SASANIAN PRESENCE AND LATE IRON AGE SAMAD IN CENTRAL OMAN, SOME CORRECTIONS¹

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Summary

ISTORICAL characterisations of the Parthians and Sasanians generally focus on Iranian and Mesopotamian centres, where historical and archaeological outlines are clearest and yield the most information. Toward the geographic periphery of these two successive empires, sources are less clear, the history correspondingly vaguer. One may raise the question, if a given region is periodically nominally under their political, military and commercial control, is it an integral part of these empires, and to what extent does this periphery have a cultural and political identity of its own? South-Eastern Arabia is a case in point. The following notes update a dialogue which began with the quantitative and qualitative leap in archaeological fieldwork in the 1980s and 90s in the Sultanate of Oman and the United Arab Emirates. There is no question whether in the late pre-Islamic period the ethnic substrate of both of these parts of South-Eastern Arabia was basically Iranian – there is no evidence for this. Rather, one asks whether Parthian and Sasanian forces were able to dominate the region militarily and politically, or if they lacked the wherewithal for a wide occupation outside of a few centres. Is the term Parthian/Sasanian Oman simply a matter of editorial policy for certain colleagues, an expression perpetuated by force of habit from previous publications, by a socalled school, a mere convenience for Iran-oriented archaeologists, or does it reflect the real late pre-Islamic historic situation in South-Eastern Arabia?

The archaeology especially of late pre-Islamic South-Eastern Arabia suffers from a historiographic divide: Most of the few who write on late pre-Islamic South-Eastern Arabia work sites in the United Arab Emirates. They generalise about the archaeology in the present-day Sultanate of Oman in terms of their own sites, relying on their own publications. Owing to the nature of the sources, the late pre-Islamic chronology and history in the Sultanate in fact is difficult, as we will see. Although written off as "Parthian/Sasanian Oman", most of the available evidence suggests that central tribal Oman at this time is culturally and perhaps politically a loose unit in itself. The question of the chronology of a culture/period/assemblage

¹ The author thanks J. Schiettecatte and Ch. J. Robin for the invitation to speak at the conference in Paris, "Arabia on the Eve of Islam". At the start, the author provided D. Kennet with unpublished documentation of his excavations, ¹⁴C lab reports, an unpublished study thermoluminescence analysis and answered numerous questions. The author thanks Kennet for providing him with a pre-publication copy of his paper of 30.07.2006 on the decline of eastern Arabia in the Sasanian period. In a 7 page detailed rebuttal distributed at the Paris meeting, the author pointed out many of the points which Kennet made regarding Samad he had made himself in his excavation report of 2001. Following the debate, on 06.09.06 Kennet issued a brief email statement claiming to have altered some of his argumentation for the forthcoming publication announced in AAE, which since has appeared. Although numerous errors mar in that author's text and his new statement, the present author limits himself here to only the more basic points. The value of the present study is that some of Kennet's misunderstandings might also have been difficult for other readers. Arguments can be restated and complemented. In the context of the present discussion it should be noted that Kennet's work on the archaeology of the UAE also is controversial: See Kervran in press. The conventional *ta-marbuta* endings of the place-names have been shortened to a simple a; other diacritics do not appear.

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named eponymously after the place where it was discovered in Samad al-Shan in the eastern province of the Sultanate of Oman combines with the question of the role of the Arsakids and Sasanians in eastern Arabia. How do these groups interact historically?

The author's dating of the Samad period/cultural assemblage in the excavation report can and should be raised, deemphasizing the ¹⁴C assays to better fit the artefactual evidence available. It is not his purpose here to outline a completely new chronology for Samad, which would require considerably more time and space. Without new data, this could only be tentative. He hesitates to add to the ink which has been spilt over the question of chronology and Iranian presence, but a solution along new lines which recently presented itself, seems worthy of a short explanation.

Introduction/State of Research

The sequence of cultural assemblages and historic events which lead up to the advent of Islam in South-Eastern Arabia were scantly known until serious fieldwork began in the region at the end of the 1970s. In pioneering reports published early (Vogt 1981; Weisgerber 1982), the team of the German Mining Museum describe an artefactual assemblage which consists of different grave forms, a limited repertory of pottery forms, iron weapons and stone vessels. Iron artefacts associated with no true writing, just letters, gave rise then to the terminology "late iron age".

First attempts in the early 1980s of the team of the German Mining Museum in Bochum to Oman characterise the then newly discovered finds from Samad seized on artefactual resemblances with those in Iran, in the U.A.E. and on Bahrayn. Using the nomenclature of the time, the team expected the remains of "Hellenistic, Parthian and Sasanian" periods in the Sultanate, as comes to expression in early grant proposals which G. Weisgerber wrote. Instead, a find assemblage came to light with few relations toward the north-west or the north. By 1986, the early dating of the graves (300-0 BCE and perhaps later) first suggested, seemed questionable owing to a lack of stratified finds and work was taken up again. G. Weisgerber and the author conducted a second parallel study which was to help secure the chronology and character of the proceeding early iron age by means of the study of a large hoard of 500 metallic artefacts from 'Ibri/Selme in central Oman (Yule & Weisgerber 2001). At that time it was not yet possible to identify and deal with finds transitional between the early and late iron age. Nor was it clear where the Samad sites were distributed geographically, since until 1980 only one was known (Samad cemetery S10). Over the years the data increased dramatically: At the end of the Samad project in 1995 some 210 late iron age graves of a total of 360 had been investigated. Today 59 sites at 29 localities containing finds as known at Samad are scattered over an area of some 80 000 km² (Yule 2005), mostly in the Sharqiya (eastern province). A distributional area as large as Denmark is of consequence (Yule 2001a, 2005, 2006). Today, while no-one can seriously challenge the existence of the Samad assemblage, its dating is problematic.

At the beginning of the second Samad project in 1988, the question immediately arose whether or not the area where so-called Samad sites were located also contained sites of other contemporary cultures/artefactual assemblages. Such sites were suspected on the island Masira, for example. A study written in 1988 (Yule & Kervran 1993) was conceived at a time when basic questions about the nature of Samad remained unanswered, such as its distribution, relation to other find assemblages, dating and possible artefactual similarities with finds of the early iron age. A clear view of the archaeological makeup of late pre-Islamic Sultanate of Oman was at that time hardly possible, and changed dramatically with successive mapping attempts (Fig. 1). The study of 1988 pointed out to the presence of different archaeological complexes. Samad is by no means the only cultural assemblage in central Oman in the centuries prior to the coming of Islam. This and other then new sites and finds (e.g.

Yule/Weisgerber 1988) represented a major step forward for iron age regional studies, but also for those of the earlier periods. In what has become the Sultanate of Oman, late pre-Islamic cultural complexes include the Northern Late pre-Islamic Cultural Assemblage (NLPC, Yule 2001b), best known from sites in the U.A.E., Samad cultural assemblage, late iron age culture of the southern province Zafar (ibid.) and random finds without a clear cultural association, for example in some of the individual Bawshar graves. Suhar is a special case with some pottery of the NLPC, its own wares, and some Iranian and Indian imports.

In the early 1980s reports on the late pre-Islamic sites, finds, and distribution area for Samad were not lacking (Weisgerber 1982; Vogt 1984; Yule 2001a & 2005 for the bibliography). How were they received by other authors? D. Potts maintains (2002: 647) that he had little access to the preliminary reports on Samad only two years prior to the appearance of his handbook of 1990, and Samad is relegated to a brief seven pages as a part of the Parthian period in South-eastern Arabia. Had he asked, the author would have sent him texts and unpublished images for his work. By comparison with the very detailed and elaborate treatment of his own research at ed-Dur, that in late pre-Islamic Oman unfortunately is marginalised with little comment. In terms of sites and finds, the Samad assemblage is larger than the NLPC, but its sites are not urban in character, as for example are ed-Dur and Mleiha. A central point is that only a few artefactual correspondences are in evidence between Iran and the central part of Oman, which speaks against Potts' nomenclature.

Regarding the Samad project as a whole, it first should be mentioned that the field efforts of the Bochum team depended as much on luck as on skill. For example, the lack of sites and graves which clearly postdate 300 BCE was puzzling. Given the large number of robbed tombs which we excavated, the possibility loomed that there would not be enough intact contexts to enable a valid picture of central Oman's late iron age. For this reason an additional excavation season (1991) was conducted, to increase the volume of study material. In fact, the data for the chronology contain contradictions and in writing up, a major task was to reconcile these with each other (Yule 2001a: 141-163; 2005: 303).

Major Issues

As some might have it, the Samad complex plays no role in the history of Oman. Kennet published a paper (2005: 108) which purports to, "...examine the archaeology of the Sasanian and early Islamic periods in historical 'Uman (modern Oman and the United Arab Emirates)" in which he describes late pre-Islamic Oman omitting all of the work of the Bochum team on numerous sites in Oman³. For example, his map of Arabia inexplicably omits the numerous Samad sites. Where Kennet lists the sites related to the large Mleiha and ed-Dur in the U.A.E., the important sites of 'Amla/al-Fuwayda and al-Baruni in the Sultanate also are omitted, without comment, although they show the same basic find assemblage as those in the U.A.E. (Yule 1999a). Kennet's characterisation of the archaeological situation "in historical 'Uman" is at best misleading as a result of its selectivity of sources.

The results of the Samad and Selme reports regarding the late pre-Islamic period were discussed both positively and negatively. In the circle of colleagues working in the U.A.E. the Bochum projects on the iron age find little resonance. One publication denigrates the renowned editorial series, Prähistorische Bronzefunde, per se as, "a perfect illustration of the collection of typological data with little or no attempt at interpretation" in which the publication of the early iron age Ibri/Selme hoard of metal artefacts was about to appear (Potts 1998: 182), which is surprising since this useful series comprised of 150 monographic studies enjoys wide use, and is a standard in European prehistoric studies. But Potts ameliorates this negative impression somewhat in his review of the final report on the Selme hoard (2004: 157-158).

³ The problem lies with the quality of the vetting of *Antiquity* as well as that author's work.

The most controversial part of the Samad write-up (Yule 2001a) is that dealing with the chronology. A main difficulty for comprehension is that it appeared mostly in German, which few have the patience to deal with, and the sources for a chronology are contradictory. This study was designed on the lines of biological identification books, the find classes ordered by taxa. It is no more difficult to use the report than other models upon which it draws, including A. Furumark, *The Mycenean Pottery* (1939). Haerinck (2003) and Potts (2002) challenged the late dating of graves and finds on the strength of the ¹⁴C determinations because they were unsupported by artefactual comparisons. Their reviews deserve a word of thanks from the author. Potts' review of the Samad report contains understanding, but the criticism is partly ritualistic and pro forma. For example, he doubts that scholars will use the classification abbreviations (p. 646), although they are a simple means to cite the many different artefactual classes. "Potts allows a disproportionate amount of attention to individual artefacts which are then minutely characterised as to shape, colour, ware, provenience etc. with a corresponding lack of attention to the concept of type and assemblage" (Højlund 1992: 2). This also applies to his evaluation of the Samad site report.

Potts is however, certainly right that the author included all of the material which he excavated between 1988 and 1991 in the report, even if it was not strictly relevant to the iron age. It seemed better to make it available as soon as possible. Based on Potts' general work published in 1990, more negative on the Samad publications is Kennet (2006) his comments resemble, "...a review of *Lady Chatterley's Lover* in the magazine *Field and Stream*"⁴. For example, given the author's own caveats regarding the difficulties especially in his report of 2001, one is taken aback at the contradictions which Kennet somehow seems to discover in the chronology since the chapter on chronology does nothing else than try to reconcile these (2006). He also finds fault with the author's citing of his ¹⁴C determinations from the laboratory sheets although none exist (2006: 15)⁵.

The nomenclature used in the discussion of Samad plays a role in the reception of the site reports. "Yule has argued for the existence of a distinct "Culture" at the Samad cemetery and at numerous other sites in the region of northern Oman..." (Kennet 2006). Thus without argument, evidently one can challenge whether Samad is a culture or any kind of assemblage. The author, however, sees no reason to discount either the Samad, Lizq/Rumayla, Wadi Sūq, Harappa, Aztec or any other culture as such without good reason: Samad has a regularly reoccurring set of constituent archaeological attributes. In this context Kennet omits the fact that others, such as Häser, Schreiber, Vogt, Weisgerber refer to these attributes in a relative time frame: e.g. "Samad civilisation". Omitting their literature in this particular part of his polemic of 2006, serves to cast doubt on the existence of Samad as a cultural entity. Its dating is a separate issue (e.g. Schreiber in press).

The term "culture", as in "Samad culture", may be offensive to certain readers. An American-style cultural anthropologist might easily find the wide usage of "culture" in archaeological circles to be anarchic. The *Oxford English Dictionary* gives surprisingly little information on this concept, which perhaps in developed form is not very old: *cultural*: "relating to a civilisation esp. that of a particular country or a particular period" (supplement p. 258). If one alters the word "culture" to "assemblage" or "period", this might make it palatable to some readers, although in the archaeological literature of recent years "culture" and "civilisation" occur in an amazingly wide variety of contexts interchangeably (P. Eltsov

⁴ Hyman Rickover with regard to the negative reception of a paper of his, that in fact was a major success in terms of naval planning.

⁵ His list of "erroneous" radiocarbon determinations contains errors itself which arise from citing ones made in D. Potts' study of 1992 (e.g. in fact, bln-2747 is from grave S101130) instead of citing the author's assays and lab reports which the author had sent him. There are neither missing assays nor extra ones in the publications Cf. Yule & Wagner in press for a correction on Kennet's "correction". Here and elsewhere, if he would take the trouble to read the text, his questions would be resolved.

personal communication). The reason that the author referred to a "Samad culture" in the first place is that this assemblage is clearly neither Hellenistic, Parthian nor Sasanian, which for good reason many would accept as cultures since they have numerous clear attributes of their own. Moreover, the attribution of sites to a given well-defined cultural assemblage for dating purposes is a widely used archaeological procedure, in itself not objectionable.

In an attempt to correct difficulties in the chronology, four years after the appearance of his excavation report on Samad, the author reiterated the main problems with regard to the dating system in an article (2005). Here, the problem of 25 ¹⁴C assays that dated down into the 10th century CE still remained unresolved. While the author recognised certain obviously bizarre assays from Samad graves, initially he accepted late ones, because severally they awakened confidence. The author now submits that contradictions in the evidence can better be rationalised by further de-emphasising the radiocarbon evidence, since it contradicts the artefactual parallels too strongly. While a few ¹⁴C determinations seem in fact valid and corroborate datings by means of artefactual comparisons, it is difficult to choose which assays are valid, since more than half seem too late compared to artefactual datings.

Relative Chronology

A relative chronology for Samad is difficult because datings are rarely stratigraphic, but rather rest on radiocarbon and comparison with datable artefacts combined with a correspondence analysis of the finds and contexts. In order to arrive at a relative chronology, the author attempted a seriation of graves and their finds. Seriation, a sorting procedure which is carried out in virtually every institute for prehistory in Europe, finds wide usage in archaeology. It can be used for virtually any category of data and for a variety of different purposes. At the risk of repeating results already published, the main difficulty with the seriation in the Samad cemeteries is that the majority of the graves were robbed, so that often artefact classes preserved in a given grave were unique or rare. This need not disqualify seriation, but it weakens its validity. Thus, the artefact classes combine imperfectly with those in other contexts (Yule 2001a: 153). Otherwise the material in the graves is suited for classification and seriation-sorting. Pairs of plausible presumably contemporary grave/find combinations exist early (gr. S2137 and S2138) and late (S3011 and S3012) in the series. The author's study of 2005 attempts a relative and absolute chronology based artefactual comparisons and ¹⁴C data. If the latter are removed, the relative chronology seems basically unchanged.

Absolute Chronology and outside Comparisons

It is useful to show the main artefactual synchronisms graphically and update them as an aid to comprehension. Artefactual synchronisms⁶:

1. Vessels with early iron age vessel fabric and shapes occur in late iron age graves in Samad cemetery S10, without being holdovers. For this reason they date early in the Samad sequence. Such include the early iron age hard fabric (Fig. 2.1 and 2.2) known mainly in forms atypical for the late iron age. The punch decoration and horizontal lug in Fig. 2.2 also are related to early iron age forms. Bowls with constricted rim, such as in Fig. 2.3 from grave S3004, suggest an earlier dating in context with certain other finds in that grave. The constricted rim brings to mind early iron age vessels of the pottery classes G12.01-07. Similarly, in the early iron age "honeycomb" cemetery at Bawshar in grave B065 (Costa & al. 1999) vessels occur in the levigated, temperless balsamarium fabric of the late iron age, which suggests that these bowls occur late

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⁶ Taken largely from Yule 2001a: 155-157 and revised.

within the early iron age sequence (Fig. 2.4 and 2.5).

Fig. 2.6 shows a bowl with a constricted rim from Qala'at al-Bahrayn trench 1959, period IVc or IVd (c. 500-300 BCE) which comes close in shape to Fig. 2.4 from Bawshar grave B06. This provides a dating for at least one vessel and grave B06.

- Fig. 2.7, assigned to Qala'at al-Bahrayn period Va (300-200 BCE), resembles Fig. 2.5 in shape from grave B65, a stratigraphically late grave at Bawshar. These shape comparisons between Bahrayn and Bawshar are by no means chronologically precise and show only chronological tendencies. One might question to what extent the balsamarium ware begins early, predating the late iron age or to what extent bowls with constricted rims reflect a very conservative development. This point has been argued in another place for such a shape (Yule 2005: 306). Thus, bowls with constricted rims are a hallmark of the entire early iron age. At the other end of the time scale M. Pfrommer (1987: 55) documented bowls with constricted rims in metal down to c. 325 BCE in Egypt. Later examples appear at Samad (Fig. 2.8), where the dating derives from other finds with which the bowls occur in the graves. On the basis of early iron age comparisons it would be ill-advised to simply push them back into the early iron age, disregarding their accompanying finds. Such situations belong to the chronological contradictions of the Samad assemblage.
- 2. Pattern burnished vessels at Samad on vessels from the early grave S2137 (cf. Fig. 3.1) find correspondences at ed-Dur and Mleiha (engobe partiellement lisée, Mouton 1992: 45-46 fig. 12.1-9, 17.1-7) in the common ware of période pre-islamique récente A (PIR. A), which is dated from the 3rd century to the 1st half of 2nd century BCE. Unfortunately in none of the published drawings of vessels from Mleiha is this patterning visible.
- 3. Arrowheads of the P14 class from early Samad graves such as S2137 and S2138 (Fig. 3.2 and 3.3) compare to certain ones from Mleiha PIR. A (Fig. 3.4 and 3.5).
- 4. Balsamaria of the morphologically heterogeneous class G07.01 from Samad and sites of the Northern Late pre-Islamic Culture (Yule 2001b for this term). Fig. 3.6 from grave 'Asima As24 in the U.A.E. is similar in shape with some 10 examples from the Samad assemblage, for example Fig. 3.7 from grave S2104.
- 5. A balsamarium of the G07.06 class from Samad grave S3015 (Fig. 3.8) is identical to one from ed-Dur *chantier F* outside of the building (Fig. 3.9). The latter vessel is thus not dated by context. Mouton (1992: 131 fig. 113.8) assigns this grey ware bottle to his PIR. D (c. 225 1st ½ of the 4th century CE). The vessel from Samad is an import, to judge from the unique ware and must be of the same date.
- 6. A small wheel-turned bowl from grave S10607 (Fig. 3.10) of the class G15.13 resembles closely another hand-made one from the early iron age honeycomb cemetery at Bawshar grave B59 (Fig. 3.11).
- 7. In 1987 gardeners uncovered the partial inventory of a damaged late pre-Islamic grave in Sama'il/al-Baruni, which is designated Bar1 (Fig. 4 and 5). The MeOB12 bronze bowl shows a hunt scene of so-called Post-Phoenician type which is considered to date to 200-400 CE (Fig. 4.1). This dating of this artefact conforms with that of the others in the grave. A G08 variant storage vessel consists of the green clay known from ed-Dur, rarer in Mleiha (Fig. 5.11 and 12). The greatest occurrence of such vessels is in the 3rd and 4th century (citing R. Boucharlat, letter 16.07.1989). The P11 arrowheads (Fig. 5.10) correspond to type D ones of M. Mouton (1990: 98 table 6). There can be no doubt as to the cultural interconnections of the Bar1 inventory to sites such as ed-Dur, the NLPC.

- 8. A S05 rim-flanged double-edged sword came to light in Samad grave S101125 (Fig. 6 right) which has caused considerable controversy regarding its age. Based on ¹⁴C, the author first dated it and its relatives around the 5th century CE (2001b: 199). Details of its manufacture play a role in the dating. Potts writes that this sword was cast (1998: 197), which is only partly correct. Only the blade and handle appear to be one piece. It has a rim-flange, two sling devices made of iron, the wooden scabbard itself having decayed. The rimmed grip flange is welded to the sword, as one sees best in examples during excavation which have partly rusted and sprung apart (Fig. 7.1). This sword dates probably earlier than expected as a result of others which the author excavated from graves at 'Amla/al-Fuwayda (1999a: 139) which may belong in PIR.B (2nd 1/2 of the 2nd century - 1st century BCE) to judge from accompanying finds. One such rimflange sword grip from Mleiha was published years ago (Fig. 6 below), which raises the dating since settlement appears to terminate there in the 1st ¼ of the 4th century CE. Be this as it may, D. Kennet picked up D. Potts' dating of the sword as a Sasanian import (Kennet 2006: 16 citing Potts 1990, 295 and from a periodical not available to me) with a "double locket system datable to the late fourth century at the earliest". Most of the evidence for S05 swords and their relatives point to a local origin in SE Arabia. As for the so-called double locket suspension system, this means simple a scabbard slide suspended over the shoulder by means of a sling connected to the slide at two points. Despite what W. Trousdale wrote on its appearance in Western Asia during the reign of Shapur II (died 379), it is not narrowly datable and ranges in date from the 1st millennium BCE into the medieval period (cf. Pritchard 1969; fig. 36, 170, 174, 184, 185, 351, 352, 356 etc.). In 1985 Potts himself published an example in another context which influenced him⁷: Fig. 7.2 shows a Maciya (one from Maka) from the 6th-5th century BCE Achaemenid façade of tomb I of Darius I at Nagsh-i Rustam near Persepolis, which Potts himself cited in 1985. Swords slung over the shoulder occur commonly in Assyrian art (Parrot 1961: p. xvii, 14, 41, 55, 56, 56, 76, 77, 104, 107, 114, 123, 14). At least one example shows that the sword sling hangs from one point (p. 56), but in other cases, owing to the scale, it is difficult or impossible to determine whether one or two sling points are used. In archaic Greek vase painting prior to the 5th century depictions of sword slings are also common (Charbonneaux & al. 1971: p. 38, 47, 48, 49, 68, 73, 85, 88, 91, 103 etc.), although most either are in a small scale or appear to be rather hung from one sling point. Examples also are known with two sling points: (cf. Greek telamon but more particularly aorter). One 7th century Greek example (Charbonneaux & al. 1971: 47 fig. 50) shows a scabbard slide hung so that it only can hang from two points although both are not visible. While a sword sling is not specifically known in Akkadian (agukhkhu is a candidate). The Latin word, cingulum is known from Roman contexts. At the other end of the time-scale the jamila is mentioned in medieval classical Arabic poetry (Yule 2001a: 199 citing Schwarzlose 1886: 55, 208) as a means to wear a sword. Swords worn over the shoulder and hung at two
- 9. No sherds of Samad type came to light in Kush/U.A.E. (Kennet oral communication) or Suhar/Sultanate of Oman, the only sites in the region with controlled excavation which yielded layers dating to the 2nd ½ of the 1st millennium CE.

points is a simple and practical feature which is hardly datable.

Difficult and dubious synchronisms:

G11 glazed bottle from grave S3032 (Fig. 7.3) resembles two others (Fig. 7.4 and 7.5) from a grave in War Kabad/Luristan found together with two drachmas of Ardashir (224-241 CE,

⁷ Potts 1998, 195 fig. 10 in fact is not a drawing from tomb II, but is rather a composite drawing from the renderings of a Maciya in the different tomb facades, as Potts cited, G. Walser (1966),

Vanden Berghe 1972: 6 fig. 2, pl. 1.3-4). It also resembles glazed vessels from Dura Europos (Fig. 7.6 and 7.7), and Seleucid BI-ware from Failaka. Since the green-glazed pottery from Failaka belongs to the same tradition as that from Dura Europos some 500 years later, G11 glazed bottles certainly have a long time of currency (Yule 2001a: 155 note 1472 regarding these comparisons and their dating validity).

Since different dating options are open, a granulated silver earring (O1) is not clearly datable (Yule 2001a: 157). For this reason, the author excluded the earring in question in the synthesis of potential dating criteria (2001a: 158-160).

Søren Fredslund Andersen's new and yet unpublished doctoral thesis illuminates the question of potential comparisons between Samad and Bahrayn (Andersen 2005) complementing those which the author made in the site report (e.g. 2001a: 75). Andersen wrote to the author in 2005 and again in 2006 that the Samad assemblage is distant in terms of artefactual comparison to Bahrayn. The parallels between the two areas consist of small glazed vessels. Andersen (05.08.2006): "There are a few, 2-3 parallels in glazed ware in your Samad collection, but it is out of c. 120 pottery types from Bahrayn covering the period from c. 200 BC to AD 450, so the collections look very different to me. The composition of grave goods is also different, since weapons are almost absent in Bahrayn".

Sasanian presence

The Parthians are more elusive than the Sasanians with regard to their presence in Southeastern Arabia and find direct mention only in the Periplus Mares Erythreae. One must assume that they had the financial and military means to occupy a few centres. Our sources allow little more insight into the amount of Sasanian control in Oman. On the other hand, one major settlement yielded quantitatively significant Sasanian finds and is identified in certain historical sources, Suhar (24°22'N; 56°45'E). Moreover, such suggest that Suhar and the other foreign capital, al-Rustaq (23°24'N; 57°26'E, itself a Persian place-name), were the main Sasanian centres in Oman. 'Arja' on the Batina coast (24°27' N; 56°34'E) also seems to be an Old Persian name (personal communication V. Piacentini) and occurs in diverse ancient fortified places in Iran including Bam, Kerman, Shiraz, Tabriz, Tehran (Perry 1987). Unfortunately, nowadays in this highly disturbed mining district ancient remains of any kind are rare (Hastings & al. 1975: 13, 21 fig. 7 right; Costa & Wilkinson 1987: 93-144). A stepped terrace first considered a ziggurat later turned out to be a Sasanian fort, based on a ¹⁴C determination (Ham 1044, 510/530 CE Masca corrected, Weisgerber 1987: 149 table 14). One assumes that as in other places, such as the Yemen, there was no real Sasanian control outside the towns and main roads. This is characteristic of the Sasanian control in Arabia, for example in the Yemen. Kennet's assertion that: "the only Sasanian period archaeological site known ... was Jazirat al-Ghanam" (Kennet 2006: 109) found little understanding at our Paris conference, especially from the excavator of Suhar, M. Kervran. Since 1958 and into the 1970s Suhar yielded substantial published finds of Sasanian type, in the first detailed report appeared 1984 and later in 2004 (Kervran 2004: 271-275). Several finds from the earliest levels also contain parallels at ed-Dur (Kervran 2004: 272). In any case other categories of historical analysis cannot be simply dismissed in order to achieve a clear historical picture.

Moreover, Kennet (2006) dismisses J. Wilkinson's fine but dated analysis on late pre-Islamic settlement in Oman, arriving at the understatement that the "local Omani historical tradition is represented most importantly by al-'Awtabi's *Kitab Ansab al-'Arab*". Wilkinson himself overstates the case regarding the importance of this source for early Oman: Without confirming accounts by al-Salimi, al-Ṭabariand al-Baladuri, 'Awtabi's work would be an unsupported curiosum. In fact, these various works cite each other, sharing entire passages. Kennet cavils that only part of the *Kitab Ansab al-'Arab* was edited by M. Hinds. This argument does not cast doubt on this source or Wilkinson's knowledge of Arabic. The *Kitab*

Ansab al-'Arab is no more problematic than any other Arabic text in this thematic complex. If this is the false information which Kennet alludes to on the first page of his text (2006), then such doubt is unconvincing because Wilkinson brought too many different informational fragments together into a historic picture of settlement in the early 1st millennium in the central part of Oman that one can simply dismiss the tribal settlement and its relations with the Sasanians. Wilkinson and others understand the Sasanians to be present in central Oman early in the Sasanian period and their influence climaxes during the governance of Kawad (488–531) (Wilkinson 1977: 131).

With regard to Wilkinson's thesis about the great economic expansion of the Sasanians in central Oman, in Kennet's text (2006) Kennet does, however, correctly point out, that Wilkinson had no real archaeological basis for his historic reconstruction. Prior to the discovery of the Samad assemblage, which falls largely in the area of his historical interpretation, Wilkinson had no recourse than to rely on folktales to support his historic observations and analogies.

Kennet (2006) arbitrarily excludes Wilkinson's theory that the late Sasanian period was a time of *qanat/falaj* building and proposes that the *falaj* originated 1500 years earlier in the EIA by virtue of dated examples in the U.A.E. Origin and time of expansion, however, are two different matters. His argumentation ignores the evidence of, for example, dated 'aflaj (Yule 2001a: 180, 191-193) such as the falaj al-Maysar M46 which dates to the late EIA (Yule & Weisgerber 1999: 100-101; Yule 1999b: 133, 137 Fig. 16). Kennet also ignores the figh documents of the first Imamate in which falaj-shareholders with Iranian names are cited (Wilkinson 1983: 182-183). In fact, for Wilkinson's falaj chronology there is no evidence where he describes its development first on the west and then east side of the Jabal Akhdar with the help of the siphon falaj (Yule 2001: 192). In fact the dating of the siphon ganat/falaj is open to question even in Iran where more material is available for study. Wilkinson's whole idea seems too schematic to be plausible. Kennet's non-articulation of these key arguments does little to further his theses about a lack of Sasanian presence in the central part of Oman. The high date production of the Samad period is only possible by means of *qanat* irrigation. Thus, in the early 1st millennium CE the falaj/qanat was unquestionably a prominent part of the landscape.

Based on the dramatic expansion of the population during Sasanian times in the Diyala region of Iraq, by analogy, the period of Sasanian presence in central Oman is not necessarily a poor one. The population there expands in the Diyala to 35 times the density and distribution relative to the Achaemenid age. "This was a time when a single city, Ctesiphon, embraced a larger area within its walls than the total area of the 130 known sites in the entire basin during the Isin-Larsa period, the apogee of earlier antiquity" (Adams 1965, 71-73; confirmed in Susiana by Wenke 1987: 255). Furthermore, Adams's surveys indicate a drastic decline of settlement size and density just prior to the onset of the Islamic age there (Adams 1965: 74). These same developments may be valid for central Oman. Such weighty arguments lie fairly within Kennet's topic, are published prominently and are readily available, but find no mention in his argumentation.

Conclusions

The Samad assemblage cannot be wished away, but its dating can be further discussed. Similarly, although the dating evidence is variegated, there is enough for the presence of the Sasanians that they doubtless occupied parts of Oman. If one simply dates Samad by means of the argument that owing to a few parallels it dates to the same time as the NLPC – until the 1st ½ of the 4th century – this leaves the question open for many Samad grave inventories that are not narrowly dated. This argument does not help us to construct a model to explain when both cultural assemblages ended and why this happened. The terminal date of the NLPC need

not apply for Samad. There is little sense in trying to use the ¹⁴C determinations already taken for Samad for further study. Together with G. Wagner, in a separate study which has been circulated prior to publication a possible project by means of several thermoluminescense datings seems a possible alternative.

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Fig. 1: Sites mentioned. The squares on the map are 'Samad' and the black dots are of the Northern Late pre-Islamic Cultural Assemblage.

Fig. 2

- 2.1 Pottery from Samad grave S101116, Department of Antiquities = DA 5916;
- 2.2 Grave S101116, DA 5915;
- 2.3 Grave 3004, DA 9740;
- 2.4 Bawshar grave B06, DA 7562 (drawing: L. Couvert);
- 2.5 Grave B65, DA 7435 (drawing: L. Couvert);
- 2.6 Qala'at al-Bahrayn trench 1959, per. IVc or IVd (F. Højlund & H. Andersen 1994, fig. 1204);
- 2.7 Qala'at al-Bahrayn trench C, per. Va (F. Højlund & H. Andersen 1994, fig. 1316);
- 2.8 Samad grave S10815, DA 12118.

Fig. 3

- 3.1 Pitcher from grave S2137/2, DA 9324 (drawing: I. Steuer-Siegmund);
- 3.2 Arrowhead from grave S2138/3, DA 9640.5 (drawing: I. Steuer-Siegmund);
- 3.3 S2137/1, DA 9630.4 (drawing: I. Steuer-Siegmund);
- 3.4 and 3.5 Arrowhead from Mleiha PIR A;
- 3.6 Balsamarium from 'Asima As24 (M. Mouton 1992, fig. 23.1-4);
- 3.7 Balsamarium from grave S2104, DA 9328 (drawing: I. Steuer-Siegmund);
- 3.8 Balsamarium from grave S3015, DA 10677;
- 3.9 Balsamarium from ed-Dūr *chantier F* (O. Lecomte & al. 1989, p. 36, fig. AC.3);
- 3.10 Bowl from grave S10607, DA 11199 (drawing: I. Steuer-Siegmund);
- 3.11 Bowl from Bawshar grave B59, DA 7450.
- Fig. 4: Sama'il/al-Baruni grave inventory Bar1 (drawings 4-6: I. Steuer-Siegmund).
- Fig. 5: Sama'il/al-Baruni grave inventory Bar1.
- Fig. 6: Late pre-Islamic swords excavated from 'Amla/al-Fuwayda (graves Fu16, Fu19, Fu12), Mleiha and Samad grave S101125.

Fig. 7

- 7.1 Excavation photo of 'Amla/al-Fuwayda grave Fu10, sword grip (after E. Schmidt 1970, fig. 47);
- 7.2 Representation of a Maciya throne bearer from the façade of the tomb of Darius I at Nagsh-i Rustam;
- 7.3 Glazed "perfume" bottle from grave S3032, DA 11384 (drawing: I. Steuer-Siegmund);
- 7.4 and 7.5 Glazed "perfume" bottle from Luristan/War Kabud gr. 1 (after L. Vanden Berghe 1972, p. 6, fig. 2);
- 7.6 and 7.7 Glazed "perfume" bottle from Dura Europos (after N. Toll 1943, p. 42, fig. 23: 1931.456, I-246);
- 7.8 and 7.9 Glazed "perfume" bottle from Failaka (L. Hannestad 1983: pl. 29.301 and 302).

Key words:

Central Oman

late iron age

Northern Late pre-Islamic Cultural Assemblage

Parthians

Paul Yule

Samad

Sasanians