

old disputed cemetery determined that the ground had belonged to Christians rather than Muslims.⁵³

The corpse is then placed on a ladder or bier with low sides, covered with a shawl or rug (variations in which signify the sex or status of the deceased) and carried to the freshly dug grave by male relatives, sometimes accompanied by boy singers, professional wailers, musicians, paupers and female relatives.⁵⁴ If it is sometimes considered unlucky to precede the bier as this is the position of the angels of death. Similarly, as the angels proceed on foot, it is often considered improper to ride to a Muslim funeral. In contrast to Christian practice, these funeral processions travel rapidly because, on the one hand, the righteous should be allowed to reach heaven as rapidly as possible, whereas in the case of sinners the corpse should reduce as much as possible the length of contact with the funeral procession is also affected by the speed of the goodness of the deceased.⁵⁵ There are no restrictions on other religious minorities attending the funeral, but some consider it inappropriate to stand beside the open grave as this is considered a Jewish custom.⁵⁶

Grave construction

This usually varies according to the materials available or the local type of subsoil but there may be different chronological change possibly related to different socio-ethnic groups⁵⁷ and the T. el-Hesi data suggest somewhat greater care being paid to the construction of graves for women.⁵⁸ The most important feature common to many regions is the belief that women should be buried deeper (i.e. at c. 1.5 m) than men (c. 1-1.3 m), i.e. shoulder and breast height respectively, the aim being to cover the respective sexual shallow graves however those excavated at T. Songor B ranged from 0.20-0.80 m depth.⁵⁹ Burials of all ages were excavated at T. el-Hesi, ranging in depth from c. 0.20-1.50 m, again the shallowest generally belonging

to infants or secondary burials and the deepest to an exceptionally tall adult.⁶⁰ Further differences apparently occur depending on whether the deceased was bedouin, semi-sedentary or fully sedentary.⁶¹

Common types of Late Islamic grave vary from stone⁶² or mudbrick-lined cist⁶³ (the latter suggestive of a mudbrick village in the vicinity and perhaps even the season as fresh bricks can only be made during the dry season) to simple shaft graves⁶⁴ or shafts with undercut side-chambers blocked with re-used mudbricks, stones, fired bricks, slag or even bushes.⁶⁵ The latter obviously leave no archaeological traces.⁶⁶ The size of the side-chamber should be sufficient to allow the deceased to sit upright during its interment by the angels.⁶⁷ The bases of the graves should be pure earth.⁶⁸ Multiple graves are permissible in times of war or epidemic but care should be taken to ensure that the first interment is that of the most pious.⁶⁹ Graves at Atras were unusual in that the villagers here also used caves as tombs: there was careful avoidance of those caves that contained undecomposed bodies but old burials were simply swept to one side before the new interment was placed.⁷⁰ Garayquist noted the sealing of tomb-entrances with stone slabs which were then plastered over in order to reduce the chance of disturbance by men or animals.⁷¹ Channels were also dug around the tomb for drainage.⁷²

In parts of Egypt, family vaults are constructed above ground.⁷³

Other unusual excavated burials include simple interments placed beneath a cairn of stones.⁷⁴ Thomson⁷⁵ mentions that robbers' tombs were marked by such cairns that were added to and cursed by passers-by. Cain burials are more common in Afghanistan and India.⁷⁶ Finally, at T. Meworah and T. el-Hesi, miscarried foetuses and young babies were buried in so-called 'Gaza-ware' pots.⁷⁷ Incidentally, these provide a clue as to the late date (probably early eighteenth century AD or later) of these graves.⁷⁸ Other Islamic jar-burials have been reported from T. Zetor, north mound (?),⁷⁹ Beisheba & T. Sera,⁸⁰ and other Palestinian sites.⁸¹

Cemetery location

Owing to religious prohibitions on intramural burial, Islamic graves tend to cluster in distinct cemeteries beyond the settlement. The distance maintained between the living and the dead varies from a track-width at T. Abu Dhahir⁸² to almost a kilometre at Alahad and Godin Tepe⁸³ or more at Hasanahad⁸⁴ and T. Yelkhi.⁸⁵ Cemeteries are often found on dry raised ground (i.e. agriculturally poor or useless areas), particularly on nearby deserted tells,⁸⁶ or rocky outcrops.⁸⁷ In cases where an old cemetery becomes full, a new spot is chosen.⁸⁸

In some cases there is shared use by different villages of one mound as a place of burial, the nearest side of the mound corresponding to the village.⁸⁹ Whereas

archaeologists would probably refer to such cases as single cemeteries, the villagers in question see distinct areas as being representative of different communities. Instances of longer-distance transport of the dead are provided by the extensive Shiite cemeteries at Kerbela, Najaf, Meshed, Qom and (in the Salafid period) Ardabil, whence the deceased used to be wrapped in shrouds or reeds, supported on wooden boards and carried on horses, mule or camel-back.⁹⁰ In the case of Coptic funerals where the burial takes place at a monastery, the coffin of the deceased is usually carried on camel-back.⁹¹ Significantly, improvements in transport may contribute towards an increase in long-distance transport of the dead.⁹²

In urban cases, where cemeteries become full and/or pressure on space precludes expansion of the cemeteries, two solutions are possible. The first is re-burial in crypts (as in the case of Christian communities in Mosul); the second is the creation of separate cemeteries outside the walls (Muslim Mosul). The latter tend to become the focus of certain other activities considered hazardous or 'antisocial', such as pottery production or car-repair garages.⁹³ Incidentally, Chase also cites the case of Bosnian Muslim cemeteries being located close to threshing floors.⁹⁴ Finally, Barth describes a preference by some nomads for burial either in a village cemetery or close to a perennial water supply,⁹⁵ less concern seems to have been shown by other bedouin tribes, who simply buried the corpse near the tent.⁹⁶ The size of bedouin cemeteries varies from a few dozen to several hundred.⁹⁷ All cemeteries are usually avoided at night when they are considered to be haunted by jinn.⁹⁸

34 Buitendahl, 51.
35 Lane 1896, 476-481; 1987, 260-261; Janssen 1927, 335.
36 White 1965, 92-95; 158-161; Swartz 1974, 214.
37 Buitendahl 1968, 113; Alva 1987, 58.
38 Robinson 1982, 128.
39 Simpson 1982, 128.
40 Tombs, 10, preparation.
41 Most 1928, 87-72.
42 Watson 1979, 215. This factor would be interesting to compare with graves of other periods where both the anthropological and the tops of the grave-slabs are recorded, unfortunately, the latter are usually recorded away or are un-occupied in an excavation. Some of the Islamic graves at Masunono, see mentioned (Ohara *et al.* 1966, 5).
43 Masunono & Yokoyama 1989, 295; Yokoyama & Masunono 1990, 189, 195.

43 Farago & O'Connell 1978, 169; Tombs 1985, 36-37; Eakins 1993, 9-10, 12, 15, 18.
44 Most 1928, 670-671; Fiorina 1983b, 74; Tombs 1985, 43; Hobs 1989, 65-66.
45 Balawari, Curtis, Colton & Green 1993, 31, 33; Fig. 30(a-b); Hesi, Grave Types II, IV (Tombs 1978, 229); T. el-Hesi, Grave Types II, IV (Tombs 1985, 38-39, 63; Eakins *et al.* 1978, 4; Fig. 23, Pl. 6, 1-5); (adults and children); T. Meworah 1987, 75; T. Sh. Ahmed el-Azary (Yerin 1961, Pl. 1); Umm Qais (Machen 1996, 1991a, 137); T. Yopce-tem (*et al.* 1967, 9-10, Pls. XI-XIII).
46 T. Songor A, Grave 111, a single infant, out of a total of some 235 Islamic graves excavated at this site (Kamada & Ohno 1988, 151, Pl. 44B).
47 Caesarea, area KK (Chase 1992); T. el-Hesi, Grave Types I, II (Stem *et al.* 1978, 4); Fela (Hennessy *et al.* 1983, 359; Birre 1992, 221); T. Songor A (Kamada & Ohno 1988, 150-151); T. Zetor, north mound (Ohara *et al.* 1966, 3).
48 (Tombs 1985, 37; Becker 1933, 119); T. el-Hesi, Type I (Kamada & Ohno 1988, 151, Pl. 44A); T. Songor A (Stem 1980, 30; Cf. also Dickson 1949, 210).
49 The type with undercut side-chambers was probably rather common in antiquity but as burials were often only re-used when the excavator made direct contact with the bones are somewhat suspect (cf. Tombs 1985, 37).
50 Lane 1896, 484; Buitendahl 1968, 115.
51 Alvar 1990, 364.
52 Bell 1911, 99; Al-Khaysi 1988, 178.
53 A ninth-century cemetery. Early Islamic instance of the same practice was found at Strat (Bell, *pers. comm.*).
54 Garayquist 1965, 56, 85, 104.

61 Ohara (*et al.*) 1967, Pl. XIII A.
62 Stern *et al.* 1978, 8.
63 Cannan 1927, 8; Ohara (*et al.*) 1970, 74; commented on the prevalence of infants' burials at T. Zetor Cemetery.
64 See Selected Jar-burials at T. Zetor Cemetery.
65 Simpson, in preparation.
66 Krarner 1982, 76.
67 Watson 1979, 15.
68 E. T. Abu Dhahir, Simpson, in preparation; T. al-Hawi, Bell, Tucker & Williams 1989, 20-21; T. Meworah; Stern *et al.* 1978, 4.
69 Middle Euphrates, Bell 1911, 84. The same is found in other parts (Simpson, 1992).
70 Also Dhan, Simpson, in preparation; Amini/ Yelkhi; T. el-Hesi, Simpson, in preparation; T. Meworah; Maru- moro & Yonjima 1989, 297; Umm Qais (Machen 1991a, 136-137, 46-141; cf. also El-Adigun, De Vries 1987, 346).
71 Balawari, Simpson, December 1992; T. Yelkhi; Fiorina 1983b, commentary on Balawari, was shared by at least seven different nearby villages (Balawari, Kabarti, Badana Alla, Badana eni nearby villages (Balawari, Kabarti, Badana Alla, Badana

55 Buitendahl 1968, 118; Lane 1987, 262.
56 T. Meworah, Tomb 40 (Stem *et al.* 1978, 4); adult.
57 Thomson 1911, 488.
58 Halbert 1950, 187-188; Bell, *pers. comm.*
59 Stern *et al.* 1978, 4, 5, 9; Fig. 1, Pls. 6, 4, 5, 21; Tombs 1985, 39-40, 107, Pls. 26-27, 84; Eakins 1993, 9, 11-12, 18; Pls. 13-15, 28-29.
60 Amino acid epimerisation analysis of stratified lamellar shells from a site in the Negev suggests a date of c. 1700 for two associated sherds of 'Gaza-ware' (Koson & Goodfriend 1993).
61 Ohara (*et al.*) 1967, Pl. XIII A.
62 Stern *et al.* 1978, 8.
63 Cannan 1927, 8; Ohara (*et al.*) 1970, 74; commented on the prevalence of infants' burials at T. Zetor Cemetery.
64 See Selected Jar-burials at T. Zetor Cemetery.
65 Simpson, in preparation.
66 Krarner 1982, 76.
67 Watson 1979, 15.
68 E. T. Abu Dhahir, Simpson, in preparation; T. al-Hawi, Bell, Tucker & Williams 1989, 20-21; T. Meworah; Stern *et al.* 1978, 4.
69 Middle Euphrates, Bell 1911, 84. The same is found in other parts (Simpson, 1992).
70 Also Dhan, Simpson, in preparation; Amini/ Yelkhi; T. el-Hesi, Simpson, in preparation; T. Meworah; Maru- moro & Yonjima 1989, 297; Umm Qais (Machen 1991a, 136-137, 46-141; cf. also El-Adigun, De Vries 1987, 346).
71 Balawari, Simpson, December 1992; T. Yelkhi; Fiorina 1983b, commentary on Balawari, was shared by at least seven different nearby villages (Balawari, Kabarti, Badana Alla, Badana eni nearby villages (Balawari, Kabarti, Badana Alla, Badana

72 Sufira, Karahow, Twonita and Zana Khurumi). T. Yelkhi was shared by villagers from Amini (or Dvuni) at Khehshah and elsewhere. This situation was also suggested at T. Dier, Mita (Lugin 1857, 54-56, 65-66; Bird 1988, 1, 35-36; Broward 1972, 14; OHSNST 6799; cf. Marconi 1977; Fitch E5; Broward 1972, 74; Algen 1990, 564. These have inspired some archaeologists to interpret Bronze Age cemeteries on Behram (Mackay 1929; Langner, Kadiyok 1984/85) and Parthian graves at Warha (Lofius 1957, 66; cf. also Ward 1886, 21) as being evidence for similar long-distance transport of the dead. In both cases, however, the discovery and excavation of nearby contemporary settlements suggests instead that they simply served local populations (Frohlich 1983).
73 Buitendahl 1968, 124.
74 Adams 1989, 195.
75 Moon has bones of also Burder 1847, 419-420. Pottery production may be reflected in the archaeological record with the concurrence of Early Dynastic graves and kilns at T. (Lug- harra, Kati (Mason 1974, 346).
76 Chase 1992, 172. Cf. also Haiman 1992, 49; Lancaster & Barth 1990, 142; Cf. also Haiman 1992, 49; Lancaster & Barth 1990, 142-143.
77 Lane 1928, 418; Dickson 1949, 207.
78 E.g. Haiman 1996, 127; Dagan 1992, 101. De Vries (1987, 345) estimated that there may be over a thousand bedouin burials at El-Lajjun, over a hundred individuals have already been excavated.
80 Dickson 1949, 208.

Cemetery organisation

Graves within a cemetery are normally regularly spaced.⁸¹ The combination of this with regular alignments theoretically contributes to a more efficient use of space. However, most cemeteries tend to be rather organic in their growth, developing first laterally than vertically as pressure of space precludes further spread and finally shifting away altogether to a new location. This sequence was partly demonstrated by the Stratum II Islamic cemetery at T. el-Hesi.⁸² At T. Topgan, there was clustering of graves according to family (rather than social) status and graves of close kin were located as close together as possible.⁸³ However, as death does not respect family ties, in practice the development of family plots is complicated by the natural outward growth of the cemetery.⁸⁴ Blackman, Granqvist and Lane each describe segregation of corpses according to sex where the burials are placed in shared vaults or caves.⁸⁵ In the Hamrin basin of Iraq, the mound of T. Madhur is said to have been used only for women and children.⁸⁶

Separated areas or distinct cemeteries for children and infants are frequent.⁸⁷ At Hasanhad, the two cemeteries were 140 metres apart.⁸⁸ The reason given was that babies were too young to know sin and therefore should be kept separate.⁸⁹ However, there are also exceptions.⁹⁰ Granqvist records the occasional burial of children in the same graves as adults if they died at the same time, the reason being that the children help protect the associated adults.⁹¹ Fakhry has noted that in the Bahra oasis (Egypt) newborn babies may be buried anywhere, including the house, and without a grave-marker, but children over three days of age have to be interred individually within a cemetery, unless they die shortly after a parent when they may be interred in the parent's grave.⁹² Excavated instances of this have been demonstrated from T. el-Hesi, including one case of a pair of young infants possibly despatched immediately after birth because of the difficulty of simultaneously

rearing two children.⁹³ A further discovery at this site was that greater care was paid to the grave-construction and laying out of the body of children who died at about three years of age, suggesting a possible change in their family status at this age.⁹⁴

Finally, there are numerous cases of graves clustering around the tombs of shaliks and other important figures, who are themselves interred close to a mosque or shrine.⁹⁵ In most cases, it seems as if it is the presence of the shrine that dictates the growth of a cemetery, the main reasons apparently being that proximity to a holy person will help protect the grave from disturbance and increase the amount of blessing in the afterlife.⁹⁶ A similar reason evidently lies behind the storage of grain, heavy agricultural equipment or other possessions near a tomb or shrine.⁹⁷

Interment & orientation

Islamic burials are normally primary inhumations, hence normally fully articulated primary inhumations, articulated and disarticulated burials have been excavated at T. el-Hesi and El-Lejjun. The latter were presumed to belong to "bedouin nomads who brought their deceased from temporary burials in the winter pastures to be reburied here".⁹⁸ However, a strong case most, if not all, of the secondary burials represented the remains of individuals accidentally disturbed during later grave-digging.⁹⁹ Cremation is strictly forbidden to Muslims and it is said that a corpse is as capable of suffering pain as a live person.¹⁰⁰

The orifices of the body usually are closed in order to hinder evil influences; however, the ears are left open so that the deceased may reply correctly upon subsequent questioning by visiting angels.¹⁰¹ Curiously, the jaw may be tightly bound in order to prevent the lower portion from accidentally opening,¹⁰² any cords around the shroud are loosened.¹⁰³ In some cases the shrouds themselves are removed, carefully folded and placed in the grave beneath the body.¹⁰⁴ These observations suggest that the T. el-Hesi excavator's interpretation of

pus found in two graves as means of securing such shrouds¹⁰⁵ is incorrect. It is interesting to note here that red staining, thought to derive from skin coloration, was found on the bones of three women's skeletons at T. el-Hesi.¹⁰⁶ The body is laid in the grave facing Mecca and usually with the head to the west; specific grave orientation of course varies throughout the Islamic world.¹⁰⁷ At T. Abu Dhanir, slight shifts in orientation during different sub-phases were noted although the reasons for these are unknown. A minority of burials excavated at T. el-Hesi were plainly orientated away from Mecca; the excavators suggested this may have been either because of a wish to face Jerusalem, Islam's third holiest city¹⁰⁸ or perhaps even through genuine uncertainty on the part of one or more individuals as to the true direction of Mecca.¹⁰⁹

Minor variations occur in the laying out of the body but it is unclear whether this was truly random or whether it reflects minor variations in chronological and social groupings. Some 235 Islamic graves were excavated at T. Songor A, in the Hamrin basin of Iraq; the bodies were either placed on their back or on their side, with legs extended but arms either flexed or straight by the sides.¹¹⁰ At T. el-Hesi, the majority of the excavated burials were either extended on their back or placed on their right side; a minority were placed in other positions, including that of a young woman who had been decapitated, at least one other individual may have been buried alive.¹¹¹ At T. Zoror (north mound), the excavators found that bodies were placed with the head either to the west or the east,¹¹² crucially, however, all the bodies faced south, i.e. towards Mecca. In many cases, the body was placed on one side,¹¹³ in others, the bodies were placed on their back with the right arm extended by the side but the left arm bent and the left hand placed over the pelvis or (less commonly) the chest.¹¹⁴ At

Aras, the right hand was placed beneath the head; if necessary, the body or head was propped up on bricks or stones to ensure that they remained correctly orientated.¹¹⁵

At T. Dar' Alla, the bodies are said to have been covered with shreds and mudbricks.¹¹⁶ This may reflect concern in protecting the corpses from being disturbed, particularly by dogs for this reason, villagers in western Iran placed large stones over the bodies.¹¹⁷ Alternatively, it may reflect an aversion to letting the earth touch the dead body.¹¹⁸ Finally, each of the mourners throws dust or three handfuls of earth into the grave before the backfilling begins.¹¹⁹

Grave-goods

Late Islamic graves containing objects are surprisingly frequent in excavations, despite Islamic prohibitions on grave-goods.¹²⁰ Excavated categories of finds comprise coins, European tokens; items of jewellery, including beads, bells, pendants, finger-rings, earrings, hair-rings, toe-rings, bracelets, anklets and headpieces (sometimes utilising perforated coins or unperforated metal discs); pins, combs, mirrors, knife blades, glass bottles, ceramics and natural coloured stones arranged around the head of the corpse.¹²¹ The range and relative frequency of these objects can be judged from the accompanying Appendix.

The funerary significance of many of these grave-objects is uncertain. The occasional discovery of unperforated coins in Islamic graves recalls classical and Partho-Sasanian practices and would seem to be at complete variance with Islamic belief.¹²² However, Empson records that Yazidis in northern Iraq occasionally placed gold coins with the deceased as a means

81 At Al-Hadid they were approximately a metre apart. (Kramer 1992, 78).
82 Fargo & O'Connell 1978, 169; Toombs 1985, 22-29; Eskins 1993.
83 Sweet 1974, 214-215, cf. also Granqvist 1965, 57. This is difficult to demonstrate archaeologically although attempted at T. el-Hesi (Toombs 1985, 22-29, 46-47).
84 Kramer 1982, 78.
85 Blackman 1968, 116; Granqvist 1965, Lane 1890, 484.
86 Road *et al.* 1984, 113.
87 E.g. T. Abu Dhanir. Simpson, in preparation; Alibab: Kramer 1982, 76; Rothemann, Granqvist 1965, 58; T. Ikranu: Yabry 1989, 42; T. Songor B: Matsumoto & Yokoyama 1989; Yokoyama & Matsumoto 1996; cf. also Canada 1997, 8.
88 Wilson 1979, 215. Although the reasons are unknown, similar segregation is found in a number of ancient Near Eastern sites, for instance Samirran T. es-Sawwan (Campbell, this volume); Ushad T. Abha; Qadin 1985, 1, 33-36) and Bronze Age Sair (Dhahin 1982, 23; Fig. 32, Pl. 40).
89 Cf. Toombs 1985, Eskins 1993.
90 Granqvist 1965, 83.
91 Fakhry 1950, II, 121.

92 Toombs 1985, 23-24, 26; Eskins 1993, 11, 17, Plg. 4-11.
93 Toombs 1985, 41, 69-71.
94 Yezin 1961, 3; Barni 1980, 142; Toombs 1985, 30-32; Hamran 1986, 127; Scheiber 1989, 99; Merthen 1991a, 136, 140-141; Eskins 1993, 15; Bahl & Gill, in press.
95 Lewis 1971, 59-69.
96 Kanani 1992, 58; Adams & Nissen 1972, 237; Site 449; Merthen 1991a, 136; Frank, this volume, cf. also Lanawar & Lanawar 1993, 154.
97 De Vries 1987, 345.
98 Toombs 1985, 32, 44-47; Eskins 1993, 9-11, 15-17, Pl. 3.
99 Toombs 1985, 129.
100 Granqvist 1965, 82-84; Roberts 1982, 128. For coins in graves see n. 124-127, 142-143. On the other hand, Mustil (1978, 670) states that Rawla, Tooman do not close the eyes or nostrils.
101 Blackman 1968, 115.
102 Al-Hamadhani 1973, 85.
103 Blackman 1968, 115.
104 Butcher *n.d.*, 53, 57.

105 Toombs 1985, 104.
106 Cf. Mustil 1978, III, 424. Their unusual physical characteristics and clustering suggested that they may represent 'women from a different tribal group, characterized by longer crania, [who] entered the community which used the cemetery by marriage, and that these women adopted their skin with the community' (Toombs 1985, 90). This discovery recalls similar cases of ochre-stained burials from earlier periods in the Near East.
107 The Yezidis of northern Iraq are said to be interred with their faces to the east (Drower 1941, 56-57, 183). Lane (1890, 47-9) hints at further variation as some Muslims orientated the top half of the head rather than the face towards Mecca at the time of death. I am grateful to Dr A.A. Sowell (for kindly pointing out other exceptions) (Manchester, December 1995).
108 Toombs 1985, 79, 82, 83; Toombs (1985, 78) also observes that minor variations in orientation of the head could easily occur if the shroud was not fully removed during the final stage.
109 Karimidi & O'Connell 1988, 151.
110 Karimidi & O'Connell 1988, 151.
111 Oman 1995, 21, 55.
112 E.g. T. Zoror, north mound (this volume, Pl. X).
113 E.g. T. Zoror, north mound (this volume, Pl. X).
114 Carver *et al.* 1992, 26-27, 33, 35; El-Jamali; De Vries 1987, 345; Eskins 1993, 26-27, 33, 35; El-Jamali; De Vries 1987, 345.

115 Parker 1988, 142, 146; Fig. 14; T. Zoror, north mound (this volume, Pl. X).
116 Cf. Mustil 1978, III, 424. Their unusual physical characteristics and clustering suggested that they may represent 'women from a different tribal group, characterized by longer crania, [who] entered the community which used the cemetery by marriage, and that these women adopted their skin with the community' (Toombs 1985, 90). This discovery recalls similar cases of ochre-stained burials from earlier periods in the Near East.
117 The Yezidis of northern Iraq are said to be interred with their faces to the east (Drower 1941, 56-57, 183). Lane (1890, 47-9) hints at further variation as some Muslims orientated the top half of the head rather than the face towards Mecca at the time of death. I am grateful to Dr A.A. Sowell (for kindly pointing out other exceptions) (Manchester, December 1995).
118 Toombs 1985, 79, 82, 83; Toombs (1985, 78) also observes that minor variations in orientation of the head could easily occur if the shroud was not fully removed during the final stage.
119 Karimidi & O'Connell 1988, 151.
120 Oman 1995, 21, 55.
121 E.g. T. Zoror, north mound (this volume, Pl. X).
122 Carver *et al.* 1992, 26-27, 33, 35; El-Jamali; De Vries 1987, 345; Eskins 1993, 26-27, 33, 35; El-Jamali; De Vries 1987, 345.
123 Simpson 1992. The lack of perforations suggest that they were not simply re-used as items of jewellery.

of rearing the examining angels who questioned the deceased in the grave during the first night of burial,¹²⁴ and in the Bahra oasis of the Egyptian Western Desert, Fasbry mentions that people still occasionally placed a coin in the mouth of the old-aged in order to prevent other deaths in the family.¹²⁵ An Iranian adaptation of this practice is described by Sykes, who refers to the placing in the mouth of an elderly carmelian carrying the names of the twelve imams.¹²⁶

According to Butcher, Copts as well as Muslims may be buried with items of jewellery.¹²⁷ Some objects may be gender-specific. Invernizzi observed that bracelets and beads were found associated particularly with young girls' burials at T. Yekhi,¹²⁸ and Ohana burials at T. Zeror.¹²⁹ Grave-goods of any sort were less common in male graves at T. el-Hesi although exceptions included burials with metal rings and bracelets.¹³⁰ Significantly, at this site, the discovery of bracelets too large to have been worn by the children with whom they were found suggests that at least some of the jewellery may have belonged to mourners rather than the deceased.¹³¹

There is a certain amount of known ethnographic detail linking items of dress with local Near Eastern superstitions. Certain materials were preferred as a means of protection for the wearer. These include the wearing of a blue glass or stone bead in order to reflect the 'Evil Eye' back onto itself, or cowries (known among the Qasbiqi as *Bihar Tank* 'Eye-Crackers') designed to break the 'Evil Eye'. Dark green stone beads were considered by some to prevent post-natal diseases and protect against any ill effects of menstruation. Similarly, serpentine was regarded as being effective against insect bites, goldstone against poison, certain yellow glass beads against jaundice, tortoise-shell and alum against illness and red agate, carnelian or amber were regarded as a means of healing, preventing ear/throat inflammation, abortion, internal bleeding and other dangers, and promoting love and fertility. Brown/black and white worn as a means of increasing marital affection; a smooth opaque white bead to promote lactation.¹³²

124 Empson 1928, 63.
125 Fasbry 1920, II, 122. Alternatives were to bury an onion in the grave or to lay a nail in the earth over the head of the deceased (ibid.). The Mandaeans have a similar belief in order to prevent the Mandaean from returning and taking close relatives with him, perhaps an allusion to the spread of infectious disease within a family, stones are placed on the mouth and around the deceased has a lengthy tradition (cf. Curtis this volume).
126 Sykes 1902, 167. A yet further variation is illustrated by the apparent discovery of simple plain carnelian beads in the mouths of early Seleucid burials excavated at Sarr on Bahian (Hefling 1949).
127 Butcher, 52.
128 Invernizzi 1960, 30.
129 Ohana (ed.) 1966, 3.
130 Ohana & O'Connell 1978, 169; Toombs 1985, 92-93, 104-105.
131 Toombs 1985, 92-93, 101, 103.

turquoise to ensure prosperity; coral was associated with kindness and good fortune; and cloves were worn at weddings.¹³³ Among these materials, blue glass beads and bracelets, cowries, and agate, carnelian and coral beads are found within Islamic (as well as earlier) graves; cloves are unlikely to survive into the archaeological record (and in any case are less likely to have formed part of the death assemblage).

It is worth noting that frequently the colour or shape of a bead is regarded as more important than the raw material itself – hence the substitution of, for example, red glass or, more recently, red plastic for carnelian or agate beads. In addition, the specific forms of certain beads and types of jewellery were significant: circular or triangular shapes were considered powerful magic and bells and reflective surfaces were also regarded as effective means of protection against evil influences.¹³⁴ Triangular pendants, bells and mirrors all occur in Late Islamic graves. Cowries at T. el-Hesi were interpreted as fertility charms and bracelets with snake-head terminals regarded as possible insurance against the more elaborate ethnographically attested styles of metal jewellery – let alone gold or silverwork – do not appear in Islamic graves; instead, cheaper versions made of glass or plastic are more abundant within the mortuary context.¹³⁵ A possible explanation of deliberate manufacture for the artefact is inappropriate here and an explanation should be sought within the social and economic context. A detailed comparative study of regional urban, village and bedouin jewellery styles, associated beliefs and the excavated mortuary evidence would be very useful.¹³⁶ In the meantime, the available evidence strongly suggests that costly jewellery was retained in circulation whereas items with amuletic significance were preferred grave-goods.

The available ethnographic accounts are usually silent on the topic of grave-goods, possibly because many of their authors did not witness closely the burial ceremonies.¹³⁷ Exceptions are Granqvist and Musil who mention the burial of a strike-a-light in a village grave at Atlas, a set of coffee utensils in another, a comb and a piece of soap in the graves of virgins, a needle and a thread or kohl with women and a water-filled pitcher beside the head of bedouins.¹³⁸ It is interesting to note

132 Almgren *et al.* 1976, 45; Weir 1959, 193-202; Mathen 1991a, 139-140, 1991b, *et al.* also Budge 1920, 306-330.
133 Almgren *et al.* 1976, 45.
134 Toombs 1985, 105; Eakins 1993, 60-61.
135 This is despite the fact that metal bracelets and both gold and silver jewellery were manufactured in villages as well as the urban centres (e.g. cf. Buckingham 1823, 140).
136 Cf. Buckingham 1827, 292, 382; Lane 1899, 519-532; Spenser 1992, 57. Attempted by Jero (n.d.) for Late Assyrian graves excavated at Assur.
137 Cf. e.g. Sauer 1974, 215.
138 Granqvist 1965, 62-63, 84; Musil 1908, III, 424. On historic period links of a Miller 1984. Coffee appeared throughout the Near East in the sixteenth century (Eaton 1991) following an initial period of religious disapproval similar to that

that at least some of these items (coffee sets, mirrors, combs) are occasionally left as offerings on top of the graves or are depicted on Late Islamic gravestones.¹³⁹

The presence or absence of objects are clearly unreliable means of distinguishing pre-Islamic from 'Islamic' graves. Indeed, firmly identifiable Early Islamic graves are surprisingly rare. From the point of view of the archaeologist, this material culture therefore is potentially most useful in dating graves within the Islamic period: as these graves provide relatively closed groups, they may be considered representative of minor categories of Ottoman and later material culture.¹⁴⁰ The occasional discovery of earlier coins re-used as elements of jewellery¹⁴¹ suggests that extreme caution should be used before attempting to date graves on the basis of associated coins.¹⁴² However, some success has been had through comparison of imported glass 'trade beads' found, for instance, in Late Islamic graves at Caesarea with dated assemblages from North America.¹⁴³

Finally, although technically not grave-goods, mention should be made of the Iraqi Shi'ite practice of placing small inscribed clay 'prayer-stones' in the graves of pilgrims who had made the journey to Kerbela (whence they were made).¹⁴⁴ The Yazidis of northern Iraq have a similar custom.¹⁴⁵ Conder also mentions the inclusion in certain Palestinian Shi'ite graves of character commendations written on palm-leaves or the writing of prayers on the shroud.¹⁴⁶ These practices recall the occasional occurrence of scroll amulets in graves of earlier periods.¹⁴⁷

Grave-markers

Muslim law disapproves of inscribed or ornamented graves. It is therefore ironic that many of the most splendid monuments of Islam comprise tombs. A primary purpose of grave-markers is to prevent people from accidentally treading on or otherwise disturbing

the dead.¹⁴⁸ Qur'anic quotations are rarely used, however, lest the inscriptions become accidentally defiled in this way. The extent and type of grave-marker varies considerably from site to site. Ethnographic accounts from Egypt,¹⁴⁹ Palestine,¹⁵¹ Jordan,¹⁵² Iraq,¹⁵³ Kuwait,¹⁵⁴ and Hadramut¹⁵⁵ attest the use of temporary palm-frond, reed, brick, pottery or sand mound markers. In Baluchistan, there is even deliberate selection of third millennium carved stone objects as markers for recent graves or shrines.¹⁵⁶ Similarly, in eastern Jordan, old Saliatic inscriptions seem to have been re-used as bedouin grave-markers.¹⁵⁷ The placing of palm-fronds, aloes, myrtle and sometimes sweet basil above graves in Egypt, Iraq, Syria and Turkey are believed to bestow a blessing on the dead.¹⁵⁸ Likewise, flowers are grown over Druze, Iranian and Turkish graves¹⁵⁹ and scarlet flowers are placed over Yazidi headstones on feast days.¹⁶⁰ According to Lewis, cypresses were planted in Ottoman cemeteries because 'the aromatic resinous scent which they gave off was considered an antidote to the graveyard smells, and because of the implications of immortality in their evergreen leaves'.¹⁶¹ The scale and importance of these beliefs in late Ottoman Syria is illustrated by Buckingham's description of mule caravan trade in myrtle.¹⁶²

Significantly, most of these types of markers tend to erode rapidly and are unlikely to leave recognizable traces in the archaeological record.¹⁶³ Use of these may explain, however, the occasional accidental discovery of entire cemeteries of unmarked graves (T. el-Hesi,¹⁶⁴ T. Mervoraki,¹⁶⁵ T. Sogor,¹⁶⁶ A. T. Tuncelir,¹⁶⁷ T. Yekhi),¹⁶⁸ or, as T. Abu Dhabir, Alahad and T. Dickson 1949, 208.
149 Cf. Dickson 1949, 208.
150 Blackman 1968.
151 Janssen 1927, 236; Dugan 1992, 94.
152 Buckingham 1823, 122-123.
153 Lofriu 1857, 99; Bell 1911, 80; Boas 1960, 28; Postgate 1980b, 101.
154 Dickson 1949, 210.
155 Halber 1959, 187-188.
156 Dulon 1977.
157 Lanoster & Lanoster 1993, 134, 137.
158 Thomson 1911, 84; Blackman 1968, 115-117, 239, 260; Lane 1997, 263.
159 Butcher 1847, 408-409, 414-417; Conder 1889, 125; Barth 1980, 143; Lamplough 1986, 59.
160 Drower 1941, 105.
161 Lewis 1971, 106; cf. also Drower 1977, 183, 190.
162 Buckingham 1823, 400-401.
163 The use of temporary grave-markers in antiquity can be inferred by common orientation and a lack of intersecting grave-cut. However, at T. Sogor, A. many of the grave-cuts did intersect, supporting the excavator's comment that no good markers could be traced (Kemalida & postulates from Ohana 1986, 1, 150).
164 Ohana 1986, 1, 150.
165 Stern *et al.* 1977, 4, 198, 130.
166 Karasid & Othman 1989/90, 333.
167 Fuller & Fuller 1989, 30. Earlier this century, Mandaeans cemeteries rarely included grave-markers although 'some weathered to erect trees' (Mandean) neighbours, have begun to erect trees 'in the name of the buried person on the site'. In earlier times, according to local belief, the dead were exhumed (Drower 1977, 184).

Hassanabad, many of the children's graves were unmarked.¹⁶⁹

Unworked stones are frequently used as grave-markers, for instance in Iran,¹⁷⁰ northern Iraq,¹⁷¹ Jordan,¹⁷² Palestine and the Negev.¹⁷³ More unusual types of marker are found in Central Asia: at Konniya-Urgench (Turkmenistan), the ladders used as tiers in the funeral-procession were then left upright above the grave, whereas at Kaminskoye (Kyrgyzia) aluminium yurt frames placed over the graves were used to imitate the former homes of the deceased.¹⁷⁴

Where present, tombstones may indicate the name, family or tribe and profession of the deceased. This is particularly well-defined in the case of Ottoman tombs in Istanbul and other Turkish cities.¹⁷⁵ Conversely, according to Kramer,¹⁷⁶ villagers at Allahabad were usually unable to identify grave occupants "unless the deceased were close kin, the death was very recent, or the grave has an inscription". At Arta, different shapes of stone were used to correspond to different sexes:¹⁷⁷ in Egypt, sex was distinguished by different numbers of sticks or projections at the top of the tomb,¹⁷⁸ and in western Iran the addition of a third stone over the centre of the grave marked the women's graves.¹⁷⁹ Elsewhere, women's graves are denoted by garments or plants of hair placed over the top,¹⁸⁰ although Drower¹⁸¹ implies that plants simply mark a sign of mourning by widows. Upright gravestones may also be attributed another function as seen at the angels of death. Individuals who died in battle may have weapons deposited on the tombstone, as in the case of tombs observed immediately outside Mosul in 1758,¹⁸² and more recent graves in Iraq.¹⁸³

Yassin has briefly described bedouin cut tomb-stones found in Jordan and decorated with "some of the symbols of bedouin hospitality, such as the coffee grinder, and the coffee pot and cups".¹⁸⁴ These may reflect a bedouin belief reported by Granqvist that "coffee utensils mourn on the death of a sheikh. They are hung up and turned upside down."¹⁸⁵ Significantly, a number of bedouin graves in eastern Jordan possess a "short distance from the foot of the grave ... a circle of

stones, often built up against a large standing stone, with a variable number of upright stones within it and, perhaps, a pile of small spherical stones nearby." These "represent a coffee hearth(s), the stones within it being coffee pots and the smaller ones being camel-dung fuel".¹⁸⁶ Further elaborate adult gravestones are occasionally found in western Iran and south-east Turkey: examples include the depiction of a prayer stone, prayer beads, ewer and bowl (=washing set) or a semi-circular comb for a man and scissors, a mirror or a double-sided comb for a woman. Others depict scenes with armed horsemen, ibex, gazelles or weaving, with the front and back sides of the stele corresponding to "life" and "death".¹⁸⁸ In some Yazidi cases, the scene may symbolise the manner of death of the individual interred beneath.¹⁸⁹

Post-funerary ceremonies

Dyeing of the face and hands, tearing of garments, scratching of cheeks, wailing and occasionally the playing of musical instruments (drums or flutes) at the grave by female relatives of the deceased are customary amongst Muslims (and minority groups)¹⁹⁰ as a forbidden by the Prophet and disapproved of by the orthodox.¹⁹¹ Necklaces and tracterles may be broken and at the grave-side are provided by the discovery of glass bracelet fragments near Late Islamic graves at T. Abu Dhahir,¹⁹² T. Khanu,¹⁹³ T. Razuk¹⁹⁴ and T. Songor A.¹⁹⁵ The period of mourning is characterised also by the wearing of dull-coloured or old clothing, and a temporary stop in manufacture of bright textiles or basketry.¹⁹⁶ Quotations from the Qur'an are recited over the grave and incense is burnt at Yazidi funerals.¹⁹⁸

Throughout the Near East, there is a strong Late Islamic tradition of undertaking ritual meals at the grave-side. In Egypt, specially-baked loaves are brought regularly to the grave where they are often donated in bread, figs, dried fruit, water, clothes and even cash offerings were also made at the grave-side in Egypt, Palestine, Syria and Iraq as an act of charity on behalf of

the soul of the deceased,²⁰⁰ special care was taken in some cases to take the favourite food of the deceased.²⁰¹ Early nineteenth century "bedouin" graves in the Amman area were covered in "numerous proprietary offerings and tokens in memory of the tenants of the graves".²⁰² Musti confirms that specially baked bread offerings and water libations were offered at bedouin graves,²⁰³ a practice that continues today.²⁰⁴ Drower details the carefully prescribed ingredients of and customs at Mandean ritual meals in the marshes of southern Iraq.²⁰⁵ Baldensperger²⁰⁶ mentions that other Palestinian gravestones had scooped-out tops in order to collect rainwater as a drink for the departed souls.²⁰⁷ The same reason presumably lies behind the Egyptian practice of placing a full water-jar at the head of the grave,²⁰⁸ and may explain the discovery of six water jugs (dabaz) above the capstones of an excavated man's grave at T. el-Hesi.²⁰⁹

Conclusions

The diversity in excavated rural Late Islamic graves reflects variation in the age, sex and social status of the deceased. Anthropological verification is required if these factors are to be tested as alternative social prevalent archaeological tendency. Detailed anthropological studies of excavated Late Islamic populations are still at an early stage²¹⁴ but their potential importance has been highlighted with reference to data from the Negev and Hamrin basin.²¹⁵ The relationship between different contemporaneous ethnic and religious groups

is unclear from archaeological yet similarity between Muslim and Coptic mortuary ceremonies has been demonstrated from Egypt²¹⁶ and Batis has alluded to "marked tribal differences in burial customs" in the Eastern Desert of Jordan.²¹⁷ The ethnographic record for the Near East points to relatively rapid changes in fashion and wide variation of detail within even relatively small geographical areas; the implications of these variables for appreciating variability in associated material culture and death-assemblages should not be underestimated. There are hints also of regional continuity in burial-practices from pre-Islamic times, particularly concerning treatment of the body and the placement of grave-goods (albeit within an altered theological context). For instance, in Egypt funeral ceremonies are "performed largely for the benefit of the departed, to ensure them happiness in the life beyond".²¹⁸ Throughout the Late Islamic Near East there are strong suggestions that local superstitions, popular beliefs and orthodox religion all play important roles in death and funerary ceremonies. Where present, many grave-goods seem to have been selected for their perceived apotropaic properties rather than material value; major disparities with the corresponding above-ground ethnographic record demonstrate the potential unreliability of economic reconstructions based solely on mortuary data. Finally, there are strong suggestions of simple practicality in terms of grave construction and cemetery organisation. On the basis of these observations, it is not surprising that considerable intra- and inter-site variation also occurs in the Ancient Near East. Indeed, cemeteries from different periods may have more in common than do different sites within a single period.²¹⁹ Comparative studies of the mortuary evidence from different periods would be useful in future.

169 Personal observation; Kramer 1982, 76; Watson 1979, 215.
170 Kramer 1982, 76-77.
171 Drower 1941, 36-37.
172 Yassin (ed.) 1988, 273.
173 Schäfer 1989, 59; Dagan 1992, 101.
174 Personal observations, 1991. The conical roof of Seljuk and later tombs may be influenced by tent designs.
175 White 1885, III, 347-358.
176 Kramer 1982, 78.
177 Granqvist 1965, 86.
178 Fakhry 1950, II, 121; cf. also Mural 1928, 670; Mersten 1991a, 137.
179 Kramer 1982, 76.
180 Granqvist 1965, 106-107; Roberts 1982, 128.
181 St. Clair 1941, 36-37.
182 St. Clair 1867, 236.
183 Ibn 1773, 232.
184 Personal observations, 1985-1987.
185 Yassin (ed.) 1988, 273; cf. Praga, this volume.
186 Granqvist 1965, 105-106.

187 Lancaster & Lancaster 1993, 152-155.
188 Watson 1979, 215; Mortensen & Mortensen 1989, 933-934, Pls. 13, 18; Vanden Berghe & Toussaint 1992, 20-35, 190 Cf. Drower 1937, 180-181.
189 Fakhry 1950, II, 122; Granqvist 1965, 53-54, 142-143.
190 Al-Hammidi 1973, 85; Dickson 1949, 209-210.
191 Simpson, in preparation.
192 Ghaz 1989, 42.
193 Gama & Oishi 1981, 81; Pl. 55, 24-26.
194 Gama & Oishi 1988, 159, 176; Fig. 17.
195 Drower 1941, 98.
196 Drower n.d., 59-60; Lane 1890, 485; Blaueman 1968, 115, 118-120, 259, 261.

197 Lancaster & Lancaster 1993, 152-155.
198 Watson 1979, 215; Mortensen & Mortensen 1989, 933-934, Pls. 13, 18; Vanden Berghe & Toussaint 1992, 20-35, 190 Cf. Drower 1937, 180-181.
189 Fakhry 1950, II, 122; Granqvist 1965, 53-54, 142-143.
190 Al-Hammidi 1973, 85; Dickson 1949, 209-210.
191 Simpson, in preparation.
192 Ghaz 1989, 42.
193 Gama & Oishi 1981, 81; Pl. 55, 24-26.
194 Gama & Oishi 1988, 159, 176; Fig. 17.
195 Drower 1941, 98.
196 Drower n.d., 59-60; Lane 1890, 485; Blaueman 1968, 115, 118-120, 259, 261.

200 Conder 1889a, 126; Wilson 1966, 159; Canaan 1927, 188-193; Empson 1928, 63; Drower 1941, 98; Fakhry 1950, II, 121; Granqvist 1965, 90, 99-100, 157; Sweet 1974, 215.
201 Fakhry 1950, II, 122.
202 Bucknham 1825, 122-123.
203 Meiri 1928, 671-672.
204 Lancaster & Lancaster 1993, 153-154.
205 Drower 1937, 188-188, 204-224.
206 Baldensperger 1893, 217.
207 Cf. also White 1885, III, 347; Lewis 1971, 305.
208 Fakhry 1950, II, 121.
209 Toornha 1965, 106-107. The roots of these practices can be traced back to at least the third millennium in Mesopotamia, whereby libations were offered with the intention of preventing the dead from returning to haunt the living (Thompson 1903: I, xxxviii-96; the latter can be detected in the Near East to ancestor cultic practices, see Beyer 1991).
210 Maturity for burials in the Negev, 18.
211 Biss, cited in 1.3.11.4, 159-160; Fig. 24, 2-3.
212 Rod et al. 1981, 81, Pl. 104-4.
213 Gibson (ed.) 1993, Fakhry & Wada 1981; Kerwan 1982, 76.
214 Etkon 1982; Corcoran 1987; Bourke 1992, 221; Brower 1992.
215 Wada 1982, 99; Marumoto & Yokoyama 1989, 207; Fakhry 1993, 49-55.

216 Blaueman 1964, 109-138.
217 Batis 1990, 96.
218 Blaueman 1964, 130.
219 Beyer 1992.
220 Cf. Stadel, this volume.

Appendix: Artifact categories from excavated Late Islamic graves in the Near East

Coins

Balawat (Curtis, Collon & Green 1993, 30), T. Dor, Site K-60 (Guz-Silberstein & Raveh 1990, 51), T. el-Hesi (Toombs 1985, 95, 100-101, 116, Pls. 68b, 69a-b, 70), El-Lejjun (Betlyon 1985, 32-33, 1987: 683-684; De Vries 1987, 344-346), T. Karrana, Burial 16 (Wilhelm & Zaccagnini 1991, 12-13; Ilisch 1993), T. Mevorakh (Stern *et al.* 1978, 4-5, 9, 20, Pl. 46: 15), Mt. Nebo (Saller 1941, 285), Qal'at al-Bahrain (Kervran 1982, 75), Rang Mahal, Grave 1 (Halbert 1959, 185, Pl. 86: 41), Umm Qais (Mershen 1991a, 137-138), T. Yoqne'am (Avisar 1987, 7).

N.B. Some examples at T. el-Hesi and El-Lejjun were hammered flat, hence the legends were illegible.

Tokens

T. Chagar Bazar, Trench A (Mallowan 1936, 6; Christie Mallowan 1983, 136-137; 17th century, Hans Krauwinkel of Nuremberg).

Beads

Silver: T. el-Hesi (Toombs 1985, 99, Pl. 65a).

Copper alloy: T. el-Hesi (Toombs 1985, 97, 99, Pls. 62a: 4, 63a).

Glass: T. el-Hesi (Fargo & O'Connell 1978, 173; Toombs 1985, 94-100 & Pls.), El-Lejjun (De Vries 1987, 344), T. Mevorakh, Tomb 28 (Stern *et al.* 1978, 5, 9, 103, Pl. 41: 4, 6), Mt. Nebo (Saller 1941, I, 314), T. Qiri, Tombs 5-7 (Avisar 1987, 8, 48-49: Figs. 6: 14-15, 17, 21-22), T. al-Raqai (Curvers 1987, 7, 29: Fig. 17: 89), T. Razuk, Burial 5 (Gibson (ed.) 1981, 82, Pl. 104: 8), T. Songor A, Graves 46-47, 55, 154, 251 (Kamada & Ohtsu 1988, 160-161, 171: Fig. 18), Umm Qais (Mershen 1990, 332), T. Yelkhi (Invernizzi 1980, 30), T. Yoqne'am (Avisar 1987, 8).

Venetian glass (?): T. Qiri, Tomb 5 (Avisar 1987, 8, 48-49: Fig. 6: 18).

Composition: T. el-Hesi (?) (Toombs 1985, 94, 96-99), T. Qiri, Tomb 5 (Avisar 1987, 8, 48-49: Fig. 6: 16), T. Songor A, Graves 46, 278 (Kamada & Ohtsu 1988, 151, 160, 171: Fig. 18).

Plastic: El-Lejjun (De Vries 1987, 344, 346).

Blue plastic: T. Razuk, Burial 4 (Gibson (ed.) 1981, 82, Pl. 104: 5).

Amber: T. Iktanu (Prag 1989, 42; cf. also Prag 1991, 55), T. Mevorakh, Tomb 17 (Stern *et al.* 1978, 5, 9, 103, Pl. 41: 2), T. Qiri (Avisar 1987, 8, 48-49: Fig. 6: 19), Umm Qais (Mershen 1990, 332). N.B. Mershen (1991a, 139) suggests a possible source for amber on the river Zarqa in Jordan.

Bone: T. el-Hesi (Toombs 1985, 95-96, 98 & Pls.), T. Razuk, Burial 4 (Gibson (ed.) 1981, 82, Pl. 104: 5), Umm Qais (Mershen 1991a, 139).

Shell: T. el-Hesi (Toombs 1985, 98, 100, Pls. 67a: 8-9, 67b: 3, 5, 8, 10), El-Lejjun (De Vries 1987, 344), T. Qiri, Tomb 5 (Avisar 1987, 8, 48-49: Fig. 6: 19), T. Razuk, Burials 2, 4 (Gibson (ed.) 1981, 81-82, Pls. 55: 8-15, 104: 5), T. Songor A, Graves 55, 154, 278 (Kamada & Ohtsu 1988, 151, 160-61, 170: Fig. 18), Umm Qais (Mershen 1991a, 139).

Coral: T. Songor A, Grave 278 (Kamada & Ohtsu 1988, 151).

Wood: T. Songor A, Graves 46, 55 (Kamada & Ohtsu 1988, 160-161, 171: Fig. 18).

Carnelian/agate: T. el-Hesi (Fargo & O'Connell 1978, 173; Toombs 1985, 93, 95, 97, 99-100 & Pls.), T. Mevorakh, Tombs 13, 17, 30, 35 (Stern *et al.* 1978, 5, 9, 103, Pl. 41: 5, 7-12), T. Songor A, Graves 46, 47, 55, 278 (Kamada & Ohtsu 1988, 151, 160-161, 171: Fig. 18), Umm Qais (Mershen 1991a, 139).

Crystal: T. Songor A, Grave 278 (Kamada & Ohtsu 1988, 151).

Soapstone: T. Mevorakh, Tomb 17 (Stern *et al.* 1978, 5, 9, 103, Pl. 41: 1, 3).

Black stone: T. Zeror, north mound (Ohata (ed.) 1967, 9-10, Pl. XII).

Red stone: T. Razuk, Burial 4 (Gibson (ed.) 1981, 82, Pl. 104: 5).

White stone: T. Razuk, Burial 4 (Gibson (ed.) 1981, 82, Pl. 104: 5).

Unspecified stone: T. Razuk, Burial 2 (Gibson (ed.) 1981, 81-82, Pl. 55: 8-15), T. Songor A, Grave 46 (Kamada & Ohtsu 1988, 160, 171: Fig. 18), Umm Qais (Mershen 1990, 332, 1991a: 139).

Unspecified: El-Bawiti (Fakhry 1950, II, 110, Pl. LXVII), T. el-Hesi (Toombs 1985, 18), T. Jezreel, Area B (Usishkin & Woodhead *et al.* 1991/92, 29/31), Mt. Nebo (Saller 1941, I, 314), T. Sh. 'Ahmed el-'Areyne (Yeivin 1961, Pl. 2), Umm Qais (Mershen 1990, 332), T. Yoqne'am (Avisar 1987, 7), T. Zeror, north mound (Ohata (ed.) 1966, 3).

N.B. Some of these beads may derive from bracelets (see below).

Bells

Silver: T. Mevorakh, Tomb 17 (Stern *et al.* 1978, 5, 9, 103, Pl. 41: 15).

Copper alloy: T. Gubba (Ii 1989, 224, Pl. 49, No. 210), T. el-Hesi (Toombs 1985, 101, Pl. 69c-d, with traces of cloth), El-Lejjun (De Vries 1987, 344), T. Mevorakh, Tomb 29 (Stern *et al.* 1978, 5, 9, 103, Pl. 41: 13-14), T. Songor A, Grave 100 (Kamada & Ohtsu 1988, 158, 170: Fig. 17, Pl. 52A).

Unspecified: T. Sh. 'Ahmed el-'Areyne (Yeivin 1961, Pl. 2: 21).

Pendants

Silver: T. Mevorakh, Tomb 4 (Stern *et al.* 1978, 5, 9, 103, Pl. 41: 18).

Copper alloy: T. Mevorakh, Tombs 31, 33 (Stern *et al.* 1978, 5, 9, 103, Pl. 41: 16-17).

Glass: T. el-Hesi (Toombs 1985, 100).

Composition: Balawat (Curtis, Collon & Green 1993, 30).

Shell: mother-of-pearl: T. el-Hesi (Toombs 1985, 100, Pls. 59a: 43, 62c: 1, 66a: 23, 68c).

Green stone: T. Qiri (Avisar 1987, 7-8, 48-49: Fig. 6: 20).

Travertine: T. el-Hesi (Toombs 1985, 98, 100, Pl. 67a: 4).

Unspecified: T. Yoqne'am (Avisar 1987, 7).

Finger-Rings

Copper alloy: T. el-Hesi (Toombs 1985, 101-102, Pl. 71b, silver-plated), El-Lejjun (De Vries 1987, 344), Pella (?) (Hennessy *et al.* 1983, 359), T. al-Raqai (Curvers 1987, 8), T. esh-Shari'a (Oren 1976, 12), T. Songor A, Grave 154 (Kamada & Ohtsu 1988, 158, 170: Fig. 17, Pl. 52A).

With stone insets: T. el-Hesi (Fargo & O'Connell 1978, 173; Toombs 1985, 101-102), Umm Qais (Mershen 1991a, 137, 139), T. Zeror, north mound (Ohata (ed.) 1966, 3).

With glass insets: El-Bawiti (Fakhry 1950, II, 110, Pl. LXVIII), T. el-Hesi (Toombs 1985, 101-102).

Iron: T. el-Hesi (Toombs 1985, 101, Pls. 71a, 72c).

Bone: T. el-Hesi (Toombs 1985, 101, Pl. 71c: 1-2).

Unspecified: T. Sh. 'Ahmed el-'Areyne (Yeivin 1961, Pl. 2), Umm Qais (Mershen 1991a, 137, 139).

Earrings

Copper alloy: El-Bawiti (Fakhry 1950, II, 110), T. Deir Alla (Van der Kooij & Ibrahim (eds) 1989, 90, 110, two with traces of textile), T. Gubba (Ii 1989, 224, Pl. 49, No. 211, with traces of cotton), T. el-Hesi (Toombs 1985, 97, 102, Pl. 62d, with glass drops and traces of cloth), Pella (?) (Hennessy *et al.* 1983, 359), T. Songor A, Grave 47 (Kamada & Ohtsu 1988, 170, Fig. 17, Pl. 52A, each with a pair of drops).

Unspecified: T. Sh. 'Ahmed el-'Areyne (Yeivin 1961, Pl. 2), Umm Qais (Mershen 1991a, 137).

Hair-Rings

Copper alloy: El-Bawiti (Fakhry 1950, II, 110, Pl. LXVIII).

Twisted glass: T. Deir Alla (Van der Kooij & Ibrahim (eds) 1989, 90, 110).

Toe-Rings

Copper alloy & iron: T. el-Hesi (Toombs 1985, 102 & Pls.).

Bracelets

Copper alloy: El-Bawiti (Fakhry 1950, II, 110, Pl. LXVIII), T. Deir Alla (Van der Kooij & Ibrahim (eds) 1989, 110), T. el-Hesi (Fargo & O'Connell 1978, 173; Toombs 1985, 103-104 & Pls, some with snake-head terminals and traces of cloth), El-Lejjun (De Vries 1987, 344), T. Mevorakh, Tomb 17 (Stern *et al.* 1978, 5, 9, 103, Pl. 41: 20), T. esh-Shari'a (Oren 1976, 12, one with traces of cloth), T. Songor A, Grave 278 (Kamada & Ohtsu 1988, 151, Pl. 44A: on both arms), Umm Qais (Mershen 1991a, 139), T. Yoqne'am (Avisar 1987, 7), T. Zeror, north mound (Ohata (ed.) 1966, 3).

Iron: Caesarea, area KK (Chase 1992), T. Deir Alla (Van der Kooij & Ibrahim (eds) 1989, 110), Gezer, Cave 30 (?) (Macalister 1912, I, 312), T. el-Hesi (Toombs 1985, 104, Pl. 81a-c), El-Lejjun (De Vries 1987, 344), T. Mevorakh, Tombs 5, 17, 31 (Stern *et al.* 1978, 5, 9, 103, Pl. 41: 19), T. Songor A, Graves 264, 278 (Kamada & Ohtsu 1988, 151, Pl. 44A: on left arm), Umm Qais (Mershen 1991a, 139), T. Zeror, north mound (Ohata (ed.) 1966, 3).

Unspecified metal: Umm Qais (Mershen 1990, 332).

Blue glass: T. el-Hesi (Toombs 1985, 102-103 & Pls.), T. Mevorakh, Tombs 2, 25, 31 (Stern *et al.* 1978, 5, 9, 103, Pl. 41: 21-22), T. al-Raqai (Curvers 1987, 7, 29: Fig. 17: 90).

Amber glass: T. el-Hesi (Toombs 1985, 102-103, Pl. 76a: 4).

Coloured twisted or trailed glass: T. Dan, area B (Spauer 1992, 57-59), Gezer, Cave 30 (Macalister 1912, I, 312, 315, Fig. 166), T. el-Hesi (Toombs 1985, 103 & Pls.), T. Jemmeh (Petrie 1928, 25, Pl. LVXVII: 4-8), Jerusalem: Bethany (Saller 1957, 327), Mt. Nebo (Saller 1941, I, 314), T. Sh. 'Ahmed el-'Areyne (Yeivin 1961, Pl. 2).

Unspecified glass: T. Gubba, Graves 295-303, 352-353 (Ii 1989, 221, 234: Fig. 23, Pl. 44), T. el-Hesi (Toombs 1985, 18), El-Lejjun (De Vries 1987, 344), Qal'at al-Bahrain (Kervran 1982, 75, Pl. VIB), T. esh-Shari'a (Oren 1976, 12), Umm Qais (Mershen 1990, 332, 1991a: 137, 139), T. Yelkhi (Invernizzi 1980, 30).

Plastic: T. Razuk, Burial 4 (Gibson (ed.) 1981, 82, Pl. 104: 7).

Leather studded with metal: T. el-Hesi (Toombs 1985, 104).

Leather studded with glass: Umm Qais (Mershen 1990, 332, 1991a: 137, 139).

Unspecified: T. Sh. 'Ahmed el-'Areyne (Yeivin 1961, Pls. 1-2).

N.B. Bracelets formed of glass, composition, shell and silver beads were found with Burial 3 at T. Razuk (Gibson (ed.) 1981,

82). Further bead-bracelets were excavated in Graves 154 & 251 at T. Songor A (Kamada & Ohtsu 1988, 161, 171: Fig. 18).

Anklets

Copper alloy: T. Deir Alla (Van der Kooij & Ibrahim (eds) 1989, 90, 110).

Iron: T. Deir Alla (Van der Kooij & Ibrahim (eds) 1989, 90, 110).

Head-dresses

T. el-Hesi (Toombs 1985, 105-106, Pl. 80a), El-Lejjun (Betlyon 1985, 32-33; De Vries 1987, 344), Umm Qais (Mershen 1990, 332, 1991a: 139).

Pins

Copper alloy: T. el-Hesi (Toombs 1985, 104, Pl. 64b).

Combs

Wooden: El-Lejjun (De Vries 1987, 344), Rang Mahal (Halbert 1959, 185).

Mirrors

Bronze: T. Songor A, Grave 278, circular mirror found close behind the cranium of an adult (Kamada & Ohtsu 1988, 151, 158, Pls. 44A, 53).

Glass: T. Mevorakh, Tomb 17 (Stern *et al.* 1978, 5-7, Pl. 41: 23-25). Traces of silvering survived on the backs suggesting that they were originally mounted on a perishable (perhaps cloth) backing.

N.B. Mirror fragments are also reported from bedouin graves at El-Lejjun (De Vries 1987, 344).

Knife Blades

Iron: El-Lejjun (De Vries 1987, 344).

Glassware

T. el-Hesi (?) (Toombs 1985, 108), El-Lejjun (De Vries 1987, 344; Parker 1988, 142, 146: Fig. 14), T. Sh. 'Ahmed el-'Areyne (Yeivin 1961, 4, Pl. 2: 1-8).

Ceramics

T. Dor, Site K-60 (Guz-Silberstein & Raveh 1990, 51), T. el-Hesi (Toombs 1985, 106-108, Pls. 82-83, 85, 88b).

Natural Coloured Stones

T. Khirbet Salih, Burials 2-3 (Wilhelm 1993, 261).