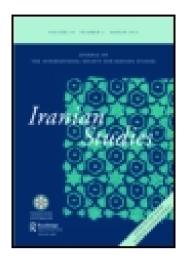
This article was downloaded by: [141.214.17.222]

On: 09 January 2015, At: 11:31

Publisher: Routledge

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House,

37-41 Mortimer Street, London W1T 3JH, UK



Iranian Studies

Publication details, including instructions for authors and subscription information: http://www.tandfonline.com/loi/cist20

Archaeological evidence for textiles in pre-Islamic Iran

Trudy S. Kawami

Published online: 02 Jan 2007.

To cite this article: Trudy S. Kawami (1992) Archaeological evidence for textiles in pre-Islamic Iran, Iranian Studies, 25:1-2,

7-18, DOI: <u>10.1080/00210869208701764</u>

To link to this article: http://dx.doi.org/10.1080/00210869208701764

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the "Content") contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms & Conditions of access and use can be found at http://www.tandfonline.com/page/terms-and-conditions

The production of textiles began very early in the Near East, even before the development of settled villages and the domestication of plants and animals in the Neolithic Period (New Stone Age, the 7th and 6th millennia B.C.). Flax was one of the first fibers to be woven; it appears in an elegantly knotted net with a woven border found in the Nahal Hemar Cave on the southwest banks of the Dead Sea." Flax also appears about the same time in Anatolia at Catal Hüvük, a partially excavated site once covering some 32 (?) acres. The Catal Hüyük textiles, which also included wool or mohair worked in S- and Z-spun two-ply yarns, came from intramural burials where they bound up the bones of the dead and in one case filled a skull.2 Unfortunately, the fires that destroyed the site on several occasions charred the fabrics so that no trace of color now remains. However, the dye plants woad, madder and weld are native to the region, and the excavator believed that they were used at Catal Hüyük.

Closer to Iran are the impressions of two types of fabric as well as reed matting and basketry found on small clay objects at Jarmo, a Neolithic village on the western slopes of the Zagros Mountains in eastern Iraq.3 The textile remains from the Iranian plateau proper do not date quite as early, in part because scientific archaeology began later in Iran; and it is only since the late 1950s that widespread work has been carried out, primarily in the Zagros and in Khuzistan, Natural dyestuffs are abundant in Iran as are mordants,4 and one may assume that these materials were utilized in antiquity. Additional information about ancient Iranian textiles can be derived from representations in works of art as well as the impressions left by textiles wrapped around metal that later corroded. These mineralized formations or pseudomorphs were produced by petrification and faithfully replicate the shapes of the fibers, providing the researcher with documentation for organic material that normally would have been lost. The Iranian corpus may also be supplemented by evidence from Mesopotamia, the lowland to the west that was in continual contact, both peaceful and hostile, with Iran. Present evidence suggests that Mesopotamia was a vital factor in the Iranian textile tradition. The following preliminary survey is presented with the hope that it will arouse new interest in material long known and provoke further work by qualified specialists.

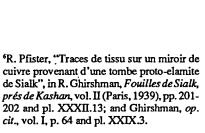
Archaeological evidence for textiles in Iran first appears in the fifth millennium B.C. at Seh Gabi in Kurdistan where ceramic vessels holding infant burials retained not only impressions but actual fragments of textiles. Further evidence does not occur again in the archaeological record until the Proto-Elamite period, about 3000 B.C., when writing and urban culture had developed. Excavations at Sialk in north central Iran have yielded a copper

Archaeological Evidence for Textiles in Pre-Islamic Iran

by Trudy S. Kawami

- 'T. Noy, "Neolithic Period", in Treasures of the Holy Land: Ancient Art from the Israel Museum (New York, 1986), p. 44 and fig.19.
- ²J. Mellazrt, Çatal Hüyük (London, 1967), pp. 150, 219-220 and pls. 116-118; H. B. Burnham, "Çatal Hüyük The Textiles and Twined Fabrics", Anatolian Studies 15 (1965), pp. 169-174; M. L. Ryder, "Report of Textiles from Çatal Hüyük", Archaeology 16 (1966), pp. 39-46.
- ³L. Braidwood et al. eds., Prehistoric Archaeology Along the Zagros Flanks (Oriental Institute Publication 105; Chicago, 1983), p. 398 and fig. 169: 7-10. For a summary description of the site see S. Lloyd, The Archaeology of Mesopotamia (rev. ed; New York, 1984), pp. 33-35.
- ⁴H. E. Wulff, The Traditional Crafts of Persia (Cambridge, Mass., 1966), pp. 189-193.
- Mound B, Dalma period. See L. Levine, "Seh Gabi", Iran 10 (1972) pp. 179-180; and S. Matheson, Persia: An Archaeological Guide (2nd ed; London, 1976), p.1 292. The samples currently in the West Asian Department, Royal Ontario Museum, Toronto, will be published by the excavator.

Figure 1. Right profile view of silver bull figurine, southwestern Iran, Proto-Elamite period, ca. 3,000 B.C. The tasseled corner of the robe is visible near the knee. Courtesy of The Metropolitan Museum of Art, New York. Purchase, Joseph Pulitzer Bequest, 1966, 68.173



⁷E. F. Schmidt, Excavations at Tepe Hissar, Danghan (Philadelphia, 1937), pp. 201 and 203.

⁸M. Z. Lecaisne, "Note sur les tissues recouvrant des hache en cuivre", MDP 13 (Paris, 1912), p. 163 and suppl. pl. XLIII.

⁹D. P. Hansen, "A Proto-Elamite Silver Figurine in the Metropolitan Museum of Art", *Metropolitan Museum Journal* 3 (1970), pp. 5-14.

¹⁰C. H. Greenewalt and L. J. Majewski, "Lydian Textiles", in K. De Vries, ed., From Athens to Gordion (University Museum Papers 1; Philadelphia, 1980), p. 139; and Hansen, op. cit., p. 24 (with photograph).

¹¹P. Amiet, Elam (Ouvres-sur-Oise, 1966), no. 43, p. 48; P. Amiet, Glyptique Susienne des origines a l'époque des perses achemenides (MDP 43; Paris, 1972), no. 673; pp. 18 and 105, and pls. 17 and 82. For a concise survey of the archaeological evidence for weaving in the ancient Near East as a wholesee R. S. Ellis, "Mesopotamian Carpets in Modern and Ancient Times: Ancient Near Eastern Weaving", American Journal of Archaeology 80 (1976), pp. 76-77.



mirror with what appeared to be shreds of S-spun linen in its corroded surface.⁶ Remains of textiles dated slightly later in the third millennium come from Tepe Hissar in northeastern Iran and Susa in southwestern Iran. At Hissar copper daggers excavated from a tomb and a burned structure have fabric associated with them.⁷ At Susa a copper axe that had been wrapped in two different pieces of cloth, one coarse and one fine, was found. Both fabrics were identified as linen.⁸

Numerous impressions from engraved cylinder and stamp seals of the period show seated, crouching or kneeling figures enveloped in heavy robes. A silver vessel in the form of a bull kneeling in human posture now in the Metropolitan Museum of Art (Fig.1) provides a larger, three-dimensional version of these figures.9 In this case the demonic combination of human and animal forms makes clear that this is not a representation of mundane activity but the action of a supernatural being having great power. The garment that wraps around this remarkable creature features a distinctive diagonal stripe alternately plain and decorated with a stepped pattern. The cloth is apparently a single rectangular piece with a plain edge that curves diagonally across the front of the figure and has a small tassel at the lower corner near the right knee. This sculpture also had been wrapped in cloth before burial and traces of the pseudomorph remain.10 The Proto-Elamite period also provides the earliest representation of a ground loom in Iranian art.11

Most human images of the third millennium B.C. in Iran are small scale representations usually engraved on cylinder seals; few reliefs and statuettes have survived. Notable even in these small works, however, is a shift by the middle of the third millennium from the smooth if bulky garments of the Proto-Elamite period to heavy tufted or fleecy fabrics. ¹² This shift appears in Mesopotamia as well, particularly in the votive statues of the Early Dynastic period. ¹³ The general similarity in garments between the Iranian and Mesopotamian representations, despite major differences in language, culture and religion, points up the complexity of the relations between these two regions.

A remarkable silver beaker, a chance find in the cultivated plain near Persepolis and now in the Iran Bastan Museum, Tehran, 14 points up these basic similarities as well as a few differences. The repoussé beaker depicts two female figures clad in long robes with even triangular tufts recalling Mesopotamian clothing. However, these Iranian representations differ from the Mesopotamian in two respects: first, both garments have a band of long wavy fringe encircling the neck and curving from waist to hip; and second, one garment apparently has long sleeves. Neither the strips of long wavy fringe nor long sleeves are found in Mesopotamian depictions of women's clothing. The Iranian beaker bears an Elamite inscription identifying the standing figure as the goddess Narunde and the seated figure as the priestess Kuri-Nahiti. The language of the inscription enables us to identify the ethnicity of the figures shown. The Elamites, whose language is related to no other in the Near East, were the dominant political and social power in southwest and central Iran from the early third though the early first millenium B.C.15

A more Mesopotamian appearing garment appears on the stone cult statute of the goddess Narunde excavated at Susa.¹⁶ Identified by its Akkadian and Elamite inscriptions, the sculpture is usually dated about 2250 B.C. As in Mesopotamia, the heavy tufted garment goes out of fashion by the end of the millennium but remains the appropriate dress for divinities in later periods.

We usually assume that these fleecy garments were made from leather with the fleece left on and perhaps dressed or trimmed in a decorative way. Indeed they are often erroneously called *kaunakes*, a Greek word meaning fleece that has no ancient connection with these divine garments. However, it is also possible that the garments were made of a looped, cut looped or knotted pile fabric, an artificial fleece as it were. Such textiles are known in a later period¹⁷ and the evidence for them will be discussed below.

¹²Amiet, Elam, op.cit., pp. 179-181, 188-192 and 210; E. Porada, "Iranische Kunst", in W. Orthmarm, ed., Alte Orient (Propylaean Kunstgeschichte 14, Berlin, 1975), p. 379 and pl. 281b.

¹³For illustrations see H. Frankfort, *The Art and Architecture of the Ancient Orient* (rev. ed.; New York, 1970), pp. 46, 48-50, 55-58 and 69-74.

¹⁴W. Hinz, Altiranische Funde and Forschungen (Berlin, 1969), frontispiece and pl. 11-44, esp. 13, 15 and 16.

¹⁵For a concise history of these people see E. Carter and M. W. Stolper, Elam, Surveys of Political History and Archaeology (University of California Publications: Near Eastern Studies 25; Berkeley and Los Angeles, 1984); and W. Hinz, The Lost World of Elam (New York, 1973).

¹⁶Amiet, *Elam*, no. 166, pp. 226-227; Porada, "Iranische Kunst", *op.cit*., pl. 50.

¹⁷H. Fujii, "at-Tar Caves", Archiv für Orientforschung 29/30 (1983-4) (hereafter Fujii, 1983-4), pp. 181-82 and fig. 23. For a brief discussion of the textile finds from this site, see K. Sakamoto, Oriental Carpet and Textile Studies I (1985), pp. 9-17.

¹⁸Matheson, op. cit., p. 304; and A. Hakemi, Catalogue de l'exposition: Lut. Shahdad "Xabis" (Tehran, 1972), pp. 15-16.

¹⁹Wulff, op. cit., p. 172; P. Ackerman, "Textiles through the Sasanian Period", A Survey of Persian Art I (Oxford, 1938), p. 682.

²⁰Porada, "Iranische Kunst", p. 384 and pl. 289; B. Brentijes, Das alte Persien. Die iranische Welt vor Mohammed (Vienna and Munich, 1978), p. 50; H. H. von der Osten, Die Welt der Perser (Stuttgart, 1956), pl. 14, an excellent photograph. For the history of this period see Carter and Stolper, op. cit., pp. 37-39 and 166.

²¹Amiet, *Elam*, pp. 361, 372 and 414-421; and Porada, "Iranische Kunst", p. 384 and pl. 288.

²²No agreement exists as to the date of this head which has been placed in the mid to late third millennium B. C.: O. W. Muscarella, "Ancient Near Eastern Art", The Metropolitan Museum of Art Bulletin (Spring, 1984), pp. 7 and 55 suggests ca. 2000 B.C.; Porada, "Iranische Kunst", p. 381 and pl. 284 posits an early second millennium B. C. date; B. Schlossman, "Portraiture in Mesopotamia in the Late third and Early Second Millennium B. C. Part II: The Early Second Millennium", Archiv für Orientforschung 27 (1981/82), pp. 156-59 suggests the late second millennium. This writer favors the latest date for stylistic reasons. For a more comprehensive account of this head see O. W. Muscarella, "Excavated and Unexcavated Achaemenid Art", in D. Schmandt-Besserat, ed., Ancient Persia: The Art of an Empire (Malibu, 1980), pp. 34-35 and pl. XVI.

²⁴C. Burney, "Excavations at Haftavan Tepe 1969: Second Preliminary Report," *Iran*, 10 (1972), pp. 134-35 and pl. IVa.

²⁴Burney, op.cit., p. 129 and pl. Ib.

Few textiles are known from eastern Iran, a region relatively unknown archaeologically. At present only the cemetery of Shahdad has yielded any woven remains, traces of matting beneath some of the interred bodies, as well as from within a metal vessel.¹⁸

Iranian textiles of the second millennium B.C. have left equally few traces. Despite this, various types of woven fabric, including weft-faced plain weave, have been attributed to second millennium Iran.19 These identifications, however, are based on old studies whose conclusions may not be as secure as once thought. The art of the period, particularly the large naturalistic works, at present remains the best source of information. The massive copper/bronze statue of Queen Napirasu (13th century B.C.) excavated at Susa and now in the Louvre shows a woman clad in a garment with a short-sleeved fitted bodice, and a skirt.20 Both skirt and bodice bear an all-over pattern of small circles with central dots, a motif perhaps woven into, or embroidered or appliqued onto, the fabric. The bodice, or the undamaged part of it, appears to be without ornament in contrast to the slightly bell-shaped shirt where a band of extremely long fringe encircles both the waist and the hem, the hem fringe having attractive wave-like undulations. The placement of the fringe and its general arrangement recall the garb of the figures on the silver Elamite beaker discussed above. A vertical panel with bands of geometric ornament runs up the front of Napirasu's skirt; the end of the panel has a long triangle of fringe folding over at the waist beneath the clasped hands of the queen. The total effect of the various patterns and textures rendered by fine incised lines on the smooth simple forms of the statue is that of understated sumptuousness. Judging from the rich combination of patterned fabric and long fringe and from other smaller representations of richly clad Elamite men and women,²¹ this mode of dress was characteristic of a certain stratum of the Elamite population in the second half of the second millennium B.C.

Cloth headgear in the form of turbans also appears in the second millennium. The beautifully modeled though much corroded copper head of a man wearing a turban now in the Metropolitan Museum of Art²² is one of the earliest representations of that type of headgear in Iran. Textile remains of an elaborate headdress perhaps similar to that of the Metropolitan Museum head appear at Haftavan Tepe just west of Lake Urmiyah. Dated to about the ninth century B.C., both plain weave fabric and evidence of thread (pseudomorphs?) used to secure decorative bronze disks were excavated from the grave of a young girl.²³ An earlier level at the same site also yielded traces of woven reed matting.²⁴

A series of curious bronze rollers with ornamental frames coming without specific provenance from western Iran provides some insight into the actual production of textiles in Iran in the early second millennium B.C. Now identified as heddle-pulleys on the basis of ethnographic parallels,25 these bronzes have Mesopotamian rather than Iranian parallels and suggest strong Mesopotamian influence in western Iran in the Old Babylonian period (Elamite sukkalmah period, ca. 1900-1500 B.C.). In southwestern Iran this period was characterized politically by the close involvement of Mesopotamia and Elam,26 a complex relationship that is also traceable in the engraved cylinder seals of the period.27 Mesopotamia was the hub of a lucrative international textile trade in the early second millennium B.C.,28 and it is not suprising that Mesopotamian influence should appear in the textile production of western Iran.

The Elamites remained the dominant people in southwestern Iran in the early first millennium B.C. The main evidence for their textiles comes from the rock reliefs in the Bakhtiari Mountains of northern Khuzistan. Women and certain men in religious scenes carved at Malamir²⁹ Shikaft-i Salman³⁰ and Kul-i Farah³¹ in the Izeh valley still wear heavy skirts with long fringe recalling the dress of Queen Napirasu from Susa and the priestess and goddess on the Elamite silver beaker. One is tempted, therefore, to identify the skirt with the long fringe at waist and hem as specifically religious garb. The other major source of information on late or Neo-Elamite dress is the royal Assyian relief which record primarily military garb.³²

Charred fragments found at Hasanlu near Lake Urmiyah document the varied textiles known in Iron Age Iran. Partially preserved by the fire that swept the citadel during its sack about 800 B.C., the pieces include both S- and Z-spun, one- and two-ply yarns (see Appendix I). One example has an interesting pile weave in which small loops occur at intervals. In addition two small tassels, perhaps part of the decoration of the rich horse gear found at Hasanlu, remind us that textiles could decorate animals and inanimate objects as well as people.³³

Ornamental ivory plaques from Hasanlu may also provide clues to the movement of textile craftsmen and artisans between Iran and northern Mesopotamia. The stylistic similarity between the imagery of some plaques and the embroidered bands on carved representation of nineteenth century B.C. Neo-Assyrian clothing raises the possibility of Iranian craftsmen working in the royal Assyrian ateliers.³⁴ While the evidence is admittedly indirect, it does serve to remind us that the ancient textile traditions did not run in narrow channels defined by modern concepts of nationality or ethnicity.

²⁵P.R.S. Moorey, "Bronze Rollers and Frames from Babylonia and Eastern Iran: Problems of Date and Function", *Revue Assyriologique* 71 (1977) pp. 137-50.

²⁶Carter and Stolper, Elam, pp. 24-32.

²⁷ Ibid., p. 149.

²⁸S. Dalley, "Old Babylonian Trade in Textiles at Tell al Rimah", *Iraq* 39 (1977), pp. 155-59; K. R. Veenhof, "Some Social Effects of the Old Assyrian Trade", *Iraq* 39 (1977) pp. 109-118.

²⁹von der Osten, *op. cit.*, pp. 37-38 and pl. 19 top (lower left figure).

³⁰L. Vanden Berguhe, *Reliefs Rupestres de l'Iran Ancien*, (Brussels, 1983), cat. no. 2, pp. 2627 and 111 and pl. 1.

³¹Vanden Berguhe, *op.cit.*, cat. no. 4, pp. 112-113 and pl. 2.

²²J. Reade, "Elam and Elamites in Assyrian Sculpture", *Archaeologische Mitteilungen aus Iran* 9 (1976), pp. 97-106 and pls. 21-28.

³³M. de Schaunesee and R. H. Dyson, Jr., "Hasanlu Horse Trappings and Assyrian Reliefs", Essays on Near Eastern Art and Archaeology in Honor of Charles Kyrle Wilkinson (The Metropolitan Museum of Art; New York, 1983), pp. 60-66 and 72-73; M. A. Littauer and J. H. Crouwel, "Ancient Iranian Horse Helmets?", Iranica Antiqua 19 (1984) pp. 41-44 and 51.

³⁴J. V. Canby, "Decorated Garments in Assurnasirpal's Sculpture", *Iraq* 33 (1971), pp. 42-43.

³⁵E. O. Negahban, A Preliminary Report on Marlik Excavation. Gohar Rud Expedition, Rudbar, 1961-62 (Tehran, 1964), fig. 88 and p. 50.

³⁶E. O. Negahban, Metal Vessels From Marlik (Praehistorische Bronzefunde, Abt. II, Bd. 3; Munich, 1983), no. 50, p. 77. For the best illustration see Edith Porada, "Notes on the Gold Bowl and Silver Beaker from Hasanlu", A Survey of Persian Art, vol. XIV: Proceedings, IVth International Congress of Iranian Art and Archaeology (London, 1960), pl. 1988.

³⁷O. W. Muscarella, "Fibulae and Chronology, Marlik and Assur", *Journal of Field Archaeology* 11 (1984), pp. 416-17.

³⁸Namio Egami, Shiniji Fukai and Siichi Masuda, *Dailaman I. The Excavations at Ghalekuti and Lasulkan* (Tokyo University Iraq-Iran Archaeological Expedition Report 6; Tokyo, 1965), p. 31 and pl. LXXV, 88-90.

³⁹Ghirshman, op. cit., frontispiece, pp. 129-36, and pls. X-XI, XII-XV and XX.

⁴⁰R. C. Hendrickson, "A Reconstruction of the Painted Chamber Ceiling at Baba Jan", *Iranica Antiqua* 18 (1983), pp. 82-96.

⁴¹K. De Vries, "Greeks and Phrygians in the Early Iron Age", in K. De Vries, ed., From Athens to Gordion (University Museum Papers 1; Philadelphia, 1980), pp. 35 and 44-46; L. Bellinger, "Textiles from Gordion", The Bulletin of the Needle and Bobbin Club 46 nos. 1 and 2 (1962), pp. 5-34; L. Bonfante, Etruscan Dress (Baltimore, 1975), pp. 12-13.

⁴²Matheson, op. cit., p. 75; "at-Tar", AFO (1983-84) pp. 173-74 and fig. 19.

⁴³Hansen, op. cit., p. 14, notes 25 and 26; Greenewalt and Majewski, op. cit., p. 139; Bellinger, "Textiles from Gordion", op. cit., p. 13. For an example from the Levant see R. A. S. Macalister, The Excavations at Gezer 1902-1905 and 1907-1909, vol. 1 (London, 1912), pp. 293-94.

"H. Granger-Taylor, "The Textile Fragments from PG16", Anatolian Studies 33 (1983), pp. 94-95.

⁴⁵J. McGinnis, "A Neo-Assyrian text Describing a Royal Funeral", State Archives of Assyria Bulletin, 1, no. 1 (1987), pp. 5-6. I am grateful to Pauline Albenda for this reference.

The tombs of Marlik on the southwest Caspian coast some 400 km to the east of Hasanlu on have also yielded fragments of the fabric including cords and bands³⁵ as well as an elaborately decorated silver beaker whose corroded surface retained the pattern of the fabric with which it was wrapped.³⁶ The date of these pieces is unclear. The Marlik cemetery has been dated as early as the 11th century B.C., but a least one tomb (No. 36) dates in the late eighth or seventh century B.C.³⁷

Another early first millennium tomb at Ghalekuti in Dailaman in the same general Caspian region yielded a mirror with flax (a pseudomorph?) and fragments of hemp cloth and strings.³⁶

Sialk, a site in north-central Iran approximately contemporary with Hasanlu, is the type-site for a series of richly painted ceramics featuring angular patterns of hatched diamonds, checker boards, and what one might call crossed squares, a cruciform arrangement of squares set within a single square.39 These distinctive patterns appear in less precisely rendered versions at other sites, but the closest parallels are found more than 300 km away at 8th-7th century B.C. Baba Jan painted on large clay tiles that ornamented the ceiling of a rectangular columned hall.40 The application of what we consider a ceramic pattern to a ceiling—but not to the ceramics—at Baba Jan suggests that the vessels of Sialk were not the source of the Baba Jan tile patterns. The common source may well be textiles, whether woven, appliquéd or pieced. In the absence of additional documentation, this remains merely a suggestion though it is interesting to note that fabrics with a checkboard pattern are a common occurance in textiles from contemporaneous Anatolian and Mediterranean cultures41 and are known from the later Parthian period in Iran and Mesopotamia.42

Present evidence suggests that metal objects were usually wrapped in fabric before being deposited in tombs or temple foundations. ⁴³ No documentation for cloth itself as a grave gift is known from Iran at present, though textile funerary deposits do appear contemporaneously in southern Mesopotamia at Ur⁴⁴ and are documented for a royal Assyrian burial in northern Mesopotamia. ⁴⁵

The political ascendance of the Achaemenid Persians in the sixth century B.C. does not coincide with any marked change in the Iranian textile tradition.⁴⁶ The Achaemenid capital of Persepolis, occupied between 519 and 331 B.C., yielded only one textile fragment of uncertain date,⁴⁷ but the numerous architectural reliefs of the complex show figures wearing a variety of costumes including softly gathered or pleated robes, smooth jackets, leggings or trousers, and stiff coats with long sleeves worn over the shoulders.⁴⁸ The softly pleated cloth could be linen, wool or even silk,⁴⁹ and the heavy coats may well

have been leather or felt to judge from similar garments worn until recently by Iranian shepherds.⁵⁰ The jackets and leggings/trousers worn by Persian as well as by various Saka (Scythian) tribes would of necessity be very flexible as they were riding clothes. Judging from the striped patterns seen in Greek representations it is possible that these garments were knitted.⁵¹ The possibility also exists that some garments were cotton as the plant was introduced into the royal Assyrian gardens at least 150 year earlier as a rarity from India.⁵²

The construction, ornamentation and origin of these various garments have been studied53 though there is still no concensus regarding their significance, and the figural representations on glazed bricks at Susa offer additional information that has yet to be thoroughly considered.54 The linguistic distinctions between Medes and Persian has been applied to the riding clothes and long pleated garment respectively. The distinction, however, may be between court dress, the long pleated robe, and riding or rather fighting garb, as the Persian king in the so-called Alexander mosaic from Pompeii wears a sleeved tunic and trouser in the midst of battle.55 The Greek Xenophon remarked on the embroidered trousers of the Persians and once used a richly ornamented "Persian robe", to pay for a guide through the mountains of Anatolia.56 Even the question of the origins of the long pleated robes, as well as the hoods, sleeved jackets and trousers remains problematic, as naturalism is not a characteristic of pre-Achemenid art in Iran, and few ethnic or political groups (the two are generally assumed to be synonymous) can be clearly identified in the archaeological remains before the Achaemenid period. At present one can only observe that the long fringed Elamite skirt does not appear.

Textiles also played a major role in the furnishing of the court. The Treasury reliefs and the door jamb reliefs of the Tripylon and the Throne Hall (Hall of a Hundred Columns) show elaborately fringed canopies over the Achaemenid king.⁵⁷ Omamented with embroidered or appliqued lions and winged sundisks, the canopies or baldachins introduced a new attribute of royalty into western Asia, as the Assyrian kings do not seem to have used them.

Textiles may have also had a purely symbolic significance. A secondary figure with a loop of folded cloth in his right hand appears in many court scenes. Regarded by some as a servant, ⁵⁸ this solemn male who stands directly behind the Crown Prince has been identified with the office of Treasurer mentioned frequently in the Persepolis Treasury tablets ⁵⁹ and with that chamberlain. ⁶⁰

The existence of pile carpets, the textile commonly associated with Iran, has been posited as early as the eighth century B.C., the Neo-Assyrian period in Mesopo-

⁴⁶U. Schneider, Persepolis and Ancient Iran (Chicago, 1978) (microfiche), B9 and B10. For a summary of the Achaemenid use of textiles see A Farkas, "Is There Anything Persian in Persian An?", in D. Schmandt-Besserat, ed., Ancient Persia: The Art of An Empire (Invited Lectures on the Middle East at the University of Texas at Austin 4; Malibu, 1980), pp. 20-21.

⁴⁷Fragments of wool were found in courtyard 29. See U. Schmeider, *Persepolis and Ancient Iran* (Chicago, 1978), microfiche B9 and B10, Or. Inst. PS-321a & b.

⁴⁸See S. Bittner, *Tracht und Bawaffnung des persischen Heeres zur Zeit der Achaimeniden* (Munich, 1987), pp. 62-133 for an extensive discussion of Achaemenid dress and ornament.

⁴⁹Although no silk datable to the Achaemenid period has been found in the region generally termed Iran, Chinese silk has been found in Central Asia, an area of Achaemenid activity if not actual control. See K. S. Rubinson, "Mirrors on the Fringe: Some Notes", Source Notes on the History of Art IV, nos. 2/3 (winter/Spring, 1985) p. 49. Furthermore, Chinese silk was present in Greece in the late fifth century B. C. and in Hallstatt burials in northern Europe in the sixth century B. C. See J. P. Wild, "Some Early Silk Finds in Northwest Europe", The Textile Museum Journal 23 (1984), pp. 17-19 and 22.

soWulff,p. 222; A. Shay, "Traditional Clothing in Iran", Ornament 6, no. 1 (Sept. 1982), p. 5. Other garments may also have been leather if one accepts Herodotus' observation (Persian Wars I.71), admittedly literary rather than archaeological evidence for the preceding century. A pieced fur coat with long, thin ornamental sleeves and a decorative yoke from a 5th-4th century B. C. context in Central Asia provides a luxurious version of this coat type: see Nara Prefectural Museum, The Grand Exhibition of Silk Road Civilization. The Oasis and Steppe Routes (Nara, 1988), no. 137, pp. 130-131 (colour photo) and 255 (in Japanese).

⁵¹Bittner, op. cit., pp. 125-126 and pls. 6-8 and 27. These figures are usually called Persians or Amazons when they appear in a classical context. See J. Boardman, Athenian Red Figure Vases. The Archaic Period (New York), 1975), pp. 218, 222 and 233, pl.s 279, 283, 303.1-2 and 360.

⁵²Akkadian *tse naš šipati* ("shrubs that bear wool"): R. Campbell Thompson, *A Dictionary of Assyrian Botany* (London, 1949), pp. 113-114.

53Bittner, pp. 111-118.

⁵⁴J. V. Canby, "A Note on Some Susa Bricks", Archaeologische Mitteilungen aus Iran 12 (1979), pp. 315-320 and pl. 50,2.

55M. C. Root, The King and Kinship in AchaemenidArt (Acta Iranica: Textes et Memoirs; Leiden, 1979), p. 130.

56Anabasis, I, 4 and IV, 7.

⁵⁷Root, op. cit., pp. 237 and 287-88; A. B. Tilia, Studies and Restorations at Persepolis and Other Sites in Fars (Instituto Italiano per il Medio ed Estremo Oriente; Reports and Memoirs 16; Rome 1972), pp. 183-190 and fig. 3; E. F. Schmidt, Persepolis I. Structures, Reliefs, Inscriptions, pp. 163-64 and pl. 123, upper right.

58Root, p. 237.

⁵⁹W. B. Henning, "The Monuments and Inscriptions of Tang-e Sarvak", Asia Major 2 (1952), p. 165.

⁶⁰D. N. Wilbur, Persepolis. The Archaeology of Parsa, Seat of the Persian Kings (New York, 1969), pp. 86 and 102-103.

⁶¹P. Albenda, "Assyrian Carpets in Stone", Journal of the Ancient Near East Society, Columbia University 10 (1978), pp. 1-2.

62Albenda, op. cit., pp. 4-10.

63McGinnis, op. cit., pp. 5-6.

⁶⁴For Mesopotamian carpets see M. Barrelet, "Un inventoire de Kar-Tuklti-Ninurta: textiles decores assyriens et autres", *Revue d'Assyriologie* 71 (1977), pp. 66-68.

65M. S. Dimand, Oriental Rugs in the Metropolitan Museum of Art (New York, 1973), p. 6; S. I. Rudenko. Frozen Tombs of Siberia (Berkeley, 1970), pp. 296, 298-304 and pls. 174-76; Brentjes, op. cit., p. 102 and pl. 70.

⁶⁶Wilbur, op. cit., pp. 22 and 26-28; Schmidt, Persepolis, pls. 29B, 35, 37, 42B 43 and 45B; Tilia, op. cit., pls. CLXII-CLXIV.

⁶⁷K. S. Rubinson, "The Date of Pazyryk", American Oriental Society meeting, Chicago, March 20-23, 1988. A more detailed consideration of the problem by Juliano *et al.* occurs tamia.⁶¹ These carpets are thought to be mirrored by the carved stone of thresholds in the royal Assyrian palaces.⁶² A recently published account of a royal Neo-Assyrian funeral mentions an Urartian (east Anatolian) rug with black borders.⁶³ Of course, these "carpets" may be flat woven *gilims* or felts and not pile fabrics as our understanding of Assyrian textile terms is incomplete.⁶⁴

Remains of pile carpets do not actually appear on the Persian plateau until well after the Achaemenid period. The carpet from Kurgan Five of the frozen tombs at Pazyryk in the Altai Mountains is often assumed to have been a Persian import⁶⁵ because the motifs of led and ridden horses occur in the Achaemenid reliefs at Persepolis. 66 But the combination of this motif with that of the grazing elk or deer, a Siberian theme, suggests that the Pazyryk rug was not produced in the Achaemenid ateliers but merely utilized Achaemenid imagery. Since Achaemenid imagery eventually spread from Macedonia to northern India, one Achaemenid motif is no sure indiction of date or place of production. A recent study of the contents of the Pazyryk tombs has led to a later date, second half of the fourth through early third century B.C., than has been customary.67 This later date plus the non-Iranian aspects of the Pazyryk rug68 argue against its relevance as documentation for early Iranian carpet production, Nonetheless it remains an important work.

The Parthian period in Iran (ca. 250 B.C.-224 A.D.), a time of complex political alliances, was strongly affected by the international trade moving along the Silk Route, the caravan tracks that crossed northern Iran ultimately reaching China to the east and the ports of Roman Syria to the west. Scraps of Chinese silks from the tomb of Palmyra in Syria document the continued presence of this luxury fabric in the Near East, ⁶⁹ while other pieces from the Crimea indicate the movement of Chinese textiles along a more northernly, "unoffical" route. ⁷⁰

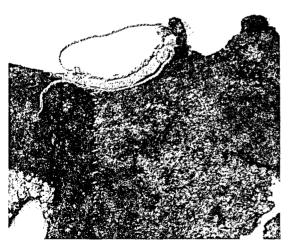
Textile remains of the Parthian period in Iran are for the most part wool fragments. Some pieces come from tombs in the Germi region of eastern Azarbaijan⁷¹ while a garment fragment was excavated at Shahr-i Qumis in Gurgan to the northeast. ⁷²(See Appendix II for a partial list of these textiles.) Dated to the first half of the 1st century B.C. by a coin found in the folds of cloth, the Shahr-i Qumis fragment is a section of the left shoulder and neckline of a cotton-lined, undyed black-brown felt garment (Fig.2). The blue silk cord that presumably secured the neck opening is the oldest excavated piece of silk known from Iran at present. Hemp cord and other textile remains also come from Noruzmahale on the Caspian coast. ⁷³ Moreover, the occurance of cotton in late Parthian burials in southern Mesopotamia⁷⁴ suggests that the use of

that fiber was widespread in the region by that date.

Iranian sculpture of the Parthian period provides a good deal of information regarding the types of male garb but offers little indication of fibres, structures or decorative techniques used. Where surfaces remain undamaged, one can see vertical bands of spirals or volutes running from neck to hem on the front of sleeved tunics and down the front of trouser legs⁷⁵ Some of these garments also bear a uniform allover pattern featuring a diaper or diamond with a central dot or circle.⁷⁶ The superposition of these bands over the pattern suggests that the volute bands were appliquéd.

As in the preceding period, archaeological evidence for pile carpets comes from outside the Iranian plateau. A variety of knotted pile fragments from secondary burials in reused caves at at-Tar in southern Mesopotamia offers a parallel to the finds at Shahr-i Qumis and suggests possible Zoroastrian burial practices in the region. The fabrics of at-Tar encompass five types of knots and one pile piece is two-sided, an indication of sophisticated production.⁷⁷

Until the excavations at Shahr-i Qumis in northeastern Iran, the identification of Sasanian textiles in Iran was based on literary descriptions, on the appearance of what were considered Sasanian motifs on textiles in western church treasuries, 78 and on the few Sasanian reliefs that indicated textile patterns. 79 Aside from the aivan reliefs at Taq-i Bustan, an unfinished work dated in the late Sasanian period, 80 the clearest patterns are found in earlier Sasanian graffiti at Persepolis. Interestingly these early Sasanian images show the same all-over pattern of dotted diapers or diamonds as found on late Parthian representations from



in a special issue of Source, Notes on the History of Art vol. X, no. 4 (1991).

⁶⁸M.C. Whiting, "A Report on the Dyes of the Pazyryk Carpet", *Oriental Carpet and Textile Studies* I (1985), pp. 18-22. I am indebted to Paul Ramsey for this citation.

⁶⁹M. A. R. Colledge, *The Art of Palmyra* (Boulder, Colo., 1976), pp. 101-102.

⁷⁰H. Granger-Taylor and J. P. Wild, "Some Ancient Silk From the Crimea in the British Museum", *Antiquaries Journal* 61 (1981), p. 305.

71Matheson, p. 75.

⁷²J. Hansman and D. Stronach, "Excavations at Shahr-i Qumis, 1967", Journal of the Royal Asiatic Society (1970, no. 1), p. 51; J. Nunoma, The Origins of Sericulture and Ancient Silks (Tokyo, 1979), pp. 341-343 (in Japanese).

⁷³N. Egami, S. Fukai and S. Masuda, *Dailaman II. The Excavations at Noruzmahale and Khoramabad 1960* (Tokyo University Iraq-Iran Archaeological Expedition Report 7; Tokyo, 1966), p. 14, fig. 2:1; p. 17, fig. 3 (Japanese text).

¹⁴Fujii, 1983-4 op. cit., p. 177; H. Fujii, "At-Tar Caves, Hill-A Excavations in 1971", Sumer 29 (1973), p. 64.

⁷⁵T. S. Kawami, Monumental Art of the Parthian Period in Iran (Acta Iranica 26; Leiden, 1987), pls. 29, 31 and 33. For slightly later examples of this type of ornamental woven band see J. Trilling, "The Roman heritage. Textiles From Egypt and the Eastern Mediterranean 300 to 600 A.D.", Textile Museum Journal 21 (1982), pp. 70-72. See also T.S. Kawami, "Clothing in the Arsa-'cid Period", Encyclopaedia Iranica, in press.

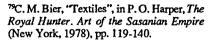
⁷⁶Kawami, op. cit., pls. 30-31 and 33.

⁷⁷Fujii, 1983-84, pp. 178 and 181; anon., "Excavations in Iraq 1983-84," *Iraq* 47 (1985), p. 225.

78 Ackerman, op.cit., pp. 690-715.

Figure 2. Fragment of black-brown wool felt garment with silk cord from Shahr-i Qumis, Site IV, Room 9; first half of the first century B.C. Courtesy of The Metropolitan Museum of Art, New York, Harris Duncombe Colt Gift, 1969, Inst. 69.1.7. See also Appendix II, no. 1.

Figure 3. Fragments of a yellowish wool looped pile textile from Shahr-i Qumis, Site VI, Room 23, QM/67/156. Sixth century A.D. Courtesy of The Metropolitan Museum of Art, Dunscombe Colt Gift, 1960, 692434 a,b.



⁸⁰G. Herrmann, The Iranian Revival (The Making of the Past; Oxford, 1977), pp. 131-135; For a detailed description of the Taq-i Bustan textiles, see S. Fukai et al., Taq-i Bustan IV. Text (Tokyo University Iraq-Iran Archaeological Expedition, Report 20; Tokyo, 1984). The textiles of Taq-i Bustan may in fact reflect Central Asian, not Iranian production. See Bier, op. cit., p. 125. For Central Asian examples of a slightly later date see G. Azarpay, Sogdian Painting. The Pictorial Epicin Oriental Art (Berkeley, 1981), pp. 97, 106, 111, 119, and 121.

⁸¹Bier noted this in a paper read at the symposium held in New York in conjunction with the exhibition *The Royal Hunter* at Asia House in 1978.

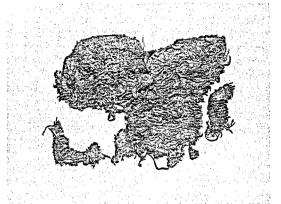
²T. S. Kawami, "Kuh-e Khwaja, Iran, and Its Wall Paintings: The Records of Ernst Herzfeld", Metropolitan Museum Journal 22 (1987), pp. 40-41 and 50.

⁸³Kawami, "Kuh-e Khwaja", op. cit., p. 39, fig. 18.

⁸⁴E. H. Peck, "The Representation of Costumes in the Reliefs of Taq-i Bustan", *Artibus Asiae* 31 (1969), pp. 122-23.

ask. Riboud, "A Newly Discovered Caftan from the Northern Caucasus", *Textile Museum Journal* 4, no. 3 (1976), pp. 21-42 also includes an extended discussion of related technical and historical questions.

Assanian Repository at Qumis," Journal of the Royal Asiatic Society, (1970), no. 2, p. 155. Trudy S. Kawami, "Ancient Textiles from Shahr-i Qumis", Hali 59 (Oct. 1991), p. 99. See also Appendix II.



southwestern Iran.⁸¹ The Sasanian wall paintings of Kuh-i Khwaja show further example of Sasanian garments with floral or dotted (pearled) patterns and decorative borders in the Parthian fashion.⁸² Nothing like the large medallions with pearled borders or the animals or birds seen at Taq-i Bustan appears at Kuh-i Kwaja and only one garmen.⁸³ has a pattern featuring dotted circles on the neck and shoulders. Indeed some of the garments shown in the Taq-i Bustan reliefs are unique to that site and suggest the adoption of foreign, that is Eastern, fashions.⁸⁴ A silk caftan featuring pearled roundels excavated in the northern Caucasus has been attributed to Iran.⁸⁵ but its eighth/ninth century date not only places it outside the limits of this survey, but futher emphasizes the lateness of the Taq-i Bostan representations.

It is only in the Sasanian period that clear evidence for pile carpets appears on the Iranian plateau. The Sasanian levels at Shahr-i Qumis produced yellowed fragments of several looped pile textiles⁸⁶ (see Fig. 3, Appendix II, no. 5 and Appendix III).

Archaeological evidence for Iranian textiles of the pre-Islamic period comprises an irregular assemblage dependent upon the random luck of excavations and the keen eye of the excavator. Despite many gaps in the chronology and little data from the eastern half of the country, one can identify a richly developed craft as early as the late fourth millennium B.C. and can follow traces of a complex interaction with the highly centralized Mesopotamian textile tradition that continued for millennia. By the late first millennium B.C. commerce along the Silk Route introduced Central Asia as another significance source of influence in both material and design. The textile crafts in pre-Islamic Iran, as complicated and sophisticated as in later periods, still await a comprehensive study.

TEXTILE ACKNOWLEDGEMENTS

I am grateful to Carol M. Bier for sharing her expertise with me, to Annette Ittig for suggesting the topic, to Nobuko Kajitani and C. Y. Wilder for facilitating my research at the Metropolitan Museum of Art, to David Stronach for permission to publish the Shahr-i Qumis material, and to Lionel Bier, Richard Ellis, and Louis Levine for their helpful comments. The conclusions—and errors—remain my own.

Appendix I

The Hasanlu Textiles

Eighty-one textile samples were excavated at Hasanlu between 1959 and 1974. Most come from Period IV (1100 - 800 B.C.), the public buildings of which were sacked and burned. The bulk of these samples seem to have come from goods stored in the burned buildings, though some textiles were associated with bodies in the cemetery and in the burned buildings. The textiles include woven cloth, fringed, pile or looped pile textiles and balls of yarn. The majority of the thirty-two samples examined to date are wool. Others are bast and other vegetal fibers as well as goat hair. For further information contact Maude de Schauensee, Keeper of the Iranian and Mesopotamian Collections, The University Museum, Philadelphia.

Appendix II Excavated Textiles from Shahr-i Qumis in the Metropolitan Museum of Art, New York

(1)	Parthian	Inst. 69.1.7	Black-brown wool felt fragment of child's garment (left shoulder and neck) lined with fine cotton and fastened with a thin silk cord. (Figure 2)
(2)	Sasanian	Inst. 69.1.8	Wool fragment with red/orange, white and blue stripes.
(3)		Inst. 69.1.9a-c	Wool fragments with brown and white stripes.
(4)		Inst. 69.1.10	White wool
(5)		69.24.34a,b	Fragments of a yellowish wool looped pile fabric. (Figure 3)
(6)	,	Inst. 69,1.12	Mass of at least ten wool fragments including one piece with white palmettes and one with white pearls on a blueground.
(7)		Inst. 69.1.13	Linen
(8)		Inst. 69.1.14	Yellowish bands of coarse cloth and fragment of a pile fabric, presumably wool.
(9)		Inst. 69.24.29 a-b	Two fragments of a wool shroud, white with a single green thread (dated coin found in folds).

Appendix III

Technical Analysis of Inst. 69.24.34a,b

Description

weft-faced plain weave with supplementary looped pile weft

Dimensions

Largest fragment: 15 cm. w. x 11 cm. h.

Warp

wool, undyed 2 Z-spun singles, combined 5 warps per cm.

Wef

wool, undyed S-spun, single 33 wefts per cm.

Pile

wool, undyed

2 Z-spun singles, combined height: 4-5 cm. 2-3 loops per cm.