris, 1966, No. 1473.

^{43.} A. Moortgat, Art of Ancient Mcsopotamia, London, 1969, Pl. 257.

Enkidu, the "wild man" of the Gilgamesh epic,⁴⁴ however, as the figure appears in a variety of roles in Mesopotamian art, the curls alone will not serve to identify him as a single character, except insofar as he is one in a long series of frontal-faced "heroes."

One of the most common motifs that include a central kneeling figure is that of two men slaving a third, which is often thought to represent the killing of the monster Humbaba by Gilgamesh and Enkidu. Since Humbaba himself inhabited the "Cedar Mountain" of the Amanus or the Lebanon, the motif is thought to have originated in Syria, and indeed finds great popularity in the early first millennium reliefs of Carchemish and Tell Halaf.⁴⁵ In addition, among the ninth century sculptures found at Carchemish are two column bases on which a small hero or griffin-demon kneels with extended arms between two lions; while on a relief from the Herald's Wall one finds a kneeling, frontal-faced figure wearing a shortsleeved tunic and with hairdo shown as two large curls to the shoulder, who grasps the hind leg of a lion in one hand and the horn of a bull in the other (Fig. 33).46 Following Mesopotamian idiom, he is clearly shown as the "hero," the "master of animals." In another instance, on a ninth century relief from Tell Halaf, a kneeling hero in short tunic, with beard and hair curls, is depicted supporting the arms of two bull-men who in turn support a winged sun-disk (Fig. 34).47 It is in North Syria also that the chief god of the pantheon is the storm god whose associated animal is the bull, and on whose back he is often shown standing (cf. Fig. 35),48 while a number of doublebull bases are thought to have once supported statues of the $\mathrm{god}^{.49}$

Finally, there is by now a rather large collection of equestrian ornaments that have been attributed to North Syrian manufacture, including works in bronze, on which iconographic themes may be related to the breastplate.⁵⁰ The ornaments include frontlets, blinkers and crests; however, no breastplates have yet been found.⁵¹

A copper/bronze crest from Ziniirli is particularly interesting, as it must once have borne a tripartite decoration with central figure flanked by two lions, although only portions of the bodies of the two animals are preserved (Fig. 36). The frontlets seem to prefer a theme of a naked goddess holding her breasts or holding lotus flowers and often standing on the head of a lion. Barnett has shown that in this motif (as on the breastplate), there is an inherent implication of power and protection. This same female figure appears on bronze equestrian shoulder ornaments from Salamis; and a related male genius bearing an animal is seen in the center of the decorated breastplates from that site.52 The consistency of iconography in equestrian ornaments in this period from east to west, employing powerful and protective figures, male or female, at the center, suggests that the Hasanlu breastplate is part of a larger tradition in which what were

^{44. &}quot;...he is endowed with head hair like a woman, the locks of his hair spread like Nisaba," (Gilgamesh Epic, Tablet I:ii, lines 36-37, in J. B. Pritchard, ed., *Ancient Near Eastern Texts*, 2nd Fdition, Princeton, 1955, p. 74).

^{45.} Cf. W. Orthmann, Untersuchungen zur späthetitischen Kunst, Bonn, 1971, Pls. 10a and 28a. For the most recent discussions of the Humbaba motif in general, cf. M. T. Barrellet, "Remarques sur un découvert fait à Tell al Rimah," Iraq XXX (1968) 206-214, and P. Calmeyer, "Ein neuer Becher...," Acta Praehistorica et Archaeologica I (1970) 81-86. For the location of Humbaba in Lebanon, cf. Th. Bauer, "Ein viertes altbabylonisches Fragment des Gilgameš-Epos," INES 16 (1957) 257, 1. 13, reverse.

^{46.} Orthmann, Untersuchungen, Pls. 26a, 32d and e.

^{47.} Ibid., Pl. 12b. The iconographic significance of the relief is unclear, both in the relationship of the figure to the bull-men and in the relationship of the bull-men to bulls in general.

^{48.} E.g., ibid., Pls. 5d and 53d.

^{49.} Ibid., Pl. 25e.

^{50.} One might also wish to compare the bulls' heads on the breastplate to bronze bull protomes from several sites, some of which have been attributed to North Syria; but while it does seem rather certain that the siren cauldron attachments may be placed specifically in North Syria (cf. O. W. Muscarella, "The Oriental Origin of the Siren Cauldron Attachments," *Hesperia XXXI* [1962] 317-329 and H.-V. Herrmann, *Die Kessel der orientalisrenden Zeit*, Olympische Forschungen, VI, Berlin, 1966, pp. 74-78). Muscarella is probably correct in limiting the attribution of animal heads to "Near Eastern" or "Oriental" workshops at this point (cf. "Winged Bull Cauldron Attachments from Iran," *MMJ* 1 [1968] 15).

^{51.} R. D. Barnett, "North Syrian and Related Harness Decorations," in K. Bittel, ed., Vorderasiatische Archäologie, Berlin, 1964, pp. 21-26; O. W. Muscarella, "Near Eastern Bronzes in the West: The Question of Origin," in S. Doehringer et al., eds., Art and Technology, Cambridge, Mass., 1970, pp. 109-128; F. von Luschan, Ausgrabungen in Sendschrift V, Berlin, 1943, Pl. 40d; J. J. Orchard, Equestrian Bridle-Harness Attachments, Ivories from Nimrud (1949-1963), fasc. I, pt. 2 Aberdeen, 1967, Nos. 135 and 136; R. S. Young, "The 1961 Campaign at Cordion," AJA 66 (1962) Pls. 46 and 47.

^{52.} Karageorghis, Salamis 5, p. 23 and Pls. CXIX, CXX and CCLXVII.

considered to be appropriate themes for specific classes of objects were consciously selected and charged with meaning; it also suggests that the sense of power and mastery so apparent in the breastplate was a strived-for effect.

The nude female standing on a lion appears on the bronze frontlet from Tell Tainat—the only such piece from a well-excavated context; however, the main motif is actually that of a kneeling male hero who dominates two sphinxes which he holds by the tail as his feet rest upon two lions (Fig. 37).⁵³

The Tainat frontlet is done in relief, and also makes use of incised details such as hatching on the animals' bodies. Nevertheless, it is far more crudely executed than the Hasanlu breastplate, exhibiting none of the same elaborate patterning on the animals or the human figure, while the hero is a slender, beardless personage, very different from the breastplate hero.

On the basis of the findspot of the frontlet, as well as stylistic parallels, Kantor has tentatively dated it to the late eighth century B.C. The North Syrian style in the ninth century, which would correspond to the period in which the Hasanlu citadel was occupied,⁵⁴ is heavy, tending toward

54. The destruction of the citadel at Hasanlu is generally attributed to Urartean expansion into the Solduz Valley toward the end of the ninth century B.C. The historical sequence has been reconstructed in R. H. Dyson, Jr., "Problems of Protohistoric Iran as seen from Hasanlu," JNES 24 (1965) esp. pp. 202-203, and treated as well in "Preliminary Report on Work Carried Out During 1968 by the Hasanlu Project in Azerbaijan," Bastan Chenassi va Honar-e Iran 2 (1969) 19. Evidence for the Urartean presence is seen in the inscription attributed to Ispuini and his son Menua found at the site of Qalat Gah in the Ushnu Valley southwest of Hasanlu, on which cf. O. W. Muscarella, "Qalatgah: An Urartian Site in Northwestern Iran," Expedition 13, 3-4 (1971) 44-49; more recently, M. van Loon, "The Inscription of Ishpuini and Meinua at Qalatgah, Iran," JNES 34 (1975) 201-207. Carbon dates from Hasanlu tend to support this view, giving dates in the tenth and early ninth centuries for samples taken from structural beams in the Burned Buildings, with slightly later ninth century dates for organic substances, such as grain, found in the buildings (cf. R. H. Dyson, Jr., "The Hasanlu Project 1961-1967," Vth International Congress of Iranian Art and Archaeology, Vol. I, Tehran, 1972, pp. 56-57). For a list of squat, powerful animals, and one of the salient characteristics of the style is the clear segmentation of animals' shoulders into separate areas outlined by a single or double line, as can be seen on the relief from the Herald's Wall at Carchemish cited just above (Fig. 33).55 Here again, however, there is lacking that sense of surface decoration which one finds on the breastplate. In addition, while the North Syrian storm god is clearly associated with a bull or bulls, there is as yet no precedent for him in the role of subduer of the bulls; he is generally shown in a striding posture in which his mastery of the bull is quite evident. And finally, he is always distinguished by a headdress clearly marked for divine figures-a high, conical cap with a bulbous top, which frequently includes one or more registers of horns. "Masters of animals" on the other hand are generally bareheaded. The pointed helmet worn by the figure on the Hasanlu breastplate, as we will see below, is modeled after that of the common Assyrian foot soldier.

Nor can any direct parallels be cited in North Syria for the type of bird shown on the breastplate or their association with a similar motif. So that while we may recognize a certain quality of heaviness in style, as well as the association of a massive male figure with bulls, and a tendency toward 3-figure composition, there is no evidence that would support the attribution of the Hasanlu breastplate to a Syrian hand or workshop.

ASSYRIA

When one looks to the art of Assyria in the ninth century B.C., one finds again frequent use of kneeling figures. On linear-style cylinder seals, for example, these figures are almost always shown in profile, engaged in either stabbing or shooting arrows at a single animal.⁵⁶ There is one example of a standing figure dominating two rampant

^{53.} Kantor attributes the presence of this motif to a continuous tradition in North Syria from the 15th century B.C. when it was a popular subject in Mitannian glyptic. However, it was by no means peculiar to the region, occurring as well on contemporary seals of the Middle Assyrian period and from there on into Neo-Assyrian work of the first millennium, as will be discussed below (cf. Kantor, *JNES 21*, pp. 104-105).

known Urartean sites in northwest Iran and a discussion of the Urartean penetration of Azerbaijan, see W. Kleiss, "Bericht über Erkundungsfahrten in Iran im Jahre 1970," AMI 4 (1971) especially pp. 56-72 and map, p. 69.

^{55.} Orthmann, Untersuchungen, Pl. 27c.

^{56.} E. Porada, Corpus of Ancient Near Eastern Seals in North American Collections I: The Collection of the Pierpont Morgan Library, Washington, D.C., 1948, Nos. 610-619 (cf. esp. 617-619 which include bulls as the prey).

bulls,⁵⁷ but he does not kneel. Such a scene must also have been represented on what are now just the fragmentary lower portions of a pair of reliefs of Assurnasirpal II from the newly excavated Central Building at Nimrud.⁵⁸ In one case a winged genius, in the other a male figure in open skirt, stands in profile between two rampant lions, and in all probability the central figure held on to the animals in some way. With these exceptions, the reliefs of Assurnasirpal II and Shalmaneser III as well are generally restricted to hunting, battle or ritual scenes, and the relatively infrequent occurrences of other heraldic compositions seem to be reserved for figures opposite a central tree.

It is actually in the incised decoration applied to garments worn by prominent figures on the reliefs that we find the closest parallels to our motif. 59 On a relief showing the seated Assurnasirpal holding a cup, the king wears a garment with very elaborate decoration visible on the right shoulder. In the uppermost panel, just below the bottom of the king's beard, is a kneeling, bearded man in a horned mitre, who holds a forepaw of a male sphinx in each hand (see Fig. 38 and detail, Fig. 39).60 The central figure is kneeling; however, his head is in profile, his hair indicated as the typical Assyrian "court" hairdo (a bunch of curls flowing out from the nape), he wears a long open skirt belted at the waist over his tunic, and he is barefooted. In addition, unlike the hieratic pose of the Hasanlu breastplate, there is a greater emphasis on interaction between the three figures, as the free forepaw of the left sphinx rests on the man's right heel while the paw of the right sphinx rests on his left thigh.

On another elaborate garment detail, <u>a kneeling</u> four-winged genius holds the tail of a bull in each <u>hand.⁶¹</u> Again, the man is shown in profile; however, he wears a horned headdress along with the long open skirt. The bulls in this case are winged. They are shown with the forelegs bent as if kneeling themselves, and turn their heads back toward the central figure.

Most reminiscent, perhaps, of the person on the Hasanlu plaque are figures from two additional embroidery details. On the first, a hero stands grasping what was probably the mane-hair of two rampant winged bulls whose forepaws just hang in the air (Fig. 40). Although the central figure is shown in profile, his hair is rendered as three superimposed curls.⁶² On the second detail, this figure is actually shown with frontal face and shoulders, so that we see a pair of large curls on either side of his head. What is more, the hero is shown kneeling, the rear leg of a lion in each hand, as the lion in turn bites into the neck of a bull (Fig. 41).⁶³

Although the kneeling hero is winged and wears the Assyrian open skirt with wide belt, he and the figure in profile cited just above both attest to the presence of the curly-haired hero dominating two bulls in the Assyrian repertoire and hence tradition of the ninth century. Nevertheless, the figures incised on garment details show none of the closely packed massiveness of the Hasanlu breastplate figure, nor the same details of dress, headgear or patterning on the body.

It is therefore all the more striking that while none of the central figures in Assyrian antithetic groupings wear headgear anything like that shown on the breastplate, identical helmets are consistently worn by soldiers of both Assurnasirpal and Shalmaneser in battle and hunting scenes,⁶⁴ and the type is noted by Hrouda in his typology of Assyrian helmets as the standard ninth century form (Fig. 42).⁶⁵

On one of the reliefs of Assurnasirpal showing mounted bowmen (Fig. 8), not only do the helmets resemble that worn by the Hasanlu "hero," but also the elaborate patterned tunic with bands of geometric decoration, although not identical and with very different divisions of the overall space, brings to mind the linear decoration of the garment on the breastplate.

^{57.} Ibid., No. 625.

^{58.} J. Meusczynski, "Neo-Assyrian Reliefs from the Central Area of Nimrud Citadel," *Iraq* 38 (1976) 37-44 and Pls. VIIIb and XI.

^{59.} These details were scrupulously copied in nineteenth century drawings, published in Layard, *Monuments*, Pls. 6, 8, 9, 44-50. Certain corrections have been noted recently by J. V. Canby, "Decorated Garments in Assurnasirpal's Sculpture," *Iraq* 33 (1971) 31-53, although I would disagree with her conclusions that the incised work was not done by Assyrians.

^{60.} Layard, Monuments, Pl. 6; Canby, Iraq 33, Pl. XIX.

^{61.} Layard, Monuments, Pl. 8.

^{62.} Ibid., Pl. 48:1.

^{63.} Ibid., Pl. 9. Other related figures on garment decorations include Pls. 44:1 and 3, 47:2 and 50:7.

^{64.} E.g., ibid., Pls. 10, 11, 18, 26.

^{65.} Hrouda, Kulturgeschichte, Pl. 23. The type later becomes more pointed and has ear flaps, sometimes even crests, as one moves into the eighth and seventh centuries.

One of the most unusual aspects of the breastplate is the way in which the central figure pulls on the bulls' forelegs, bringing them back over the bodies. The one parallel to this gesture comes to us once again on the Assurnasirpal garment details, where two Assyrian soldiers grapple with wild bulls as part of a hunt.⁶⁶ Each man stands beside (in the foreground of) a single bull, facing right, and grasps a horn in the left hand while pulling back on the foreleg with the right (Fig. 43). Again, then, we have an instance of an Assyrian prototype of our motif, but in a very different context. Furthermore, when bulls are represented in Assyrian sculpture, they all demonstrate similar stylistic characteristics. Sometimes these include hatching all over the body;67 sometimes several rows of very small tight curls, all uniform in size and direction, and in verv clearly demarcated areas-up to six rows on the back, three down the rear flank, three along the belly.68 And all have a similar rectangular patch of curls on the brow to represent the forelock. The same stylization is apparent on Assyrian ivories and wall paintings from Nimrud, and continues into the eighth and seventh centuries in an unbroken tradition which eventually is reflected in the art of the Achaemenid Empire.⁶⁹ It is not only quite distinct from the loose overall pattern of large curls and the undulating line on the brow of the Hasanlu bulls; it is also very different in spirit.

When birds of prey are represented in Assyrian reliefs, it is generally in the appropriate narrative context of a battle, where the birds follow the carnage.⁷⁰ Often such birds are represented in the upper field, although they are usually shown with a rounded breast and with both wings visible (Figs. 44 and 45), as opposed to the angular, single-winged birds of the breastplate. Only in a single case, where a bird is actually pecking at a fallen body, is it represented with an open beak.⁷¹ Even then, it is not at all the same hooked and gaping beak as we see on the Hasanlu plaque.⁷²

It is indeed unfortunate that we are forced to compare an equestrian ornament in bronze with primarily monumental stone sculpture in order to establish the nature of the connections between the Hasanlu breastplate and Assyrian tradition. It would certainly be preferable if we also had a large corpus of equestrian bronzes, particularly the very breastplates we see represented on Assyrian reliefs. However, as "style" is not something differentially necessarily or consciously applied, but rather reflects underlying cultural attitudes at a given time and place, and as it can be demonstrated in seals, ivories and sculpture that there is a very definite "Assyrian" style in the ninth century B.C. which pervades these three media, it seems a fair assumption that they represent the general mode of Assyrian production in bronze as well. One of the clues we have to this effect is in the chariot ornamentation and standard poles represented on the reliefs themselves, which were most probably made of bronze. On several of these standards, we see a pair of bulls back to back supporting the upper disk; on another, a god wearing a horned mitre is standing in the pose of the storm god on the back of a bull, all in distinctly Assyrian style (Fig. 45).73 The single example that we have of an actual Neo-Assyrian embossed bronze plaque, showing a lion and bull combat, is said to come from Khorsabad. This attribution is corroborated on stylistic grounds by comparison with other Sargonid works of the late eighth century.74 Again, the piece fits in well with others of known Assyrian manufacture and distinguishes itself readily from the Hasanlu breastplate in its more linear conception and realistic modeling without

^{66.} Layard, Monuments, Pl. 49:2 (=Canby, Iraq 33, Pl. XVII:b).

^{67.} Ibid., Pl. 32.

Cf. e.g., ibid., Pl. 4 (winged bull gateway figure) and Pl.
 (relief) of Assurnasirpal II; Pl. 54 (obelisk of Shalmaneser III).

^{69.} M. E. L. Mallowan and L. G. Davies, *Ivories in Assyrian Style*, Ivories from Nimrud (1949-1963), fasc. II, Aberdeen, 1970; Parrot, Assyria, Fig. 34 (Khorsabad) and Fig. 120 (Susa).

Layard, Monuments, Pl. 26; R. D. Barnett and M. Falkner, The Sculpture of Assurnasirpal II, Tiglath Pileser III and Esarhaddon from the Central and Southwest Palaces at Nimrud, London, 1962, Pls. XLI, LXVII.

^{71.} Layard, Monuments, Pl. 18.

^{72.} On one of the bronze bowls from the hoard found in the Northwest Palace at Nimrud, which is most probably of Syrian workmanship (cf. Layard, *Second Series*, Pl. 62), pairs of vultures are shown on either side of their prey—a small goat. Despite their proximity to the victim, however, the beaks are closed.

^{73.} Layard, Monuments, Pl. 14 and T. A. Madhloom, The Chronology of Neo-Assyrian Art, London, 1970, Pl. XI:3 and 4.

^{74.} E. Porada, "An Assyrian Bronze Dise," BMFA XLVII (1950) 2-8.

surface patterns. It further suggests that ninth century bronzes also would have followed a classical Assyrian mode of representation consistent with what we know of stone and ivory, and distinct from the Hasanlu piece.⁷⁵

If one reflects then on the parallels that can be cited between the breastplate and ninth century Assyrian works, it is clear that isolated elements abound: yet they find curious juxtapositions on the breastplate. Birds of prey are added to a scene in which they do not appear in Assyria; the central figure wears a good Assyrian-like helmet, but in a context in which the helmet would not appear in Assyrian representations. Most striking is the parallel occurrence of the same or a very similar curly-haired "hero" dominating a pair of bulls. Yet even with the strong iconographic parallel, it is evident that the styles in which the respective figures are represented are quite different. In no way then can one attribute the breastplate to Assyria. One can only point to two more or less contemporary traditions which apparently shared a number of traits, but whose end products were qualitatively quite distinct. It would suggest either that the two groups were culturally rather close, or that one had left a very strong imprint upon the other.

IRAN

Elam. What primarily distinguishes the breastplate from North Syrian or Assyrian works is the sense of massive power achieved by broad,

thick forms, combined with careful attention to decorative detail and elaborate overall surface pattern. Significantly enough, these last are qualities which have been characteristic of Iranian art since the proto-Elamite period. Early seals from Susa exhibit this in, for example, the division of animal bodies into segmented parts and the elaborate application of surface patterns not occasioned by the natural forms (Fig. 46).⁷⁶ In addition, there is a bitumen bowl in the Musée Iran Bastan in Tehran, executed in the shape of a recumbent bull, which is of a type well known from early second millennium contexts at Susa. and on which we find a very clear parallel to the use of an overall pattern of spiral curls on the animal's rump, back and forequarters. What is more, these curls are shown in reversed direction in alternating registers, just as the Hasanlu bulls' locks are indicated (Fig. 47).77

A large series of decorated bitumen roundels often overlain with sheet metal that have

^{75.} One group of probable ninth century bronzes to which the mind naturally turns is the collection of "Cretan shields" from the Idean Cave (E. Kunze, Kretische Bronzreliefs, Stuttgart, 1931). A cursory glance will indicate, however, that there is little on the shields with which one can directly compare the breastplate. A single piece to which one might refer is the smaller tympanum (ibid., Pl. 49), which shows a man with long beard and "Assyrian-like" hairdo, wearing a short tunic with pant-legs rather than a skirt. He stands with the left leg bent and resting on the neck of a kneeling bull, as he holds a lion upside down in the air above his head. The only really similar characteristic of this piece to the breastplate is that the man's face and chest are shown in frontal view. He is, of course, also associated with a bull. The legs are in profile but not kneeling; and while there is a certain attention to surface patterning in the man's garment and on the bull, it is quite different from the breastplate. Not insignificantly, however, this is the one piece for which there seems to be a consensus regarding very strong Assyrian influence if not manufacture (J.

Boardman, *The Greeks Overseas*, Baltimore, 1964, p. 84); yet one cannot say that the tympanum and the breastplate were in the same line of descent, although they may reflect a similar parent tradition.

^{76.} E.g., Amiet, Glyptique mesopotamienne archaïque, pp. 40-41 and Pls. 32:509, 516, 517, 34:537, 538, as a few examples. And while Amiet notes, p. 42, that antithetic composition is relatively rare in the Proto-Elamite period, nonetheless there are a significant number of examples of male figures between two animals (Pl. 14:236, 238 and 239) to establish a long tradition for the motif.

^{77.} Published in P. Amiet, Elam, Auvers-sur-Oise, 1966, p. 275 and No. 205 (=Musée Iran Bastan, Tehran, No. 503). Related bitumen bowls in the shape of recumbent animals are to be found in ibid., Nos. 204, 206 and 207. The type in general is discussed in Porada, Ancient Iran, pp. 55-56 as specifically Elamite. In addition, there is a round bowl of bituminous stone also from Susa, on which four couchant bulls are represented in relief in a mountainous landscape (Amiet, Elam, No. 203; more recently published by E. Porada, "Iranische Kunst," in the Propylaen Kunstgeschichte, Vol. II, Berlin, 1975, Pl. 302a). The bulls all have double rows of spiral curls along their backs, widening to an additional four registers on the rump and three on the shoulder. While the curls do not alternate direction in successive registers, they are otherwise much in keeping with the treatment of curls, both on the bitumen vessels and on the breastplate. Furthermore, if indeed some of the Uruk period stone vessels are actually products of Elam as suggested by Porada (above, fn. 39), one would also have an early parallel for the very distinctive conception of sculptural projection from a relief ground as exemplified by the breastplate and the Marlik and Susa vessels discussed below. In fact, the very existence of these later works might well reinforce the stylistic argument of Porada for an Elamite origin of the early stone vases.

appeared in recent years on the art market⁷⁸ can with some assurance also be attributed to Elam, based first upon the popularity and availability of bitumen as a material⁷⁹ and second on the recent discovery of an actual roundel in good excavated context at the site of Haft Tepe in Khuzistan.⁸⁰ The Haft Tepe piece comes from a level not later than the thirteenth century B.C., and is decorated with a central rosette bordered by a register of recumbent rams. Its date would seem to be confirmed by parallels to similar animals on a limestone macehead from the Kassite palace at 'Agar Ouf.⁸¹ What is of interest to us here is that some of the known roundels contain a frontal male face in lieu of the rosette at the center (Fig. 48). These faces, with their straight beards horizontally cut off at the bottom and a hairdo consisting of three sets of spiral curls-one pair at the temples, the other two hanging down alongside the mouth and beard respectively-are of course very closely reminiscent of the central male figure on the breastplate. If indeed this group does represent Elamite work.82 we are provided with a precedent for our frontal-faced hero with three registers of haircurls in Iran in the late second millennium quite independent of the Neo-Assyrian use of the same subject some 400 years later.

Porada has recently summarized the qualities which characterize Elamite art in general.83 Discussing the bronze statue of queen Napirasu, wife of the Elamite king Untash-dGal, ca. 1260 B.C. (Fig. 49), and the limestone stela fragment of Adda-Hamiti-Inshushinak, ca. 650 B.C. (Fig. 50), she noted a) with regard to the statue, a tendency to deal more naturalistically with the upper part of the body and in a more generalized fashion with the lower portion; b) a tendency toward overall surface patterning in the decoration of the queen's garment; c) evidence of the technical achievement of Elamite bronze workers, in this case with regard to the casting process, but also including the subsequent elaborate added surface incising; d) the particularly wide shoulders of the male figure on the stela fragment and as characteristic of Elamite art in general; and e) in reference to the king, the "mannered stylization of the forms" and the "delicate linear ornamentation of the robes."84 One cannot imagine a description more evocative of those qualities which have been ascribed to the breastplate. Furthermore, the two pieces discussed by Porada bracket in time a period from the thirteenth to the seventh century B.C., making it highly likely that the same characteristics of Elamite art would have been operative in the interval as well, and it is precisely in that interval that the Hasanlu plaque is to be placed.

Unfortunately, there are no exactly contemporary Elamite works with which to directly compare the breastplate. One Elamite piece of somewhat later date—a ceramic vase with incised decoration of two bulls opposite a tree (Fig. 51a and b), found beneath the Achaemenid palace at Susa and dated to the eighth-seventh century B.C.⁸⁵—may serve to strengthen these ties, however. One can point to

^{78.} Metropolitan Museum of Art, MMA 62.115 and MMA 66.31.1 (Wilkinson, BMMA 24, Fig. 10); British Museum, BM 134906 and BM 134909; Amandry Collection (P. Amandry, "Un motif 'scythe' en Iran et en Grèce," JNES 24 [1965] Pl. XXVIII:1 and 2); Schimmel Collection (O. W. Muscarella, ed., Ancient Art: The Norbert Schimmel Collection, Mainz, 1974, No. 151); and three reputedly in the possession of a New York dealer. In this regard, it should be noted that when these pieces appeared on the market, they were universally attributed by their dealers to northwest Iran. Such attributions are questionable at best, and in the present case, happened to coincide with the attention focused at the time on the material from Marlik. It would certainly not be the first time that inaccurate provenances were given to pieces by zealous dealers to enhance their interest. This does not deny the possibility that some of the roundels do indeed come from the north, however, present evidence as outlined below does seem to place the group in the south, both stylistically and in terms of the material.

Cf. the bitumen vessels cited above, and the bitumen seals found at both Susa and Chogha Zanbil (Amiet, *Elam*, No. 419 and E. Porada, *Tchogha Zanbil IV: La Glyptique*, Paris, 1970. No. 41).

^{80.} This conclusion was similarly arrived at by Amiet in a paper presented at the VIIth International Congress for Iranian Art and Archaeology in Munich, September 1976, and has subsequently been published as "Appliqués iraniennes," La revue du Louvre 27 (1977) 63-69.

^{81.} T. Baqir, "Iraq Government Excavations at 'Aqar Quf: Second Interim Report, 1943-44," *Iraq Supplement* (1945) Figs. 27 and 28.

^{82.} A fragmentary limestone bust of a deity found at Susa

⁽Amiet, *Elam*, No. 289 and Porada, *PPK II*, Pl. 291b, with discussion, p. 384), whose hairdo as preserved recalls the central male figure of the roundels, would tend to support this. 83. Porada, "Aspects of Elamite Art and Archaeology."

Expedition 13, 3-4 (1971) 28-34, and PPK II, pp. 367-371.

^{84.} Porada, Expedition 13, 3-4, p. 30 and Figs. 2 and 3, resp. 85. Amiet, Elam, No. 376 (=Louvre SB 411 bis).

the awkward angularity of the incised bulls which is actually quite reminiscent of the way in which the birds are represented on the breastplate, as well as the heavy proportions of the bulls themselves and the way in which the shoulder is emphasized as a separate unit.

In addition, the series of copper/bronze beakers sometimes styled "Elamite" provide us with certain similarities in conception which necessitate their mention. On one example, there appears a bird with hooked, open beak-the single parallel we have to the pair of birds on the breastplate.86 Furthermore, one of the favored motifs in this group is that of a kneeling bowman shooting at a single animal, the decoration executed in a combination of repousse and incision (e.g., Fig. 52).⁸⁷ One may further observe careful attention to pattern on garments and animal bodies. However, when one compares the style of the figures in general to the breastplate-particularly the way in which heads are shown in profile, as are the lower parts of the men's bodies with the buttocks emphasized, the skirt indicated not as a single symmetrical panel but clearly divided to allow for greater ease in kneeling; the way in which decorative patterns on the garments follow the lines of the body while decoration on animal bodies is much tighter and more stylized-we cannot associate the Hasanlu piece any more firmly with the beakers than we did with the Assyrian garment decorations.⁸⁸

West Central Iran. The style of the Luristan bronzes, while also showing a tendency toward overall patterning of animal bodies and an

emphasis on the outline of the body through decorative bands.⁸⁹ remains guite distinct from the breastplate in the oddly geometric, highly exaggerated and stylized slender bodies of both human and animal figures. As a further distinction between the breastplate and the bronzes, while numerous examples of antithetic compositions exist that involve trees between men or animals, there are relatively few examples of the "master of animals" motif, and a number of those examples which do exist have been recognized as of questionable authenticity.90 Finally, Moorey notes with regard to antithetic motifs that much of the imagery in Luristan of the early first millennium B.C. most probably had an Elamite origin-a possibility which would accord with the historically close relationship that existed between the two areas in our period.91

89. Cf. Porada, *Ancient Iran*, Fig. 59 and p. 96, with regard to a quiver plaque from Surkh Dum, dated ca. ninth century B.C.

90. Moorey, Catalogue of Ancient Persian Bronzes in the Ashmolean Museum, Nos. 128ff and pp. 124-125.

91. Moorey, ibid., p. 207, and L. D. Levine, "Geographical Studies in the Neo-Assyrian Zagros, Part II," *Iran XII* (1974) 104-106. Curiously enough, the Luristan bronze with the closest relationship to the Hasanlu breastplate is also an equestrian ornament: a pair, actually, of V-shaped cheek

^{86.} P. Calmeyer, *Reliefbronzen im babylonischem Stil*, Munich, 1973, Fig. 103, from the Barbier Collection.

^{87.} Ibid., p. 49, No. F.5, in the collection of the Metropolitan Museum of Art, New York (= MMA 48.178.1).

^{88.} Ibid., Pls. 2:1, 3:2, 4:1, etc. It must further be underscored that all of the decorated examples of this group of beakers come from the art market. On the basis of the identifiable Elamite monuments like those of Napirasu and Adda-Hamiti-Inshushinak mentioned above, the group does seem at home in the "Elamite" style (Porada, *Expedition 13,3*-4, p. 33). Nevertheless, the only excavated examples found thus far are undecorated beakers, and none of these from Elam (e.g., from Hasanlu, Marlik and War Kabud in Luristan [O. W. Muscarella, "Decorated Bronze Beakers from Iran," *AJA* 78 (1974) 239] and from Kurdistan [cf. below]). Several of the decorated pieces are reputed to have been found in Luristan;

they are therefore sometimes referred to as "Lur" (cf. Amiet, Elam, p. 501). Calmeyer, however, would prefer to see them as Babylonian (Reliefbronzen). Moorey would tentatively agree with Calmever in viewing the pieces as predominantly Babylonian, although he has rightly pointed out how little we know about both Elamite and Kassite or Babylonian art of the period from 1300 to 800 B.C. (Review of Calmeyer, Reliefbronzen, in Gnomon 47 [1975] 281). Two of the decorated beakers seem with reasonable authority to have come from the Mahi Dasht plain around modern Kermanshah (cf. Muscarella, AJA 78, p. 243). A third, but undecorated beaker of the same shape has been most recently discovered in situ in an Iron Age grave at the site of Chogha Maran, ca. 20 km. north of Kermanshah, sounded as part of the comprehensive survey of the Mahi Dasht currently being undertaken by L. D. Levine of the Royal Ontario Museum (=Md. '75/289, Grave 7, Object 4: information kindness of the excavator). As the Mahi Dasht is directly on the Great Khorasan road which today, as in ancient times, is one of the major routes across the Zagros, connecting Mesopotamia with the Iranian plateau, it would indeed be a most likely region for either the distribution of such objects, or even, although this is pure speculation, for their production. Perhaps further archaeological investigation in the plain will help to clarify the role of the area with regard to this elusive group of objects, but what is clear for our purposes is that present information will not permit use of the beakers as evidence for or against association of the breastplate with "Elamite" art.

Work recognized as Elamite therefore comes perhaps closest thus far to the spirit in which the Hasanlu breastplate was conceived. If it is difficult in the absence of specific parallels with contemporary objects to assert that the breastplate should be considered an "Elamite" work, we have nonetheless come considerably further in demonstrating not only that the theme of a "hero" was known in Iranian tradition of the early first millennium, but also that very specific characteristics of style exhibited by the breastplate can be identified as traditionally Iranian.

Northwest Iran. It is within that context that we now turn to examine the extraordinary collection of fine metalwork from the site of Marlik, southwest of the Caspian region and southeast of Lake Urmia. Although no equestrian ornaments were found in the graves of Marlik, a series of decorated gold and silver beakers was discovered representing the highest quality workmanship.⁹²

On one incised silver beaker from the site, a central male figure with frontal chest stands between two lions which he grasps by the throat.⁹³ This piece further establishes the occurrence of the "master of animals" motif in Iran, although the style is quite different from the Hasanlu breastplate. On two occasions birds of prey are

represented on Marlik vessels: once as a frontal eagle between two rams;94 and once as birds flying in the field.⁹⁵ While this last cup is likewise not stylistically related to the breastplate, again one may observe a similar tendency to surface pattern. The eagle-and-rams bowl comes closer in style to the breastplate in the over-all pattern of hair-curls on the rams' bodies and in the details of eye and brow ridges (Fig. 53). Furthermore, it is this bowl which was cited earlier as one of the examples of repoussé work in which heads are executed fully in the round. Both the rams and the eagle have frontal heads hammered from the single sheet of metal, thus projecting from the vessel wall. It is this characteristic which ultimately provides the clearest link between Marlik and the Hasanlu plaque, and the technique of combining high-relief bodies with heads in the round is also to be found on what has been called the "most beautiful"-certainly the highest quality in terms of execution-of the Marlik cups (Fig. 54).96

The cup in question shows two pairs of rampant winged bulls, their bodies in profile, heads turned out at right angles to the wall of the vessel. As noted above, the vessel has been hammered out of a single piece, with the exception of the bulls' horns and ears. The animals are not as heavy in proportion as the bulls of the breastplate. Heads are more slender and delicate, exquisitely modeled, and the horns are not as thick in relation to the size of the head. The bodies are covered with short hatch marks over the entire surface; there are no curls. In this respect, the bulls are even more schematized than the animals of the breastplate.

Porada, in her discussion of the Marlik beaker, compares this piece with the Old Elamite bitumen vessels to which we referred above.⁹⁷ She notes the incorporation of the surrounding space into sculpture as characteristically Iranian and specifically Elamite. In fact, a rather extraordinary bronze vase in high relief was actually found at Susa on which two registers of animal friezes are represented, the bodies hammered in repoussé, with heads projecting in

pieces from a horse-bit, decorated with the torso of a bearded male figure rising between the necks of a pair of bovids (Moorey, Ancient Persian Bronzes in the Adam Collection, No. 37A and pp. 71-72). In their publication, Moorey noted that although the animals in particular did fall within the canon of the Luristan style, these pieces were generally different from the predominant style of other known Luristan horse-bits, and he suggested precisely that they reflect influence from the North. In a more recent communication (personal letter, 14 September 1976), he notes: "The Hasanlu breastplate could well be cited as a possible prototype for the iconography of these pieces," and he now suspects they may have been manufactured somewhere north of Luristan in an area more directly in touch with the Iron II culture of Azerbaijan.

^{92.} These vessels have been variously dated to the 12th-11th century B.C. (Porada, Ancient Iran, Pls. 22a and b), the very late second or early first millennium B.C. (Negabban, JNES 24, p. 325), or the 8th-7th century B.C. (R. Ghirshman, *The Arts* of Ancient Iran, New York, 1964, p. 96). Although the latter date is certainly too late, either of the two earlier dates could well serve to establish a traditional context for the Hasanlu piece.

^{93.} Negahban, Marlik, Fig. 104.

^{94.} Ibid., Fig. 112.

^{95.} Ibid., Fig. 113 and Pl. IV.

^{96.} Porada, Ancient Iran, p. 99; illustrated in *ibid.*, Pl. 22a and in Negahban, Marlik, Fig. 114 and Pl. V.

^{97.} Porada, Ancient Iran, p. 99.

the round (Fig. 55).98 The heads on the Susa vase were attached by soldering, although from the front they appear to be of a piece with the vessel. The upper register contains four couchant bulls; the lower, four standing equids. While I have not seen the piece, from photographs it would seem that the bulls do not exhibit the same degree of attention to surface incising of details in body- or facial-markings as do the breastplate animals. Moreover, the bulls' bodies on the Susa piece seem thicker and worked more en gros, without either the subtle modeling or the tendency to hammer individual body parts in separate segments, so characteristic of the breastplate. Nevertheless, the high relief and extent to which the heads project does make one think of the similar way in which the Hasanlu figures emerge from the background.99

The main problem is that simply because the beaker was found at Susa is not enough evidence to argue for its necessarily being "Elamite"—particularly as, in size as well as in decoration of the bottom and upper border, it is not only comparable to but quite one with the Marlik assemblage.

Two last vessels should be mentioned in this regard: first, the gold cup from Kalardasht, in western Mazanderan province of the south Caspian region, on which heads of four lions project in the round from the vessel wall; and second, a gold cup showing four gazelles with projecting heads, said to be from the Safid Rud region of the neighboring Gilan province, along the southwest Caspian.

The Kalardasht bowl has been rightly called a cruder piece than the Marlik beaker, in that the animal heads were very obviously made separately and riveted onto the body of the cup.¹⁰⁰ The vessel attributed to Gilan, however, is clearly the equal of the Marlik beaker in the delicacy of the modeling and the technical quality of execution. As on the Marlik vessel, ears and horns were added separately. Wilkinson, in his publication of the Safid Rud piece, has noted that

98. Amiet, Elam, No. 356, pp. 472-473.

although the projecting heads at first appear to have been hammered out from the body of the cup, as has been said of the Marlik beaker, they were in fact fashioned separately and fastened with virtually invisible seams by a process of hardsoldering well known in Iran in antiquity.¹⁰¹

The base of the Safid Rud cup is of the same type and design as the Susa and Marlik beakers.¹⁰² On the basis of distribution, the archaeological evidence at present would seem to argue for an origin of the type in northwest Iran.¹⁰³ All of the vessels mentioned—Marlik, Susa, Kalardasht and Safid Rud—demonstrate extraordinary mastery over metalworking techniques, and constitute a group in which the Hasanlu breastplate is very much at home. And despite the difference in form and function, the extent to which the effect of the plaque is determined by spatial factors is very much in keeping with the metal vessels.¹⁰⁴

Finally, then, we must consider the large copper/bronze roundel found during commercial excavations at Geoy Tepe near Rezaiyeh (only ca. 50 km. from Hasanlu) in 1934, now in the Musée Iran Bastan, Tehran (Fig. 56).¹⁰⁵ The roundel has been both hammered and chased. Within the inner circle, 14 cm. in diameter, a male figure is represented between two reversed bulls, each of which he holds by a hind leg. The central

104. That this tradition of relief figures extending into space is characteristic of Northwest Iranian workshops is suggested by a bronze plaque said to be from Ziwiye and presently in the Musée Iran Bastan, Tehran (P. Amandry, "A propos du trésor de Ziwiye," Iranica Antiqua VI [1966] Pl. XXVIII:1a-d). The plaque, 22 cm. long, is tanged at the top for hanging, and combines cut-out work, surface incision and the heads of a bull and lion hammered out in full three dimensions from the ground. The details of curves in the bull's muzzle and the raised brow ridges are parallel to the treatment of the breastplate bulls. Amandry has actually speculated that this piece may have been part of a horse's harness decoration (ibid., p. 126). Moorey has noted that it is almost certainly later in date than the occupation of Hasanlu level IVB (personal communication, 22 October 1976), however unfortunately neither its precise chronological context nor the validity of the claim that it actually came from Ziwiye can be established.

105. Y. Godard, "Disque en bronze découvert en Adharbaidjan," Athar-e-Iran 3 (1938) 303-305 and Fig. 207.

^{99.} The extent to which the heads project is considerably greater than the 2 cm. indicated by Negahban for the Marlik beaker (cf. *JNES* 24, p. 323), and would compare better to the 6.5 and 5.5 cm. respectively that the man and bulls project on the breastplate.

^{100.} Porada, Ancient Iran, p. 99.

^{101.} Wilkinson, *BMMA* 24, frontispiece, and discussion, p. 104 (in the collection of the Metropolitan Museum of Art, New York, MMA 62.84). Porada has recently published a superb color plate of the piece (*PPK II*, Pl. XXXVII and discussion, pp. 373 and 390).

^{102.} Wilkinson, BMMA 24, Fig. 3.

^{103.} Cf. fn. 78, however.

figure is shown with frontal face and shoulders, while the lower half of the body is in profile with legs apart as if walking to the left. He has large eyes and a broad, flat nose. The beard is cut off square at the bottom; the hairdo consists of three sausage-like corkscrew curls extending out to each side, which correspond neatly to the three registers of curls sported by the breastplate hero. The tunic worn by this figure is short-sleeved and knee-length, and a double tassel presumably attached to the belt hangs down between the legs.¹⁰⁶ Particularly striking in relationship to the breastplate is the way in which the hands that hold the hind legs of the two bulls are represented with very large thumbs (especially the left) that curve up at the tip.

There is clearly not the same degree of surface pattern as on the breastplate, and the compositional problem solved on the breastplate by having the central figure kneel is not as well handled here: the man is so large that little room remains within the circle for the bulls, which therefore seem like rather negligible opponents. Nevertheless, both the scale of the piece and the motif of a frontal-faced hero between bulls is closely related to the representation on the Hasanlu plaque, both in overall conception and in several details.

The Geoy Tepe roundel is thought to have been

either a chariot ornament or, more probably, a shield boss, and has been tentatively dated to the eighth century B.C. on the basis of similarities to a Sargonid relief from Khorsabad.¹⁰⁷ I myself am more inclined to emphasize the ties to Middle Assyrian seals of the late second millennium. Either way, within that time range, the Geoy Tepe roundel affords a significant parallel to the breastplate from within Azerbaijan, and one only wishes it had come from controlled excavations in good stratigraphic context.

To summarize the parallels noted thus far for the Hasanlu breastplate, then, it would seem that while similar aspects of iconography and even specific details may be observed in essentially contemporary works from North Syria and Assyria, it is within the framework of Iranian stylistic traditions and metalworking techniques breastplate that the must be viewed. Furthermore, there are significant parallels for iconography and details from the immediate region of northwest Iran which suggest a tradition that need not be dependent upon the West for the breastplate's conception. If one is to attempt to place the breastplate in its proper cultural and historical milieu, one must therefore look to a place in which Western motifs and prototypes may have been absorbed and incorporated into a Iranian tradition of stylistic pervadingly preference and technical execution-i.e., somewhere in Iran, but in contact with Assvria and possibly even North Syria.

^{106.} This tunic with tassels is particularly characteristic of the Middle Assyrian period, and can be seen worn by a male "hero" often sporting spiral or sausage hair-curls (cf. Porada, *Corpus*, Nos. 592, 597, 599, 600, 608, 609).

^{107.} Godard, Athar-e-Iran, p. 305.

THE HASANLU CONTEXT



It is a common archaeological maxim that the simplest explanation for the discovery of a piece at a given site is that it originated there. Thus, having provided a context in which the breastplate may be seen technically, stylistically and iconographically, we must consider the evidence for the possibility that the Hasanlu breastplate may have been manufactured at Hasanlu itself.

Examination of the archaeological assemblage at Hasanlu makes it clear that the conditions established as necessary for the manufacture of the breastplate do obtain: that is, accessibility to the West and at the same time to the South. Objects of North Syrian manufacture have been recognized at Hasanlu, particularly ivory carvings and lion bowls, and North Syrian influence has been noted in connection with the gold bowl found at Hasanlu as well as in the architecture.¹⁰⁸ Likewise, a large quantity of objects found at the site are clearly Assyrian, including fragments of ivory carvings, glazed wall tiles, stamp and cylinder seals. In addition, found in the 1974 season was half of a macehead inscribed in cuneiform: "Palace of Assur-Uballit" (king of Assyria from 1365 to 1330 B.C.).¹⁰⁹

Although only a single Assyrian cylinder seal from Hasanlu has been published, showing an archer stalking a horned animal, there is actually a very extensive collection of linear and early drilled-style seals found at the site. These include a large number which are carved with the motif of a kneeling hunter in opposition to his animal prey, a type cited earlier from Assyria as a possible iconographic source for the kneeling figure on the breastplate (see above and Fig. 57).¹¹⁰ An inlaid 'Egyptian blue' paste gorget found at the site bears the same motif as the published seal: a bowman taking aim at a horned goat (Fig. 58).¹¹¹

^{108.} For the ivories, cf. O. W. Muscarella, "Hasanlu 1964," BMMA 25 (1966), esp. pp. 125-127 and Fig. 6. In addition, North Syrian influence has been noted on several ivories of "local" style (Figs. 11-14). The same author has recently completed a catalogue of all the ivories from Hasanlu (in press), including those found in seasons subsequent to 1964, in which a considerable quantity of fragmentary ivories of North Syrian manufacture have been excavated; I am grateful to Dr. Muscarella for permission to refer to them here. For the North Syrian lion bowls, cf. Muscarella, "The Third Lion Bowl from Hasanlu," Expedition 16, 2 (1974) 25-29. North Syrian elements on the gold bowl from Hasanlu have been noted by E. Porada. "The Hasanlu Bowl," Expedition 1, 3 (1959) 19, and by Muscarella, "Hasanlu in the Ninth Century B.C. and its Relations with other Cultural Centers of the Near East," AJA 75 (1971) 264-265. Arguments relating to the architecture are presented in T. C. Young, Jr., "Thoughts on the Architecture of Hasanlu IV," Iranica Antiqua VI (1966) 60-62.

^{109.} In general, cf. Dyson, JNES 24, pp. 198-203. A single example of an Assyrian-style ivory was published by Muscarella, BMAA 25, Fig. 2, however the collection includes a large quantity of fragments, to be published in the forthcoming catalogue mentioned above. Glazed wall tiles are referred to in Dyson, "Digging in Iran: Hasanlu, 1958," *Expedition 1*, 3 (1959) 14; seals in Dyson, "In the City of the Gold Bowl: New Excavations at Hasanlu in Persian Azerbaijan," Illustrated London News, September 12, 1964, pp. 372-374 and Fig. 6, as well as in Dyson, "Ninth Century Men in Western Iran," Archaeology 17 (1) (1964) Fig. 14. The macchead has been noted in Dyson and Pigott, Iran XIII, p. 161.

^{110.} Three unpublished examples have been registered as HAS 60-13, HAS 60-902 and HAS 60-1021. I am grateful to Robert H. Dyson, Jr. for permission to refer to these and subsequently-cited unpublished objects from Hasanlu in the present study.

^{111.} Published by Dyson in the Vth International Congress of Iranian Art and Archaeology I, Fig. 6.

Judging by the hairdo and stance of the bowman, this is most likely of Assyrian manufacture. The bowman is placed in the center of the lunate plaque, unlike the placement on the seals, and while he shoots at one goat to the right, there is a second animal to the left, thus creating an antithetic composition of a single human figure between two animals, both of which face out from the center. Moreover, a companion to the gorget in the same inlaid technique of blue paste was found in fragmentary condition in the same archaeological context (Fig. 59).¹¹² On the lefthand half that is preserved, one sees a very heavily proportioned, kneeling and winged bull, with one of the forelegs bent back on the ground and the other extended forward. The bull was clearly mirrored by a similar figure on the other side, and both would have flanked some central element, now missing.

Assyrian objects seem to outweigh North Syrian works at Hasanlu, not only in quantity but also in providing specific prototypes for elements on the breastplate. Furthermore, virtually all of the North Syrian objects found at the site occur also at the ninth century Assyrian capital of Nimrud,113 and at present there is not enough evidence to substantiate direct contact between North Syria and northwest Iran in this period. Rather, as noted by Young with regard to architectural forms, the Assyrians could well have acted as a link between the two areas, and been responsible for the distribution of North Syrian goods to Iran.114 In particular, on both of the gorgets, as well as on the seals, we are presented with kneeling figures, bulls and the heraldic composition which mark the breastplate. They thus provide us with the models necessary for the adaptations we see on the breastplate at the time when the piece would have been made.115

It will be remembered that a great number of the iconographic parallels for the breastplate came from the garment decoration on Assyrian reliefs, decorations generally thought to represent elaborately patterned embroidery. It has been frequently noted that textiles, although so rarely preserved in the archaeological record, cannot be ignored as significant factors in the transmission of art styles and motifs, and from the one period in which we have ample textual evidence, the Old Assyrian, textiles indeed constituted a major commodity of exchange between Assyria and areas with which she was in contact.¹¹⁶ Thus it would not be untoward at all to postulate that Neo-Assyrian textiles, too, may have played a role in western Iranian art of the early first millennium.

The complete nature of the Assyrian presence in northwest Iran at this time is not yet fully understood. Shalmaneser III apparently campaigned in the area from ca. 843 B.C. on, particularly if, as suggested by Levine, the 'Lower Sea of Nairi' represents modern Lake Urmia. However, there is no evidence that Assvria wielded any political control over the region.117 It is generally assumed that the destruction of Hasanlu level IVB took place toward the end of the ninth century B.C. at the hands of the Urarteans who were then engaged in territorial expansion to the south and east of their homeland around Lake Van (see above, note 54). Whether or not Hasanlu's prior relations with Assyria consisted also of direct military conflict, the presence of so many Assyrian objects at the site would certainly attest as well to some sort of institutionalized exchange ¹¹⁸

^{112.} HAS 64-607. I leave open the question of whether these two pieces could be part of the local "Egyptian blue" tradition rather than being Assyrian imports. Suzanne Heim will pursue this in her Ph.D. dissertation on pre-Achaemenid Iranian glazes for the Institute of Fine Arts, New York. Even if they are locally made, however, the debt to Assyria is extremely strong.

^{113.} Compare, for example, the ivory fragment from Hasanlu (Muscarella, *BMMA* 25, Fig. 6) with that published in Barnett, *Catalogue of the Nimrud Lories*, London, 1957, S.13. Other examples from more recent seasons at Hasanlu have been documented by Muscarella in his forthcoming catalogue of the ivories.

^{114.} Iranica Antiqua VI, p. 61, n. 2.

^{115.} One would like to know considerably more about

Urartu in the ninth century B.C. Areas like Van were evidently occupied, and must have provided the spring-board from which Urartean expansion into Northwest Iran was launched in the last quarter of that century. It would certainly not have been impossible for North Syria and Urartu to have been in contact at that time, as was surely the case in the early eighth century, thus making an independent northerly route from North Syria to Iran possible; however at present there is no concrete evidence to support such a reconstruction.

^{116.} Cf. K. R. Veenhof, Aspects of Old Assyrian Trade and its Terminology, Leiden, 1972, Pt. II, pp. 79-218, dealing with textiles and wool.

^{117.} L. D. Levine, "Geographical Studies in the Neo-Assyrian Zagros, Pt. I," Iran XI (1973) 20-21 and n. 90.

^{118.} For the historical context of the second millennium B.C., cf. the doctoral dissertation of Carol Hamlin, "The Early Second Millennium B.C. Ceramics of Dinkha Tepe, Iran and an Analysis of the Habur Ware Ceramic Assemblage of Northern Mesopotamia," University of Pennsylvania,

The second requisite for the stylistic features apparent on the breastplate was access to Elam in the south. One of the most tantalizing pieces found at Hasanlu thus far is a stone bowl on which is inscribed a short text identifying a king "Bauri of Idi."119 Assuming Levine's geographical identification of Idi and its state, Zamua, to be correctly located in the Zagros south of the Lower Zab,120 the presence of the bowl at Hasanlu would reflect contact with points south, if not directly with Elam. In addition, Levine cites indications of close connections between Elam and Elippi, which he located in the area of modern Luristan and Kurdistan.¹²¹ The artistic relations between Luristan and Elam are clear (see above). Hence, once ties are established between Elam and states to its north, and between Hasanlu and states to its south, it is not at all unlikely that the chain of connections existed the entire length of the route. Furthermore, Porada has pointed out the possible relationship of lion-pins and glazed wall tiles from Hasanlu to Elamite work of approximately the same period.¹²² Substantiating this are the quantity of shells found in a small structure between Burned Building I and Burned Building II at Hasanlu which have been identified as local to the Persian Gulf and the Indian Ocean,123

suggesting that indeed the routes to the south were open for the passage of goods. Finally, to this last may be added the presence at Hasanlu of two undecorated bronze beakers of the type known from the south (see above, note 88).

Several objects found at Hasanlu in recent years reflect ties to the West, even if they cannot with assurance be demonstrated to have been imports. One such object is a conical bronze helmet found in Burned Building II (Fig. 60).¹²⁴ With its median ridge and curving bands at the front, it is virtually a model for the helmet worn by the central figure on the breastplate. Helmets of this general type may be seen on Assyrian reliefs of the ninth century B.C. (see above and Figs. 42 and 45); however, whether the Hasanlu helmet must then be an import is not clear. It could simply be that there was a generalized Near Eastern helmet type in the period, worn in several localities.125 On the other hand, this is not the only helmet type found in Hasanlu level IVB. Some are guite distinct, with high crests and ear flaps (e.g., HAS 60-620, 906, 1078; 62-581), while others are very similar to the conical type but squatter and less pointed in shape (Fig. 61). It is worthy of note that this squat type is closer to the helmet worn on the breastplate than the taller version, and reflects the distinction made in the Assurnasirpal II relief which Barnett has suggested represents Iranians (Fig. 11). There, the "Persian" helmets are less tall and pointed than their Assyrian counterparts, and precisely identical in shape to the helmet of the breastplate. We may thus have typological variables present at Hasanlu which reflect

Philadelphia, 1971, a portion of which has been published as "The Early Second Millennium Ceramic Assemblage of Dinkha Tepe," Iran XII (1974) 125-153. For some suggestions on the dynamics of how that exchange might have been effected in the first millennium, see Winter, "Perspective on the 'Local Style' of Hasanlu IVB: A study in receptivity," in L. D. Levine and T. C. Young, Jr., eds., Mountains and Lowlands: Essays in the Archaeology of Greater Mesopotamia, Malibu, 1977, pp. 377-378.

^{119.} Dyson, JNES 24, Pl. XXXIX.

^{120.} Levine, Iran XI, Chart, p. 15, and pp. 17-22. It must be stated, however, that although Levine's argument seems convincing, it is not conclusive, and it still remains possible that ancient Zamua and therefore Idi is to be identified with the area around Lake Urmia. The fact of the bowl having been found at Hasanlu cannot be considered evidence for Idi as the ancient name of the site itself, however, as in addition to the Assyrian macehead mentioned above (fn. 109), there is also a stone bowl from Hasanlu inscribed with the name of the Kassite king Kadashman-Enlil (Dyson, Vth Int. Congr. of Iranian Art and Arch., Fig. 8), so that royal objects were obviously gathered from a variety of places. Moorey kindly informs me (personal communication) that the same is true of inscriptions found at Surkh Dum in Luristan in a similar time range.

^{121.} Levine, Iran XII, p. 104 and Fig. 2.

^{122.} Porada, Ancient Iran, pp. 123-124.

^{123.} Ibid., p. 121.

^{124.} HAS 60-883, published by Dyson in *ILN*, Sept. 30, 1961, Fig. 14. A second helmet in very fragmentary condition was found in 1972 (HAS 72-69). It has the pair of curving bands on either side, but no apparent median ridge, and in addition, there is a row of rosettes around the base of the helmet, with small holes at the lower edge, presumably to facilitate attachment of the leather lining.

^{125.} As for example in the eighth century B.C., where the same helmet type is worn by Assyrians on reliefs and by Urarteans on bronze bells. In addition, actual examples of the helmets have been found inscribed with the names of Urartean rulers. Of the seven known Urartean helmets, four come from Karmir Blur, Beningrad, 1970, Pls. 43, 44, 48), one from Van (S. Lloyd, *Early Highland Peoples of Anatolia*, London, 1967, Fig. 123), one from Cavustepe, unpublished (reference in O. A. Taşyürek, "The Bronze Urartean Helmet in the Gaziantep Museum," *Turk Arkeoloji Dergesi 31* [1974] 177), and finally, one of unknown provenance recently purchased by the Gaziantep Museum (ibid, illustrated pp. 180-181).

geographical or cultural factors; however at present there is not sufficient evidence to tell. All we can say is that pieces were present at the site to serve as models for the representation on the bronze, while at the same time a helmeted hero/master of animals wearing such a helmet was without precedent in Assyria.

A series of cast metal vessel handles have now been found at Hasanlu that have in common a shaped finger-grip at the top which was obviously meant to protrude above the rim of the vessel.126 One of these was published by Porada, who, on the basis of the bird of prey on the attached portion of the handle, called it Iranian.127 Related pieces, generally in pairs, have been found in Assyria and in Elam, as well as at Gordion in central Anatolia.¹²⁸ The Assyrian pair comes from the bronze hoard found by Lavard in the Northwest Palace at Nimrud, and while the threefinger grip is the same, the attachment plaque consists of a pair of horses which project as protomes from the plaque in the same manner as the head of the bird on the Hasanlu handle. A second pair, found in a Neo-Elamite tomb at Susa, has a four-finger grip instead of three, and shows an animal (bull or horse?) down on one knee in open relief on the plaque (Fig. 62). Despite the additional loop in the finger-grip, the attachment juncture from handle to plaque is offset by a circular torus identical to the other pieces. The most recent discovery in the series of handles from Hasanlu also has a four-finger grip. It was found during the 1972 season, in Room 1 of the Corridor Building, not far from the group of plain breastplates and collars.129

It is this last handle which is significant in the present context, for the plaque consists of a scene in openwork relief of a frontally-faced kneeling male figure who grasps the hind legs of a small, reversed goat in each outstretched hand (Fig. 63). The plaque is badly corroded and it is not possible to see any surface decoration. The hairdo seems to consist of large spiral curls or clumps of hair at each side of the face, and a long, straight beard. The figure also seems to be wearing a short tunic. The association with the representation of the breastplate is clear, and again provides a model at the site itself for the master of animals motif. Unfortunately, it is not possible at this time to suggest a place of manufacture for the series of handles, although the evidence certainly points to somewhere in Iran.

Yet another enigmatic piece from Hasanlu is a large copper/bronze bowl in very fragmentary condition, a drawing of which was published by Dyson in 1972, and which is now in the process of undergoing cleaning and restoration.¹³⁰ The vessel is executed in repoussé, decorated with four identical sets of figures: a kneeling frontal-faced man holding a staff or inverted axe in the right hand and in the left the tail of a winged bovine animal. Men and bulls all have protome heads with bodies in low relief, and all are hammered from a single sheet of metal (see Figs. 64a and b and 65-67).

The quality of the work is in general far less fine than that of the breastplate. The human figures have hair that comes very low on the brow, with a curious volute at the center. Large curls frame the face at each side, the up-sweep of these curls forming a continuous ridge around the back of the head. Eyes are circular and relatively small; cheeks are full; and the nose is very flat and broad, as on the breastplate. The mustache is long, terminating in curls, unlike that of the breastplate figure, and the beard, while similarly cut off squarely at the bottom, is rendered as rather crude horizontal registers of short vertical hatches.

Both beard and mustache are more characteristic of the Elamite stela of Adda-Hamiti-Inshushinak, cited above. The figure on the bowl is likewise shown with the massive, wide

^{126.} Maude de Schauensee has kindly informed me that some of the handles were found still attached to vessels in this manner (e.g., HAS 58-240).

^{127.} Ancient Iran, Pl. 9 right, and p. 56 (published also by Dyson, "Early Cultures of Solduz, Azerbaijan," in A. U. Pope, ed., Survey of Persian Art XIV, London, 1967, p. 2962).

^{128.} Layard, Discoveries in the Ruins of Nineveh and Babylon, London, 1853, p. 185; Arniet, Elam, No. 358 a-b (a pair); Muscarella, Art and Technology, Fig. 8. In addition, a bronze bowl of unknown provenance with a pair of similar handles attached is currently in the collection of the Museum of the American University, Beirut (No. 68.102), and has been published by Barnett, "The Nimrud Bowls in the British Museum," Rivista di Studi Fenici II (1974) 24. 129. HAS 72-135.

^{130.} Dyson, in Pope, *Survey XIV*, Fig. 1034, and discussion, p. 2962. The restoration is currently being done in London by S. Nan Shaw Reade. At present, the heads are detached (male heads are ca. 5.4 cm. from the crown of the head to the tip of the beard by ca. 3 cm. maximum width; bulls' heads ca. 3 cm. from the neck to the muzzle); several unjoined fragments are all that is left of the body of the vessel.

shoulders and narrow waist considered typical Elamite characteristics. Whatever the full garment may have been, it is possible to see that it was belted, unlike that of the breastplate hero. Three concentric half circles mark the right shoulder of the garment, and the overall design, unlike the careful and complex patterns of the breastplate, is rendered as schematic bands of parallel or curving strokes. The barest indication of geometric decoration is also visible around the buttock area on the skirt, again less like the breastplate than the so-called "Elamite" beakers discussed earlier. A further distinction from the breastplate is the manner in which the figure's buttock is shown in profile. In addition, the man is not only shown kneeling, but actually sitting on the calf of the leg whose knee touches the ground. The thigh of the right leg is thus not parallel to the ground, but rather is extended up and out, with the lower portion of the leg forming a complementary diagonal. The figure therefore sits much closer to the ground than either the breastplate hero or comparable Assyrian figures, although both Assyrian representations and the Hasanlu handle share, along with the bronze beakers, an emphasis on the rounded buttock in profile.

The detail of holding an animal by the tail is one known from North Syrian and Assyrian contexts. e.g., on the Tell Tainat frontlet (Fig. 37), on a North Syrian bowl of the ninth century found in the Kerameikos cemetery at Athens,131 and on Assyrian garment decorations from the reliefs of Nimrud. On one of the garment panels, for example, a kneeling griffin-demon with a staff in one hand is shown holding a winged male sphinx by the tail (Fig. 68).¹³² In this case, both the clubwielding arm and the animal's tail are raised, however, as are the animals' tails on the Tell Tainat frontlet. Here, on the other hand, the club points toward the ground, as does the bull's tail. The hand that grasps the club seems rather mittlike, but still is nowhere as exaggeratedly large. nor does it have the enormous upward-curving thumb of the figure on the breastplate. If anything, the kneeling man is most like the figure on the handle plaque from Hasanlu discussed immediately above, although one would want to

131. E. Akurgal, The Art of Greece: Its Origins, Pls. 39 and 40. 132. Layard, Monuments, Pl. 49:4 and Canby, Iraq 33, Fig. 4. see both works together after surface corrosion had been removed. The cable decoration which forms the lower borders of the bowl and on which the figures stand is unlike any from Marlik or Hasanlu in that it is composed of extremely thick, almost vertical, elements, more like a twisted rope than a real guilloche.

The protome bulls' heads on the bowl, like those of the male figures, seem to have been hammered from a single piece, including the rather large ears. The stubs of the horns are smoothed and unbroken. It is possible that full horns were not intended, or that they were meant to be added separately. Closest to the treatment on the breastplate is the way in which incised double lines are used to emphasize portions of the bulls' faces. Thus, an almost identical pendent semicircle is inscribed from the base of one horn to the other, outlining the area of the bull's forelock. The muzzle is also outlined by an undulating line which rises twice to indicate the nostrils. Unlike the breastplate, however, and consistent with the male heads of the bowl, the eves are executed as circles with a raised band around the entire perimeter, rather than with a brow-ridge; and there is a wavy line extending diagonally down from the eye to the nostril on each side, to suggest the contours of the muzzle. These differences in detail, along with the difference in size and proportion of the bulls' ears, make it unlikely that the breastplate and the bowl might have been done by the same hand-thus corroborating our comparison of the male figures in the two cases as well. Nevertheless, in technique and in general substance, the two pieces are clearly related, and could well have come out of the same or similar traditions.

Several copper/bronze rhyta in the form of animal heads found at Hasanlu afford additional parallels to the protome bulls of the breastplate (cf. one example, Fig. 69). Two are bull or calf rhyta; a third is clearly a ram.¹³³ All are hammered

^{133.} HAS 59-845, in the collection of the Metropolitan Museum of Art, New York (MMA 61.100.2; I am grateful to Vaughn E. Crawford and Prudence O. Harper of the Ancient Near East Department for permission to reproduce the piece here). HAS 60-1006 is a second unpublished bull's head rhyton; HAS 60-771 a ram's head. A fourth, horse-head rhyton (HAS 60-881) has been published in Porada, *Ancient Iran*, Pl. 32 right, but seems to be stylistically different (cf. treatment of the eyes, etc.).

from the inside, with details added in incision from the exterior, and all share the thickened eyebrow-ridge over a tear-shaped eye found on the breastplate—a convention that continues into the Achaemenid period in fine metalwork.¹³⁴ In addition, the ram rhyton has the same undulating lines which mark the tip of the muzzle on the breastplate. Although the muzzles appear to be more square and less well modeled on the rhyta, this may simply be due to the desire for maximum carrying capacity in the drinking vessels.

A final group of related objects consists of three medallion-shaped belt buckles with repoussé decoration in the form of animals on the central boss. The first of these comes from a burial in the cemetery to the north of the citadel mound, and shows two pairs of animals in superimposed registers.135 In each case, a lion is at the left, facing right, with one paw raised toward a couchant bull facing left. The faces of both lions and bulls are turned 90 degrees from their bodies and are executed frontally in very high relief. Unfortunately, the piece is badly corroded, and I have been able to study it only from photographs. The second buckle consists of a triangular composition, set within a guilloche border, of a lion in the upper field whose paws extend down toward what appear to be two couchant bulls(Fig. 70a and b).¹³⁶ All three heads are executed as protomes; the bulls' bodies extend straight back toward the lion's paws. Both forelegs are splayed out and back on either side of the body, while only one hind leg-the outer in each case-is visible. It is impossible to determine for certain that the lion's body did not similarly extend back behind him given the present state of surface corrosion on the plaque. However, it would appear that only his head, forequarters and front paws were indicated. This results in a rather disquieting shift in perspective, from the aerial view of the bulls to the frontal view of the lion. The position of the lion on this second belt buckle is echoed on the third-both were found in the debris of the entrance chamber to Burned Building I. This last is unfortunately not complete: the protome head, shoulders and upper portion of the front paws of a lion in relief are clearly preserved, and the lion is evidently meant to be seen head-on. Subsequent cleaning of the buckle has shown that the forepaws must have been grasping at least one horned animal as prey, a portion of whose head and body is indicated by incision at the right (Fig. 71a and b).¹³⁷

The only other example I know from the Near East of this head-on view appears on an ivory horse's frontlet of North Syrian style from Nimrud, where a nude female figure holding blossoms stands upon just such a frontal lion. By contrast, several of the more or less contemporary Cretan shields found in the Dictean Cave on Mount Ida include protome bosses of eagle and lion heads, the respective talons or paws indicated in relief as extending down from the forequarters toward the bodies of couchant subject animals (for example, Fig. 72).138 Although the debt of the Cretan bronzes to ancient Near Eastern metalwork is generally acknowledged, this attempt at frontality had been used as evidence of Cretan or Greek manufacture, as it was argued that Near Eastern craftsmen had never attempted to solve spatial problems. The Greeks, by contrast, did go on to pursue complex issues of frontality, with the view becoming quite popular in the sixth century B.C. as a means of representing horses and chariots in early Corinthian and Athenian Black Figure vase painting (Fig. 73), Archaic sculpture and bronze relief,139 the assumption thus being that such interests were characteristically Aegean. The Hasanlu buckles therefore introduce an entirely new factor into the history of frontality and spatial illusion in two-dimensional art, as the pieces are, if not earlier than, at least contemporary with the Cretan shields.140 It is this grappling with the

^{134.} For example, the silver rhyton in the Schimmel Collection (Muscarella, ed., Ancient Art: The Norbert Schimmel Collection, No. 155).

^{135.} HAS 64-288.

^{136.} HAS 58-450; in the collection of the University Museum, Phildelphia (UM 59-4-113).

^{137.} HAS 58-244; in the University Museum, Phildelphia (unaccessioned).

^{138.} Orchard, Equestrian Bridle-Harness Attachments, No. 135: Kunze, Kretische Bronzreliefs, Pls. 2, 4, and 7.

H. Payne, Necrocorinthia, Oxford, 1931, Fig. 19 bis, and discussion, p. 74; E. Kunze, Archäische Schildbänder, Berlin, 1950, Pl. 46:XVIII and pp. 183-185; E. Kunze and H. Schlief, II Bericht über die Ausgrabungen in Olympia (Winter, 1937-38), Pl. 28; idem., III Bericht (Winter, 1938-39), Pl. 31; and H. Krahmer, Figur und Raum in der äugptischen und griechischarchäischen Kunst, Halle, 1931, Pl. 5 (=the metope sculpture from Selinus, currently in Palermo).

^{140.} An interesting question is then raised regarding the role

complexities of the frontal view which is of particular interest to us with respect to the composition of the breastplate (see discussion above) and suggests that the organization of space on the breastplate is not a unique or sport phenomenon, but rather should be seen as part of an attempt on the part of the Iranian artists of the time to deal with the perceptual in new and challenging ways.

All of the objects discussed thus far from Hasanlu provide important parallels for the breastplate in specific details, overall motif, composition, style and technique from the site itself, and could have served as models in local production. Nevertheless, the large number of well-established imports found at Hasanlu attest to an eclecticism which forces one to question each object in terms of the likelihood of its actually having been manufactured there. The fact that the belt buckles, for example, or the copper/bronze bowl share characteristics with the breastplate does not constitute sufficient evidence that the pieces are locally made. In order to pursue such a question with regard to the breastplate, it is first necessary to determine whether a recognizable "local style" can be isolated at the site, and whether the pieces we have been discussing would conform.

Perhaps the two best-known objects from Hasanlu are the gold bowl and the silver beaker, found in 1958 in Burned Building I.¹⁴¹ When we compare the figures on the gold bowl, for example, with the breastplate, we find that only in general aspects, like the division of bodies and especially legs into segmented parts, are the two in any way really similar. Surface patterning is less elaborate on the gold bowl, and characteristic markings, such as small circles at the ankles and concentric semicircles at the joints, so typical of the bowl.¹⁴² are not found on the bronze. The overall hatching on the bulls' bodies is perhaps closer to the Marlik gold beakers than to the breastplate; it is rather on the rams in procession just below the rim that we see alternating rows of spiral curls to indicate the coat. The emphasis on the complexity of narrative themes on the gold bowl is also quite distinct from the intense involvement with the single theme of the breastplate. The closest motif to the breastplate on the bowl is that of two heroes killing a bearded, frontally-faced and kneeling figure (Fig. 74), a motif which, as mentioned above, has its antecedents in North Syrian reliefs. When one compares the central figure to the breastplate hero, we see really very few points of resemblance, in that the gold bowl figures in general are characterized by very long straight hair bound by a fillet around the brow and short pointed beards, while they wear short tasseled kilts.

Although the gold bowl has been suggested to have been an heirloom and thus to precede in time the manufacture of the silver beaker, which is essentially contemporary with its archaeological context,143 the two vessels share certain characteristics of very prominent ski-slope noses, as well as the straight hair and pointed beards cited above-all of which definitely favor a single stylistic grouping (see Fig. 75). These same characteristics can be observed on ivories found at the site, which, although like the beaker are clearly indebted to Syrian and Assyrian work, constitute a coherent group, and have been termed "local style."144 In addition, these features appear again on a series of plaques in silver, bronze and iron, which virtually duplicate scenes from the ivories and thus participate in this local style¹⁴⁵(note particularly that horses are a

of Iranian work in influencing Greece. At least we know that some Iranian objects were reaching the West by the eighth century B.C. (cf. C. Kopcke, "Heraion von Samos: Die Kampagnen 1961/1965 im Sudtemenos," *MDAI* 83 [1968] Pls. 123, 124:1, 126:4, 127:1, and pp. 291-292 and 294).

^{141.} The gold bowl was initially published by Porada, Expedition I, 3 (1959) 18-22; cf. also R. H. Dyson, Jr., "The Golden Bowl and the Silver Cup—Treasures with a Dramatic History and Rich Significance. Excavations at Hasanlu near Lake Urmia, Pt. II," *ILN* 236 (1960) 250-251, and Porada, Ancient Iran, pp. 101-105, for subsequent discussion and bibliography. A detail of the silver beaker is illustrated in Ancient Iran, Pl. 28; full photographs with views from two angles in Porada, *PKK II*, Pls. 310a and b; and a roll-out

drawing of the entire vessel by Grace Freed Muscarella in Muscarella, BMMA 25, Fig. 10.

^{142.} Cf. Porada, Ancient Iran, p. 105.

^{143.} Ibid., pp. 106 and 123; and Porada, *Expedition I*, 3, p. 22. Against this, cf. Muscarella, *AJA* 75, p. 265.

^{144.} Muscarella, BMMA 25, Figs. 8 and 9.

^{145.} HAS 62-1058 to 1064, and HAS 64-475. On HAS 62-1059, for example, we see female figures who do not quite kneel although both legs are bent; this posture, as well as the way in which the heads are represented, is virtually identical with the ivories. The silver plaque, HAS 64-475, showing a man in a chariot and the attached horse, is likewise virtually identical with representations on ivories, for example, HAS 64-918 to 922.

common subject in this local group, in both ivories and metal plaques—for example, Figs. 76 and 77—thereby suggesting their cultural importance). Finally, lions with open mouths and bared fangs shown on the "local style" ivories ¹⁴⁶ are closely comparable both to the series of cast bronze lion pins found in abundance at the site,¹⁴⁷ and to lions depicted on a series of "local style" cylinder seals, one of which was mentioned by Dyson as recalling similar figures on the silver beaker, thus completing the circle of interrelating elements which define the group.¹⁴⁶

Porada has suggested that one accept as a working hypothesis the assumption that the gold bowl was made at Hasanlu itself.¹⁴⁹ In light of the overwhelming assemblage of objects in a single style, crossing media from bone and frit seals and repoussé metal plaques to carved ivories, the silver beaker and gold bowl, I feel we must recognize this as indeed the "local style" pervading production at the site of Hasanlu prior to the destruction of the citadel at the end of the inth century.¹⁵⁰ And if that is so, then the breastplate is clearly a phenomenon apart.

The closest one can come to finding a significant parallel between the breastplate and the "local" group is on the silver beaker, where the concentric semicircles that depend from the line of the bulls' and horses' backs can be compared to the concentric semi-ellipses that mark the top of the birds' wings on the breastplate. The crude angularity of the birds and the hatching of their bodies could perhaps be compared to the bull and lion of the lower register of the beaker, and the very fact of the birds' open beaks could be related to the frequency with which lions are shown with open mouths in the local style. However, the

birds' shoulders are far more carefully outlined than the animals on the beaker, and the hatching is set into triangular locks to suggest feathering. It is really pressing the evidence to suggest that the similarities cited reflect more than a general tendency to linear decoration common to metalwork. A glance at the human figures on the beaker should suffice to separate the two works immediately.

Therefore, with reluctance, it would appear that it is not possible to attribute the manufacture of the breastplate to Hasanlu with any authority. In fact, the weight of the evidence seems to suggest that it be located elsewhere. While we have established that all of the criteria required for the breastplate were indeed present at the site (i.e., evidence of contact with the west and south in a north-Iranian milieu), still it must be remembered that we know so much about Hasanlu precisely because it has been excavated. and should heed the caution that problems of contact, centers of production, continuity and discontinuity can be distorted purely on the basis of which sites have been excavated and how many.151 Precisely, not just Marlik, but other as yet unexcavated sites in northwest and northern Iran may have sustained as intense relations with Assyria as have been demonstrated for Hasanlu. Indeed this is suggested by the brief soundings and excavations that have been done in the area. particularly at the site of Saqzabad in the Ghazvin plain, southeast of Marlik, where during the course of investigation, a horse's tassel ornament of Assyrian type and two linear-style Assyrian cylinder seals were excavated in association with major first millennium architecture.¹⁵²

We are therefore thrown back to a more generalized regional attribution of north or northwest Iran for the breastplate—a designation which could in fact include Hasanlu, but which would take in the broader area of the southwest Caspian and Marlik, an area known for metalwork of the highest quality comparable to the Hasanlu breastplate, and in which the same historical context of accessibility to Assyrian works and influence as well as to Elamite production would pertain.

^{146.} Muscarella, BMMA 25, Figs. 18 and 21.

^{147.} Dyson, JNES 24, Pl. XXXVII.

^{148.} HAS 62-841. Another has been published by Dyson, "Hasanlu and Early Iran," Archaeology 13 (1960) 128, a third is to be found in "Archaeological News: Hasanlu, 1962," Archaeology 16 (1963) 132. A more comprehensive discussion of the 'local style' at Hasanlu by the present author was undertaken between the completion of this manuscript and its final publication (cf. citation above, fn. 118).

^{149.} Expedition 1, 3, p. 22.

^{150.} The plausibility of this suggestion is certainly strengthened by the fact that both one- and two-piece molds for casting have been found at Hasanlu (e.g., HAS 60-228, 576, 577 and HAS 60-117, 245, 517, 518), indicating that metalworking was being carried on at the site (cf. reference in Dyson, "The Hasanlu Project," in J. R. Caldwell, ed., New

Roads to Yesterday, New York, 1966, p. 423).

^{151.} P. Ålin, comment to Muscarella, in AJA 75, p. 265. 152. I am very grateful to Dr. S. Malek Shahmirzade for informing me of this material, which will be published by him in a forthcoming issue of Marlik Magazine, now in press.

The specific reference in iconography also eludes us, if the general sense of the plaque does not. We have consistently referred to the motif as the <u>"master of animals." However, whether the</u> central figure himself represents a god, a semidivine genius or a hero based on an idealized human model is not clear. In fact, the boundaries between these three categories in Near Eastern art are not always easy to determine.

In the Assyrian and North Syrian works with which we have compared the breastplate, we have called attention to bulls, both singly and in pairs, as attributes of Assur and the storm god, chief deities of their respective pantheons. Yet in all cases, the selected image is one in which the bulls are harnessed and serve generally as a pedestal for the god (see, for example, Fig. 35). Furthermore, the god is usually clearly distinguished by his headgear-a tall, bulbous cap with protruding horns that mark the divine in one form or another from the third millennium B.C. onward. By Assyrian or North Syrian definition, therefore, our figure would not be recognized as a god, but rather as some sort of lower-level genius or hero. Nevertheless, the unique instance of a standard military helmet being worn by the central figure cautions us to leave this question open, for an important aspect of the storm god as known in the West is that he is also the god of war. Unfortunately, we know little about the gods or religious practices of northwest Iran in this period. With regard to the gold bowl from Hasanlu, Mellink has written that the iconography is not inconsistent with what we know of Hurrian culture of the late second millennium, which certainly included a storm god as primary deity,153 and in that period there was also a close relationship in material culture from the Solduz Valley to the Habur.¹⁵⁴ Yet the leading figure in the procession of deities on the gold bowl again has his bulls harnessed, as the draught animals of his chariot; he is not called upon to grapple with them in any way.155

In the end, however the identity of the figure on the breastplate may have been recognized in antiquity, what we may assume is that the great power of the piece was apparent, even as we perceive it now. The choice of subject matter, shared by other equestrian ornaments from the West, was selected as appropriate to the object, serving as a complement to the protective function of the metal-and-leather shield itself—splendid for show and effect, and efficacious when needed in the hunt and in war.

The special esteem in which the breastplate was held in its own time is clearly evident from the quantity of bells and other trappings that were associated with it. It is also suggested by two facts relating to the archaeological context in which the breastplate was found: first, that it was kept separate, not part of a group as were the plain breastplates from Room 1 of the Corridor Building; and second, that while the collection of equestrian ornaments from Burned Building IVE and from the rest of the Corridor Building were all found on the ground floors,¹⁵⁶ the decorated breastplate had been stored on the second floor, precisely as the gold bowl had been in Burned Building I.¹⁵⁷

Finally, not only does the archaeological context of the breastplate reinforce its special status, it also leads to speculation concerning the nature of the Corridor Building in which the piece was found.

In Burned Building IVE, it has been noted that the contents of the second storey collapse were of a very different nature from the equestrian ornaments lying on the first floor. They consisted of such domestic decorated items as beads, buttons, etc.—the same sort of domestic assemblage that came from the second storeys of other Burned Buildings on the citadel. The presence of the horse trappings and large storage jars on the second floor of the Corridor Building suggests that this was not an inhabited domestic structure, and one is tempted to query at least whether perhaps we are dealing with a tack room over a corridor associated with a stable which still lies unexcavated beyond the eastern baulk.¹⁵⁸

^{153.} M. J. Mellink, "The Hasanlu Bowl in Anatolian Perspective," *Iranica Antiqua VI* (1966) 72-87. 154. Cf. fn. 118.

^{155.} Cf. drawing, Porada, Ancient Iran, Fig. 63-64.

^{156.} Reference by Dyson and Pigott, *Iran XIII*, p. 162. This may not have been their primary context, however, as Dyson informs me the objects were piled in the center of the room—possibly gathered in the course of the general looting at the time of the conflagration but never actually carried off.

^{157.} Noted by Porada, Ancient Iran, p. 101.

^{158.} S. Kroll has recently argued that three similar buildings in the Urartean occupation at Bastam in northern Azerbaijan could also have been stables ("Zur Pferdehaltung in Urartu," paper delivered to the VIIth International Congress of Iranian Art and Archaeology, Munich, September 1976), although in that case he has the full plans of the buildings.

We do know that there were horses on the citadel at the time of destruction, as the remains of a number of skeletons have been observed. Most significantly, five skeletons were found in the columned hall (Room 3) of Burned Building V, immediately to the south of the Corridor Building, while a sixth skeleton was discovered in the eastern storage room (Room 9) of the same structure (Fig. 78).¹⁵⁹ The horses would have had easy access in a panic into both of these chambers through Room 1 of our building—particularly if the doorway leading from Room 1 into the Lower Court had been closed (see plan, Fig. 2).¹⁶⁰

Strong supporting evidence for the suggested function of the Corridor Building comes from the fact that a row of eight large storage jars set along the south wall of Room 2b were found to contain remains of cereal fodder appropriate to a stable (Fig. 79).¹⁶¹ And finally, further support may be seen in the plan of the citadel itself. In the 1974 season, it was determined that the monumental gateway that closed the Lower Court was aligned with another major gateway at the western edge of the citadel.¹⁶² Between the two gates, there was a cobbled pathway, appropriate for equestrian traffic-and possibly even for chariots.163 It will be noted from the plan (Fig. 2) that the doors of the Corridor Building likewise line up on an eastwest axis with the Lower Court Gate; and it is precisely this sort of unimpeded access that would have been required were there to have been a stable on the citadel.



Thus the Hasanlu breastplate is a unique object in its own right and is also part of a particular archaeological context; through it we are provided with a tantalizing glimpse of a cultural and historical moment. The plaque is a work of consummate skill, in which several traditions have been united into a dynamic whole. Taking the breastplate, as we hope has been convincingly established, as a work of the ninth century B.C. from northwestern Iran, it stands further as a microcosm of the influences absorbed by the region at that time. If one understands influence to be not merely an overlay upon a passive culture but rather a reflection on some level of the active acceptance-embrace, even-of desirable qualities, the breastplate then reflects clear cultural attitudes of northwest Iran in the early first millennium B.C. in relation to the large and powerful states of Assyria to the west and Elam to the south. By extension, the breastplate then provides material witness to the fact that ideas and information must have been fundamental, although non-material, agents in and results of the process.

In its archaeological context, the breastplate offers insight into the function of the architectural complex where it was found. As a single piece, it further suggests that the breastplate would have

^{159.} Cf. field notes of M. Stolper, Operation Y32-31, 1972, Plan I; and of M. Ingraham, Operation Y33, 1974, notes and plan for 6 August. Other horse skeletons on the citadel have been found in Burned Building VI, near the Western Gate, and in front of Burned Building III.

^{160.} Postholes on both sides of that doorway indicate that there was a door.

^{161.} I am grateful to R. H. Dyson, Jr., who brought this information to my attention. It is based upon the results of flotation analysis undertaken at the site by M. Tosi during the 1974 season.

^{162.} See Dyson, "Hasanlu, 1974: The Ninth Century B.C. Gateway," in Proceedings of the IIIrd Annual Symposium on Archaeological Research in Iran, Tehran, 1975, pp. 179-188.

^{163.} In the southeast corner of Room 1 of the Corridor Building, a large amorphous mass of wood was uncovered on the floor, part of which seemed to take on the configuration of a long, narrow pole extending from a rather substantial solid clump (cf. field notes of I. Nicholas, Operation W32, 31 July 1974). Although the wood was too decomposed to allow for definite reconstruction, it could possibly have been the box of a chariot with yokepole.

been meant for a riding horse, since corrollary evidence indicates that ornaments for chariot horses came in matched sets. In the skill and attention lavished on the decoration, in contrast to the plain breastplates and collars found in the same building, a system of social stratification is implied in which the decorated breastplate would have been worn by the horse of an individual of high status, just as the royal mount or chariot in Assyrian art was always more elaborately caparisoned than those of the king's followers.¹⁸⁴ And finally, in the motif and its manner of execution we see something of the power called forth to protect the horse and its rider. The discovery of the breastplate thus underscores the unique opportunity afforded by the citadel of Hasanlu: in the preservation occasioned by the site's violent and apparently surprise destruction, and thus the abandonment of goods so rarely found *in situ*, we have been permitted, in good archaeological paradox, to catch rare glimpses of life.

^{164.} See, for example, the king's chariot depicted in a wall painting at Til Barsip (Parrot, Arts of Assyria, Fig. 346). It is interesting to note that a royal or state monopoly on the ownership of horses in general has been suggested for Assyria (cf. N. Na'aman, "Two Notes on the Monolith Inscription of

Shalmaneser III from Kurkh," *Tel Aviv 3* [1976] 100, with reference to J. N. Postgate, *Taxation and Conscription in the Assyrian Empire*, Rome, 1974, pp. 7ff, 102f and 208ff, and F. M. Fales, "Note on some Nineveh Horse Lists," *Assur I* [1974] 5-24).

APPENDIX

TREATMENT OF THE COPPER/BRONZE BREASTPLATE, HAS 74-241, IN THE FIELD

1. Discovery. The piece was found lying on its face in the earth; deformation of the central figure's head and bulls' heads, as well as the break in the right corner, suggests the piece had fallen. It was possible to see that the metal was in fair condition despite corrosion, and the plaque was therefore removed with no treatment *in situ* and bedded in cotton for support.

2. Cleaning. The entire right side had been found broken off, and two fragments of the upper edge at the right subsequently broke off through the weight of the metal. Each fragment was cleaned separately, the surface first brushed with a soft camel's hair brush to remove dirt, and then surface powder from corrosion taken off with a small scalpel. The reverse was then well cleaned, corrosion removed with a scalpel until the original patina was reached, and the entire surface washed with distilled water until cotton no longer picked up dirt. To dry completely, the plaque was left in the sun for three hours, then washed with alcohol which combines with water; it was left in the sun to dry again, and finally washed with pure acetone, which removes water from alcohol. Rim and holes around the rim were carefully cleaned, at which time the piece was turned, and the same process followed on the front as on the back, with the addition that the decorated areas were cleaned with a needle along the lines of incision, the small fragments being cleaned under a microscope.

3. Integration. Small cracks were filled with Araldit (AW106 + hardener HY953 in proportions

of 1:1, commercially marketed as UHU Plus). Large cracks, as in the faces of the bulls and the man's head, were done with Araldit 488 powder dissolved in acetone (approximately 3%), so as to be reversible if desired. Araldit 488 was put on the edges of all cracks and underneath open areas; it was left to dry 24 hours, then AW 106 + hardener was added to close the cracks. The mixture was colored with the ground powder of removed corrosion, to approximate the color of the metal. The man's nose and the muzzle of the left bull were backed with tape before working; tape was subsequently removed once the integration hardened. After drying, the surface of each integration was scraped to reduce the luster and make a matte surface in keeping with the rest of the piece. Once the surface cracks were sealed, the piece was again turned and the broken parts stuck together, using the same solution of Araldit 488 in acetone on the edges.

4. Final process. To arrest subsequent corrosion, the plaque was washed very lightly by applying a solution of 3% Benzotriazol diluted in acetone. The solution was applied with a paint brush, moving the solution and the brush constantly to avoid attacking the bond of the integrations. The plaque was then dried in the sun for two hours, and the crystals which came out in the process were removed by swabbing with alcohol. Finally, the whole plaque was washed with Paraloid B72 (Acriloid) in a 3% solution with acetone, to protect the piece from humidity and acids in the air.

INGRID REINDELL Istituto Centrale del Restauro, Rome

REFERENCES

Akurgal, Ekrem

1968

The Art of Greece: Its Origins. New York.

Amandry, Pierre

1965

Un motif 'scythe' en Iran et en Grèce. JNES 24: 149-160.

1966

A propos du trésor de Ziwiye. Iranica Antiqua 6: 109-129.

Amiet, Pierre

1966a

Glyptique mesopotamienne archaïque. Paris.

1966b

Elam. Anvers-sur-Oise.

Baqir, Taha

1945

Iraq Government Excavations at 'Aqar Quf: Second Interim Report, 1943-44. Iraq Supplement. London.

Barnett, Richard D.

n.d.

Assyrian Palace Reliefs and Their Influence on the Sculptures of Babylonia and Persia. London.

1957

Catalogue of the Nimrud Ivories. London.

1964

North Syrian and Related Harness Decoration. In Vorderasiatische Archäologie: Studien und Aufsätze Anton Moortgat zum 65. Geburtstag gewidmet von Kollegen, Freunden und Schulern, edited by K. Bittel: 21-26. Berlin.

1967

Assyria and Iran: The Earliest Representation of Persians. In *Survey of Persian Art*, edited by A.U. Pope, XIV: 2997-3007. London.

1974

The Nimrud Bowls in the British Museum. Revista di Studi Fenici II: 11-33.

Barnett, Richard D., and Margarete Falkner

1962

The Sculpture of Assurnasirpal II, Tiglath Pileser III, and Esarhaddon from the Central and Southwest Palaces at Nimrud. London.

Barrellet, M. T.

1968

Remarques sur un decouvert fait a Tell al Rimah. Iraq 30: 206-214.

Bauer, Theo

1957

Ein viertes altbabylonisches Fragment des Gilgames-Epos. JNES 16: 254-262.

Bernard, P.

Une pièce d'armure perse sur un monument Lycien. Syria 41: 195-212.

Boardman, John

1964 The Greeks Overseas. Baltimore.

Bouzek, J.

1971

Openwork 'bird-cage' bronzes. In *The European* Community in Later Prehistory: Studies in Honor of C. F. C. Hawkes, edited by J. Boardman et al.: 72-104. London.

Calmeyer, Peter

1970

Ein neuer Becher Acta Praehistoria et Archaeologica 1: 81-86.

1973

Reliefbronzen in babylonischen Stil. Munich.

Canby, Jeanny Vorys

1971 Decorated Garments in Assurnasirpal's Sculpture. Iraq 33: 31-53.

Coles, J. 1973

Archaeology by Experiment. New York.

Dyson, Robert H., Jr.

1959

Digging in Iran: Hasanlu, 1958. Expedition 1 (3): 4-17.

1960a

The Golden Bowl and the Silver Cup - Treasures with a Dramatic History and Rich Significance. Excavations at Hasanlu near Lake Urmia. Part II. *ILN* 236 (6289): 250-251.

1960b

Hasanlu and Early Iran. Archaeology 13 (2): 118-129.

1961

Excavating the Mannaean Citadel of Hasanlu and New Light on Several Millennia of Persian Azerbaijan. *ILN* 239 (6374): 534-537.

1963

Archaeological News: Hasanlu 1962. Archaeology 16 (2): 131-133.

1964a

Ninth Century Man in Western Iran. Archaeology 17 (1): 3-11.

1964b

In the City of the Gold Bowl: New Excavations at Hasanlu in Persian Azerbaijan. *ILN* 245 (6528): 372-374.

1965

Problems of Protohistoric Iran as Seen from Hasanlu. JNES 24: 193-217.

1966

The Hasanlu Project. In *New Roads to Yesterday*, edited by J. R. Caldwell: 413-435. New York.

1967

Early Cultures of Solduz, Azerbaijan. In Survey of Persian Art, edited by A.U. Pope, XIV: 2951-2970. London.

1968

Hasanlu and the Solduz and Ushnu Valleys: Twelve Years of Exploration. *Archaeologia Viva* 1 (1): 83-101.

1972

The Hasanlu Project 1961-1967. In *The Memorial* Volume of the Vth International Congress of Iranian Art and Archaeology, 1: 39-58. Tehran.

1975

Hasanlu, 1974: The Ninth Century B.C. Gateway. In Proceedings of the IIIrd Annual Symposium on Archaeological Research in Iran: 179-188. Tehran. Dyson, Robert H., Jr., and Vincent C. Piggott

Survey of Excavations in Iran - 1973-1974: Hasanlu. Iran 13: 182-185.

Fales, F. M. 1974

Notes on Some Nineveh Horse Lists. Assur 1: 5-24.

Ffoulkes, C.

1929

Some Aspects of the Craft of the Armorer. Archaeologia 79: 13-28.

Ghirshman, R.

1964 The Art of Ancient Iran. New York.

Gjerstad, Einar

1963

Supplementary Notes on Finds from Ajia Irini in Cyprus. *Medehaus Museet Bolletin* 3: 3-40.

Godard, Y.

1938 Disque en bronze découvert en Adharbaidjan. *Athar-e-Iran* 3: 303-306.

Hall, H. R. 1928

Babylonian and Assyrian Sculpture in the British Museum. Paris.

Hamlin, Carol Kramer

1971

The Early Second Millennium B.C. Ceramics of Dinkha Tepe, Iran, and an Analysis of the Habur Ware Ceramic Assemblage of Northern Mesopotamia. Ph.D. dissertation, University of Pennsylvania.

1974

The Early Second Millennium Ceramic Assemblage of Dinkha Tepe. *Iran* 12: 125-153.

Herrmann, Hans-Volkmar

1966

Die Kessel der orientalisierenden Zeit. Olympische Forschungen, VI. Berlin.

Hodges, H.

1964 Artifacts: An Introduction to Early Materials and Technology. London.

Hrouda, B.

1965 Die Kulturgeschichte des assyrischen Flachbildes. Bonn.

Kantor, Helene J.

1962

A Bronze Plaque with Relief Decoration from Tell Tainat. JNES 21: 93-117.

Karageorghis, Vassos

1967

Excavations in the Necropolis of Salamis, I. Salamis 3. Nicosia.

1973

Excavations in the Necropolis of Salamis, 111. Salamis 5. Nicosia.

King, L. W.

1915 Bronze Reliefs from the Gates of Shalmaneser, King of Assyria. London.

Kleiss, W.

1971 Bericht uber Erkündungsfahrten in Iran im Jahre 1970. AMI, N.F. 4: 51-112.

Kopcke, G.

1968 Heraion von Samos: Die Kampagnen 1961/1965 im Südtemenos (8-6 Jahrhundert). *MDAI* 83: 250-314.

Krahmer, H.

1931 Figur und Raum in der ägyptischen und griechischarchäischen Kunst. Halle.

Kunze, E.

1931 Kretische Bronzereliefs. Stuttgart.

1950

Archäische Schildbänder. Berlin.

Kunze, E., and H. Schleif

1937-38

II Bericht über die Ausgrabungen in Olympia. Berlin.

1938-39

III Bericht über die Ausgrabungen in Olympia. Berlin.

Layard, Austen H.

1849 Monuments of Nineveh. London.

1853a Discoveries in the Ruins of Nineveh and Babylon. London.

1853b

A Second Series of the Monuments of Nineveh. London.

Levine, Louis D.

1973

Geographical Studies in the Neo-Assyrian Zagros, pt. I, Iran 11: 1-27.

1974

Geographical Studies in the Neo-Assyrian Zagros, pt. 11. Iran 12: 99-124.

Lloyd, Seton

1967 Early Highland Peoples of Anatolia. London.

Madhloom, T. A.

1970 The Chronology of Neo-Assyrian Art. London.

Mallowan, M. E. L., and L. G. Davies

1970 Ivories in Assyrian Style. Ivories from Nimrud (1949-1963), fasc. 11. London.

Mellink, M. J.

1966 The Hasanlu Bowl in Anatolian Perspective. *Iranica Antiqua* 6: 72-87.

Meusczynski, J.

1976 Neo-Assyrian Reliefs from the Central Area of Nimrud Citadel. *Iraq* 38: 37-44.

Moorey, P. R. S.

Catalogue of the Ancient Persian Bronzes in the Ashmolean Museum. Oxford.

1974

Ancient Persian Bronzes in the Adam Collection. London.

1975

Review of *Reliefbronzen* by P. Calmeyer. *Gnomen* 47: 278-283.

Moortgat, A.

1969 Art of Ancient Mesopotamia. London.

Muscarella, Oscar W.

1962 The Oriental Origin of the Siren Cauldron Attachments. *Hesperia* 31: 317-329.

1966 Hasanlu 1964. BMMA XXV (3): 121-135. 1968 Winged Bull Cauldron Attachments from Iran. MMJ 1: 7-18. 1970 Near Eastern Bronzes in the West: The Question of Origin. In Art and Technology, edited by S. 1967 Doehringer et al., 109-128. Cambridge, Mass. 1971a 1970 Qalatgah: An Urartian Site in Northwestern Iran. Expedition 13 (3-4): 44-49. 1971b Hasanlu in the Ninth Century B.C. and its Relations with Other Cultural Centers in the Near East. AJA 75: 263-266. 1974a (Editor) Ancient Art: The Norbert Schimmel 1950 Collection. Mainz. 1974b Decorated Bronze Beakers from Iran. AJA 78: 239-252 1974c The Third Lion Bowl from Hasanlu. Expedition 16 1970 (2): 25-29. Na'aman, Nadav 1976 Two Notes on the Monolith Inscription of Shalmaneser III fom Kurkh. Tel Aviv 3: 89-106. Negahban, E. O. 1965 Notes on Some Objects from Marlik. JNES 24: 309-327. 1974 1074 Marlik. Teheran. Oppenheim, A. Leo 1950 Review of Business Documents of the Neo-Babylonian Period by H.H. Figulla. JCS1V: 309-32. Orchard, J. J.

1967

Equestrian Bridle-Harness Attachments. Ivories from Nimrud (1949-1963), fasc. I, pt. 2. Aberdeen.

Orthmann, W.

1971

Untersuchungen zur späthetitischen Kunst, Bonn.

Parrot, André

1961 The Arts of Assyria. New York.

Payne, Humphrey

1931 Necrocorinthia. Oxford.

Piotrovsky, B.

Urartu. New York.

Karmir Blur. Leningrad.

Porada. Edith

1948

Corpus of Ancient Near Eastern Seals in North American Collections, I: The Collection of the Pierpont Morgan Library. Washington, D.C.

An Assyrian Bronze Disc. BMFA XLVII: 2-8

1959

The Hasanlu Bowl. Expedition 1 (3): 19-22.

1969 Ancient Iran. New York.

Tchoga Zambil, IV: La Glyptique. Paris.

1971

Aspects of Elamite Art and Archaeology. Expedition 3 (3-4): 28-34.

1975

Iranische Kunst. In Die alte Orient, Propyläen Kunstgeschichte, II, edited by W. Orthmann: 363-398. Berlin.

Postgate, J. N.

Taxation and Conscription in the Assyrian Empire. Rome.

Potratz, J.

1966

Die Pferdetrensen des Alten Orient. Rome.

Pritchard, J. B., (Editor)

1955 Ancient Near Eastern Texts Relating to the Old Testament (2nd Edition). Princeton.

Robinson, H. R. 1967

Oriental Armor. New York.

Rostovtzeff, M. I. et al. (Editors)

1936 The Excavations at Dura-Europos: Preliminary Report of the Sixth Season of Work. New Haven.

Strommenger, Eva

1964

5000 Years of the Art of Mesopotamia. New York.

Taşyürek, O. A.

1974

The Bronze Urartean Helmet in the Gaziantep Museum. Turk Arkeologi Dergesi 21: 177.

Thureau-Dangin, F.

1931

Arslan Tash. Paris.

Untracht, O.

1968 Metal Techniques for Craftsmen. Garden City, New York.

van Loon, M.

1975

The Inscription of Ishpuini and Meinua at Qalatgah, Iran. JNES 34: 201-207.

Veenhof, K. R.

1972

Aspects of Old Assyrian Trade and its Terminology. Leiden.

Wallis Budge, E. A.

1914

Assyrian Sculpture in the British Museum. London.

von Luschan, F., and W. Andrae

1943 Ausgrabungen in Sendschirli, V. Berlin.

Wilkinson, C. K.

1965 Art of the Marlik Culture. *BMMA* 24: 101-109.

Winter, Irene J.

Perspective on the 'Local Style' of Hasanlu IVB: A Study in Receptivity. In *Mountains and Lowlands: Essays in the Archaeology of Greater Mesopotania*, edited by L. D. Levine and T. C. Young, Jr.: 371-386. Malibu.

Young, Rodney S.

1962

The 1961 Campaign at Gordion. AJA 66: 153-168.

Young, T. Cuyler, Jr.

1966 Some Thoughts on the Architecture of Hasanlu IV. Iranica Antiqua VI: 48-71.

ILLUSTRATIONS



Figure 1. Copper/bronze horse's breastplate, HAS 74-241, reproduced at one-half full size. Musée Iran Bastan, Teheran.

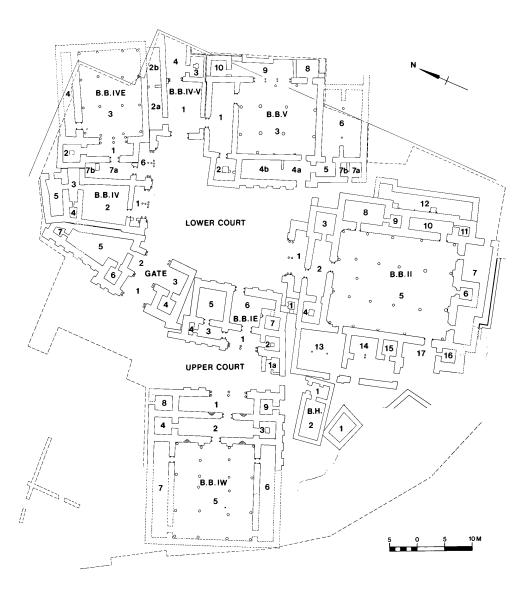


Figure 2. Plan: Citadel of Hasanlu, Level IVB

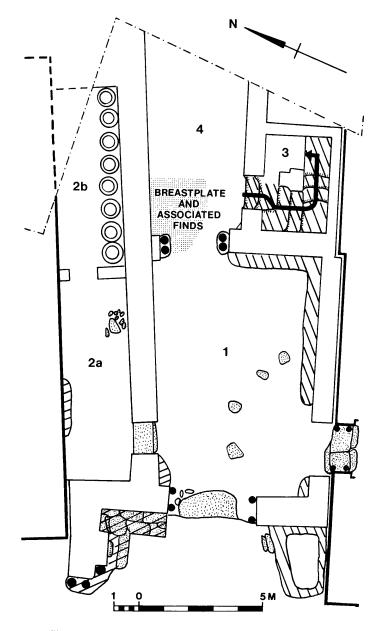


Figure 3. Plan: Hasanlu Burned Building IV-V (the Corridor Building)







Figure 6. 'Collar' breastplate, HAS 72-144a. Musée Bastan, Tehran.

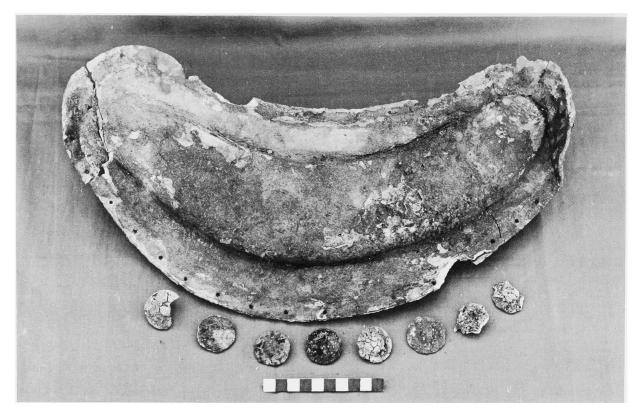


Figure 7. 'Lunate' breastplate, HAS 72-147a. Musée Iran Bastan, Tehran.



Figure 8a. Relief from Room B, slab 9, the Northwest Palace, Nimrud, reign of Assurnasirpal II. British Museum 124544.

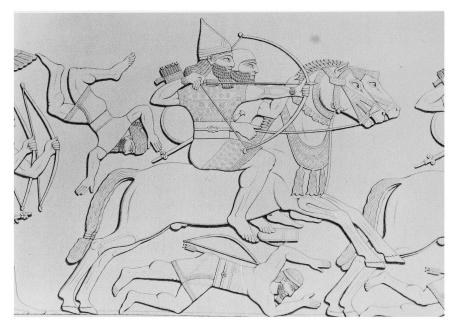


Figure 8b. Drawing of part of slab 9

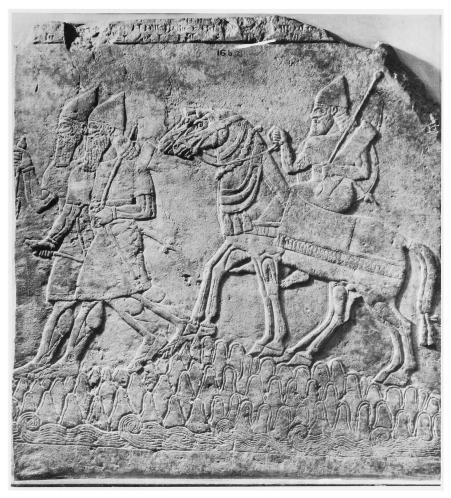


Figure 9. Relief from the Northwest Palace, Nimrud, reign of Assurnasirpal II. British Museum 124558.



Figure 10. Bronze gate-band from Balawat, reign of Shalmaneser III. British Museum 124661.



Figure 11. Relief from Room B, slab 27, the Northwest Palace, Nimrud, reign of Assurnasirpal 11. British Museum 124559.



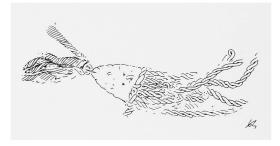


Figure 12. Tassel, HAS 74-S37A; Burned Building IV-V a. Tassel *in situ* b. Drawing of tassel

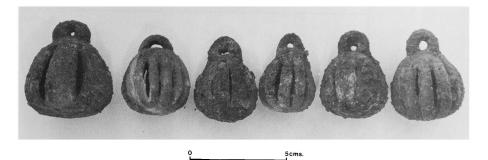


Figure 13. Copper/bronze open-cage bells, HAS 74-56, -62, -1, -63, -59, -70; Burned Building IV-V. Musée Iran Bastan, Tehran.

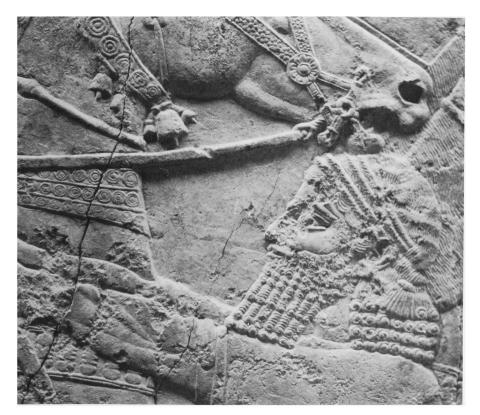


Figure 14. Detail of relief from Room C, slabs 5-6, the North Palace, Nineveh, reign of Assurbanipal. British Museum 124858-59.



Figure 15. Sketch plans: ornaments in fill (W-32 [15]) a. immediately above breastplate (levels 1-4) b. immediately below breastplate (levels 5-10)





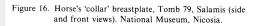


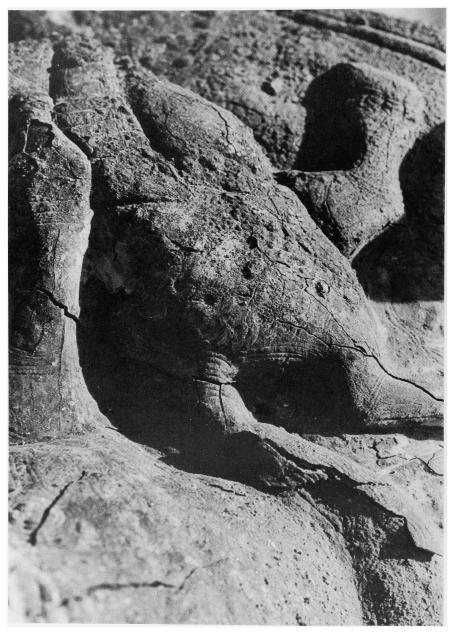




Figure 17. The breastplate, HAS 74-241, before conservation



Figure 18. Breastplate, HAS 74-241: detail showing radial cracks in face and chest



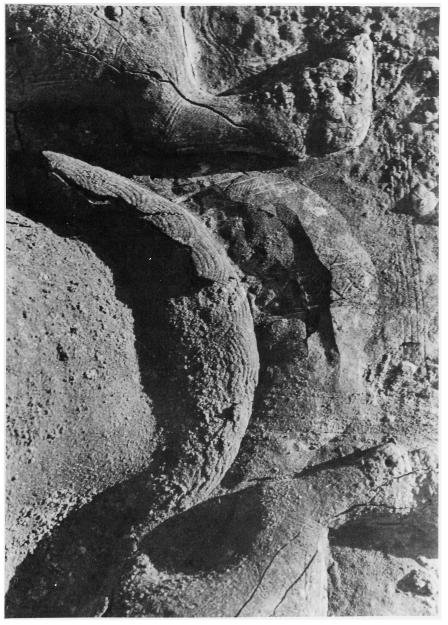




Figure 21. Side view of the breastplate, HAS 74-241, after conservation



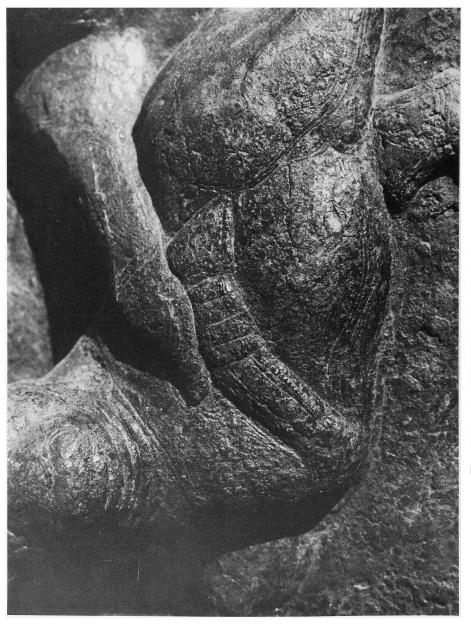
Figure 22. Reverse of the breastplate, HAS 74-241, after conservation



Figure 23. Breastplate, HAS 74-241: detail of reverse, central cavity



Figure 24. Breastplate, HAS 74-241: head and chest of central figure





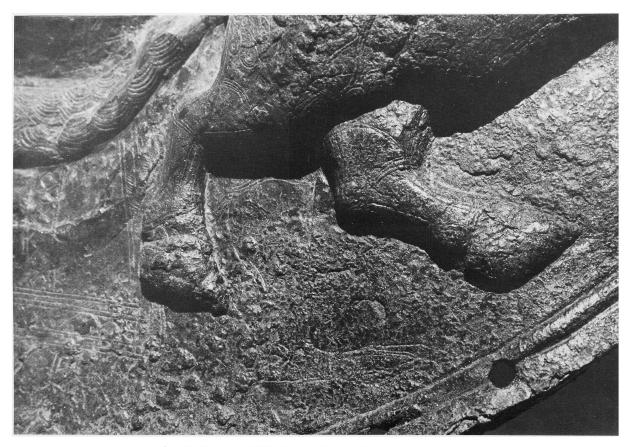


Figure 27. Breastplate, HAS 74-241: incised left leg of figure and legs of bull at right

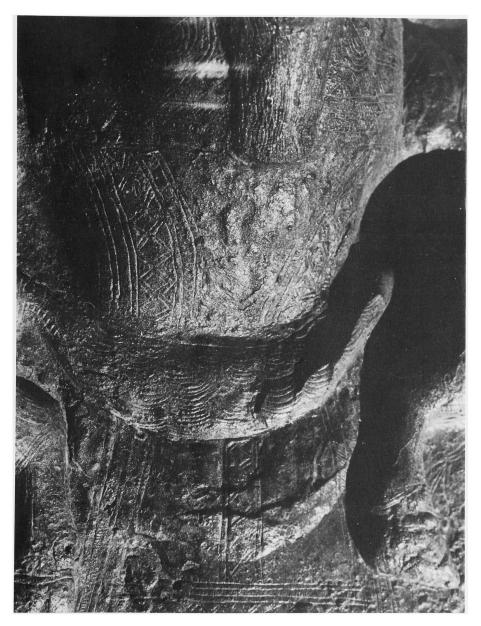


Figure 28. Breastplate, HAS 74-241: detail of central figure showing garment pattern and crossed tails



Figure 29. Breastplate, HAS 74-241: head of bull at left



Figure 30. Breastplate, HAS 74-241: incised bird at right



Figure 31. Breastplate, HAS 74-241: incised bird at left



Figure 32. Limestone vase, possibly from Uruk (purchased 1927), Uruk period (front and side views). British Museum 118465.



Figure 33. Neo-Hittite relief, Herald's Wall, Carchemish, ninth century B.C. National Museum, Ankara, 9665.



Figure 34. Neo-Hittite relief, Palace of Kapara, Tell Halaf, ninth century B.C.

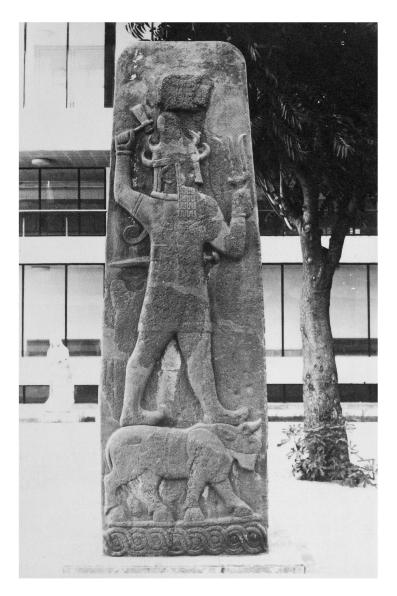


Figure 35. Neo-Hittite stela of Storm God, Til Barsip, ninth century B.C. The Museum of Aleppo.

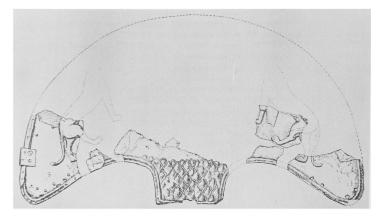


Figure 36. Copper/bronze horse's crest ornament (?), Zinjirli, ninth/eighth century B.C. Staatliche Museen, Berlin.



Figure 37. Bronze horse's frontlet, Tell Tainat, ca. eighth century B.C. (side and front views). Oriental Institute, Chicago, A22209.



Figure 38. Drawing of part of relief from Room G, slab 3, Northwest Palace, Nimrud, reign of Assurnasirpal II. British Museum 124565.

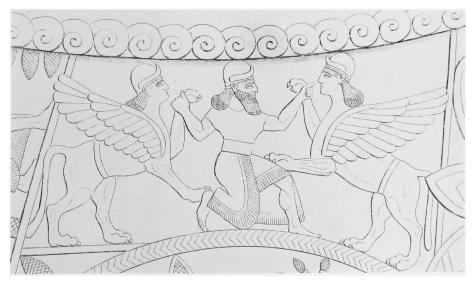


Figure 39. Detail of Figure 38, garment decoration



Figure 40. Drawing of garment decoration, relief from Room G, slab 8, Northwest Palace, Nimrud, reign of Assurnasirpal II. Metropolitan Museum of Art, 32.143.4.

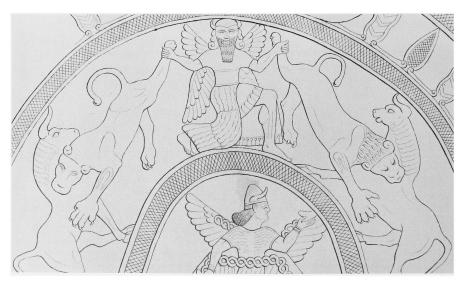


Figure 41. Drawing of garment decoration, relief from Room G, slab 6, Northwest Palace, Nimrud, reign of Assurnasirpal II. British Museum 124567

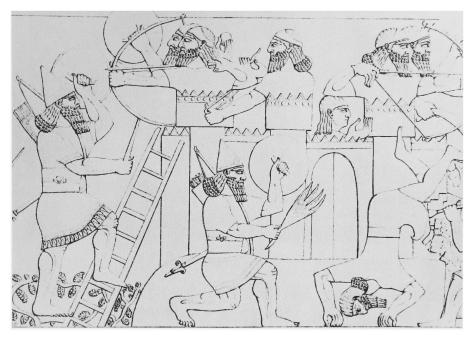


Figure 42. Drawing of relief from Wall F, slab I, Southwest Palace, Nimrud, reign of Assurnasirpal II. (Original lost.)

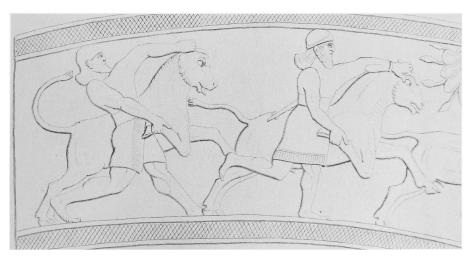


Figure 43. Drawing of garment decoration, relief from Room G, slab 16. Northwest Palace, Nimrud, reign of Assurnasirpal II. Staatliche Museen, Berlin, VA939.



Figure 44. Drawing of part of relief from Room B, slab 3, Northwest Palace, Nimrud, reign of Assurnasirpal II. British Museum 124556.



Figure 45. Relief from Room B, slab 6, Northwest Palace, Nimrud, reign of Assurnasirpal II. British Museum 124550.



Figure 46. Impression from a cylinder seal, Susa. Louvre SB1484.

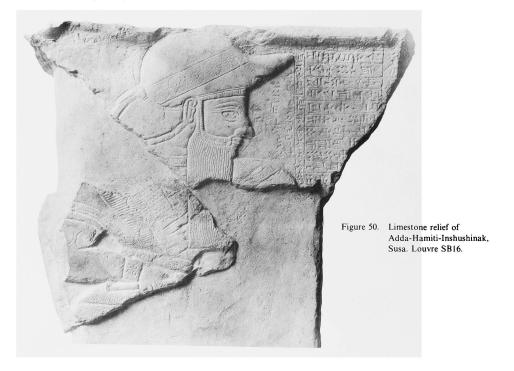


Figure 47. Bitumen bowl in the form of a couchant animal, Susa. Musée Iran Bastan, Tehran, 503.



Figure 48. Bitumen roundel, provenance unknown, late second millennium B.C. Schimmel Collection, New York.

Figure 49 on opposite page



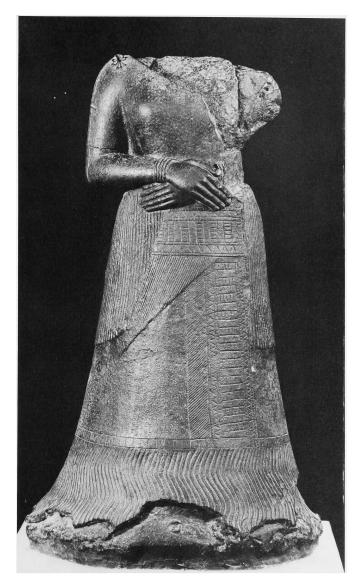


Figure 49. Bronze statue of Queen Napirasu, Susa. Louvre SB2731.



Figure 51a. Incised ceramic beaker, Susa. Louvre SB411 bis.

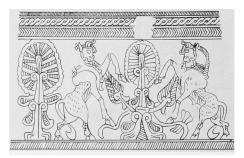


Figure 51b. Roll-out drawing of incised motif



Figure 52. Copper/bronze beaker, said to be from western Iran. Metropolitan Museum of Art 48.178.1, Joseph Pulitzer Bequest.



Figure 53. Gold bowl, Marlik Tepe. Musée Iran Bastan, Tehran.



Figure 54. Gold beaker, Marlik Tepe. Musée Iran Bastan, Tehran.

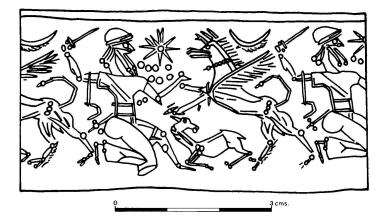


Figure 55. Bronze beaker, Susa. Louvre SB2825.



Figure 56. Copper/bronze roundel, Geoy Tepe, second half of second millennium B.C. Musée Iran Bastan, Tehran.





- Figure 57. Imported Neo-Assyrian cylinder seal, HAS 60-13. University Museum, University of Pennsylvania, 65-5-19. a. Seal and impression b. Drawing of impression



Figure 58. Blue paste inlaid gorget, HAS 64-606; Burned Building II. Musée Iran Bastan, Tehran

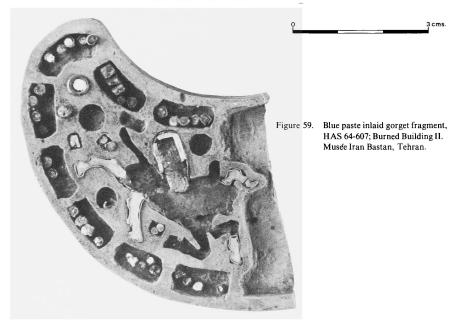




Figure 60. Tall conical copper/bronze helmet, HAS 60-883. Musee Iran Bastan, Tehran.



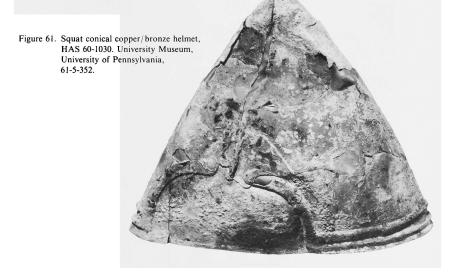




Figure 62. Bronze vessel handle, Susa (from a Neo-Elamite tomb). Louvre SB3748B.



Figure 63. Bronze vessel handle, HAS 72-135. Musée Iran Bastan, Tehran.

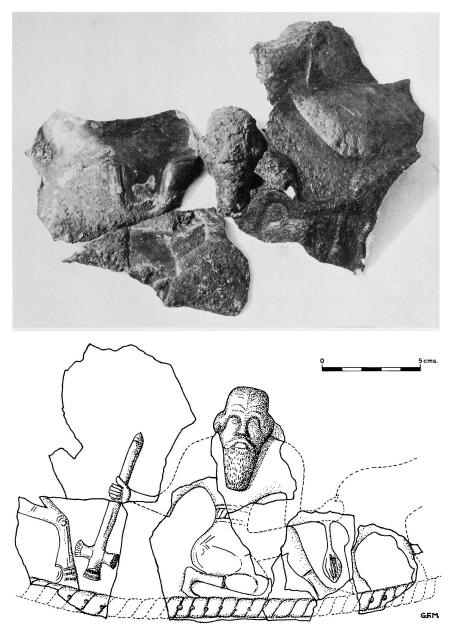


Figure 64. Fragments of copper/bronze repousse bowl, HAS 58-239b. University Museum, University of Pennsylvania, 59-4-159. a. One section of bowl

b. Drawn reconstruction of another section

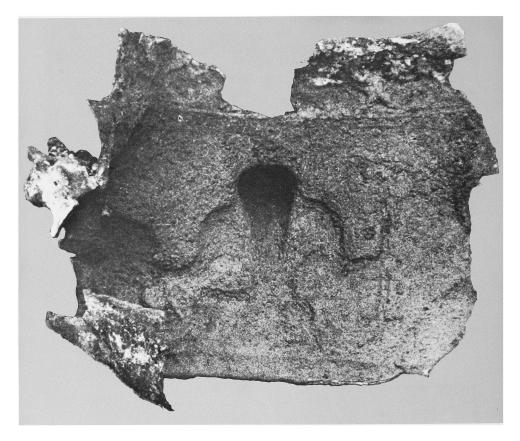


Figure 65. Fragments of copper/bronze repoussé bowl (reverse), HAS 58-239b





Figure 66. Bull's head from copper/bronze bowl, HAS 58-239b

Figure 67. Male head from copper/bronze bowl, HAS 58-239b



Figure 68. Drawing of garment decoration, relief from Room G, slab 8, Northwest Palace, Nimrud, reign of Assurnasirpal II. Metropolitan Museum of Art 32.143.4.



Figure 69. Copper/bronze rhyton in form of calf or bull's head, HAS 60-1006. Metropolitan Museum of Art 61.100.2.



Figure 70a. Buckle of copper/bronze belt, HAS 58-450. University Museum, University of Pennsylvania, 59-4-113.

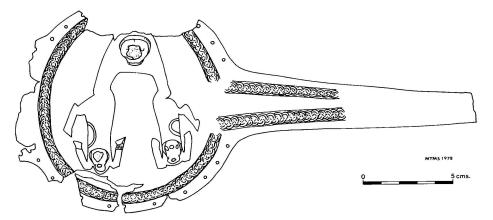






Figure 71a. Copper/bronze belt buckle, HAS 58-244; Burned Building I. University Museum, University of Pennsylvania, 59-4-158.

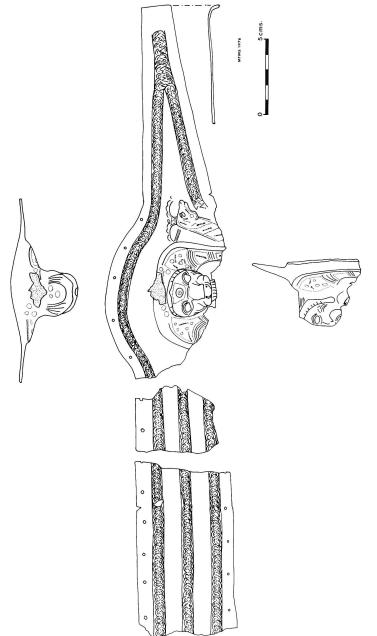


Figure 71b. Drawing of portions of belt, HAS 58-244, with top and side views of head

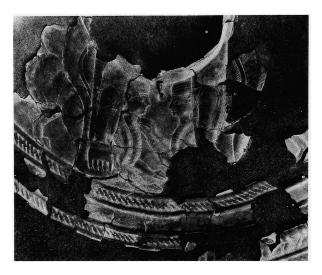


Figure 72. Detail of Cretan shield, Mount Ida. National Museum, Athens.

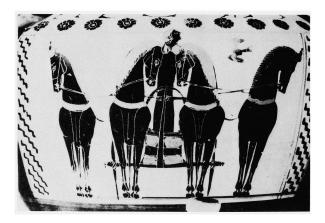


Figure 73. Detail of frontal quadriga from Attic black-figure vase painting, Munich 1468



Figure 74. Roll-out drawing of gold bowl, HAS 58-469; Burned Building I. Musee Iran Bastan, Tehran.



Figure 75. Silver beaker, HAS 58-427; Burned Building I. Musée Iran Bastan, Tehran.

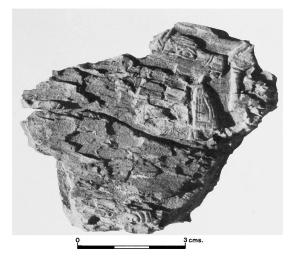


Figure 76. Local-style ivory fragment, HAS 60-950; Burned Building II. Musée Iran Bastan, Tehran.



Figure 77. Iron plaque with bronze studs, HAS 62-1057. University Museum, University of Pennsylvania, 63-5-178.

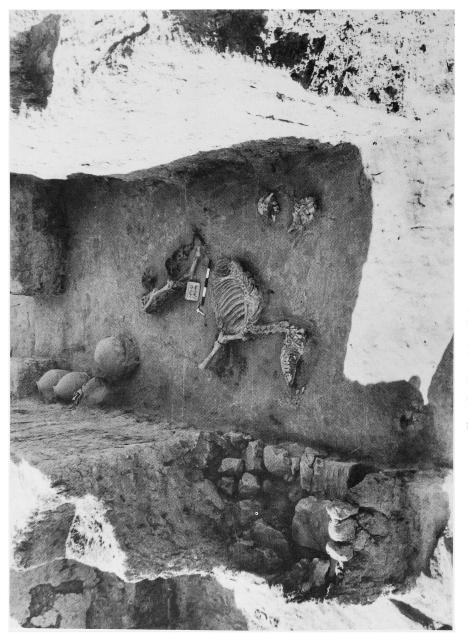




Figure 79. Fodder storage vessels in Room 2b, Burned Building IV-V

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