ANALYSING THE RECENT PAST: THE ARCHAEOLOGY OF DEATH, PASTORALISM, POTS AND PIPES IN THE OTTOMAN JAZIRA AND BEYOND

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Introduction

> "Every hundred yards that we advanced, the scene became more striking. One long line of diminutive tents formed a temporary street of eating-houses; there were kibaubs, pillauf, fritters, pickled vegetables, soups, rolls stuffed with fine herbs, sausages, fried fish, bread of every quality, and cakes of all dimensions ... Here and there a flat tomb, fancifully covered with gold-embroidered handkerchiefs, was overspread with sweetmeats and preserved fruits; while in the midst of these rival establishments, groups of men were seated in a circle, wherever a little shade could be obtained, smoking their long pipes in silence, with their diminutive coffee-cups resting on the ground beside them." (Pardoe 1854: 134–35).

This 19th century description of a major cemetery in Istanbul conjures an evocative image redolent of Orientalist European paintings of the Middle East. Nevertheless, within the context of this paper, it provides a highly appropriate combination of death rituals, colourful yet highly transient activities, and the far-reaching social impact that tobacco and coffee consumption had within the Ottoman empire.

Most human activities leave some traces in the archaeological record but their retrieval relies on a combination of technique, experience and interpretation. The most intensive techniques traditionally have been devoted to sites of early prehistoric periods where the lack of any other sources renders archaeology and analogy the only methods by which they might be understood. In the past few decades this situation has begun to change as archaeologists and historians have realised the potential of pooling techniques and comparing the written record with excavated data from historical sites. Nevertheless, few attempts have yet been made to apply this approach to post-medieval periods in the Middle East although the potential is great, not only in illustrating aspects of the complex Ottoman economy, but also in offering case-studies whose application might be extended more widely. The following observations are based on a combination of archaeological sources, many published here for the first time, which were themselves the accidental by-product of fieldwork directed primarily at earlier remains. The results should be viewed alongside the growing number of studies into the pre-modern social and economic fabric of the Middle East, and analyses of "the material culture of modernity" (Baram and Carroll eds 2000).

Despite the huge revival of interest in the socio-economic affairs of the Ottoman empire, most analyses have focused on the macro-economy, urban industries and long-distance trade, whereas relatively little attention has been paid to local or specialised crafts and craftsmen (McGowan 1981; Faroqhi 1984; 1995; 2005; Faroqhi and Deguilhem 2005). Anatolia, the Balkans and parts of Syro-Palestine have also received the brunt of academic attention, but very little research has been published on other parts of the empire such as northern Syria or Iraq. Furthermore, interest has tended to dwell on the 15th-17th centuries with little attention paid to the situation during the later centuries.

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Although detailed studies have been published on the provisioning of meat and bread in Jerusalem (Cohen 1989), the silk industry of Bursa and Lebanon (Faroqhi 1984), and on certain classes of object detailed in palace or private inheritance inventories (Samancı 2003; Establet and Pascual 2003), analyses of individual classes of object are much scarcer. Comparative analyses of textual and archaeological data-sets are rarer still (Baram and Carroll eds 2000; Gerelyes and Kovács eds 2003). Nevertheless, a number of focused studies have started to appear in recent years within Turkey, for instance on the copper industry of Tokat (Belli and Kayaoğlu 2002) and the revival of the glass industry in Istanbul (Küçükerman 1999). It is within this context of object-based interpretations of Ottoman material culture that this essay is set, and one which attempts to combine archaeological and written perspectives.

Archaeological studies of Ottoman material culture are few, and these tend to focus on a given class of artefact rather than a whole assemblage. Multi-site analyses or cross-category comparisons are rarer still for this period, although commonplace in other fields of archaeology. The present analysis explores to what extent such an approach has validity for the Ottoman period, and offers four related case studies. These are concerned with grave-goods, the distinction between sedentary and pastoral occupation, pottery production and distribution, and the use of smokers' pipes in distinguishing and seriating post-medieval sites. In each case the archaeological evidence suggests a very complex picture, and one which underlines the importance of further in-depth studies of Ottoman material culture, and how this relates to temporal and social fashions and patterns of production. In short, it cannot be assumed that even for a period as recent and well-documented as this that written sources alone provide all the answers. Some practices, for instance relating to mortuary behaviour, relate to deep-rooted local customs rather than strict religious orthodoxy. Grave-goods are regularly encountered in late Ottoman graves: although these are often items of personal adornment and associated with Bedouin cemeteries, other categories of object are also occasionally encountered. In each case, these finds challenge strict interpretations of what is normal Muslim behaviour and in some cases these graves are all that survive in the archaeological landscape for the local populations despite the very late period. Middle Eastern pastoral nomadism creates a romantic vision of Bedouin in many people's minds but identifying such groups again offers archaeological challenges. The author's excavation of a campsite in northern Iraq provides a case study of how one such community can be detected and interpreted through ethnographic analogy. The third case study looks at the range of available sources for Ottoman pottery, textual, ethnographic and archaeological. These illustrate the huge diversity of local styles and hint at the production and distribution of specialities as well as bulk goods. Archaeological evidence from northern Iraq is used to illustrate this issue in one little-known region corresponding to the Ottoman *vilayet* of Mosul. This evidence in turn suggests a higher density of rural occupation in this area than previously recognised. The fourth and final case study examines the evidence that the ubiquitous Ottoman smokers' pipes offer in detecting and dating sites, and appreciating sensitive temporal changes and patterns of social consumption across the Ottoman empire.

1. The archaeology of death: graves, coins and tokens

> "Every soul shall taste death. We will prove you all with evil and good. To Us you shall return." (*The Qur'an*: 'The Prophets' 21: 35).

Analyses of death ritual are an integral part of archaeological research regardless of period or place. The fascination is part morbid, but part driven by the regular accompaniment of items of everyday or imitated material culture with the deceased: from these a link is made with crafts in the land of

the living and, equally importantly from an archaeological perspective, a datable timeline. The analysis of human remains of recent periods, however, has been more sensitised through association with native communities or present religious faiths.

Within Islam death is an intensely personal yet very public affair. The moment of death is believed to be God's choice and beyond that lies a person's destiny. At the moment of death of a believer, the angels wrap the soul in a sweet-smelling shroud and escort it to the seventh heaven for recording before it is returned to the body in the grave for interrogation. An unbeliever's death was less pleasantly handled as the soul was extracted "like the dragging of an iron spit through moist wool, tearing the veins and sinews." The choices were heaven or hell. The heavenly perfumed paradise was proverbially filled with beautiful women, expensive clothing, luxury housing, alcohol and exotic food. Hell – as in Christianity – was a very unpleasant place indeed with the flesh perpetually renewed in order to be flayed, dismembered, boiled and burnt, and the only refreshment was boiling pus. No wonder that individuals were encouraged to lead a spiritual life, and there is very clear guidance on how a body should be interred in order to be readied for the soul's inquisition on the first night by Munkar and Nakir, the black-faced blue-eyed angels of death. Yet the Qur'an says nothing about funerals and Muslim beliefs about death are based on tradition developed after the death of Muhammad (Welch 1977; Halevi 2007). The procedures for treatment of the dead are prescribed in these later Islamic law manuals, and Book 40 of *The Revival of the Religious Sciences* by the 11th century Iranian scholar al-Ghazali deals exclusively with "The Remembrance of Death and the Afterlife" (al-Ghazali 1989).

Nevertheless, although Islam directly impinges on the ways in which a body is prepared for burial and what ceremonies should be observed, there is a remarkable diversity of responses across the Muslim world (Insoll 1999: 166–200). In some cases these reflect deeper-seated local traditions. Others reflect variation according to region, tribe, ethnic group, social status or gender. There are a growing amount of data recorded from Ottoman urban cemeteries within Anatolia and the Balkans, where a characteristic feature was the commemoration not only of the individual but also their profession through the addition of an elaborately carved white marble headstone (Veinstein ed. 1996). The provision of elaborate tombstones is normally considered a feature of urban rather than transhumant societies. However, an equally distinctive but highly localised tombstone tradition flourished in the Luristan region of western Iran during a period of political isolation in the 19th and early-20th centuries. In addition to the inscription, women were represented or symbolised on the headstone "obverse" by scenes of spinning, carpet-weaving, a cradle or travelling with a child, whereas the men were represented as warriors, hunters or pious Muslims; in both cases there was a "reverse" side which showed mourners or a riderless horse indicating the departing of the individual (Mortensen 1983). The late date of these markers suggests that the inspiration may lie in passing familiarity with urban practice elsewhere – the author has seen related tombstones in southeast Turkey and dated 18th and 19th century tombstones depicting armed horsemen or riderless horses occur in Azerbaijan (Efendi 1986: figs 83–101) – yet the "folk art" iconography is that of the illiterate nomad and the gender symbolism recalls that of provincial Roman tombstones.

In addition, there are a considerable number of archaeological reports particularly from Israel/Palestine, Jordan, Syria, and Iraq which provide excavated evidence for Muslim burial practices from villages and "Bedouin" cemeteries (Table 1). Comparison of these with 18th and 19th century European travellers' accounts, more recent anthropological observations and Muslim guidelines offer useful insights into the extent to which orthodox belief combines with local custom. There are, for instance, intriguing hints at the social importance of coffee-drinking extending beyond death as coffee sets are replicated by arrangements of stones above the grave or, according to one description, the physical inclusion of coffee equipment in the grave of the deceased.

Artefact	Function	Material	Sites in alphabetic order
Coins		*metal*	Balawat, T. Dor, T. el-Hesi, T. Hisban, el-Lejjun, T. Karrana, T. Mevorakh, Mt. Nebo, Qal'at al-Bahrain, Tal-e Bakun, Umm Qais, T. Yoqne'am
Tokens		*metal*	T. Chagar Bazar
Dress accessories	anklets	*copper alloy*	T. Deir Alla
		iron	T. Deir Alla
	beads	*silver*	T. el-Hesi
		copper alloy	T. el-Hesi
		glass	T. el-Hesi, T. Hisban, el-Lejjun, Kenan Tepe, T. Mevorakh, Mt. Nebo, T. Qiri, T. al-Raqai, T. Razuk, T. Songor, Umm Qais, T. Yelkhi, T. Yoqne'am
		composition	T. el-Hesi (?), T. Qiri, T. Songor
		plastic	El-Lejjun, T. Razuk
		amber	T. Iktanu, T. Mevorakh, T. Qiri, Umm Qais
		bone	T. el-Hesi, T. Razuk, Umm Qais
		shell	T. el-Hesi, T. Hisban, el-Lejjun, T. Qiri, T. Razuk, T. Songor, Umm Qais
		coral	T. Songor
		wood	T. Songor
		carnelian/agate	T. el-Hesi, T. Hisban, T. Mevorakh, T. Songor, Umm Qais
		garnet	T. Hisban
		rock crystal	T. Songor
		soapstone	T. Mevorakh
		unidentified black stone	T. Zeror
		unidentified red stone	T. Razuk
		unidentified white stone	T. Razuk
		unidentified stone	T. Razuk, T. Songor, Umm Qais
		unidentified material	El-Bawiti, T. el-Hesi, T. Jezreel, Mt. Nebo, T. Sh. 'Ahmed el-'Areyny, Umm Qais, T. Yoqne'am, T. Zeror
	bells	*silver*	T. Mevorakh
		copper alloy	T. Gubba, T. el-Hesi, el-Lejjun, T. Mevorakh, T. Songor
		unidentified material	T. Sh. 'Ahmed el-'Areyny
	pendants	*silver*	T. Mevorakh
		copper alloy	T. Hisban, T. Mevorakh
		glass	T. el-Hesi
		composition	Balawat
		mother-of-pearl	T. el-Hesi, T. Hisban
		green stone	T. Qiri
		travertine	T. el-Hesi
		unidentified material	T. Yoqne'am
	bangles	*copper alloy*	El-Bawiti, T. Deir Alla, T. el-Hesi, T. Hisban, el-Lejjun, T. Mevorakh, Pella, T. esh-Shari'a, T. Songor, Umm Qais, T. Yoqne'am, T. Zeror
		iron	Caesarea, T. Deir Alla, Gezer, T. el-Hesi, T. Hisban, el-Lejjun, T. Mevorakh, T. Songor, Umm Qais, T. Zeror
		unidentified metal	Umm Qais
		amber glass	T. el-Hesi
		blue glass	T. el-Hesi, T. Mevorakh, T. al-Raqai
		coloured twisted or trailed glass	T. Dan, Gezer, T. el-Hesi, T. Jemmeh, Jerusalem, Kenan Tepe, Mt. Nebo, T. Sh. 'Ahmed el-'Areyny

		unidentified glass	T. Deir Alla, T. Gubba, T. el-Hesi, el-Lejjun, Pella, Qal'at al-Bahrain, T. esh-Shari'a, Umm Qais, T. Yelkhi
		plastic	T. Razuk
		leather studded with metal	T. el-Hesi
		leather studded with glass	Umm Qais
		beaded bracelets	T. Razuk, T. Songor
		unidentified material	T. Sh. 'Ahmed el-'Areyny
	earrings	*copper alloy*	el-Bawiti, T. Deir Alla, T. Gubba, T. el-Hesi, Kenan Tepe, Pella (?), T. Songor
		unidentified material	Pella, T. Sh. 'Ahmed el-'Areyny, Umm Qais
	finger rings	*copper alloy*	el-Bawiti, T. el-Hesi, T. Hisban, el-Lejjun, Pella (?), T. al-Raqai, T. esh-Shari'a, T. Songor, Umm Qais, T. Zeror
		iron	T. el-Hesi
		bone	T. el-Hesi
		unidentified material	T. Sh. 'Ahmed el-'Areyny, Umm Qais
	hair rings	*copper alloy*	el-Bawiti
		twisted glass	T. Deir Alla
	headdresses		T. el-Hesi, el-Lejjun, Umm Qais
	toe rings	*copper alloy*	T. el-Hesi
		iron	T. el-Hesi
Combs			el-Lejjun
Mirrors		*copper alloy*	T. Songor
		glass	T. Mevorakh
		unidentified material	el-Lejjun
Pins		*metal*	T. el-Hesi, T. Hisban
Knives		*metal*	el-Lejjun
Glass vessels		*glass*	T. el-Hesi (?), T. Hisban, el-Lejjun, T. Sh. 'Ahmed el-'Areyny
Pottery vessels		*pottery*	T. Dor, Girnavaz, T. el-Hesi
Natural coloured stones		*stone*	T. Khirbet Salih
Prayer stones		*unbaked clay*	Bahrain, Tall-e Bakun

Table 1: Material culture represented in excavated medieval and later Islamic graves across the Middle East (from Simpson 1995*a*; additional data from Parker and Dodd *et al*. 2005; Porter 2001; Schmidt 1957; Steiner 1995; Walker 2001)

Despite the popular and archaeological fascination with death, comparatively little research has been carried out on how the archaeological data relate to Islamic belief. This partly reflects the fact that most commentators are non-Muslim but it also reflects strong ethical concerns over how to deal with this subject, particularly during archaeological fieldwork. Agatha Christie offers an early example of this from 1934 as the first test trenches excavated by her husband Max Mallowan at Tell Chagar Bazar in northeast Syria revealed "some intrusive Roman and Islamic burials" (Christie Mallowan 1983: 66). Agatha later admitted that we "always call them Roman to the men to spare any Moslem susceptibilities" (Christie Mallowan 1983: 135–36), but proof of their much later date was provided by the discovery the following year of

> "a personal touch nearer our own times – a metal counter, with the name Hans Krauwinkel of Nuremberg, struck in about A.D. 1600, and which lay in an Islamic grave, showing that there was contact between this obscure region and Europe at that time" (Christie Mallowan 1983: 136–37).

This German token belongs to a well-known series used throughout western Europe for the purposes of reckoning on a board (*rechen Pfennig*). After the development of written accountancy in the 16th–17th centuries they were instead mainly used as gaming counters. They are numerous, very varied in type and have been found in a wide number of findspots: for instance, one was found during restoration work in 1951/52 within the timber joints of the front elevation of the Crown Inn at Chiddingfold near Guildford in southern England where it had been presumably left by one of the builders. The present token was struck in Nuremberg by Hans Krauwinckel II, son of Damianus and nephew of Hans I, who entered the family business with his brother Egidius. Following the death of Hans I, Egidius became head of the firm; *jetons* bearing the name Hans II appear two months later, dated 26 November 1586. During his career he struck a wide range of *jetons* and opened retail outlets in France and the Netherlands, but the death of the younger Hans in March 1635 brought to a close the dominance of the family business (Mitchiner 1988: 435). The means by which this token reached northeast Syria are unknown, yet one likely possibility is that it passed into circulation through an Ottoman port such as Tripoli whereupon it passed as a foreign coin.

A great variety of coins circulated in the Ottoman Empire (e.g. Inalcık ed. 1997: 945–85; Székely 2003). From 1477 the Ottoman monetary system was bimetallic as both silver (*akçe* and later *kurus*) and gold (*sultani*) coins were accepted as payment but the situation became increasingly complex as well-established local currency systems were allowed to continue in different parts of the empire. Thus, for example, the *akçe* or *sultani* system prevailed in western and central Anatolia and the Balkans, but European coins were used in the north-western provinces and North Africa, locally minted coins were used in Crimea and Yemen, a different denomination of silver (the *para*) was struck in Egypt, and Ottoman mints in Iraq and eastern Anatolia struck *dirhams* on a similar standard to that of Safavid silver *shahi*s. During the 17th and early 18th centuries many of the mints were closed and as the *akçe* was devalued while demand for coin continued to rise, the Ottoman government increasingly relied on American silver, European coin and bills of exchange to balance its deficits. At the close of the first quarter of the 19th century, the English traveller James Silk Buckingham (1830: vol. II, 170–71) refers to payments and exports from Basra including "treasure in various coins from Europe" in return for imported Indian goods.

The wide fluctuation in silver content led to further erosion of confidence in locally minted coins. The situation in Palestine at the turn of the last century was described by the Reverend Wilson (1906: 298) who stated that shortages of local cash were compensated for by "the large amount of foreign money in circulation, especially the twenty-five franc pieces of France, Italy, Austria, Greece, etc., as well as some of the silver currency of those countries". It also explains a feature of the local markets in southern Iraq which caused the East India Company Baghdad Resident Claudius James Rich to comment that "I have even been offered at Hillah English and Russian copper coins, common European seals of false carnelian, and a head of Frederick the Great in blue glass" (Rich 1839: [4], 181). Much later, during a visit to Yemen in 1937, Freya Stark (1983: 57–58) describes seeing a twelve year old girl wearing jewellery which included "a necklace of perforated gold beads ... with old Greek coins and a British pound among them: a necklace of big round gold beads below; a necklace of amber, a gold necklace rather like an order, with cases for charms and big coins ... the coins specially minted by a philanthropic society for the unemployed in Egypt". Palestinian womens' headdresses provide the most spectacular evidence for this recycling as they were typically adorned with gold and silver coins acquired at marriage but were used as a form of portable bank account which served both as a status symbol and a personal resource which could be used or added to when necessary. Two examples in the Pitt Rivers Museum and the British Museum are covered with hundreds of Ottoman silver *para*s dating between the reigns of Ahmad III (1703–1730) and Mahmud II (1808–1839), silver and copper coins from Selim II (1789–1807) to Muhammad V (1909–1918/19), ancient Greek and post-medieval Hungarian, Polish, Danish and Spanish gold coins, two 16th century

German brass reckoning counters and a Romanian two-*lei* piece dated 1924 (Wootton 1959; Weir 1989: 186–87).

Circulation patterns of coins and tokens within the rural landscape of Ottoman Syria are increasingly illustrated by archaeological data. 57 Ottoman period coins and tokens were recovered during excavations of the village of Suba, on the site of the Crusader castle of Belmont near Jerusalem. These included a Victoria penny (struck between 1860–1894), a halfpenny of Edward VII (dated 1907), a 16th or 17th century Nuremberg token which had been "pierced 6 times for use as [an] ear-ring", a possible Austro-Hungarian coin, three coins of Mustafa III (1757–1774) and Selim III (1789–1807) of Egypt, two fake Maria Theresa dollars, and an Omani coin dated 1327 AH/1909–10 (Metcalf 2000: 82–83). Several Ottoman coins are also reported from excavations at Tel Yoqne'am in northern Israel, including a perforated silver *para* dated to the first year of the reign of Mustafa III. In addition, a perforated Nuremberg token struck by Hans Schultes III (1608–1612) was found within the northwest corner tower of a fortress built by Dahir al-'Omar, the powerful mid-18th century ruler of Galilee: the excavated context suggests that it was a century and a half old when it was re-used as an item of personal adornment, although three residual or unstratified clay smokers' pipes suggest there was some form of activity at the site during the 17th or early 18th centuries (Kool 2005; Meshorer 1996: 241; cf. Avissár *et al*. 2005: 83, fig. 4.1:4). Excavations at the village site of Zir'in – biblical Jezreel – produced a Russian coin and three *jetons* as well as 33 identifiable Ottoman coins (Moorhead 1997: 156), while investigations at al-Burj al-Ahmar, on the Sharon plain, produced an anonymous 16th century coin and a five-*para* coin of Egyptian type minted by Muhammad V (1909–1918/19) (Pringle *et al*. 1986: 176). Excavations at Apollonia revealed a concealed hoard containing two gold ducats and a silver coin minted in Venice in the early 15th century, as well as 78 bronze coins minted by Suleiman the Magnificent (1520–1566); some of the bronze coins were pierced presumably wearing and the excavators speculated that the hoard was therefore concealed by a woman (Roll 1992). Excavations on the summit of the citadel at Hama produced a token of the East India Company and two coins of Carol I of Romania (1839–1914) and Shah Husein of Persia (1694–1722) among a small assemblage of 13 17th century and later Ottoman coins and 27 unspecified 19th century coins (Hammershaimb 1969; Thomsen 1969). Further afield, investigations of an Ottoman village at Kaman-Kalehöyük in central Turkey produced a silver coin of the Polish king Sigismund III (1587–1632) and a pierced 17th century European token (Mikami and Omura 1991*a*: 67, pl. 3; 1991*b*: 98, pl. 4:3). Within Istanbul, the excavations of the uppermost levels of the Byzantine church of St Polyeuktos at Saraçhane produced 11 Ottoman coins ranging from Beyazid II (1481–1512) to Sultan Resad (1909–1918), an Austrian coin dated 1807, a three-*kopek* Russian coin dated 1899, and two fragmentary Nuremberg tokens (Hendy 1986: 373). Given these various sources, it is clear that some coins and tokens had very long periods of circulation: caution therefore should be paid to the dating of the graves at Tell Chagar Bazar on the basis of one reused token.

Nevertheless, Mallowan's excavation reports add some further details on these late burials. Two test trenches were excavated during the last week of November 1934, namely on the summit (Trench A) and on the northwest side of the mound (Trench B). Trench A measured 4.5 × 3.5 m. across and was excavated to a depth of 3.5 m.

> "At 1.5 m. below the surface six skeletons of the early Islamic period [were found], heads towards Mecca. The bones lay in soft sandy soil, and it seemed that originally the bodies had been buried in pits with mud brick vaulted roofs over them. Sand had trickled through the roofs onto the bodies and eventually the roofs had collapsed onto the skeletons. Owing to the soft sand and the fallen roofs it was difficult to discern the exact position of the bodies but they seem to have been in a sitting or leaning position. One of the bodies had

> a parti-coloured Islamic glass bangle on the wrist, and a fragment of a similar glass bangle was also found in this area" (Mallowan 1934: 40).

The presence of multi-coloured glass bangles strongly suggests a Mamluk or later date as earlier examples are almost invariably monochrome (Spaer 1992). The discovery of bangles, whether glass or metal, in graves is part of a wider tradition of interring objects with the deceased (Simpson 1995*a*: 246, 251). At Tell el-Hesi the discovery of bracelets too large for the children with whom they were found suggests that some of the jewellery may have belonged to mourners rather than the deceased (Toombs 1985: 102–103), but unsurprisingly Western Muslim writers are generally silent on this whole subject ('Abdul-Hameed 1994; Arefi 1987; Muslim Students' Association 1977).

However objects are surprisingly common in Mamluk and Ottoman graves excavated across the Middle East and they were found in as many as *c*. 40% of graves in one area at Tell el-Hesi alone. These included coins, European tokens, jewellery and dress accessories (including beads, bells, pendants, finger rings, earrings, hair rings, toe rings, bangles, anklets and headdresses sometimes utilising perforated coins or unperforated metal discs), pins, wooden combs, glass or metal mirrors, knife blades, glass bottles, ceramics and natural coloured stones arranged around the head of the corpse (Eakins 1993; Toombs 1985; cf. Table 1).

The colour of a bead is frequently regarded as more important than the actual material itself - hence the substitution of red or blue glass or plastic for carnelian/agate and lapis lazuli or turquoise. Specific forms and types were also significant: circular or triangular shapes were considered powerful magic, and bells and reflective surfaces were seen as protection against evil influences. It may therefore be significant that triangular pendants, cowrie "Evil Eye crackers", bells and mirrors all occur in Late Islamic graves. Whereas elaborate ethnographic styles of metal jewellery – let alone gold or silverwork – do not appear cheaper versions made of glass or plastic are more abundant, as are beads of bone, shell or mother-of-pearl. The deliberate substitution of cheap coins sewn onto burial hoods is recorded from the Bethlehem area where more elaborate dowry headdresses were typically worn by the women. These are clearly cases where economic reality influence funerary custom.

It has been suggested that grave-goods may reflect a combination of rapid burial and taboos over further contact with everyday items or personal adornment which were used or worn by the deceased (Walker 2001: 58). In any case it removed them from circulation. However, a tradition of women making close copies of actual jewellery in unbaked clay specifically for interment with their deceased relatives has been recorded from southern Iraq, the explanation being that "the real jewellery, being precious, is not interred with the dead but retained by the family" (Ochsenschlager 1974: 172–73). The 11th century writer al-Ghazali (1989: 74) repeats a story that "the living are in more need of new things than the dead". Thus in Iran

> "when a Shi'ah dies, he is most fortunate if he can have a necklace of clay beads around his neck, a clay ring on the forefinger of his right hand, an armlet of clay on each of his arms, and a little of the dust that is swept from the tomb should be bound in a cloth and gripped in his right hand, and it is well if the sheet, in which the body is wrapped for burial, should have the words of the Koran written upon it with this clay" (Donaldson 1933: 90).

In short the simple presence or absence of objects is highly unreliable in identifying Muslim graves. However, in a few cases we find specific evidence not only for identifying a grave as that of a Muslim but specifically that of a Shi'a, as pilgrims who have journeyed to Kerbela or Mashhad may be buried with clay "prayer stones" made in those cities. Examples of such finds in graves have been noted not only in Bahrain (Porter 2001: 202–203), but also at Tal-e Bakun in southern Iran where an 8th

century coin was found together with a 14th century clay disc "prayer stone" with a Qur'anic inscription (Schmidt 1957: 118: n. 10, 120: n. 17).[1]

Further late burials were encountered in Mallowan's Trench TD which was excavated on the summit of the mound at Chagar Bazar. In this area the bodies were found interred to a depth of some 1.50 m. below the mound surface (Mallowan 1936: 6, fig. 29).[2] The depth of the graves in both areas suggests that they may have belonged to adult female burials as women are traditionally buried deeper than men across the Muslim world, the reason being a popular belief that the grave should shield the breasts and genitalia of the deceased when they rise after death (Simpson 1995*a*: 242).[3] The types of grave construction are not particularly remarkable yet they closely resemble burial traditions of similar date from Iraq. Excavations at the Eski Mosul (formerly Saddam) Dam Salvage Project site of Tell Abu Dhahir, situated on the Tigris some 85 kilometres northwest of Mosul, revealed a sequence of four different types of post-medieval grave. These consisted of simple earth-cut vertical shafts, shafts with undercut side-chambers blocked with a row of slanting stone slabs or mudbricks, cists lined and roofed with stone slabs, and cists constructed of mudbricks (Simpson 2007).

Isolated countryside cemeteries of these very late periods are usually attributed in the archaeological literature to bedouin. However, the concept of a "natural" place of rest is consistent with the strong Muslim tradition of symbolising paradise by the planting or depiction of plants at the graveside. In Istanbul, the vast extramural cemeteries of Pera and Eyup were instrumental in inspiring cemetery reforms in Europe (Johnson 2002), and in many other cases these cemeteries certainly belong to sedentary communities reusing deserted mounds as a convenient place of burial. Examples of this practice have been observed by the author in northern Iraq and Turkey, and also noted at Tell Yelkhi and Aiuni al-Kheshalat in the Hamrin basin of Iraq (Fiorina 1985: 74). These contrast with other cases in the Hamrin where old tells were avoided as places of burial "owing to a local belief that the tell was haunted" (Jasim 1985: vol. I, 16). Although Mallowan (1936: 6) reported "traces of Hellenistic, Roman and Islamic occupation" in trial trenches excavated some sixty metres from the base of the mound, the later date of the burials that he found in Areas A and TD suggests that these belonged to a precursor of the small village which existed on the edge of the mound at the time of his own excavations. Furthermore, the use of bricks in the grave construction supports the idea that these were associated with a sedentary rather than pastoralist community.

The visitation of graves was initially forbidden by the Prophet but soon rescinded. Al-Ghazali (1989: 111) states: "Pay visits to your dead, and give them your salutations, for in them there lies a lesson for you", but kissing, rubbing or touching the tomb is strictly forbidden and regarded by some early Muslim authors as a Christian practice (e.g. al-Ghazali 1989: 114). The period of mourning is characterised by the wearing of dark, dull-coloured or old clothing and abstinence of favourite items such as sweets, reading, television, radio or sex (O'Shea 1999: 174–75).

"May a thunderous incontinent cloud drench the earth of your grave with a downpour of

1 This reference presumably refers to the interment of an individual with an unfired clay "prayer-stone" of the type commonly used by Shi'a pilgrims to the shrines of Karbala, Najaf and Mashhad. A number of burials excavated in Bahrain at the Qala'at al-Bahrain and apparently at Umm al-Hassam were accompanied by such inscriptions (Porter 2001: 202–203; cf. also Simpson 1995*a*: 246–47) and the practice has been discussed at greater length by Frembgen (1988). In Israel the excavators of Tell Mevorakh found a perforated silver Crusader coin attributed to Amaury I, king of Jerusalem (r. 1162–1174) in one grave, whereas other burials in the same cemetery were interred within 18th century or later Gaza-ware jars (Simpson 1995*a*: 247: n. 142, 250). Finally, a grave excavated at Tell Razuk in the Hamrin basin of east-central Iraq contained a perforated Ottoman coin minted in 1325 AH/1907–1908 but the addition of four small plastic bracelets implies a date of at least fifty years later (Simpson 1995*a*: 247: n. 141, 251).

2 Associated grave-goods appear to have been absent in Trench TD although Mallowan attempted to distinguish between "a few burials of the Roman period" and "numerous Islamic burials", one of which contained the token described above.

3 According to a press report in *The Independent* an Iranian woman aged 35 has been buried up to her armpits in a Tehran jail and stoned to death for acting in obscene films. While men are buried up to their waists for the punishment, women go deeper to stop the stones hitting their breasts. Escapees are allowed to go free".

> clarified fat;
> And may your tomb be enlarged with a fully loaded hamper, brought by the hands of servants;
> And may geese and rice be your friendly companions, protected from dirt and dust"
> (Abu 'Abd Allah al-Bunani = van Gelder 2000: 86).

This 9th century poem satirises the life and death of a glutton and is part of a very extensive Early Islamic food literature which ranges from cookery books to moralistic views on the effects of over-indulgence. Food is listed alongside sex as the two things without which life is not worth living, and its importance extends after death. It is not difficult to see comparisons with much earlier practices and there is a strong thread of popular belief throughout the Middle East which involves consuming special meals or taking food to the grave-side within a set cycle of days. Bread, figs, dried fruit, water, clothes and even financial offerings were offered as an act of charity on behalf of the soul of the dead, and special care was taken in some cases to take the favourite food of the deceased. In Afghanistan, salt is still taken to the graves of saints and martyrs, including those of Taliban fighters buried in Kandahar where it is later collected and consumed as a folk remedy for polio and other ailments (Fisk 2002). "Bedouin" graves in the Amman area were covered in "numerous propitiatory offerings and tokens in memory of the tenants of the graves" (Buckingham 1825: 122–23); specially baked bread offerings and water libations were offered at bedouin graves, a practice which still continues in Jordan (Musil 1928: 671–72; Lancaster and Lancaster 1993: 153–54). One 19th century author records that some Palestinian gravestones had scooped-out tops in order to collect rainwater for the departed souls who were said to be parched from the bitterness of death, and water pitchers were occasionally left beside the grave (Baldensperger 1893: 217).

The offering of gifts is closely tied to deep-seated human fears of "the other". Burials excavated at Tell el-Hesi included that of a young woman who had been decapitated, possibly as a punishment for suspected adultery. At least one other individual at that site may have been buried alive, and the earliest instance of an alleged vampire within the Islamic world comes from the late-18th or early-19th century Ottoman cemetery at Mytilene where an isolated skeleton was found to have been secured with 20 cm. nails driven through its neck, pelvis and ankles (Taylor 2003: 247). Superstitions over haunted cemeteries are certainly well recorded among bedouin communities who regard these as "dwelling places for the souls of the dead" who begin to scream as soon as the burial party leave the grave-side, but as only camels can hear their cries, they plug their animals' ears (Walker 2001: 57).

2. Pastoralism or sedentism? The case of Qara Dere in northern Iraq

> "The name of all this tract of land, over which we had passed today [between Mardin and Mosul], was Belled Chitteea; but, after all my inquiries, I could learn no particular name for any of the villages which we had seen. Each of them, indeed, was small, and being inhabited only during the corn-harvest, was formed of as many tents as fixed dwellings. Though the people thus live in tents, in huts, and in houses, and the Arabic language has particular names for each of these kinds of dwelling, these distinctions are unknown here. In distinguishing the particular class of habitations, of which a settlement is formed, the Arabs call them, Beeoot Hadjar, Beeoot Khashab, and Beeoot Shahr; that is, houses of stone, houses of wood and reeds, and houses of hair: the tents of the true Bedouin Arabs being invariably made of dark hair-cloth, woven from the produce of their flocks in the camps."
> (Buckingham 1827: 260)

This 19th century European traveller's record illustrates some of the challenges faced in the identification of and distinction between settlements occupied on a seasonal basis by different ethnic groups. These problems are compounded by the passage of time and uncertainty over the definition and dating of associated material culture. Furthermore, the archaeological identification of non-sedentarised populations is notoriously difficult. In the case of Luristan, Mortensen (1983: 27) observed that one method of tracking seasonal camp-sites was through the careful mapping of cemeteries, whereas the discovery of an intrusive blobbed green glass bangle fragment at the site of Tepe Farukhabad in southwest Iran led the excavator to comment that "Such artifacts are characteristic of recent nomad camps" (Wright ed. 1981: 160). However, as the previous section demonstrates, many excavators have been too quick in their assumption that graves or other remains belong to a transient rather than sedentary population. A different case-study in the possible distinction of these groups is offered below, based on the site of Qara Dere.

This site was located in northern Iraq at the head of a small narrow sheltered valley which once drained northwards into the river Tigris but is now submerged within the reservoir formed by the Eski Mosul (formerly Saddam) Dam. The evocative site name translates as "Black Valley", which at first glance is a somewhat surprising term as there are no local black rock outcrops or asphalt seeps which might have given rise to it. One possible explanation for this toponym is an emotional association with an event or tragedy.[4] Another is that its origin instead stems from human activity in recent centuries, specifically from the seasonal use of black tents erected over stone footings.

Qara Dere lay within the sector of this dam which was investigated by the British Archaeological Expedition to Iraq [BAEI] from 1982 to 1985, and under the overall direction of Dr M. Roaf. The most striking feature of the site was a series of low drystone walls forming a group of rectangular structures clustered at the head of the valley. Sketch plans and kite photographs suggested the existence of some fifteen different structures arranged in clusters, with several structures built end-to-end as mini-chains. Most were arranged parallel with the sides of the valley but at least one was constructed at right angles to connect with the structures on either side. Prior to excavation there were no indications as to the point of entry. These structures were originally slightly higher but they had been reduced through systematic re-use of the stone for construction, hence the drystone cairns dotted across the site. The date of these structures was unclear at first. The site was recorded as Late Assyrian on a map of archaeological sites compiled by the Iraqi State Organization of Antiquities and Heritage, and distributed to participants in the rescue project. During 1982/83 a limited surface collection was made at the site in an attempt to throw further light on its date. The material consisted of coarse handmade pottery and wheel-thrown plainwares with minimal comb-incised decoration. The single most diagnostic sherds were decorated with impressed figural or geometric stamps and recognised as being 6th or 7th century late Sasanian in date on the basis of general published parallels from Nineveh. The published preliminary report highlighted the first discovery of Sasanian-period remains within the Project although it was acknowledged that excavation was required to establish the connection between the pottery and the structures (Roaf 1983: 79–81, fig. 9). During the course of 1984/85 a number of additional pottery diagnostics were collected at the site by the author, which confirmed a substantial late Islamic horizon. However, these collections were neither systematic nor intensive, and the absence of certain types may be fortuitous.

In 1985 the opportunity arose to conduct limited excavations at the site before it was submerged. These proved that the main clusters of structures visible on the surface are considerably later in date than previously suspected, and the few associated finds indicate a late Islamic date. The results of these and other investigations are being prepared for final publication but in the meantime the following notes offer a rare excavated case for a pastoralist community of this period in Iraq (Simpson

4 I am grateful to Ms Gonul Bozoglu for this suggestion.

forthcoming *a*).

Two adjacent structures were completely cleared of vegetation and form the basis for re-interpretation of the architecture. The walls were constructed of drystone rubble masonry. The rooms contained crude built installations in the corners and a clean trampled earth floor, perhaps originally covered with mats or rugs. There were no traces of plaster, mudbrick or *tauf*, either *in situ* or collapsed, which suggests that perishable or removable materials had been used for the superstructure. This implies that these buildings were seasonally occupied shelters rather than permanent dwellings. The later removal of stones for construction prevented any attempt to calculate original wall height based on extrapolation from the collapse.

The size and plan of these two structures resembles that of the larger number of unexcavated structures. The construction of standard-sized dwellings suggests a degree of egalitarianism. Ethnographic comparisons have been used in other studies to suggest a standard of 10 m^2 of roofed dwelling space per person (Naroll 1962; Kramer 1979; 1982: 5, 196). Similar structures, either single or arranged in similar "chains" and dating as early as the 4th millennium BC, have been found from the Golan to western Iran, and independently interpreted as the remains of transhumant settlement (Epstein 1998; Hole 1987: 44; 2004: 78–82). This form of architectural organisation is paralleled by tented encampments and villages where it can be demonstrated that contiguous units belong to members of a single extended family (e.g. Watson 1966: 11). Paired structures built end-to-end in the Golan were interpreted as "twin houses" belonging either to a father and son, or to two brothers (Epstein 1998: 7).

Traces of other seasonally occupied structures of this type have been recognised at a number of sites in the Eski Mosul Dam Salvage Project area. These include Khirbet Wadi Khatkhun, Khirbet Khatuniyeh (Curtis and Green 1997: 12–13, fig. 4, pl. III), Sehmuhla (Curtis and Green 1997: 13), Museifna (Nejim Abbu 1987), Tell Amran and Khirbet Jem Laklak (Ball, Simpson and Tucker 2003: 171, 175). Those at Khirbet Jem Laklak were one or two-room structures with a single separate entrance into each room; they were constructed of unshaped stones, usually one course wide and up to nine courses high in the centre where the wall originally supported a gabled roof. Associated finds were very scarce at all of these sites but all were attributed a late Islamic date, and the excavators of Museifna proposed that they belonged to the 18th century or later on the basis of associated smokers' pipes. At Khatuniyeh, as at Qara Dere, it was observed that there was little sedimentation around the excavated remains, which consisted of two rectangular buildings measuring 8.5 and 20.5 m. in length and between 3–6 m. across. Internal features at that site included low partition walls and a bread oven, implying that these were not simply animal enclosures. Unconfirmed local reports stated that these particular structures belonged to a semi-nomadic family who had since moved to the Sinjar distict, and at Sehmuhla they appear to have been used during spring.

However, close parallels for this style of pastoralist architecture can be found in highland Iraq (Solecki 1981: pl. III), and across western, southern and northeastern Iran where so-called "boulder-built villages" have been noted on archaeological surveys or noted by ethnographers since the 1930s (Schmidt 1940: 85, pls. 109, 116–17; Meldgaard, Mortensen and Thrane 1963: 107–108; Edelberg 1966/67; Demant Mortensen 1993: 86, 103–13, 118). These sites are particularly well documented from Luristan, where the winter dwellings or *zemgas* were the most substantial. The lower parts of these structures were usually semi-subterranean and constructed with solid low stone walls, often no more than a metre or so in height, but occasionally higher on one side "where they serve as passive solar collectors to provide radiant heat during the night" (Edelberg 1966/67: 395, fig. 18; Hole 2004: 77). The upper parts of the residential structures were made of mud and bent branches, usually roofed with a thickly plastered, thatched and gabled construction of rafters laid at right angles to the ridge poles, which were supported by vertical posts with forked ends and either supported on flat stones or placed directly on the ground, rather than being set within post-holes (Jaunay 1997: 314).

Occasionally these structures were covered with a combination of pitched roofs and a black tent stretched over the central portion (Edelberg 1966/67: 382–83). These settlements were occupied by semi-nomadic transhumant pastoralists during the cold winter months, for instance from November to April in Luristan, and were typically situated in sheltered positions near the foot of the mountains. The deliberate part-sunken construction was a response to the cold weather and was designed to maximise insulation. The same feature has been noted among houses belonging to a 16th–17th century Ottoman village excavated on the summit of the high mound of Kaman-Kalehöyük on the central Anatolian plateau (Mikami and Omura 1991*b*: 89–90, figs 2–4), as well as in the Ottoman village excavated at Alişar höyük (von der Osten 1937: 193–98, fig. 217).

In western Iran during the spring (April/May) and autumn (October), the occupants shifted their flocks to new grazing grounds and occupied similar structures called *siah chador* which were entirely covered with black tent fabric, whereas during the summer months of May to September the flocks were moved to higher pastures. During the latter season the inhabitants occupied flimsier tent-covered structures or so-called *kula* where the walls consisted of four rows of parallel posts supporting walls made of matting (Edelberg 1966/67: 384–86). During these warmer months the winter structures were deliberately left open, probably to facilitate ventilation and fumigation prior to re-occupation in November.

The length, width and interior plans of these different seasonal dwellings were virtually indistinguishable, the crucial detail being that the colder the season the more substantial the architecture was required to withstand it (Feilberg 1952: 46–58; Edelberg 1966/67). Owing to the inclement weather, cooking was usually executed in ovens or hearths built within these structures whereas the norm during warmer months was to cook in the open air and reserve an interior hearth for making tea (Beck 1991: 121; Allgrove *et al.* 1976: 27). The dividing cross-wall observed in some of the structures at Qara Dere may reflect a division of the interior into male and female quarters, the former being reserved for the entertainment of guests and the latter for domestic activities (cf. Allgrove *et al*. 1976: 25–26). Animal enclosures appear generally to have been left open at the top, although thorny barricades were erected along the tops of drystone walls to form an obstacle to wolves and other predators (Feilberg 1952: 46–47; Edelberg 1966/67; Beck 1991: 79, 121, 129, figs. 15, 23; Demant Mortensen 1993: 103–13, 118; Horne 1993: 46–47). By contrast, in the Zagros region between Tabriz and Sulimaniya:

> "the [Kurdish] villages are all built in the same style; of large unhewn stones, which have no binding whatever. They consist of two rooms only, having the floor and walls plastered with mud, and a roof / formed by cross beams of wood, covered with reeds, and over all, a thick layer of mud, mixed up with chopped staw. They are generally seated either upon the declivity of a mountain, or on the sloping sides of lesser hills and heights, whose summits are frequently crowned by a fortress, the paths leading to which not being discernible; indeed, their houses are, for the most part, concealed with great care and mystery. As they are buried in thickets, folded in the windings of a glen, scattered on the brow of a ravine, or the brink of a precipice, a stranger may travel through much of this romantic wilderness without discovering any traces of them." (Mignan 1839: vol. I, 276–77)

These temporary settlements therefore tended to be deliberately sited in protected locations such as ravines and valleys, both as protection against the prevailing wind and to reduce their visibility to potential raiders. They also tended to be widely spaced in order to enhance grazing and fuel collection opportunities (Barth 1980: 25; Beck 1991: 78–79, fig. 15). A similar seasonal settlement pattern appears to have been widespread throughout northern Iraq during at least the 19th century judging by travellers' accounts. Layard (1849: vol. I, 152) describes seeing Kurdish "villages

scattered on the declivities" of the valleys above Sheikh Adi in August 1846 "but their inhabitants had deserted them for rude huts, built of branches of trees, their summer habitations". A similar observation was made a few years earlier by James Silk Buckingham (1827: 253, 259) in connection with his march from Mardin to Mosul one summer:

> "The few houses seen were in shape like the long barns of English farm-yards, thatched with sloping roofs of straw. The people, who were all Koords, lived chiefly, however, in tents; so that these buildings were mostly uninhabited, and kept probably for storehouses of grain ... In the course of this march we saw many villages, both on our right and left, and went through five similar ones in the direct route, all of them small, and composed of pent-roofed dwellings of the long form before described. The people appeared generally to live in tents; and these long barns, as far as we could perceive, were more frequently used as places of shelter for cattle at night, than as the habitations of families."

"Black tent" villages were scattered throughout the Jebel Sinjar area during a visit in September/October 1838 by one Dr F. Forbes (1839: 419); in eastern Azerbaijan traditional sunken structures were known as "Karadam" because of their dark roofs.

These observations are pertinent because there has been a tendency in some quarters to view the apparent absence of Ottoman settlements as evidence for a depopulated landscape. However, as these records demonstrate, it is crucial not only to note the season of original observation before making conclusions about the presence or absence of people in the landscape, but also to consider the relative position of roads used by travellers compared to the sheltered locations favoured by most pastoralists.

Anthropological studies in western Iran indicate that pastoral groups tend to divide into smaller herding units in order to weather more effectively the effects of the lean winter season: a Basseri winter herding unit typically only numbered between two and five tents (Barth 1980: 25), and Hole (2004: 73) observed that four or five tents were typical in Luristan. However, during the warmer months camps of up to twenty tents were common. The linear organisation of temporary and seasonal campsites appears to closely reflect the slope of the terrain with a conscious desire to maintain privacy by deliberately positioning entrances to face in different directions. Maintaining privacy may be significant in that generally each tent household is an independent domestic and economic unit (Barth 1980: 11).

As in the case of Qara Dere, associated finds at these sites appear to have been scarce or absent, yet a similarly late date is probable. Sadly, it remains uncertain as to precisely who the original inhabitants were, what their relationship was with fully settled Arab and Yezidi villages along this portion of river-valley, and why or exactly when they became abandoned. However, the available ethnoarchaeological data suggest that the late structures at Qara Dere were utilised as winter shelters for a pastoralist community.

The relative scarcity of surviving material culture at Qara Dere is worth comment as it is the author's impression that sites of this type are poorer in terms of surviving material culture (pottery, clay pipes, beads, etc.) than other settlement types of this period in the region. The most likely explanation for this apparent contrast is a difference in patterns of consumption rather than refuse disposal. Ethnographic reports and travellers' descriptions of pastoralist communities in northern Iraq and western Iran suggest that pottery vessels were rarely employed, the occasional exceptions being "a small ceramic stew pot with perforated loop handles" (Watson 1979: 263, 267, fig. 10:4), money-boxes or easily transportable narrow jars with handles (Demant Mortensen 1993: 242, 275). Layard (1849: vol. I, 96) describes how "the usual Arab meal" was instead served on "large wooden bowls and platters filled with boiled fragments of mutton swimming in melted butter, and sour milk".

The material culture used by Kurdish winter-season inhabitants of Shanidar Cave therefore was probably typical of Qara Dere:

> "They had locally made pottery jars of the type whose remains littered the route to the spring above the cave. They also resembled the pottery which we found in the upper layers in our excavations. The most conspicuous items in the cave were the big open copper pots (which were carried on the move either by the women or girls big enough to handle them), a circular convex piece of sheet metal used for baking the unleavened bread over an open fire, and storage boxes. Other kitchen items included the ever-present tea kettles (one for water, and one for the tea brew), cutting knives, metal (lately of aluminium and plastic) bowls, wooden and metal spoons and the tea things. Indicative of the care with which the drinking utensils are conserved is the fact that the tea-drinking materials were kept carefully protected when not used. Fire was made using flints and iron strike-a-light bars, although cigarette lighters were appearing on the market and one or two were owned by the men. Making up the rest of the inventory were the axes and brush cutters and sickles, plus some ropes made of woven animal hair, and the goatskin bags. These and the blankets and bedding made up the essential catalogue for a tidy home, which could be transported at a moment's notice." (Solecki 1979: 323)

A similar picture emerges from descriptions of typical Qashqa'i, Shirdashti or Lur family equipment. These consisted of several tinned copper cooking pots and large copper serving dishes, a frying pan, small metal or wooden mixing bowls, iron cooking trays and a copper or iron baking griddle, iron and wooden tripods, a wooden pestle and mortar, a tin flour-sieve, woven trays for gathering, draining and serving food, and a wooden bread board; brass serving trays, aluminium plates, brass and plastic water jugs; a samovar, a copper jug or (more recently) tin kettle, a china teapot and glasses; water and yoghurt skins; lidded baskets; a tin chest for tea, tobacco and cigarettes; and assorted bags of various sizes for herbs, spices, salt, rice, grain, other dry foodstuffs, clothing and bedding (Allgrove *et al*. 1976: 27, 30–31; Watson 1979: 263; Demant Mortensen 1993: 243–75). A similar range of items – again primarily metal and wood – were used by contemporary villagers in western Iran, the principal difference being the use of large clay chests rather than bags for storage (Watson 1979: 161–64), although even these are attested from *zemgas* in Luristan (cf. Demant Mortensen 1993: 107, fig. 6:40).

However, the absence or rarity of pottery need not necessarily reflect total abandonment. There are many well-documented cases of the re-use of ruins in Jordan and Palestine during the Ottoman period where datable material culture is either totally absent or, as discussed below, limited to a small number of broken clay pipe bowls. In some cases these reflect seasonal occupation by bedouin whose material culture is largely organic and thus largely "invisible" in the archaeological record in the Middle East where it realy survive. In other instances, however, the presence of installations indicates that the settlement was more permanent. Yet, even in those cases, the villagers appear not to have used much pottery. The English traveller James Silk Buckingham (1786–1855) commented on this following his journey through the Hauran in 1816, and concluded that it was the result of inadequate clay resources:

> "Even at the present day, indeed, the want of this is so general that there are no potters or potteries in the country, and scarcely a vessel of earthenware is anywhere to be seen. The large jars used in their houses for containing corn and other provisions are made of mud and chopped straw, simply dried in the sun; their small drinking cups for coffee are of chinaware brought from Damascus; their cooking utensils are all of iron or copper tinned

> on the inside; and water, wherever we had yet had occasion to ask for it, was handed to us in round wooden vessels, about the size of an English gallon, such as is used in measuring corn, about the same size, shape, and material, and not round like a bowl; in every part of Syria and Egypt, however, the jars and water-pots are of red and yellow pottery of burnt clay." (Buckingham 1825: 185–86)

Buckingham was partly right, yet there was one village at the foot of Mount Hermon in the southern Beqa'a which apparently supplied the needs of the entire Hauran and Golan regions. This was visited only six years previously by John Lewis Burckhardt (1784–1817). Known as Rashaiyah al-Fukhar, it consisted of about a hundred houses, a quarter occupied by Greeks and the remainder by Turks. According to Burckhardt (1822: 36):

> "The inhabitants live by the manufacture of earthen pots, which they sell to the distance of four or five days journey around, especially in the Haouran and Djolan; they mould them in very elegant shapes, and paint them with a red-earth: almost every house has its pottery, and the ovens in which the pots are baked are common to all."

The earthy pigment presumably refers to common red ochre, the large-scale extraction of which is recorded in early modern times from across the Middle East. Matson (1974: 345–46) re-visited the village in 1955 and 1964, and mentions that the clay was refined through soaking in pits dug into the hill-slope, and a multiple brush was used to decorate the finished wares. Within Palestine, the tradition of making handmade painted pottery was documented among female householders at Ramallah as late as 1914, but it was already in rapid decline owing to a combination of factors: large-scale well-digging reduced the need for transporting spring water in jars, empty petroleum cans were effectively recycled and the dramatic increase in long-distance trade ensured the ready availability of cheap container glass (Einsler 1914).

3. Pottery: some observations on production and circulation in the Ottoman Empire

> "It is extraordinary that such a widespread change in material culture has not attracted the attention of Islamic archaeologists, and it is perhaps time that they turned their attention away from the luxury glazed wares which comprise less than 5% of the ceramic repertoire, towards the vast uncharted seas of everyday wares." (Johns 1998: 84)

Iznik style glazed pottery and tiles are one of the defining features of Ottoman art and design, and therefore justly feature prominently in general books, exhibition catalogues and museum displays of Islamic art. The apogee of production in the 16th century corresponds to a technical peak and consumption by the elite, but as court patronage dropped the potters are believed to have turned to mass production for a wider market. Nevertheless, according to Evliya Çelebi there were still some 300 potteries in Iznik in the 17th century, a large number and variety of kilns have been excavated there since systematic archaeological investigations commenced in 1964, and similar wares were also made in the nearby town of Kütahya (Aslanapa, Yetkın and Altun 1989; Findik 2001). By the late 17th and early 18th centuries, glazed ceramic production in Anatolia had reverted to Çanakkale and Kütahya, although views differ on the quality and appeal of these later products: Lane (1939) condemned the latter as "the poor man's substitute for the fine porcelain figures that had by then gone out of fashion in polite society", whereas "Çanakkale wares" were "true peasant art". A strongly contrasting view was expressed by Casson (1938: 472–73): "Bad glaze, usually of the 'marbled'

type common in the decadent Byzantine age badly applied, hopeless form and faulty firing combine to produce what are complete atrocities ... Simple Turkish peasants save up for years to adorn their mantlepieces with these strange abortions. At Canak-kalé the art of the ceramist can be said to be seen dying in the extreme agonies of technical collapse."

Unlike Iznik and Kütahya, Çanakkale (literally "Pottery Fort") did not manufacture tiles but instead concentrated on a range of everyday pottery and exotic tablewares partly aimed at export whereas others were sold to early tourists in search of Troy and the best-selling product today depicts a soldier in memory of Gallipolli (Tekkök 2004). The scale of Çanakkale's exports during the 19th century is illustrated by the following figures, although massive fluctuation is evident as Cyprus and Greece were added to compensate for the dual loss of lucrative Egyptian and Rumanian markets the previous year (Table 2).

Destination	Value of annual exports
Turkey	6042 French francs
Cyprus	5231 French francs
Greece	2492 French francs
Rumania	25 French francs

Table 2: Destination and value of annual pottery exports from Çanakkale in 1890 (from Cuinet 1892: vol. III, 726–27)

"Çanakkale wares" have been characterised as "a vernacular pottery reflecting the spontaneous creativity of folk art in a diverse range of dishes, jars and vases of clumsy craftsmanship made of red clay" (Oney 2002). During the late 17th and 18th centuries, deep dishes with broad rims, measuring 22–23 cm. across, were typical and decorated with free brush strokes in brown, dark purple, blue and orange on a white slip beneath a transparent, yellow or brown lead glaze, with abstract dot and line designs, floral compositions, naive fish, bird or animal motifs or renderings of mosques and boats. These were supplemented in the 19th century by a wider range of forms painted in red, green, yellow, white and gold over dark yellow, brown or dark green glazes. These new types not only included deep or covered dishes, and dishes for fruit or sweetmeats, but also ewers with braided handles sometimes terminating in birds' heads, jugs, flasks, jars, braziers, candle-sticks, lamps in the form of ships, baroque aquamaniles, vases decorated in barbotine with lizards, frogs, snakes, lions, camels, horses or human figures in low relief, and even horse-shaped vessels inspired by the Homeric stories of Troy. This pottery is referred to by Olivier (1801: vol. II, 28) as being mainly exported to Istanbul during the time of his visit in the 1790s but was also distributed as far as Egypt and Tunisia, and pieces have been found in Greece, Crete and the Aegean (Vroom 2003: 180–82). According to Cuinet (1892: vol. III, 725), this industry declined steadily after the 1860s yet thirty years later it still possessed twelve workshops with their own kilns, using local plastic clays, and each employing six people, including a foreman, two potters (who were paid the top rate), one person to prepare the clay, and two labourers (Table 3). More recently, kaolin-rich clays from Eceabat on the opposite side of the Dardanelles are used for the thrown pots, whereas stiff clays trucked in from Kınık near

Position	Daily salary
Potter	15 piastres
Foreman	14 piastres
Preparer of clay	10 piastres
Labourer	5 piastres

Table 3: Daily salaries of pottery workshop employees at Çanakkale in 1890 (from Cuinet 1892: vol. III, 726)

Bilecik and some 450 kilometres distant are preferred for making slabbed containers (Tekkök 2004).

Beyond these industries, very little attention has yet been paid to the range of other glazed, painted, plain or cooking wares circulating within the Ottoman empire. Many of these are usually assumed to be locally made, yet ethnoarchaeological evidence from Turkey and elsewhere points to a more complex pattern of different modes of production with circulation changing according to local socio-economic circumstances. In some cases pots were made by householders, either for their own personal use (Bakır 2004) or for exchange for cereals and other agricultural foodstuffs in the local markets (Ertuğ 2004; Güner 1988: 36). In recent years, wholesale purchases for cash have been documented with middlemen using trucks to transport the pots to more distant cities and temporary markets and fairs. The latter in particular may have a very long history and Faroqhi (1978) has drawn attention to different types of fairs operating in the Balkans during the Ottoman period (cf. also Vroom 2003: 256–57). During the 1980s in Erzurum Glassie (1993: 306–307) observed

> "saddles from Tokat and Maras, carved wooden spoons from Konya, and a shop filled with the same happily splashed, colored earthenware I had found at Misir Carsisi in Istanbul. Dogan Cakmur said he ordered it from Bursa and thinks it was made in Bursa and Inegöl. The big unglazed jugs he sells were made in Bursa, while the flowerpots and water pitchers dripping with color were made between Inegöl and Bilecik in the mountain village of Kınık, and the many examples I found in Erzurum, some of them old, told me that trade across the length of Anatolia in fragile pottery preceded the smooth highways and big trucks of the present."

Following a visit to Kütahya in 1669/70, Evliya Çelebi refers to bowls and plates being made by non-Muslim potters for a market wider than the town itself, and the occurrence of tiles in the Church of St. Lazarro in Venice and other Armenian churches in Cairo and Jerusalem confirm production for orders from distant Ottoman provinces and beyond. The possible existence of imitations also should not be excluded. Lane (1939: 237, no. xii: left) illustrates a covered jar of Kütahya ware type with the inscription "Sivas", and just as the term Iznik "falsely homogenizes the ware, implying answers to unanswered questions and incidentally consolidating power in the court rather than the atelier" (Glassie 1993: 897), there is a suspiciously diverse range of wares currently described as "Çanakkale ware":

> "The attribution of all earthenware decorated with colored slips or glazes to Çanakkale is like the attribution of all the orderly red carpets of northwestern Anatolia to Bergama. Works from different places are assembled visually into a single category, named for a city. Even without the kind of field research that would provide questions of provenience with valid answers, increased information and more careful formal consideration will divide "Bergama" carpets into those made near Bergama and those made near Ezine, and before I went into the region, the colorful earthenware from northwestern Anatolia had been subdivided into two kinds: Çanakkale and Kınık." (Glassie 1993: 411)

There is also evidence for wide-scale import of European tablewares into the Ottoman empire during the 18th and 19th centuries. These not only illustrate the growing influence of Western fashion over earlier preferences for Chinese or local Iznik and Kütahya wares, but also how specialised types of tableware came to replace earlier multi-functional forms. Large lidded plates, dessert bowls, coffee cups and ewers used to serve a Ramadan dessert known as *aşure* were produced for export by the porcelain factories of Meissen and Vienna from the mid-18th century onwards, other export wares were produced at Vincennes (Sèvres), and white porcelain Dresden ware plates and bowls

for serving fish, soup, salad and breakfast are among new acquisitions listed in a palace inventory for 1854 (Samancı 2003: 180, table 3). The court was one major consumer of these Western goods, and other inventories detail the growing popularity during the early 19th century of Dresden wares (tellingly referred to as *Saksonya*) and French porcelain (the equally appropriately termed *Fransizkâri* or *Pariskâri*), not just for own use but also as Ramadan gifts, as 40 large gilded bowls (*Saksonya altun kebir kase*), 25 smaller bowls of the same style (*Saksonya altun sagir kase*), and 5 bowls for mastic (*Pariskâri sakiz kases*) are listed as presents to high-ranking officials in 1825 (Samancı 2003: 179). These presents illustrate the trickle-down effect of court fashion into the private home. Imported European glassware and tableware recur in as many as 30% of private Turkish inheritance registers dated between 1705 and 1809 (Göçek 1996: 40, 103). These imports were not limited to Istanbul however: following his stay in Cairo between 1833 and 1835, Lane (1890: 289) refers to the import of "coffee-cups and various kinds of earthenware and glass (mostly from Germany)" into Egypt, and Cuinet (1896: 622) lists everyday pottery from France and other countries amounting to the equivalent of 2,000 and 12,000 francs respectively among the goods imported through the port of Jaffa in the 1880s. Yet earlier European imports into Palestine are indicated by the discovery of 16th–17th century North Italian glazed ware bowls with armorial, floral or marbled decoration during excavations of the Church of the Annunciation in Nazareth (Bagatti 1984: 187–92, fig. 69, pls 79–81) and other sites (for references cf. Vroom 2003: 171).

Within most towns and cities there appear to have been specialist pottery workshops, although the organisation and products remain little studied other than those of Gaza (Gatt 1885). Nevertheless, data collected by Cuinet (1892/94; 1896) offer some interesting insights (Table 4). There is a surprising absence of references here to pottery manufacture in some towns known to have had important industries in the decades before or after, notably Jerusalem, Baghdad and Mosul (see below). Nevertheless, these comments underline the significance of regional urban centres such as Aleppo, Diyarbakır, Erzurum, Eskişehir, Marash, Mush and Van, in addition to the well-known industries at Çanakkale and Kütahya (Table 5). Furthermore, they indicate the existence of important rural workshop traditions, for instance in the Ankara, Bitlis and Syrian vilayets, and high levels of demand for what are often implied or explicitly stated to be utilitarian wares.

Other travellers offer occasional passing reference to these and other industries: Buckingham (1825: 557) refers to "coarse pottery" produced at Antakya in the 1820s, and Warren's (1876: 491–92, 496) list of trades in Jerusalem in ca 1869 gives a total of five workshops and eleven shops, all run by Muslims, with some additional details given on the sources, supply and treatment of the clays and how it was thrown and fired. In his description of traditional practices, another writer contrasted the domestic manufacture in some villages of "the huge jars which contain the supply of water for the household" with the wheel-thrown pottery workshops of Gaza, and stated that the latter were transported "in network sacks made of a coarse tough grass, and sent on camels and donkeys to all parts of Palestine" (Wilson 1906: 251–52). Following a visit to Beirut in 1797, another traveller recorded that "They also fabricate a kind of jars and jugs in earthen ware, which, from the peculiar nature of the clay in the adjacent country, are highly esteemed and carried to all parts of the coast" (Browne 1806: 434–35). Earlier still, Evliya Çelebi refers to two particularly fine sources of clay used by potters in Istanbul during his lifetime. One was known as "Ensarı Camuru", and was found in the vicinity of Eyüp Ensarı on the Golden Horn: "pitchers are made every day of this mud. It has a pleasant smell like that of the earth on Mey Island. Whoever drinks pure water from pitchers made of this material feels that he is drinking the water of life ... The [other] material is the soft, sweetly scented mud found in a place called Sarıyer north of Kağithane [at the northern end of the Golden Horn]. Pitchers and bowls made from this mud are presented to high dignitaries. They are very valuable" (quoted by Küçükerman 1999: 74). These or similar earthenware drinking cups (*bardak-i hak*) and pitchers (*ibrik-i hak*) are listed in 19th century palace inventories in Istanbul

Vilayet or district	Products or imports	Reference
Aleppo vilayet	30 pottery workshops in Aleppo sandjak and 7 in Marash sandjak	Cuinet 1892: vol. II, 156, 175
Ankara vilayet	workshops for everyday pottery exist in Germir village, 5 or 6 km east of Kayseri	Cuinet 1892: vol. I, 319
Archipelago vilayet	numerous glazed pottery workshops on Rhodes making so-called Lindos plates, jugs and tiles, and established in the 18th century with Persian prisoners of war; other workshops on Chios, Mytilene and Samos, with annual exports from Samos valued at 200 Turkish livres	Cuinet 1892: vol. I, 378–79, 416, 455, 507, 509
Bigha mutésarrifik	12 pottery workshops with their own kilns recorded at Çanakkale, not only producing colourful glazed wares but also everyday pottery, the products being exported to Cyprus, Egypt, Greece, Rumania and parts of Turkey	Cuinet 1892: vol. III, 725–27
Bitlis vilayet	the town of Mush and several of the surrounding villages specialise in making a variety of very skilfully made pottery wares which are exported throughout this region	Cuinet 1892: vol. II, 552, 583
Bursa vilayet	12 workshops making pottery and glazed items in Eskişehir; Kütahya grew in recent years from 5 to 15 workshops, with an increase from 30 to 600 employees	Cuinet 1892: vol. IV, 99–101, 210
Castamouni vilayet	provides the entire region with cheap and everyday pottery	Cuinet 1892: vol. IV, 441
Crete vilayet	pottery imported from Marseilles and Savone	Cuinet 1892: vol. I, 562
Diyarbakır vilayet	10 pottery workshops in the city of Diyarbakır	Cuinet 1892: vol. II, 436, 460
Erzurum vilayet	7 pottery workshops in the city of Erzurum	Cuinet 1892: vol. I, 185
Sivas vilayet	pottery was one of the main industries of Tokat sandjak, where 6 workshops contained 200 workmen and produced common ware jars, vases and other vessels for local use; the large jars were used by peasants to store wine and other liquids	Cuinet 1892: vol. I, 651–53, 721
Syria vilayet	hamlets specialising in pottery production, including smooth fine white wares of Damascus, Hasbeya and Racheya, and fine amphorae (Cuinet 1896: 364); the market-town of Racheya el-Fokhar [Rashaiya al-Fukhar], the centre of the caza of the same name, possessed a large number of pottery workshops whose wares were in great demand in Syria and elsewhere	Cuinet 1896: 424
Jerusalem mutésarrifik	the area of Gaza was very well-known for its pottery production	Cuinet 1896: 616
Trabzon vilayet	95,990 kg of pottery imported to Kérassunde [Giresun] district (*kaza*) in 1890; potteries listed in Samsun sandjak	Cuinet 1892: vol. I, 72–73, 93
Van vilayet	Van itself contained 60 pottery workshops which at the time of his survey produced 300,000 pieces with a total value of 1,500 Turkish livres, of which 24,000 pieces were exported	Cuinet 1892: vol. II, 675–76

Table 4: Pottery producing centres recorded within the Ottoman empire in 1890/91 (from Cuinet 1892/94; 1896)

(Samancı 2003: 178). In the 17th century, another pottery manufacturing centre existed on the lower Golden Horn in the Jewish quarter of Balat (Mantran 1962: carte 11).

It should not be difficult in future to link these records with material displayed in regional ethnographic museums and observations by Güner (1988), Glassie (1993) and others on traditional forms of pottery. Cautious use might also be made of contemporary 19th century European depictions, at least in those cases where it can be demonstrated that the artist in question resided in the Middle East for some time: for instance, reasonably detailed illustrations of Ballas jars, flasks, dishes and

City	Number of pottery workshops
Van	60
Aleppo	30
Kütahya	15
Çanakkale	12
Eskişehir	12
Diyarbakır	10
Erzurum	7
Marash	7
Tokat	6

Table 5: Numbers of urban Ottoman pottery workshops recorded in 1890/91 (from Cuinet 1892/94; 1896)

large decorated storage jars with pairs of handles were made in Egypt by Léon Cogniet, Charles Landelle, Félix-Auguste Clément and Elisabeth Jerichau-Baumann between 1832 and 1876 (Lemaire 2001: 109, 136–37; von Folsach 1996: 88–89, 128–29, cats 71–72). Casson's (1938; 1951) distinction between the distinctive green glazed wares of Chalkis, the white slip-painted tomato red glazed bowls of Samos, the dark unglazed chafing dishes of Siphnos, the white slip-painted mugs, bowls and jugs of Skyros decorated with fish and flowers, and the scroll decorated or blue painted stamnoi and vases produced at Ayassou on Lesbos, illustrate the diversity hinted at in Cuinet's description of Aegean pottery products, and Vroom (2003: 182–86) has already documented some of these and other variants from rural sites on the Boeotia survey in central Greece. Closer study of old city plans or gazetteers doubtless will also enable the location of concentrations of pottery workshops, as illustrated by modern street name references to *çömlek* ("pottery") inside one corner of the old walled city of Diyarbakır.

Additional research into Topkapı kitchen and private inheritance inventories have thrown detailed light on the names and types of utensil used in the kitchen, their value and the demand for tablewares created by a shift from eating on trays arranged on the floor to eating while seated at the table (Establet and Pascual 2003; Samancı 2003). Among points of interest for archaeologists are references to the adoption during the 19th century of new specialised forms of tableware suitable for serving fish, salads, soups or potatoes, yet how many kitchen utensils even within Topkapı were still made of copper or wood. By contrast, Faroqhi (2005: 156) has commented on how little is known of everyday pottery and apart from Hayes' (1992) pioneering study of the coarse wares and glass excavated in the upper levels at Saraçhane in Istanbul, there has been little attempt to analyse these types of finds from excavated urban Ottoman contexts. Excavations on the Anatolian plateau have yielded some information on types of pottery use in late Ottoman villages, as sherds of "Çanakkale ware" bowls (sometimes referred to as "Avanos ware") were found at Alişar höyük for instance (Schmidt 1937: 114–15, fig. 178; von der Osten 1937: 204; Riefstahl 1937: 205, 207, fig. 228, no. 3122).

Nevertheless, there is a growing amount of data available from landscape surveys in parts of the Near East and Greece (notably Vroom 1996; 2003; Walker 2005), as well as ethnoarchaeological investigations in Turkey and elsewhere (Bakir 2004; Bresenham 1985; Crane 1988; Ertuğ 2004; Glassie 1993; Güner 1988; London 1990; Mershen 1985; Steele 1971; Tekkök 2004; Weir 1975), and excavations at rural sites such as Khirbet Faris (McQuitty *et al*. 1997), Suba (Grey 2000*a*) and Tell Ti'innik (Ziadeh 1995*a*; 1995*b*; 1999; 2000). The situation in Bilad al-Sham has received comparatively more attention than any other region, and the data synthesised most recently by Schick (1998) and Milwright (2000). These suggest the import of drip-glazed Çanakkale and related glazed wares through ports such as Akko, where a large quantity are reported from excavation (Baram 2002: 22). Open bowls of this ware which were either decorated with simple horizontal lines on the rim

or with dripped decoration on the interior have also been found a short distance inland, for instance at a mid-late 19th century village site of Horvat ‘Eleq at the southern end of Mount Carmel (Boas 2000: 554–56, pl. III: 1–6). The late date of this site provides important proof for the late survival of these simple types of “Çanakkale ware” (cf. also Glassie 1993: 871). The pottery assemblage at this site also included slip-painted and monochrome glazed bowls, European porcelain plates and bowls, “Kütahya ware” and European porcelain coffee cups, Gaza-ware jugs and jars, handmade basins, burnished cooking pots, and glazed frying pans (Boas 2000: 547–56). “Kütahya ware” coffee cups also circulated deeper into the Palestinian and Boeotian countrysides, judging by other finds from Aphek, al-Burj al-Ahmar, Suba, Zir’in and the Boeotia Survey (Kochavi 1977; Pringle *et al*. 1986: 157–58, fig. 51; Knowles 2000: 114–16, fig. 7.8; Grey 1994; Vroom 1996; 2003: 178–79); they are also represented from Aqaba Castle and sites surveyed in the Southwest Province of Saudi Arabia (Pringle forthcoming). However, on the Karak plateau plain handmade cups appear to have been used instead, perhaps because of the relative remoteness of this region (McQuitty *et al*. 1997: 189, fig. 21), and an independent tradition of making small glazed coffee cups with a white kaolin body developed at Hays in Yemen in the 16th century (Keall 2001). The results clearly illustrate the local responses to the huge social impact of coffee and how, along with the smoking of tobacco, “these modern commodities became part of the Middle Eastern cultural landscape” (Baram 2000: 154).

Most late and post-medieval assemblages from Syro-Palestine, Iraq, southern Iran, southeast Arabia and the Maghreb include local varieties of handmade decorated pottery, which have been variously termed “Hand-Made Geometrically Painted Ware”, “pseudo-prehistoric ware”, “Julfar ware” or “Kabyle ware” (Whitcomb 1991; Johns 1998; Bazzana, Elhraiki and Montmessin 2003; Kennet 2004: 53–56; Priestman 2005: 218–24, 226–30, pls. 47–59). Most of these are decorated with painted geometric designs, which are sometimes reminiscent of woven textiles or basketry but in other cases may have been influenced by the styles of earlier pottery found on abandoned archaeological sites. These wares appear in the latter half of the 12th century in Bilad al-Sham and continued with local variations and varying frequency throughout the Ottoman period. The fact that this pottery is found at Jerusalem, Hama, Aleppo and Raqqa indicates that it circulated within towns as well as the countryside, although it is reportedly absent from excavations in Beirut (van der Steen 1997).

The northern and eastern limits of this regional painted pottery tradition have not yet been closely defined although it is significant that it is absent from medieval sites investigated within the Keban and Ataturk Dam projects on the Turkish stretch of the Euphrates valley (e.g. cf. Redford 1998). In northern Iraq the equivalent pottery was decorated with incision, and this tradition is best documented from the late Ottoman period. Archaeological assemblages with pottery of this type have been published from Hatara Saghir (Simpson 1997), Gundi Shkaft (Solecki 1957: 167), and Shanidar Cave (Solecki 1952), and have been recorded by the author from several other sites in northern Iraq. Large pots in a closely related tradition are still recorded as being made in parts of southeast Turkey, including Dara and Uslu (Ertuğ 2004). Others are reported from the Hauran and the Ajlun region of northern Jordan where they were apparently made by peasant women during slack agricultural periods (Kalter 1992: 112). The function of these later pots was for storage, often of grain or flour, although edible oil, cheeses and pickled vegetables were kept in similar vessels at Aşvan and Bedyal (Weinstein 1973: 272; Macfadyen 1947: 47), and such jars at Dara were reportedly used for storing water (Dönmez and Brice 1953: 90). When the village of Tell Abu Dhahir was abandoned in advance of the construction of the Eski Mosul dam on the upper Tigris, a few pots of this type were noted in the deserted houses. As this tradition is so recent it may be possible in future to ascribe functional names to particular forms and some of these vessel types have specialised functions. This is a feature which is normally associated with developed societies, and is a useful reminder that the villagers who made and used these wares were not as crude as their pottery might indicate. Furthermore, the combination of motifs on the Handmade Painted ware appears to have

been governed by factors beyond chance or the simple copying of motifs on pottery of earlier periods. It would be instructive in future to apply this to the equivalent incised wares of northern Iraq, to see where the physical limits of these different traditions lie, and to explore the possible reasons for this distribution.

In southern Iraq the late Islamic handmade wares have been given the anachronistic term of "bedouin pottery", and were characterised by "hand-made, low-fired unglazed basins and jugs with large, irregular grit inclusions" (Adams 1981: 240). Complete forms of this type were recovered as a by-product of excavations of earlier period sites at Tell Fara (ancient Shuruppak) and Tell Khazna (Kish), and include shallow trays, spouted pots and small juglets. They have typically been found on survey associated with large bowls coated on the interior with blue glaze which "tends to be thin and rough to the touch and to flake away exposing an underlying fabric that is pinkish and granular", plus occasionally other vessels with a "green glaze and a grayish white lead glaze that usually has a curdled or pitted appearance" (Adams 1981: 240). The co-existence of handmade pottery with other types of pottery has been noted elsewhere, such as at Khirbet Faris in Jordan where the presence of "cream wares" contradicted previous assumptions that this was a purely urban ware (McQuitty *et al*. 1997: 188–89), and reinforces the hypothesis that they were speciality products rather than wares of necessity.

Another tradition is recorded from Iraqi Kurdistan, and is first recorded in 1936 from the small Christian village of Bedyal, some eighty kilometres northwest of the Assyrian Christian centre of Diyana (Macfadyen 1947). Apparently only one shape was made, namely a spouted water jug with a flat base, rounded body, tall flaring neck, one or two handles with low pointed thumb-stop knobs on the top of each, applied knobs around the base of the handles, and a low ridge immediately below the shoulder-neck junction. These were made by hand by several women using dark red clay "scraped from clefts and small local deposits in the country rock of massive Cretaceous limestone". They were fired in a clamp made of dung-cakes and decorated after firing with rows of spots or blobs arranged between vertical or curving stripes. In 1954, Matson (1983: 622–23, figs 224–26) confirmed that this pottery, as well as children's toys decorated in the same manner, was not only made in Diyana but also in the village of Havdian, on the western edge of the Diyana plain. These were described as being made from dung tempered clay, fired with dung fuel and decorated immediately after firing with a stick or crayon of bitumen. Two years later, three new vessels of this type were purchased in Diyana by members of an Oxford University expedition to Kurdistan (Galloway 1958); they are registered in the Pitt-Rivers Museum in Oxford. They consist of a jug with one handle and a thumb-stop knob on the top, a pot with two handles, and a spouted jug with a single handle. All are handmade, slightly lopsided, have sagging bases, lightly burnished surfaces, and are fired to a light reddish brown colour (pinkish on the interior) with partial fire clouding on the exterior. The lustrous black decoration was made by dabbing a stick of pigment onto the surface and pulling downwards to form a stripe, with the spotted decoration added afterwards.

Sherds of this ware have now been recognised in archaeological investigations at Gird Banahilk, a prehistoric site less than a mile from Diyana, Shanidar Cave and Sidekan in the Kurdish mountains, and Khirbet Deir Situn on the left bank of the Tigris north of Mosul. How long this tradition has existed is not known but the archaeological finds imply a century or more, and thus at least a late Ottoman village tradition. Many, if not all, of these sites are Kurdish and Christian, but it would be unwise to assume this pottery was exclusively used by a single ethnic group or religious community. Indeed, it might be added that a related tradition has been recorded in the village of Dölek, located south of Trabzon in northern Turkey, where the women decorate medium to large sized flat-based jars with spiraled or "Tree of Life" designs which also resemble motifs traditionally found on felt rugs (Güner 1988: 18–19). The cross over between media of motifs such as these is another potential avenue of research. Some are likely to be the deliberate or subconscious effect of domestic

crafts undertaken by women in a close shared environment, whereas others might even be regarded as the equivalent of a regional brand, such as the popularity of cypress tree motifs on Palestinian pipes and embroidery (Simpson 2008), or the similar motifs found on embroideries and slip-painted wares of the Aegean island of Skyros (Casson 1938: 471).

Although the use of bitumen reflects a resource local to this oil-rich region, the mode of manufacture by women was probably once rather more widespread. Matson (1974: 345) refers to a dying tradition of handmade pottery in Lebanon, where two years previously in Chirine he witnessed two eighty-year old women making frying-pans and jars, burnishing them with pebbles and lightly firing them in a hearth. In 1999, the author was fortunate to observe the crushing of calcite temper with a rotary quern and the coil-building of small oval dishes by the last of three or more generations of women potters in the village of Assia, located in the Lebanese mountains high above Byblos. Several other interesting points emerge. Firstly, as with many other domestic crafts such as weaving, basketry, mat-making or broom making, pottery production was a seasonal affair, with the clays being dug in the spring when the ground is moist and the building and firing of pottery carried out in the dry summer and autumn months. In this case this tradition of household manufacture was limited to the summer period when the families moved up from the coast: similar seasonal migration has been noted previously in the Tripoli region, the reasons being a combination of trade, the greater coolness afforded by the mountains in summer and their value as sanatoria during periods of epidemic (Rahme 1998). A similar mode of domestic production has been documented in the north-east Anatolian village of Yiğittası, and doubtless these are simply rare survivals of a much more common pattern in antiquity (Bakir 2004). Finally, like many crafts, specialised rural and domestic pottery production can be traced back a century or so according to family memories, thus within the late Ottoman period, but establishing earlier antecedents must in future rely on archaeology.

Tinned copper cooking pots were the most desirable form of cooking pot because the metal produced an even heat and they retained financial value as they could be recycled. For this reason they feature in Ottoman inheritance inventories and are often listed among the man's possessions (Establet & Pascual 2003: 191–92). However, there was also a strong continuing tradition for the use of handmade burnished cooking pots, often tempered with calcite. Crowfoot (1932) records these being made in Palestine at Kufr Lebbad near Tulkarem, and at Jib near Ramallah: "This burnishing is a very slow process; to get a really good shine, a woman will work at a pot for the best part of a day". These seem to have almost totally replaced the earlier wheel-thrown "brittle wares" used at medieval and earlier sites, although the survival of a late "brittle ware" in Syria as late as the 19th century is suggested by finds from the monastery of Deir Mar Musa (Taraqji 1998: 79, 92, fig. 9, pls 88–89). The manufacture of cooking pots, either on the wheel or by hand, is a specialised craft as it usually involves knowledge of appropriate fireclays and matching temper. Such pots are widely traded as demand is wider than the skills base or the availability of materials. This pattern still continues in Turkey, and the Bilecik region between Eskişehir and Bursa is one of the main regional centres for the manufacture of deep hole-mouth pots used for preparing and serving vegetable, meat or fish casseroles or flat-based oval trays with short vertical walls used to bake fish (both known in Turkish as *güveç*). The fact that these were highly valued in the late Ottoman kitchen is indicated by references to *güveç-i Bursa* being used for the slow cooking of vegetable dishes at Topkapı itself during the 19th century (Samancı 2003: 178). These casseroles are now trucked across the country (Güner 1988: 40–44), and since the Turkish occupation of north Cyprus in 1974 are shipped across to serve local demand where they are sold together with local plainwares made in Lefkoşa and near Girne. Prior to the partition of the Cyprus the local potters used to manufacture different varieties of brick-red handled cooking pots with lids (London 1990: 33, 72, figs 19, 88–89). The switch is therefore a direct consequence of a political event, and in Cyprus the present distribution of such pottery may therefore be regarded as an indicator of ethnicity. Although food ingredients may be

shared, their combination and method of serving are sensitive cultural indicators, and confirm the old adage that "you are what you eat." McQuitty (1984) has documented how different late Islamic communities use different types of oven but further research into variations in the type of cooking ware may also throw light on inter-communal variations.

Plainwares thrown on the wheel and impressed with pattern-wheel rouletting are also characteristic of late Islamic sites in Iraq. They have been employed as a "type fossil" for so-called Middle-Later Islamic villages located on surface survey in the north Jazira (Wilkinson and Tucker 1995: 122, fig. 79: 7–9, Type 92) and were found on five sites in the Eski Mosul Dam Salvage Project, namely Hatara Saghir, Jigan, Khirbet Deir Situn, Kharabok and Qara Dere (Simpson 1997: 101, fig. 2: 6). A single sherd is reported from Gundi Shkaft in Kurdistan (Solecki 1957: 167), another fragment was excavated in a late phase context at Ana on the middle Euphrates (Northedge 1988: 112–13, fig. 51: 8), and other sherds are present among museum collections where they are registered as being from Tekrit, Nineveh and Nimrud. Very similar decorated plainwares have also been found as far east as Iran, for instance on the surface of a ruined Safavid settlement at Andjilavand near Saveh (Kleiss 1993: 260, 265, abb. K1). The association with independently dated pipes at Hatara Saghir suggest that it existed in the 18th-19th centuries, yet the fact that sherds were included with archaeological material registered in the museum in the 19th century implies that the excavators did not recognise this type as being contemporary (cf. Simpson 1997: 112–13). This type of pottery is no longer made although notch-rouletting was still used to decorate water containers in the 1980s.

The archaeological and contemporary written sources highlighted above indicate a wide diversity of plain or decorated pottery wares being produced in urban and village workshops across the Ottoman empire. In many cases these were traded or exchanged over relatively long distances. Although Cuinet (1892/94: vol. IV, 351) reports that pottery formed only 0.02% of goods transported across the Ottoman railway network in 1893, it is significant that it is recorded at all and an even larger quantity must have been transported by pack-animal and boat. The large handmade jars were intended for the storage of dry foods, whereas glazed jars are reportedly used for keeping oil, fat, cheese or butter (Simpson 1997: 95); other types of vessel were intended as water pourers for use either at the table or for personal hygiene, and certain types of cooking ware were speciality products for baking or stewing. Some vessels were decorated with designs which appear to have been borrowed from other media, thus may be regarded as symbols of local identity, but certain types of undecorated plainwares and cooking pots were considered equally recognisable of local workshop traditions and valued for the properties of their clay and/or temper. Some types of glazed bowls were used to serve *leben* but larger bowls were used for serving communal meals. These probably represent the tail-end of a very long Middle Eastern tradition which, according to Ottoman sources, only began to change in Istanbul during the reign of Mahmud II (r. 1808–1839) with the gradual adoption of the European fashion for eating from individual plates at the table (Samancı 2003). This in turn triggered a demand for plates which was met by the large-scale import of European porcelains. Another instance of social fashion affecting patterns of consumption and supply is provided by the widespread popularity of coffee drinking, with archaeological finds of coffee cups deep into the countryside and desert margins. This phenomenon may be viewed alongside the increasing popularity of smoking tobacco from the 18th century onwards (Simpson 2002), and brings us to the last case-study examined in this essay.

4. Pipes

> "Large sums are lavished by Turks of all ranks upon pipes; they attach as much importance to the possession of a fine assortment, as Europeans to that of choice pictures or plate." (White 1845: vol. II, 129)

19th century European travellers' accounts and Orientalist paintings offer vivid and romantic illustrations of the popularity and elaborate social ritual afforded to pipe smoking across the Middle East. However, until the 1970s archaeological remains of pipes were usually ignored as too trivial or too late to be considered worthy of recording, or alternatively were attributed to the Mamluk period and, as this pre-dated the 16th century introduction of New World tobacco, were assumed to be evidence for widespread smoking of narcotics. This unwitting conspiracy was implicit of a drug-dependent Arab population followed by collapse and abandonment, yet the myth of an empty Ottoman landscape is challenged repeatedly by the historical records and some of the archaeological case-studies discussed above.

In 1971 Rosenthal effectively debunked any notion that cannabis or opium were ingested in any form other than as edible pellets, ingredients in food or through burning on open braziers, and it is now accepted that no pipes are earlier than the late 16th century and most date from the second half of the 17th century and later. Although relatively little research has been published on the Ottoman written sources, the history of the introduction of smoking tobacco, its ensuing popularity, and the responses this drew from political and religious authorities, have been the subject of a number of papers (e.g. Birnbaum 1956; Simpson 1995*b*; 2000*a*; van der Lingen 2003; Grehan 2006). These suggest that smoking was known in the Ottoman Court as early as 1576, Yemen by 1590/91 if not earlier, and Egypt by 1600/03, after which it spread like wildfire despite strong official and religious disapproval. European and Turkish sailors are a common denominator to its early popularity, endemic smoking in the army is recorded from the reign of Murad IV (1623–1640), and urban coffee-houses were popular social smoking venues by the same period. The exact means and route by which smoking came to be introduced into the Ottoman empire is more complex however. Doubtless there were multiple introductions, as the written sources suggest, but the concept of using long-stemmed pipes with a separate bowl and mouthpiece was distinct from the short-stemmed single-piece white clay pipes favoured in England and Holland. It may have been Portuguese rather than English or Dutch traders who were therefore responsible for introducing this type from North America, not only into the Ottoman empire but also into Morocco and West Africa (Shaw 1960; Keall 1992*a*; 1992*b*; 1993).

However, it was not until Rebecca Robinson's detailed analyses of pipes from Athens and Corinth, illustrated with the rich comparative sources of paintings, engravings and European travellers' accounts of the 17th, 18th and 19th centuries, that it became clear that the archaeological finds must date from a considerably later period than previously recognised (Robinson 1983; 1985). Together with a preliminary study of pipes from excavations at Saraçhane in Istanbul (Hayes 1980; 1992), these established the first outline typology for Ottoman pipes and the basis for most subsequent archaeological studies. Nevertheless, the longevity of particular "types" of pipe is more difficult to assess and doubtless some continued for longer than others. As with any artefact analysis, the definition of a particular "type" also requires close scrutiny and the potential pitfalls of circular argument over dating should be reiterated. It is no longer adequate to simply compare general colour or shape, and with the publication of more detailed analyses over a wider region it will be necessary to begin constructing more refined typologies. Pipes have now been presented in archaeological reports from almost all regions of the Ottoman empire: in addition to the groups mentioned above from Istanbul and Greece, assemblages have been published from Mytilene (Humphrey 1990), Iraq (Gargies 1987) and Egypt (French 2001), but the largest number come from the southern Levant, particularly salvage excavations in Beirut (Bartl 2003; van der Lingen 2003), and a large number of sites in Israel/Palestine (e.g. Avissár 1996; Boas 2000; Simpson 1990*b*; 2000*b*; 2002; 2008). Independently, researchers in eastern Europe have added important new data on the typological development of local pipe-making industries, particularly in Bulgaria, and the heavy influence these Turkish pipes had on the fashions of neighbouring Hungary and Croatia (Stançeva 1972; cf. Tomka 2000; 2003; Brusić 1986/87; Haider, Orgona and Ridovics eds 2000: 25–32; Tomka 2003). On

the basis of these finds, several trends are evident.

Pipes generally appear to be rather rare prior to the second half of the 17th century. Thereafter, the first datable examples are made of smooth pale grey, white or light brown clay, and tend to have small bowl capacities and shank openings which presumably correspond to the relatively high price of the imported tobacco. They also typically have stepped ring shank-ends, restrained rouletted decoration on the shank and the bowls are usually decorated with small elaborate stamps. The typically uniform pale appearance and the lack of cores implies that they were consistently fired in lightly reducing kiln conditions, although a small number of dark grey or black examples are attested. The occurrence of cypress-tree motifs on a group of the early pipes which have as yet only been recognised from sites in Palestine may be noteworthy as the same motif recurs in Palestinian embroidery (Simpson 2008).

During the 18th century there appears to be a shift towards larger and more rounded bowls which were usually coated with a lightly burnished red slip. The increase in capacity is linked to a reduction in price and wider availability of tobacco, which began to be very widely cultivated across the Ottoman Empire. This pipe tradition continues throughout the 19th century but by the 1840s lily-shaped bowls with highly burnished red slip appear to be the commonest form. There are some curious similarities between 18th and 19th century Ottoman pipe bowls and those found in Mali and other parts of West Africa (e.g. Daget and Ligers 1962): closer analysis of these and their chronology, and the varieties of pipe found along the trans-Saharan trade routes, might throw some light on the degree and direction of influence. In contrast, the scarcity of recognisable 20th century types of pipe in the Middle East probably reflects the popular switch to cigarettes which began as early as the turn of the 19th and 20th centuries in rural areas of Palestine (Wilson 1906: 127).

At Athens, Corinth, Saraçhane and Mytilene it was noted that many of the excavated pipes carried small impressed maker's marks, although they appear to be less common in the southern Levant. As many as seventy-five pipe-maker's names are now attested in all, some of which are dated to the year. The names are almost all Turkish but a few others are also recorded, including Borgest, B. Fuchez, Marruis, Nevres, Peretev, which suggest export pipes. Turkish pipes were widely copied in eastern Europe and southern Russia, and even the Turkish word for a pipe (*lüle*) entered the local vocabulary of these areas (Albanian *llulla*, Bulgarian *lula-ta* and Serbo-Croat *lula*). In several cases the pipe-makers' names hint at their origin: "Belgradi", "Edirneli Süleyman Usta" and "Hasan Istanbul Hasan" suggest connections with Belgrade, Edirne and Istanbul respectively.

Future research into Ottoman census records (*Nüfüs* registers), Shari'a court records, price lists and craft guilds (*Tawa'if*) should provide a wealth of further details on these and other pipe-makers. In most cases, however, these individuals are assumed to be based in Istanbul where the greatest number operated from within the Tophane quarter on Galata, where other crafts recorded from the 17th century and later included carpenters, tanners, tube-makers and candle-makers (Mantran 1962: carte 11). The importance of the pipe-making industry is still evident in the street names of this quarter of the city, including Lüleci Hendek Arasta ["Pipe-makers' Hollow"] which is said to have had as many as 60 workshops. Maker's marks stamped directly onto the pipes themselves also name workshops in Beykoz and Yalova; Hamdi Efendi is known to have worked at Alaça Hammam at 56 Marpuççular Yokusu, a narrow street crammed with tobacconists according to an 1874 account, and the last Istanbuli pipe-maker closed his workshop in 1928. The tools of this individual, Master Ömer, are preserved in the Istanbul Municipal Museum and would merit detailed publication (Bakla 1985; 1993). Although the 19th century workshops in the Tophane district of Istanbul have received some attention by Turkish scholars (Kocabaş 1962; Bakla 1993), at least nine other Turkish towns were also involved in pipe-making, namely Avanos, Diyarbakir, Edirne, Iznik, Kayseri, (the appropriately named) Lüleburgaz, Mardin, Siirt and possibly Sivas (cf. Cuinet 1892: vol. II, 439, 463, 506, 552; Bakla 1985; 1993: 28, 35–36; Simpson 1990*a*: 7). In the case of Diyarbakir, "a hundred and fifty

makers of ornamented pipe stems only, besides those who make the clay balls [bowls], amber mouth-pieces" were noted by one traveller in 1816 (Buckingham 1827: vol. I, 380), and the location of this industry is indicated by the survival of street names in the north-west part of the city. In addition, pipe-making is recorded from Jerusalem, Jaffa and Nazareth in the 19th century (Simpson 2008), as well as Sofia and Rusçuk in the European provinces, Baghdad and Mosul in Iraq, and Asyut and Qena in upper Egypt. From this, it may be deduced that pipe-makers catering for the heavy demand were concentrated in many, if not all, of the major urban centres across the Ottoman empire by the 19th century. Potters and pipe-makers occasionally appear to have been one and the same individuals. During the second half of the 19th century there is evidence for a well-developed industry in the Tophane district of Istanbul and in Asyut which specialised in producing sets of highly ornate pipes, charcoal braziers for water-pipe smokers, coffee cups and saucers, trays, lidded sugar bowls, pitchers, vases and hemispherical bowls with the same burnished red slip and stamped and gilded decoration (Bakla 1993). The names of some of the craftsmen responsible are also known (Table 6).

Al Hosny
Lulici Husayn Istanbul
Ibrahim
Kazim
Hajji Mehmet Cons[tantino]ple

Table 6: Late Ottoman pipe-makers' names also present on tablewares

In other cases local potters doubtless helped satisfy consumption through the manufacture of pipes as a sideline. Coarsely made hand-modelled pipes found at Mudaybi' and Khirbat al-Nakhl in southern Jordan may fall into this category and have been suggested as possible evidence for local manufacture to compensate for difficulties in gaining fine clay pipes made in Palestine or Syria (Milwright 2000: 200).

In a small number of cases glaze was used as an alternative to coloured slip. Clay pipes decorated with transparent yellow or green glaze formed 1.5% of the pipes recovered from the Kerameikos at Athens (Robinson 1983: 273, pl. 52, no. 3) and 5% of the pipes excavated at Corinth (Robinson 1985: 172–73, pl. 47, nos 6–9): these were suggested to be the sideline of a pottery workshop, although the original whereabouts of this is not known. Green glazed pipes believed to be of local Haysi manufacture are reported from Zabid in Yemen (Keall 1992*a*). In addition, clay pipes splashed with a transparent glaze fired to a yellowish colour on a light brownish clay body have been reported from a number of sites in Israel/Palestine and southern Lebanon, and doubtless again were produced as a potters' sideline. The fact that one example from Suba was also decorated with cypress-tree stamps strengthens the possibility of these being local products as this stamp motif has thus far only been noted on pipes from the southern Levant. A comparative petrographic analysis with utilitarian glazed wares of the same period might be very instructive, for instance of those glazed wares believed to have been produced at Rashaiya al-Fukhar in the southern Beqa'a valley. However, in the case of most late-19th century pipes, the clay fabrics are very fine and appear to represent the selection and/or levigation of specific clays for the bodies and slips. The stages of production have been documented most closely in the case of Istanbul where the pipe-makers relied on a local pipe-clay source in the Ökmeydani district but also imported fine clay slip over considerably longer distances, including sources near Van, Aydin and Beirut (White 1845: vol. II, 149; Seetzen 1854: vol. II, 22; Bakla 1993: 45). The clay was moistened, mixed and refined in wooden containers or large jars before being wedged and, if necessary, stained with red ochre. Small balls, each sufficient to make a single pipe bowl, were formed and weighed; these were placed inside separate two-piece moulds, any excess clay being shaved off and re-used, and a narrow boxwood borer inserted to make the

necessary aperture for the pipe stem. Pipes were frequently slipped and polished with felt at this stage. After partial drying in the sun, the bowls were decorated and finished by hand, the tell-tale mould seams smoothed over and then burnished.

There is very little evidence for post-firing treatments. The decoration instead relied on a varying combination of moulding, stamping, rouletting, incising and occasionally gilding. The use of gilt appears to be a characteristic of the Tophane pipes: although it is regarded today among collectors as a sign of relatively high value, one European contemporary commented that "The price depends upon the purity of the clay, and upon the carving and gilding. The lower orders use the cheapest, of which immense quantities are exported into the provinces. Higher personages use a better kind, but never those which are gilt" (White 1845: II, 150). The use of gilding does not appear to have been recognised on any pipes recovered from archaeological contexts in the southern Levant, implying that it was not used (or used very sparingly) by the pipe-makers in this region, and that Tophane pipes did not circulate widely (or at least outside the cities) in this region. Some pipes were traded, and the manufacture of export pipes for the Persian market is attested (Bakla 1993: 37). The discovery of a late 17th century shipwreck off the Dalmatian coast near the island of Bisaga confirms the Mediterranean export of Ottoman pipes as the cargo is estimated as including several thousand pipe bowls (Brusić 1986/87). However, it appears that greater attention was generally paid to the trade of tobacco, wooden pipe-stems and the costly mouth-pieces rather than the pipe bowls themselves, as these were increasingly manufactured within regional centres. The limited geographical distribution of certain forms of pipe and particular types of decoration supports this hypothesis. For instance, groups published from Istanbul and Greece contain pipes with pronounced disc bases that are scarce in other regions (cf. Robinson 1985), so-called "poppy head pipes" appear to be particularly common in northern Iraq and eastern Turkey (Matney 1997), and polychrome glazed pipes are characteristically Iranian (Armero 1989: 71). Within Israel/Palestine itself, as noted above, there are a number of recurrent types that have not yet been recognised from other regions of the Ottoman Empire. It is therefore likely that some, if not all, of these belong to local pipe workshops.

In addition to those pipe bowls made of clay, contemporary sources refer to individuals consuming tobacco through pipes carved from wood or, as in extreme cases in southern Iraq (as in parts of east Africa or Central Asia) as "earth pipes" along channels in the ground, but in neither case can these uses be detected archaeologically. The archaeological disappearance of wooden pipes may be particularly significant in understanding the scarcity of late 16th or early 17th century pipes, as one of the earliest references to Turkish pipes states that they were made of "reeds that have joyned unto them great heads of wood to contayne"" the tobacco (Sandys 1615: 66), and Robinson (1985: 160, 175, pls 48–49, nos C17–19) has noted that the highly burnished mahogany-like finish of three 18th century pipes from Corinth is strongly reminiscent of polished wood. In addition, during the 19th century, if not before, several bedouin tribes are recorded as carving pipe bowls from soft local stone and small numbers of such bowls, usually described as chalk, limestone or softstone, have now been recorded from sites in Israel/Palestine, southern Jordan, eastern Syria and Iraq. The distribution of these carved stone pipes along the desert fringes suggests that they may represent north Arabian imports although a similar tradition is also recorded from Sinai and Egypt (Simpson forthcoming *b*).

In many cases, it is only the presence of pipes or other diagnostic items such as bullet cartridges, bangles or buttons that prove activity at a site during the Ottoman period. One example of this is the Roman Decapolis city of Abila in northern Jordan which was surveyed and excavated from 1980 onwards by an American expedition directed by W. H. Mare. Light occupation at the site lasted into the Mamluk period but it appears to have been abandoned thereafter. However, several clay pipes were found: one was illustrated in a preliminary report, has a decorated swollen shank-end and a rounded bowl, and is probably 18th or early 19th century (Mare 1991: 30, fig. 6: 10). In addition,

European travellers' observations indicate that during the 19th century, part of the site was lightly cultivated by members of the powerful semi-nomadic Bani Sakhr tribe. During the 1860s and 1870s this tribe (presumably like many others) appears to have developed a regular pattern of returning to the same camping and grazing grounds each spring to lightly cultivate the surrounding area and sell the produce to merchant-farmers in the nearest towns. It is significant for the interpretation of this and other sites that the preferred campsites were close to ancient ruined sites where there were wells, cisterns, caves and ruined buildings which not only offered water but also concealed cool storage of foodstuffs and shelter of livestock at night (Wineland 2001; cf. Rogan 1999: 83–89; Lewis 1987: 126–43). Furthermore, ethnoarchaeological analyses of the reuse of rock-cut tombs at Petra by the sedentarised Bedul tribe suggests that these were particularly popular refuges and living-quarters during the winter months, whereas other caves were used as occasional work areas, temporary or permanent storage, or as pens (Bienkowski and Chlebik 1991; McKenzie 1991). The long-term investigations of the site of Tell Hesban in central Jordan, provide a similar archaeological instance of this. 19th century travellers' accounts refer to tented Arab encampments at the site whereas archaeological evidence for this period has been recovered from several areas of the site, including a cave used as an underground store, with a clay pipe among the reported finds (Wimmer 1978: 150–51). Many other instances of this type of Ottoman-period reuse of earlier caves and cave-tombs have been excavated in Israel, for instance at Khirbet el-'Alya near Tell Beth Shemesh and Horbat Hanut, both in the central region (Dagan 1998; Beck 1999); another cave excavated at Bir Ma'in was found to have been reused in this period by charcoal-burners (Gibson and Lass 2000).

By contrast, excavations on the site of the Crusader castle of Belmont, west of Jerusalem, provide quantifiable evidence for the range and frequency of pipes used in a small late Ottoman village as the ruined architectural shell was incorporated within the village of Suba. The excavations focused on the summit of the site and revealed that the inner ward of the castle originally formed a shady square within the heart of the village. Several of the adjoining buildings were partially excavated, including a mosque on the west side and two houses on the south side. A total of 444 pipes, all fragmentary, were recovered although the published report was based on the sample of 377 which was available for study. Many of the fragments were recovered from rubble and a typological approach was therefore followed in the final publication (Simpson 2000*b*). However, a total of 152 fragments were recovered from phased Ottoman contexts and provide the basis for the following observations (Table 7).

Context type	Context	Context description	Frequency of pipes	Catalogue numbers (bold) or Field Numbers
Construction	108.6	foundation	2	**63**, **197**
	110.10	Wall	1	**38**
	115.4	channel	3	FN 361–63
	119.5	Wall	1	**112**
	503.2	bench	1	**137**
Floors and surfaces	101.8	surface	2	FN 313–14
	106.21	surface	1	FN 308
	108.5	surface	1	FN 226
	115.3	Floor	2	**42**, FN 88
	118.18	surface	3	186
	120.9	Floor	3	**49**, **106**, FN 349
	123.5	surface	4	**23**, **122**
	124.4	surface	2	FN 315–16
	502.21	surface	2	**67**, FN 322
	502.33	surface	1	FN 323

	502.34	Floor	2	**9**, **61**
	503.21	surface	1	**20**
Occupation layers	105.16	Layer	9	**15**, **32**, **68–69**, **160**, FN 7, 47, 217, 350
	105.32	Layer	4	FN 145–48
	108.4	ash lens	2	FN 223–24
	111.13	Layer	1	FN 134
	112.5	Layer	1	**145**
	115.2	Layer	1	FN 378
	118.12	Layer	1	FN 233
	118.13	Layer	2	**195**, FN 301
	122.6	Layer	1	FN 354
	126.3	Layer	1	**191**
	126.5	Layer	3	**3**, **62**, **72**
	301.3	Layer	2	FN 341-42
	502.24	Layer	1	**97**
	502.27	Layer	3	**102**, **150**, FN 311
	503.24	Layer	4	**162**, FN 297–99
Pits	102.8	Pit	2	**134**, FN 93
	105.20	pit-fill	2	**56**, **84–85**, **178**, FN 104–105, 282–83
	110.20	Pit	2	FN 241–42
	112.9	Pit	1	FN 386
	113.28	Pit	2	**25**
	114.2	pit-fill	1	**45**
	306.2	pit-fill	3	**4**, **80**, **146**
Rubble	107.3	rubble	1	FN 347
	108.3	rubble	1	**109**
	108.7	rubble	2	**12**, FN 401
	110.22	rubble	3	**18**, **28**, FN 352
	111.5	rubble	1	**155**
	112.10	rubble	1	FN 343
	116.4	rubble	2	**126**, **165**
	117.1	rubble	9	**40**, **48**, **84–85**, **95**, FN 159–60, 243–44
	119.3	rubble	6	**187**, FN 49, 51–54
	123.2	rubble	13	**16**, **161**, **192**, FN 24–27, 264–65, 269–72
	124.2	rubble	8	**6**, **108**, **157**, FN 37–40, 260
	302.5	rubble	2	**2**, **190**
	308.3	rubble	1	**101**
	502.16	rubble	1	FN 369
	502.22	rubble	3	**53**, **111**, FN 312
	502.42	rubble	1	**78**
	504.6	rubble	2	**96**, FN 309
	504.9	rubble	3	**103**, **113**

Table 7: Clay pipes from Ottoman phased contexts at Suba, with distribution according to context type (bold numbers refer to published cat. nos in Simpson 2000*b*; FN refer to additional fragments recorded in site records)

These sherd counts indicate that almost a quarter of the fragments were found within occupation layers, with an additional 11.8% retrieved from cut features and 15.7% from floors and surfaces; the remainder were recovered either from within structural contexts (5.2%), which are likely to include residual pieces, or from within rubble (43.4%). The spatial distribution suggests a particular concentration of fragments in one area of the village square whereas surprisingly few fragments

were recovered from interior contexts. This distribution suggests that they were either deliberately deposited outside when broken or that their distribution at least partly reflects the place where smokers would congregate after work.

Although there are a growing number of reports on pipes from archaeological assemblages, many were not systematically recovered and it would be wrong to draw conclusions over the relative frequency of certain types on the basis of publications alone. In some cases the low level of recovery and/or high degree of sorting is evident from the disproportionately high number of decorated and/or semi-complete pieces. Wightman (1989: 74) hints at this in his publication of the excavations at the Damascus Gate of Jerusalem: the "red-polished chibouks were mass-produced in moulds, so their forms exhibit little variation" but only a single semi-complete plain example was illustrated in the report, whereas small fragments of such pipes dominate other assemblages. The excavations of the village of Suba, nestled inside the ruined shell of the Crusader castle of Belmont, offered an exception as the pottery processing yielded a large number of additional small fragments. Many of these belonged to the rims of red-slipped burnished pipe bowls, which constituted over 80% of the total of the assemblage. This breakage pattern suggested that the most vulnerable part of the pipes were their rims which were easily chipped if the pipe bowl was knocked on a hard surface when clearing the dottle inside. The same reason probably explains the chipping often noted along the rims of the shank ends, although as they were invariably thicker-walled they are usually semi-intact. Another reason for discard was probably a heavy accumulation of dottle inside the pipe bore at the bowl/stem junction, which was a characteristic of a large number of the pipes (Simpson 2000*b*). Future organic residue analysis of these carbonised remains might eventually give some information on the prevalent strains of tobacco consumed at different sites at different periods. In the meantime a preliminary attempt was made to apply forensic sprays to the excavated pipes in an attempt to detect possible use of cannabis. The results should be pursued under laboratory conditions but the initial study only yielded possible positive results in two cases. As might be expected, tobacco was the main stimulant and illustrates the comment by one 19th century visitor to Palestine that the village houses were "dense with tobacco smoke" (Rogers 1863: 209).

Water-pipes are rare in most archaeological assemblages. Only single fragments survive among the finds excavated at Suba, Zir'in, the Damascus Gate refuse tips in Jerusalem or Aqaba Castle, where they numbered between 0.5% and 1.6% of the total number of pipe fragments (Simpson 2000*b*; 2002; 2008; forthcoming *b*). Furthermore, no fragments of the distinctive glass, metal, pottery or coconut bases have yet been recognised from archaeological contexts. This scarcity may reflect the relatively higher price of imported Persian *tumbac* over the locally cultivated varieties of tobacco, particularly in the countryside from where most of the site assemblages derive. However, it is instructive to note that water-pipe fragments appear to have been rather commoner in deposits excavated in parts of Beirut as they constituted 11.4% of the total from excavations in the Beirut Souks and as many as half of the fragments published from the Place Debbas excavations (van der Lingen 2003: 135; Bartl 2003). One reasonable conclusion might be that the water-pipes represented by some 19th century European artists were props designed to conjure an Orientalist image rather than being an accurate reflection of the local rural material culture. However, water-pipes - then as now - probably had specific circulation patterns. They offered a long cool smoke for the comfortable seated individual and, like the very long stemmed pipes, they are redolent of comfort and status. As such, both were most appropriate for moments of leisure, receptions and coffee-houses, whereas rigid-stemmed hand-held pipes could be used throughout the day. This distinction may have implications for breakage and discard. Greater concentrations of water-pipe fragments, gilded Tophane pipes and coffee-cups, may be expected in the vicinity of coffee-houses or wealthier residences whereas cheaper clay pipes will have a wider distribution.

At Suba and Beirut Souks it was noted that many of the pipe bowl bases were heavily abraded.

This suggests that they had been originally attached to very long stemmed pipes which were rested on the ground while they were smoked (Simpson 2000*b*: 158; van der Lingen 2003: 135). This inference raises two further implications. Firstly, these pipe stems presumably measured two metres or more in length, and therefore must have resembled the archetypal long-stemmed variety illustrated by European artists. These stems were normally made of cherry (a preferred winter type) or jasmine (a summer type) as these woods were believed to absorb the nicotine as well as flavour the taste, but ebony, maple, myrtle, wild fig, apricot, plum, rose, mastic tree, carob, balsam and cheaper painted and varnished woods joined in sections were also employed. Whereas most stems were manufactured from plants reared in special orchards, cherry stem rough-outs were imported wholesale from Persia and Central Asia, straightened, veneered, polished, and finally bored at the moment of sale. High-quality jasmine stems were produced in Ortaköy on the Bosphorus but cheaper varieties were imported from Bursa and Trabzon. Costlier stems other than cherry-wood were sheathed in silk or muslin, secured at intervals with gold or silver thread and occasionally decorated with pearls or covered in transparent pink gauze; the original intention of this was that the smoker could cool the smoke during the hot part of the day by dampening the cloth-covered stem. Fragmentary reed stems have been reported from Idfa in upper Egypt (White 2004: 17, figs 12–14), and doubtless under the right conditions of preservation more will be recovered in future investigations. The identification of the woods of these archaeological specimens will provide quantifiable evidence for the circulation of different forms of stem.

Secondly, European writers and artists of the 18th and 19th centuries refer to or illustrate long-stemmed pipes being rested on small gold, gilt, brass or enamelled trays (Turkish *tassa*), whereas the wear patterns noted above suggest that these pipes were in regular contact with the ground. The obvious conclusion is that although these trays may have been used to prevent contact of the hot bowl with floor-coverings within the homes of the wealthier-to-do, they were not such a regular sight amongst the villages. As such, these differences offer a small hint at the varying levels of affluence and display across pipe-smoking society.

The present state of research into Ottoman pipes therefore raises many interesting possibilities and future avenues of investigation. Typology is an essential building block of archaeology but it is a means to an end. The basic typological development of Ottoman pipes is established but there is still much to be learnt about regional developments before we can better understand workshop outputs and circulation patterns. The huge potential of written Ottoman sources remains untapped, and future petrographic, neutron activation and chemical residue analyses offer exciting opportunities for fingerprinting clays and testing the uses of pipes. The identification and excavation of workshops would undoubtedly reveal much evidence of the production stages. The excavation of one or more dated military installations or coffee-houses should likewise offer important independent archaeological evidence for the date and scale of pipe smoking amongst the Ottoman army and general populace. The fact that these questions can now be raised shows how far the subject has already come, and how clay pipes have moved on from being regarded either as detritus or as collector's items to sensitive indicators of Ottoman craft, trade and social status (Baram 2000).

Conclusion

> "The 15th through early 19th centuries in Jordan have generally been considered a period of 'decline': after a couple of centuries of intense settlement, investment in agriculture, and overall prosperity, villages are abandoned, banditry is widespread, and the economic foundations of the Jordanian provinces crumble." (Walker 2005: 67)

This influential model of regional economic decline, bitter conflict between villagers and bedouin, and the collapse of centralised authority has been increasingly challenged in recent years, and a more cautious approach advocated by Johns (1992; 1998), Walker (2005) and others. The same applies to northern Mesopotamia where Hütteroth (1990: 179) has drawn attention to the contradiction between the evidence of the 16th century Ottoman *Tahrir Defterler* and the common perception that "from late medieval to modern times ... the destruction of the Mongol invasions was more or less responsible for the state of decay described by so many Europeans who travelled there during the 19th century."

Landscapes with good agricultural potential are rarely empty yet the archaeological criteria for recognising and dating human activity, either sedentary or pastoral, are still being defined for this period. The fact that even passing 19th century European travellers noted a complex seasonal and ethnic mix of subsistence patterns and dwelling types underlines the scale of the challenge. Closer definition and distinction of diagnostic categories of material culture are therefore crucial in recognising and charting these patterns. The so-called Ayyubid-Mamluk handmade geometric painted pottery tradition is now generally acknowledged as having continued longer than previously recognised (Johns 1998; Ziadeh 1995*a*), and the presence of smokers' pipes should offer another dating tool as the use of these post-dates the introduction of New World tobacco in the late 16th century (Simpson 1990*b*). However, these are not the only categories of material culture which might be used to distinguish human activity during these periods. In addition to pipes, polychrome trailed glass bangles were among the principal finds recovered from an Ottoman village excavated at the central Anatolian site of Alişar höyük (von der Osten, and Schmidt 1930: 232, 236, fig. 207; von der Osten 1937: 193–212, 319, 340, fig. 266). Although often mistakenly attributed to the Roman period in Turkish museum displays, Spaer (1992) has outlined a useful typology for these glass bangles, and Shindo's (1996) careful quantification of fragments found at the northern Red Sea ports of Raya and at-Tur illustrates the potential for distinguishing chronological and regional patterns. Finally, a small number have been recovered from Ottoman and later domestic contexts at Suba near Jerusalem, and Horvat 'Eleq in the Carmel range, where the stratigraphic evidence confirmed that the moulded types belonged to the Mandate period (Grey 2000*b*: 129–30; Boas 2000: 565–67, 580, pl. IX).

It might also be noted that glass bangles tend to be produced in the same workshops as beads. Closer analysis of this second category should offer social information and patterns of trade as there are easily recognisable differences between imported European "trade" beads, the chunky furnace-wound types made in Near Eastern glasshouses, and the drawn glass micro-beads which are a hallmark of Indian Ocean/south-east Asian trade and sites along the Persian Gulf (Baram 2000; Arkell 1937; Francis 1990). Several examples of the last variety were found in Ottoman or later village contexts at Suba and Horvat 'Eleq, where they were described as "embroidery beads" (Grey 2000*c*: 143–45, nos 21–24; Boas 2000: 580, pl. IX.47), whereas a wider range of types are reported from "Bedouin" graves at Tell el-Hesi and Tall Hisban (Eakins 1993; Toombs 1985; Walker 2001: 59–61). Buckingham passed through the port of Basra, at the head of the Persian Gulf, at the close of the first quarter of the 19th century. Among the Indian imports he lists beads (although whether these were micro-beads or of semi-precious stone he does not say), and among the exports he mentions Mediterranean coral imported overland via Aleppo (Buckingham 1830: vol. II, 170–71). According to Cuinet (1892/94: vol. I, 400–401), the island of Karpathos was the centre of this coral industry at the end of the 19th century. European beads are listed by Lane (1890: 289–90) among the principal Egyptian imports during the time of his residency in Cairo between 1833 and 1835, whereas beads of unspecified origin are given among the country's exports to "Sennár [south of Khartoum] and the neighbouring countries." The second category probably refers to Middle Eastern furnace-wound glass beads of the so-called Hebron type: following a visit to Darfur in the 1790s, Browne (1806:

347–48) refers to the Egyptian export to that region of beads made of coral, cornelian, "false cornelian" and agate, Venetian beads, and "Coarse glass beads, made at Jerusalem, called *Hersh* and *Munjur*"; the occurrence here of such beads of so-called Hebron type has been documented by Arkell (1937). New types of container were also imported from European glasshouses, and useful comparison might be made between finds from archaeological assemblages and the products of traditional workshops documented from Alexandria, Hebron, Armanaz or Damascus (cf. Gaulmier 1936; Sode 1996; Simpson 1999).

Material culture is a powerful indicator of changing patterns of fashion and function, trade and production. The categories discussed here were highly desirable and were easily transported but were of no intrinsic value and were easily breakable: these pipes, pots, bangles and beads therefore are ideal ingredients for detailed and comparative archaeological analysis. Although these are trivial categories within the much broader economic picture of local and long-distance trade and exchange (compare Faroqhi 1984; Eldem 1999), they offer datable proof of human activity in a wide range of archaeological contexts, and illustrate some of the difficulties in determining or distinguishing between types of human activity and intensities of occupation.

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