

Durham Research Online

Deposited in DRO:

 $17 \ \mathrm{June} \ 2011$

Version of attached file:

Published Version

Peer-review status of attached file:

Peer-reviewed

Citation for published item:

Kennet, D. (2005) 'On the eve of Islam : archaeological evidence from Eastern Arabia.', Antiquity., 79 (303). pp. 107-118.

Further information on publisher's website:

http://antiquity.ac.uk/ant/079/ant0790107.htm

Publisher's copyright statement:

© 2005 Antiquity Publications

Additional information:

Use policy

The full-text may be used and/or reproduced, and given to third parties in any format or medium, without prior permission or charge, for personal research or study, educational, or not-for-profit purposes provided that:

- a full bibliographic reference is made to the original source
- a link is made to the metadata record in DRO
- the full-text is not changed in any way

The full-text must not be sold in any format or medium without the formal permission of the copyright holders.

Please consult the full DRO policy for further details.

On the eve of Islam: archaeological evidence from Eastern Arabia

Derek Kennet*

What was the archaeological context of the rise of Islam in Arabia? The author uses new work from Eastern Arabia to show that the advent of Islam coincided with the decline of the Sasanian hegemony and one of Arabia's least affluent periods in 3500 years of history.

Keywords: first millennium AD, Sasanian, early Islamic, Arabia, forts

Introduction

'Few events in human history have transformed the face of such a large part of the globe as rapidly and as decisively as did the expansion of early Islam' is Fred Donner's somewhat Churchillian assessment of the historical significance of the early Islamic conquests (Donner 1981: 3). There is no doubt, though, that he is right. The emergence, from the sparsely populated and relatively under-developed Arabian Peninsula, of the force that was utterly and irrevocably to transform the face of antiquity is amongst the most extraordinary of historical phenomena.

Little is known about the conquests and there is still considerable scholarly disagreement about their nature: but whether one believes that they were a deliberate strategy conceived and organised under the banner of Islam (Donner 1981) or, at the other extreme, an attempt to reclaim the Promised Land inspired by Jewish messianism (Crone & Cook 1977), it is clear that the key to our understanding of the rise and early spread of Islam is to be found in the development of Arabia during the Late Antique period.

This is a difficult period for the historian because the related historiographical problems are almost insurmountable. Briefly stated, the relevant Islamic sources are based on oral traditions that began to be written down only about 150 years after the events that they describe, by which time the Islamic state had come into being and had developed its own political ideology and religious and cultural identity. The early history of Islam was, therefore, reconstructed by or for those with vested interests in this state in a way that was useful or meaningful to them (Humphreys 1991: 69-103; Robinson 2003: 39-54). The Jewish, Christian and Zoroastrian sources that could in theory be used to corroborate the Islamic tradition are all problematic because they are either entirely lacking for the period concerned, or are ignorant or potentially prejudiced about events within the peninsula. Inscriptions and poems survive but are brief and treat only a limited range of subjects; they certainly do not provide a sustained narrative of events (Hoyland 1997). The historical

* Department of Archaeology, University of Durham, DH1 3LE, UK Received: 22 January 2004; Accepted: 26 May 2004; Revised: 13 July 2004 ANTIQUITY 79 (2005): 107–118

On the eve of Islam

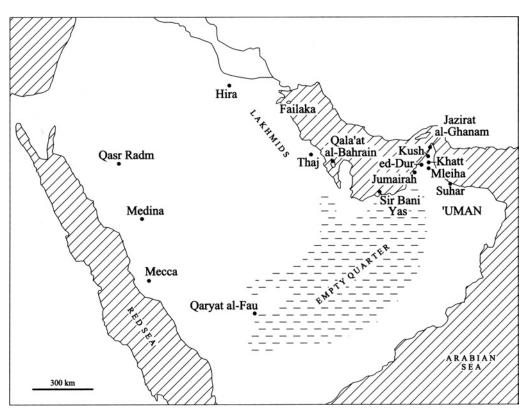


Figure 1. Arabia showing sites mentioned in the text.

problems are compounded by the fact that the archaeology of late pre-Islamic and early Islamic Arabia is still in its infancy.

Nonetheless a number of theories exist about this period. For example, Watt has proposed that the rise of Islam was related to social tensions caused by the booming Meccan trade economy (Watt 1953). Crone, by contrast, has suggested that it was part of a nativist reaction to the advancing colonisation of the peninsula by the Byzantines and Sasanians (1987: 245-50). It has also been argued, more recently, that a sixth-century ecological crisis led to a breakdown in Arabian tribal structures and created a socio-political vacuum that was filled by Islam (Korotaev *et al.* 1999).

In order to address this question, the present paper will examine the archaeology of the Sasanian and early Islamic periods in historical 'Uman (modern Oman and the United Arab Emirates) where the archaeological record is considerably better than for elsewhere. In particular, it will examine a series of recently excavated sites that have begun to provide some tentative insights into developments in the centuries leading up to the Islamisation of this particular region (Figure 1).

Between the third and the seventh century Eastern Arabia came under Sasanian influence. After Ardashir's *c*. AD 240 campaign the area between modern Qatar and Kuwait was, for the most part, controlled by the Sasanian clients, the Lakhmids who were based in Hira (Kister 1968) but the nature of Sasanian control over 'Uman itself is less clear. The province was listed by Shapur I (241-72) as part of his empire but control may have already been lost by the end of the third century (Maricq 1958; Gignoux 1971: 93). Control was reasserted early in the reign of Khusraw Anushirawan (531-78/9). Later in his reign it has been suggested that a treaty was established between the Sasanians and the local Arab kings, the Julanda, that set out areas of 'Uman under Arab control and areas under the control of a Sasanian governor, military and civil administrators and landowners (Wilkinson 1973, 1975, 1977: 122-36). Notwithstanding the fluctuating political relationship, the material culture of 'Uman, in particular the pottery, demonstrates close ties with Iran throughout the Sasanian period (Kennet 2002a).

For a long time the only Sasanian-period archaeological site known from the area was Jazirat al-Ghanam, a small isolated site on the rocky shores of the Musandam Peninsula that has never been excavated (de Cardi 1972; Boucharlat 1984: 196). But since the late 1980s an increasing number of sites has begun to emerge.

Kush

Kush is a small coastal tell with a recently excavated occupation sequence dating between the fifth and the thirteenth century AD (Kennet 1997). Period I, the earliest so far excavated, consists of two phases of mud-brick structures that can be dated to the fifth and sixth centuries (Figure 2). Although only a limited area of the earliest phase (W-01) has been exposed, a concentration of arrowheads but a lack of occupational debris might indicate a military or defensive function. This structure was deliberately backfilled and levelled before the construction of a complex of seven small mud-brick rooms measuring between 2.5 and 4m wide (W-02). There are few clues to the function of this complex, but again the lack of occupational debris and the plan suggests that it was not domestic. However, 4m to the east a contemporary sequence

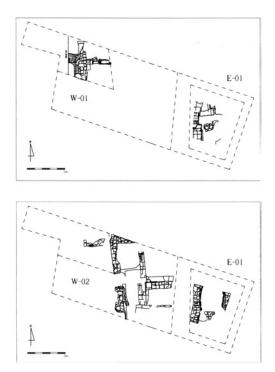


Figure 2. Period I at Kush (W-01 and W-02).

of mud-brick walls, fire-pits, hearths and drains was revealed (E-01). The extent of the settlement at this time is suggested by the fact that contemporary pottery has been picked up from all across the one-hectare site. A phase of post-holes overlies the deliberate levelling of phase W-02.

Period II represents the construction of a 14 by 7m rectangular mud-brick tower, and is, for our purposes, the most significant development in the sequence (Figures 3 and 4). The 2-metre-thick walls and lack of a ground-floor door show that this was a multi-storey tower that was built for defence. A ditch may also have been cut around the base of the site

On the eve of Islam

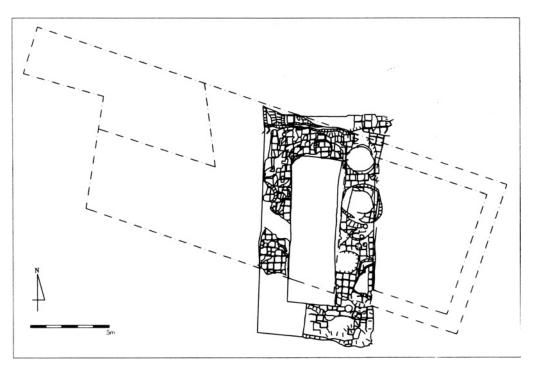


Figure 3. The Period II tower at Kush.

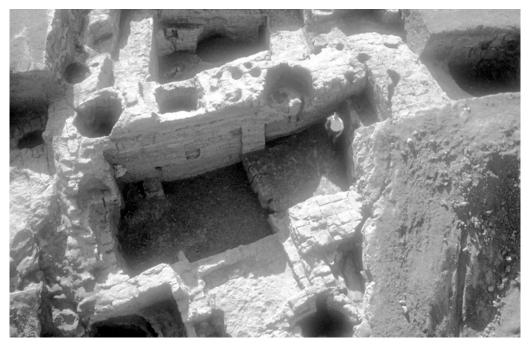


Figure 4. The Period II tower at Kush from the west.

Derek Kennet

at this time. The ground floor of the tower was probably a storeroom and was empty of occupational debris. There is, however, substantial evidence of domestic activity abutting the walls on the outside of the tower in the form of hearths, post-holes, mud-brick walls and occupation evidence, interspersed with a brief period of abandonment. The precise chronology of these levels cannot be determined but a ¹⁴C date of AD 670 ± 40 from the rake-out of a hearth butting up against the tower wall in the latest level of external occupation allows us to place the construction and use of the tower in the very late Sasanian or very early Islamic period (BM-3169 1340 ± 35 BP = AD 645-710 at 1 sigma). The tower was completely abandoned before the middle of the eighth century and was left to erode and collapse until the ninth century when the site was re-occupied.

The as-yet unpublished finds from the Sasanian and Early Islamic levels include glass, beads, shell, bone and ceramics. Many of the ceramics were imported from Mesopotamia, Iran and South Asia. The bones show that goats, sheep, cows, fish and shellfish were eaten, together with a small amount of pig. It is significant that only a single Sasanian coin was retrieved from these levels – despite the fact that over 98 000 litres of soil was passed through a 3mm sieve. Sasanian coins are known to have circulated in Eastern Arabia in limited numbers, mostly in the Lakhmid-controlled area to the north (e.g. Potts & Cribb 1995), but it seems that the economy of 'Uman was not highly monetised at this time.

In its early stages Kush appears to have been a substantial settlement of more than a hectare – it was without doubt the largest settlement of this period in the agricultural plains of northern Ras al-Khaimah (Kennet 2002b). The nature of the deposits, the layout of the rooms and the deliberate and large-scale backfilling and rebuilding of successive mud-brick phases are not suggestive of domestic contexts and may indicate a military or institutional function. The site was probably part of Julfar, a place known from a number of early Islamic sources which Wilkinson has suggested was under direct Sasanian control (Wilkinson 1973: 46). The transformation of the site into a small but strongly defended tower in the mid to late seventh century suggests that significant changes were occurring at that time.

Mleiha

Mleiha is a large, dispersed inland settlement that was occupied between the third century BC and about the fourth century AD. Its main period of occupation was during the later second and first centuries BC, after which time occupation contracted to a small area surrounding a substantial mud-brick fort (Figure 5) (Benoist *et al.* 2003; Mouton 1992: 22-35). The fort measures 50 by 55m (Benoist *et al.* 2003: 60 give dimensions of 60 by 65m, inconsistent with their Figure 2), the walls are about 2m thick and have square towers at the corners and along the sides. According to the excavator it was first occupied in the late second or early third century AD, and a second phase of occupation has been dated to the third or possibly fourth century. This was followed by a final undated layer of 'squatter' occupation. Twenty-seven rooms are arranged around the central courtyard. On three sides they contained evidence for storage and small-scale metalworking. The smaller rooms along the northern side yielded evidence of cooking and eating. Glass, alabaster and other luxury finds from a collapsed upper storey suggest that this side of the fort was occupied by a high-status individual or family.

On the eve of Islam

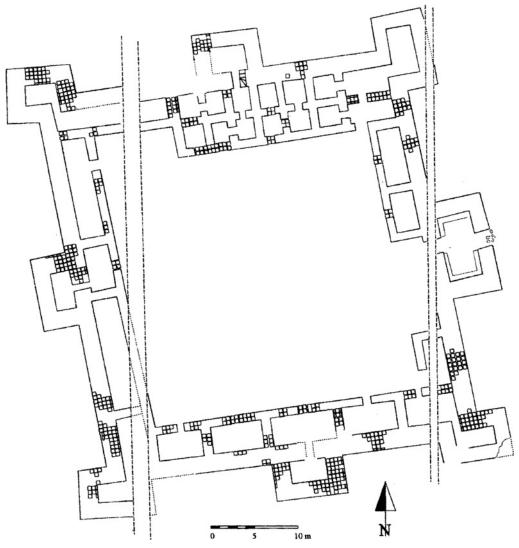


Figure 5. The fort at Mleiha (after Benoist et al. 2003: figure 2).

Fragments of coin moulds from the fort indicate that the building was also an administrative centre of some importance. Pottery and other finds from Iran, Mesopotamia, Egypt, South Asia, South Arabia and possibly Africa show that Mleiha had links to a wide-reaching trade network (Benoist *et al.* 2003: 66-71).

Ed-Dur

Ed-Dur is a large coastal settlement and cemetery 55km south of Kush. The most extensive period of occupation here was during the first and early second centuries AD, continuing until the fourth century AD in a much more restricted area (Lecomte *et al.* 1989; Potts 1990: 274-91). The site has yielded imported material from the Roman world such as

Derek Kennet

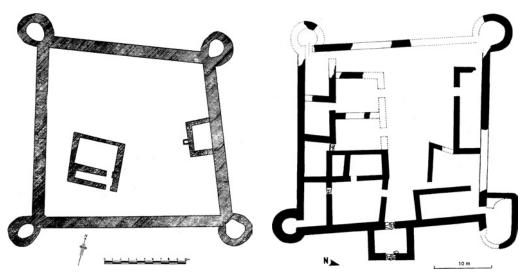


Figure 6. The Area C fort at Ed Dur (after al Qaysi 1975: figure 6).

Figure 7. The Area F fort at Ed Dur (after Lecomte 1993: figure 1).

glass and terra sigillata, as well as Mesopotamian and South Asian ceramics. There are two Sasanian-period forts at the site, one in Area C and another in Area F.

Fort in Area C

Relatively little is known about this fort (al-Qaysī 1975: 106-8; Mouton 1992: 89-91; Potts 1990: 275-6). It is a roughly square building measuring 22 by 25m with four round towers and walls 1.5m thick built of marine sandstone (Figure 6). The interior is empty with the exception of two small structures. The fort is situated on a small mound surrounded by the densest concentration of stone buildings at the site. Mouton has provisionally dated it to the second or first half of the third century AD, though it could also be somewhat later (Mouton 1992: 91 and note 254).

Fort in Area F

By the third or fourth century the once extensive occupation at Ed-Dur had contracted to limited patches of occupation around the Area F fort (Lecomte 1993). This is a roughly square structure about 25m on each side with three round corner towers and one sub-rectangular corner tower (Figure 7). The walls are between 0.4 and 0.7m thick and are built of marine sandstone. There were three entrances, the principal one was flanked by two stone eagles – possibly associated with the deities Shamash or Nasr – that may have been re-used from the earlier temple at the site. The thin walls indicate that the building was not intended for serious military use (Lecomte 1993: 195). There is only very limited evidence of domestic occupation in the lowest levels. Overlying this, the two main phases of use, which are separated by a thin abandonment layer, are funerary and cultic. In the first, dated to the third century AD, one double and two single human burials and two camel burials each containing a sword and, in one case two arrowheads, were located in

On the eve of Islam

key positions in and around the building. Outside the main entrance a series of shallow ash pits containing votive offerings of meat, glazed pottery, glass vessels and iron knives was found. In the second phase, which is dated to the fourth century AD, 58 burials, including two double burials and a collective grave of four individuals, were found in and around the eastern side of the building.

A number of contemporary cemeteries have been found in the areas close to the fort together with evidence for small post-hole huts that were possibly occupied by fishermen (Lecomte *et al.* 1989: 50-6).

The Area F fort is difficult to interpret. It was built as an elite residence but it soon became a focal point for cultic activity, possibly taking over from the earlier temple. It seems to have maintained this function until the end of occupation at the site – and possibly beyond.

Area F tower

The remnants of a small square or rectangular tower were uncovered in Area F underlying the fort. Only two fragments of a 2m thick stone wall are preserved (Mouton 1992: 91). The wall thickness shows that it was certainly a defensive building, but nothing more is known about it. It shows that the Area F fort was built in a location that had already been selected for its defensive advantages during the site's main period of occupation.

Other sites

In addition to the sites discussed above, Khatt (Kennet 1998), Suhar (Kervran & Hiebert 1991) and possibly Sir Bani Yas (Elders 2001; King 1997) have also yielded evidence for Sasanian and early Islamic occupation, although there are no comparable buildings from these sites (Figure 1). It has also been suggested that Jumairah in Dubai should be dated to the Sasanian period (Baramki 1975; Potts 1990: 298-300) but this is wrong: an inspection of the excavated pottery by the present author together with Dr H. Qandil has revealed that it dates to the ninth to eleventh centuries.

Discussion

The archaeological evidence reviewed above is still limited and does not yet provide a fully coherent historical picture. Nonetheless some preliminary trends can be discerned that might help to situate the process of Islamisation within a longer-term perspective of economic and social change. It is possible to define three distinct periods of development:

Period 1 (third century BC to first/second century AD)

During this period, about which there is now an extensive archaeological literature, a number of large and wealthy settlements flourished in Eastern Arabia such as Thaj, Failaka and Qala'at al-Bahrain, as well as Mleiha and Ed-Dur (Potts 1990: 30-48, 154-96, 197-203; Højland & Andersen 1994: 49-58, 239-300). The impression of a vigorous mercantile economy is supported by references to trade in classical sources and imports from the Greek and Roman world, as well as the large number of locally minted coins that circulated (e.g. Hoyland 2001:21-6; Whitehouse 1998; Potts 1991, 1994).

Period 2 (first/second to fourth/fifth century AD)

By the third century, if not earlier, occupation at the sites mentioned above had either begun to decline or had ended altogether. At both Ed-Dur and Mleiha the once extensive occupation had contracted to restricted areas surrounding large elite fortified residences (Lecomte 1993: 202; Mouton 1992: 22-31; Benoist *et al.* 2003: 60). The concentration of occupation around these structures suggests that social organisation had changed since the earlier period. Northedge has argued that the forts were the residences of tribal elites and it is certainly possible that their construction relates to the arrival of Arabic speaking tribes in 'Uman – a development that is thought to have occurred at this time (Northedge 2000: 32-4; Potts 1990: 221-8; Hoyland 2001: 26, 231-3). Tribal movements may have brought new cultural traits such as the elite camel burials in the Area F fort at Ed-Dur and at Mleiha that may have originated in South Arabia in the second or third centuries BC (Lecomte *et al.* 1989: 31-4, 56; Mouton 1992: 239-41; Jasim 1999; Sedov 1997).

Along with the decline of settlements, the impression of wider economic decline is supported by the fact that far fewer coins circulated during this period (e.g. Potts & Cribb 1995). There is, however, no evidence of a related collapse in mercantile activity: percentages of Mesopotamian, Iranian and South Asian pottery appear to have fallen only slightly between the first century heyday of Ed-Dur and the Sasanian levels at Kush, whilst the proportion of imported ceramics is actually reported to have increased at Mleiha (Kennet 2004: 29-31, 69-72, 80-2; Benoist *et al.* 2003: 72).

Turning to the forts themselves, it is clear that, although they are relatively small-scale, their designs follow the development of military and elite architecture in Mesopotamia and elsewhere in the Near East. Indeed, along with other forts in Arabia such as Qaryat al-Fau and Qasr Radm, they may be seen as part of a generalised Near Eastern trend towards small- or medium-sized defensive buildings that began around the end of the Hellenistic period (al-Ansary 1982: 17-8, 34; Bawden *et al.* 1980: 78-9, pl. 62; Bergamini 1987: 212). The Mleiha fort is typical of Hellenistic or Parthian structures elsewhere, although, if the excavators' dating is correct, its square towers were already somewhat old fashioned by the time it was built in the later second century AD. Parallels to the rounded towers and layout of the much smaller Ed-Dur Area C and F forts can be found in Mesopotamia by the first half of the second century AD, and this plan continues to be typical of the Sasanian and early Islamic periods there (Bergamini 1987: 207-8; Finster & Schmidt 1976). The significance of these parallels should not be overlooked as they show that elites in 'Uman in this period were influenced by international trends, both in their adoption of new military technology, and in the manner in which they used architecture to express their elite status.

Period 3 (fifth to seventh/eighth century AD)

By the fifth century AD even the limited areas of occupation at Ed-Dur and Mleiha had disappeared and the two sites had been completely deserted. It is likely that these abandonments were related to a regional economic decline that caused the disruption of settlement over much of Arabia, because at around the same time occupation at Qaryat al-Fau, Qala'at al-Bahrain, and possibly Qasr al-Radm, also came to an end (al-Ansary 1982: 28-9; Højland & Andersen 1997: 213; Northedge 2000: 31). Although pottery shows

On the eve of Islam

that trade with Mesopotamia, Iran and South Asia continued (Kennet 2004: 69-72, 80-2), the argument for economic decline is supported by the general dearth of archaeological evidence and the limited number of coins in circulation. Occupation dating to the late Sasanian period has so far been identified at only three sites: Suhar, Khatt and Kush. Khatt is a very small site, but the size of the settlement at Suhar at this time is not known.

At present little can be said about the nature of occupation at Kush during this time (Kush Periods I & II). It is possible that the site was a Sasanian colony, but further excavation is required before this can be ascertained. By the time the Period II tower was built in the seventh century the size of the settlement had declined. The links to international trends in military technology and elite architecture that are demonstrated by the Ed-Dur and Mleiha forts had also disappeared. The tower is architecturally simple and is on a much smaller scale. Its size, design and location point to the existence of a small and parochial community. Whether it was built in the last years of Sasanian rule or the first years of Islamic rule, the architecture shows that those who built it were not heavily influenced by Sasanian practice.

Despite the numerous archaeological surveys that have been carried out, there is clearly a significant lack of archaeological evidence from this period compared to almost all others going back as far as the Bronze Age. This suggests that the arrival of Islam occurred during one of the lowest ebbs in over 3500 years of 'Umani settlement history. The evidence shows that a long period of economic decline began after the first or second centuries AD and continued until at least the seventh century. It appears to have involved continual transformations in settlement patterns, social structures, and possibly the nature of local elites. The decline is well attested in Eastern Arabia, but may also have occurred elsewhere in the peninsula. Although the data are still limited and imprecise, the basic overview that they offer nonetheless helps to situate the Islamisation of Arabia within a broader perspective. Further archaeological work can be expected to yield more detailed insights into the economic, environmental and social processes that were at work during this key period in Arabia's history. Given the problematic nature of the historical sources, this may be one of the few ways open to us of making progress with this difficult question.

Acknowledgements

I am very grateful to Jeremy Johns, Peter Magee, Alastair Northedge, Chase Robinson and St John Simpson who read and commented on earlier versions of this paper.

References

- AL-ANSARY, A.R. 1982. Qaryat al-Fau. A portrait of pre-Islamic civilisation in Saudi Arabia. London: University of Riyadh.
- Вакамкі, D.C. 1975. An ancient caravan station in Dubai. *Illustrated London News* 2903.
- BAWDEN, G., C. EDENS & R. MILLER. 1980. The archaeological resources of ancient Taymã: preliminary investigations at Taymã. *Atlal* 4: 69-106.
- BENOIST, A., M. MOUTON & J. SCHIETTECATTE. 2003. The artefacts from the fort at Mleiha: distribution, origins, trade and dating. *Proceedings of the Seminar* for Arabian Studies 33: 59-76.

BERGAMINI, G. 1987. Parthian fortifications in Mesopotamia. *Mesopotamia* 22: 195-215.

- BOUCHARLAT, R. 1984. Les Périodes pré-Islamiques récentes aux Émirates Arabes Unis, in
 R. Boucharlat & J.-F. Salles (ed.). Arabie orientale, Mésopotamie et Iran méridonal de l'âge du fer au début de la période islamique: 189-99.
 Paris: Éditions Recherche sur les Civilisations.
- DE CARDI, B. 1972. A Sasanian outpost in Northern Oman. *Antiquity* 46: 305-10.
- CRONE, P. 1987. *Meccan trade and the rise of Islam*. Oxford: Oxford University Press.

Derek Kennet

CRONE, P. & M. COOK. 1977. *Hagarism: the making of the Islamic world*. Cambridge: Cambridge University Press.

DONNER, F. 1981. *The early Islamic conquests*. Princeton, NJ: Princeton University Press.

ELDERS, J. 2001. The lost churches of the Arabian Gulf: recent discoveries on the islands of Sir Bani Yas and Marawah, Abu Dhabi emirate, United Arab Emirates. *Proceedings of the Seminar for Arabian Studies* 31: 47-57.

FINSTER, B. & J. SCHMIDT. 1976. Sasanidische und Frühislamische Ruinen im Iraq – Baghdader Mitteilungen 8. Berlin: Mann Verlag.

GIGNOUX, P.H. 1971. La liste des provinces de l'Érān dans les inscriptions de Šābur et de Kirdīr. Acta Antiqua Academiae Scientiarum Hungaricae 19: 83-94.

HØJLAND, F. & H.H. ANDERSEN. 1994. Qala'at al-Bahrain 1: The Northern City wall and the Islamic fortress, vol 30: 1. Århus: Jutland Archaeological Society Publications.

–1997. Qala'at al-Bahrain 2. The central monumental Buildings, vol 30: 2. Århus: Jutland Archaeological Society Publications.

HOYLAND, R. 1997. Seeing Islam as others saw it: a survey and evaluation of Christian, Jewish and Zoroastrian writings on early Islam. Princeton, NJ: Princeton University Press.

-2001. Arabia and the Arabs from the Bronze Age to the coming of Islam. New York: Routledge.

HUMPHREYS, R.S. 1991. *Islamic history. A framework for inquiry.* Revised edition. Princeton, NJ: Princeton University Press.

JASIM, S.A. 1999. The Excavation of a camel cemetery at Mleiha, Sharjah, U.A.E. *Arabian Archaeology and Epigraphy* 10: 69-101.

KENNET, D. 1997. Kush: a Sasanian and Islamic-period archaeological tell in Ras al-Khaimah (U.A.E.). Arabian Archaeology and Epigraphy 8: 284-302.

-1998. Evidence for 4th/5th-century Sasanian occupation at Khatt, Ras al-Khaimah, in C.S. Phillips, D.T. Potts & S. Searight (ed.). Arabia and her neighbours. Essays on prehistorical and historical developments presented in honour of Beatrice de Cardi: 105-16. Turnhout: Brepols.

-2002a. Sasanian pottery in Southern Iran and Eastern Arabia. *Iran* 40: 153-62.

–2002b. The development of Northern Ras al-Khaimah and the 14th-century Hormuzi economic boom in the lower Gulf. *Proceedings of the Seminar for Arabian Studies* 32: 151-64.

–2004. Sasanian and Islamic pottery from Ras al-Khaimah: classification, chronology and analysis of trade in the Western Indian Ocean. Oxford: BAR International Series 1248. KERVRAN, M. & F. HIEBERT. 1991. Sohar pré-Islamique. Note stratigraphique, in K. Schippman, A. Herling & J.-F. Salles (ed.). Golf – Archäologie: Mesopotamien, Iran, Bahrain, Vereinigte Arabische Emirate und Oman. Internationale Archäeologie 6: 337-48.

KING, G.R.D. 1997. A Nestorian monastic settlement on the island of Sir Bani Yas, Abu Dhabi: a preliminary report. *Bulletin of the School of Oriental and African Studies* 60 (2): 221-35.

KISTER, M.J. 1968. al-Hīra: some notes on its relations with Arabia. *Arabica* 15: 143-69.

KOROTAEV, A., V. KLIMENKO & D. PROUSSAKOV. 1999. Origins of Islam: political-anthropological and environmental context. Acta Orientalia Academiae Scientiarum Hungaricae 52 (3-4): 243-76.

LECOMTE, O. 1993. Ed-Dur, les occupations des 3^e et 4^e s. ap. J.-C.: Contexte des trouvailles et matériel diagnostique, in U. Finkbeiner (ed.). *Materialien* zur Archäologie der Seleukiden-und Partherzeit im südlichen Babylonien und im Golfgebiet: 195-217. Tübingen: E. Wasmuth.

LECOMTE, O., R. BOUCHARLAT & J.M. CULAS. 1989. Les Fouilles Françaises, pages 29-56 in 'The European Archaeological Expedition to Ed-Dur, Umm al-Quaiwayn (U.A.E.): an interim report on the 1987 and 1988 seasons'. *Mesopotamia* 24: 5-72.

MARICQ, A. 1958. Res gestae divi saporis. *Syria* 35: 295-360.

MOUTON, M. 1992. La Peninsule d'Oman de la fin de l'âge du fer au début de la période Sassanide (250 av. – 350 ap. JC). Unpublished Thèse de Doctorat, Université de Paris I (Panthéon-Sorbonne).

NORTHEDGE, A. 2000. Entre Amman et Samarra: l'archéologie et les elites au début de l'Islam (VIIe-IXe siècles). Unpublished Mémoire d'habilitation à diriger les recherches, Université de Paris I.

POTTS, D.T. 1990. *The Arabian Gulf in Antiquity*. vol 2. Oxford: Oxford University Press.

-1991. The pre-Islamic coinage of Eastern Arabia. Copenhagen: CNI Publications 14.

-1994. Supplement to the pre-Islamic coinage of Eastern Arabia. Copenhagen: CNI Publications 16.

POTTS, D. T. & J. CRIBB. 1995. Sasanian and Arab-Sasanian coins from Eastern Arabia. *Iranica Antiqua* 30: 123-37.

AL-QAYSĪ, R. 1975. Taharriyāt wa tanqībāt athariyah fī dawlat al-imārāt al-^carabiyat al-muttahidah – al-khalīj al-^carabī [Archaeological researches and excavations in the UAE – Arabian Gulf]. Sumer 31: 75-155.

ROBINSON, C.F. 2003. *Islamic Historiography*. Cambridge: Cambridge University Press. SEDOV, A. 1997. Les sépultures de chameaux, in C. Robin & B. Vogt (ed.). Yemen, au pays de la reine de Saba: 21. Paris: Flammarion.

- WATT, M. 1953. *Muhammad at Mecca*. Oxford: Oxford University Press.
- WHITEHOUSE, D. 1998. Excavations at Ed-Dur (Umm al-Qaiwain, United Arab Emirates). 1: The glass vessels. Leuven: The University of Ghent South-East Arabian Archaeological Project.
- WILKINSON, J.C. 1973. Arab-Persian land relationships in late Sasanid Oman. *Proceedings of the Seminar for Arabian Studies* 3: 40-51.
- -1975. The Julanda of Oman. *Journal of Oman Studies* 1: 97-108.
- -1977. Water and tribal settlement in south-east Arabia, a study of the aflāj of Oman. Oxford: Oxford University Press.