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FURTHER CONSIDERATION OF BRONZE AND IRON AGE SETTLEMENT PATTERNS AT SALUT

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Introduction

The excavations at Salut are providing important data for understanding the development of the Iron Age site during various phases from c. 1300 to 300 BC. The dating of the site is based on the relative age of artefact assemblages (primarily pottery) according to stratigraphic context and, when possible, complementary absolute C14 dates. The results can then be assessed alongside comparable data from other sites. The data acquired so far make Salut a key site for characterizing the Iron Age in Central Oman, where the number of excavated Iron Age sites is quite limited. In addition, the data indicate a need to revise the chronological/cultural framework for the Iron Age in South East Arabia on a wider scale that encompasses the northern part of the Oman peninsula, and perhaps alternative explanations need to be found for the appearance of different Iron Age pottery assemblages found in different places but, nevertheless, at approximately the same time¹.

A further objective of the Italian Mission at Salut is to gain an understanding of how the Iron Age site relates to earlier sites located nearby. In fulfilment of this goal excavations on a more limited scale have been conducted at an Early Bronze Age tower (ST1) and a number of tombs on Jabal Salut (JS1-3). The excavation of ST1 has shown that it was occupied in the latter half of the third-millennium and re-occupied in the Early Iron Age c. 1300 BC. The excavation of the tombs shows them to have been built in the early third millennium BC and, in some cases, continuing to be used throughout the 3rd to 1st millennium BC. The re-use of the tombs on Jabal Salut during the early second millennium BC (Wadi Suq period) raises some problems because no corresponding evidence for settlements of this date has been found at ST1 or Salut. The apparent lack of settlement in the early second millennium BC is problematic and needs to be solved. It might prove instructive, therefore, to compare Bronze Age and Iron Age settlement patterns in the area surrounding Salut and other adjacent locations that would have been subject to broadly the same environmental conditions. A first step in this direction was the identification of a substantial Iron Age site on Jebel al-Agma,

¹ The three-fold division of the Iron Age period proposed by MAGEE (1996), based largely on excavations at Tell Abraq and data from other sites in the northern UAE, and for some time widely applied to the whole of South East Arabia, will clearly require discussion and revision, as was anticipated at the time of its formulation. Some suggestions have already been proposed by Phillips 2010.

a short distance east of Salut in the Wadi Bahla². This site also lies in close proximity to a number of third-millennium towers but, as at Salut, there is no apparent evidence for any settlement dating to the early-mid second millennium BC.

In the initial survey of the Wadi Sayfam and the Wadi Bahla, conducted in 1973 by Harvard University, a concentration of Bronze Age sites was recorded in the Wadi Sayfam and Wadi Bahla in the area near to Bisya (HASTINGS *et al.* 1975). Salut, recorded as BB15, was the only Iron Age site mentioned in this area (HUMPHRIES 1974: 51). In the Wadi Bahla, however, a second Iron Age site, recorded as BB-4, was located further north in the area south of Bahla town (*ibid.*: 52). The small collection of pottery from BB-4, published by the Harvard team (*ibid.*: figs. 6-7), appeared to show clear similarities with the pottery from Salut. The precise location of BB-4 was not clear from the published reports and, therefore, in anticipation that its date and location might provide some comparative data regarding Bronze and Iron Age settlement patterns, an attempt was made in February 2010 to find the site. This objective was fulfilled and it became immediately apparent that this effort was worthwhile because the site has been largely destroyed and it is doubtful that the remaining vestiges of the site will survive for much longer. The same applies to three adjacent hills nearby, which also bore traces of an Iron Age occupation that was probably a continuation of BB-4. The Iron Age occupation was indicated by a large amount of Iron Age pottery and evidence of an earlier Bronze Age presence was also present.

As already stated, the site that fits the description of BB-4, has been largely destroyed and the nearby area with evidence of Iron Age and Bronze Age date is extremely vulnerable; portions of the hill slopes have been bulldozed in order to provide a football pitch and another area is used for waste dumping. This situation led to the decision to conduct further surveys in the area. This turned out to be an even more pressing necessity than initially thought, and by the time of a second visit to the three hills and football pitch site, in November 2010, a fenced area enclosing more than one third of the site appeared to be destined for further bulldozing and new building works.

The data collected during these surveys provide the focus of this paper and will hopefully contribute to the discussion about Bronze and Iron Age settlement patterns in the vicinity of Salut and other nearby areas.

Looking for BB-4

With the aim of determining settlement patterns and comparing the characteristics of site location between different Iron Age sites in the Wadi Bahla and Wadi Sayfam, the substantial settlement recorded as BB-4 by the Harvard team in 1973 could not be overlooked.

The site, located «two kilometres south of the town of Bahla on the edge of the wadi bed», was described as extending«some four hundreds of metres along the wadi bed»³. As a result of field-walking, the site was eventually identified approximately 2.5 km south of the southern outskirts of the town of Bahla, on the inner western bank of the wadi. Several Iron Age sherds were collected on the slopes of a wide terrace, a newly built extension of

² PHILLIPS *et al.* 2010

³ HUMPHRIES 1974: 52.

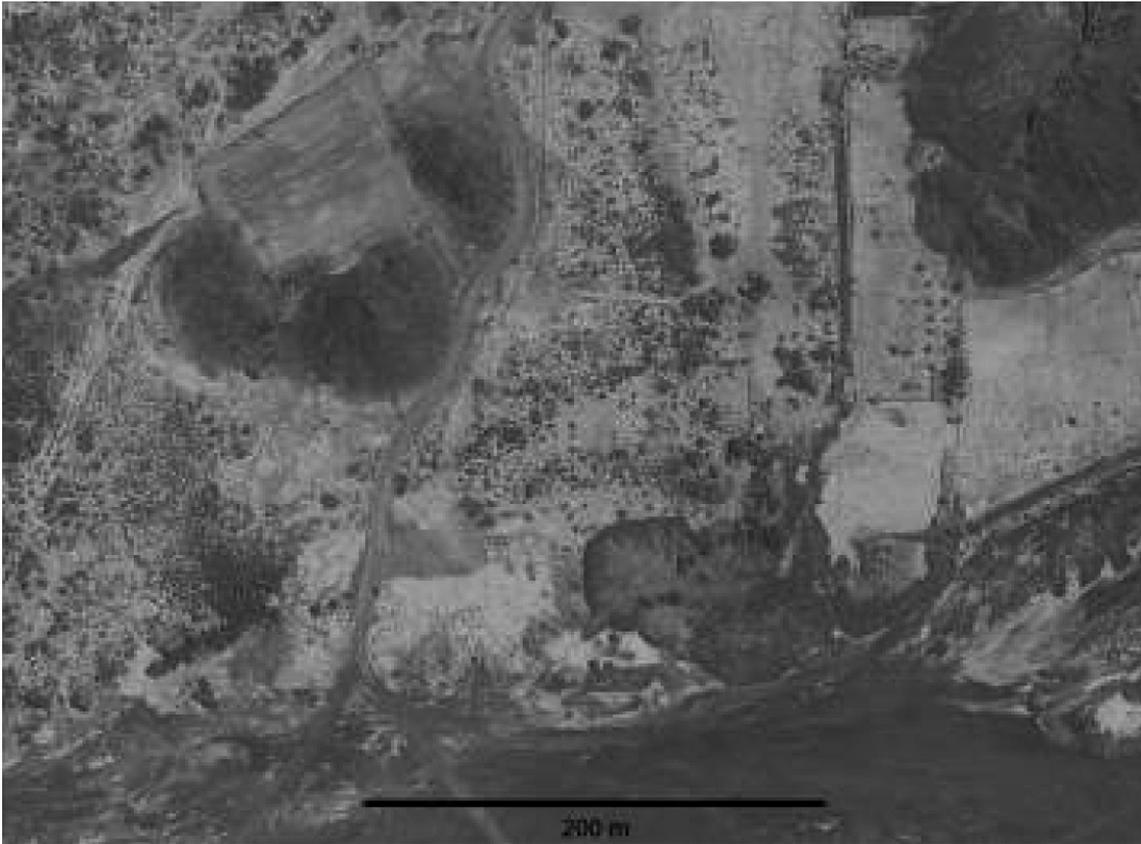


Fig. 1 - The bulldozed terrace on the bank of wadi Bahla, possibly to be identified with BB-4 (bottom centre), and the nearby three hills site with the football pitch obtained by partially bulldozing the hills slopes (top left).

the natural bank, made up by the re-deposition of soils coming from the bulldozing of an adjacent area. Additional Iron Age sherds were scattered in the area, which appear to confirm the identification of the site with BB-4. Pottery, however, was not perhaps as abundant as one might expect from a potentially large site such as BB-4 was reported to be, but building activity has deeply impacted on the area and hence a significant loss of data.

Fortunately, a more promising scatter of sherds was found at the foot of a nearby hill, which is one of three adjacent small rocky hills, two of which are joined together and the third a few meters away, which in plan form a «C» shape (fig. 1). From this area a large number of Iron Age sherds and a few unmistakable Bronze Age sherds, were collected. Along the slopes of the two joined hills, a few collapsed and eroded stone walls could still be traced. On the third hill, however, there was no evidence for any building remains despite a rich deposit of Iron Age material exposed in a short section left by the bulldozing activity. Taking into consideration just the two joined hills, the site spanned some 130 x 70 meters, to which can be added approximately 65 x 35 meters that comprise the third hill.

In the original description of BB-4, there was no mention of the site extending to the three adjacent hills and neither was there any mention of Bronze Age pottery being present. In



Fig. 2 - Bulldozing and waste dumping on the southern slope of the FP site.

order to reflect the wider extent of the site, it was considered appropriate, therefore, to label the site FP («Football Pitch»), rather than directly calling it BB-4.

In contrast to the Iron Age pottery, the Bronze Age pottery was not scattered over the hills, but concentrated in the earth bank formed by the earth pushed aside to form the football pitch. Bronze Age sherds were not abundant, and a few of them probably derived from one vessel; this could indicate that they originally belonged to a grave, completely dismantled by modern works.

Other findspots in the area

The general features of the FP site bare some similarities with those recorded at Jebel al-Agma and Salut: a rocky hill (or adjacent hills), located not far from the *wadi* bed, but at a safe distance and elevation in case of floods, surrounded by agricultural land. The only difference is that around FP no field system was traceable, though might be hidden by flourishing vegetation which itself might imply that the area was suitable for cultivation. Given this combination of factors, an obvious next step was the study of satellite images in order to spot other small hills presenting similar features and then to check them for any archaeological remains. By applying this simple approach, a number of possible sites were identified in the area south of Bahla. Field-walking drastically reduced the number of actual sites. Many of the potential sites were occupied by third millennium Hafit type cairns, while



Fig. 3 - The Football Pitch site seen from the top of the westernmost hill; bulldozing to level the pitch is evident, as well as the posts for the fence under construction around the southern hill.

other hills are so rocky as to preclude any possible occupation. However, approximately three kilometres to the north-east of the FP site, and two kilometres south of Bahla's old mosque, a few sherds of Iron Age pottery were found on a small hill - Findspot 1. The hill has an area of 160 x 70 metres, thus similar to that of the FP site, but pottery was only located on a small, lower part of the hill, to the south-east. The rest of the hill looked absolutely rocky, highly eroded and devoid of any feature. Nevertheless, the pottery that was collected could safely be dated to the Iron Age on the basis of fabric types and, more definitely, by the recovery of a typical carinated cup.

A further Iron Age site was located not far from the FP site. This site had also been previously identified as a possible contender for BB-4 in a paper published by WEISSGERBER & YULE (2003). Accounting for the recovery and study of a bronze hoard coming from al-Aqir, Weissgerber and Yule mentioned BB-4 and provided a picture of what they supposed to be the site⁴. The picture shows the ruin of an Umm an-Nar tower, which was dismantled so as to reuse the well typically located at the centre of such towers. Using the photograph published by Weissgerber and Yule as a topographic reference, this site was relocated - Findspot 2. It stands near the wadi bank, approximately 1.5 kilometres north-east of the FP site, almost midway between it and Findspot 1.

⁴ WEISSGERBER-YULE 2003: 27-28 and fig. 6.

What is not convincing about the identification of this site with BB-4 is that it is not listed among Bronze Age sites in the Harvard Survey report⁵. However, less than 200 metres west of this site, two low mounds produced some potsherds - Findspot 3. While most of the fragments were difficult to classify, some Iron Age activity was clearly indicated by some of the sherds, which include the handle from a «long handled bowl», bearing the characteristic incised herring-bone decoration. This area, where the sites have been as good as completely erased, would no doubt have rewarded further investigation, especially because it appears to be a further example where Early Bronze Age and Iron Age occupation are found in very close proximity to each other and comparable, therefore, with what has been observed at Salut, Jebel Agma and the FP site.

Notes on the pottery from the Football Pitch site

The majority of the pot sherds collected at the FP site comprises 70 sherds, which according to fabrics and shapes, can be dated to the Iron Age c. 1300-300 BC. Fine, medium and coarse fabrics can be distinguished, invariably tempered with vegetal inclusions and a moderate to abundant amount of black, white and red grits. A very low percentage of sand temper was also present. The majority of the sherds are in the fine fabric, showing a colour variation from orange/red to brown. The medium fabric is also well represented, with a wider colour range that varies from pinkish to orange/brown. A grey core due to incomplete firing of the clay was observed in a small sample of sherds that includes all three fabric types. A well-preserved dark red-brownish slip is also present on the interior and exterior surfaces of most of the sherds.

Black painted decoration is not so evident, but can be found on some bowls, carinated cups and necked jars. The typical painted motifs include «running-dog» (fig. 4, left and right), and simple vertical and wavy lines. The latter motif is also found on the upper part of some large flat-rim bowls (plate 2, 4-5).

Incised decoration is found mainly on storage jar cordons and cross-hatching, horizontal wavy lines and herring bone pattern found also on flat rims and body sherds (fig. 5 and plate 4, 35).

Open shapes such as bowls and large bowls/basins are most frequent, followed by storage jars, necked and globular jars and a small number of carinated cups and spouted bowls. Bowls and large bowls with flat or rounded everted rim are largely represented (plates 1,14; plate 2, 23-30), as well as carinated bowls (plate 1, 11-14). Both classes can be paralleled with the pottery from Jebel al-Agma (PHILLIPS *et al.* 2011: plate 4, 20-22) and at Salut. The same can be said for the storage jars with triangular or nail-headed rim (plate 6, 55-57,59) and for the necked and globular jars. Only one sherd of storage jar with internal ledge was recovered at the FP site (plate 6, 62), whilst this shape is quite frequent at Salut.

The use of horizontal or slightly overhead lugs, set on the rim of the bowls (plate 3, 19 and 33; plate 7, 80) seems to be the most outstanding feature of the FP site assemblage, when compared with the surface collection from Jebel Agma where it is attested just once and with a more cursory aspect (PHILLIPS *et al.* 2011: plate 3, 10) – but also with the richer pottery assemblage from Salut – where this kind of lug is best represented on globular jar rims. Some comparisons can also be made with other Iron Age sites in north-central Oman, such as Lizq.

⁵ HASTINGS *et al.* 1975.

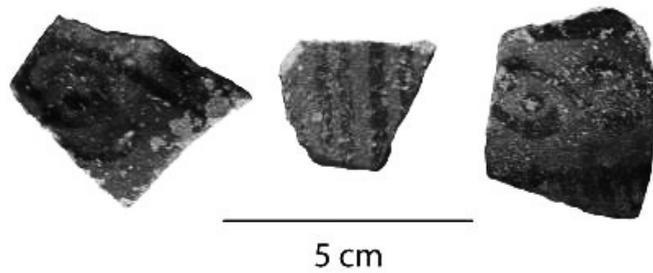


Fig. 4 - Black-painted shards from the FP site.

In particular, the fine fabric jar n. 82 (plate 7), unusual on the Jebel Agma and Salut sites, finds a good comparison with fine/common ware jars from Lizq (KROLL 1998: fig. 7, 54-56).

In general the FP site pottery comprises a range of fabrics, shapes and decorative motifs typical of an Iron Age settlement assemblage, as can be found throughout south east Arabia. More precisely, it can be safely compared with that of, for example, Period I at Rumeilah (BOUCHARLAT-LOMBARD 1985). On comparison with the pottery from Salut the pottery can be best compared with the Early Iron Age occupation, suggesting a date for the FP site settlement between the 13th and the 7th century BC. The occupation of the site could, however, extend further towards the 3rd century BC, since it is only the absence in the FP site assemblage of a typically Late Iron Age (Rumeilah Period II) ware – such as the wheel-turned Burnished Maroon Slipped Ware (MAGEE 2005) – that suggests the more exclusively Early Iron Age date, prior to the 7th century.

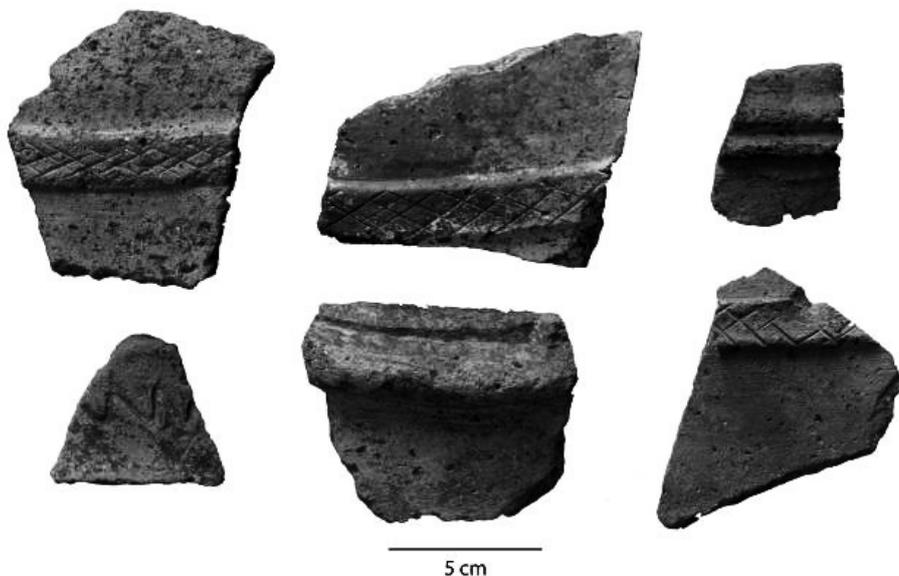


Fig. 5 - Incised decoration on the walls and applied cordons of coarse ware jars.

Bronze Age

The Bronze Age assemblage collected at the FP site consists of 14 diagnostic sherds, plus several plain body sherds. It is, nonetheless, of interest in two ways. It indicates the presence of occupation in the same place but at different times, namely the Early Bronze Age and the Iron Age, albeit with different characteristics and intensity. The Early Bronze Age pottery also indicates shapes and decoration parallels which on the one hand links it to the macro-regional ceramic tradition, which is found throughout Oman and the United Arab Emirates. It is, however, possible that some regional fabric differences exist within this wide area of distribution, and the pottery from the FP site might help to identify a specific area of local production.

All the sherds comprise a fine fabric, with a tendency to appear slightly sandy, and almost all of them are a red-orange colour in section. Inclusions are generally scarce, comprising tiny grits, sometimes micaceous, and occasionally a minimal amount of vegetal temper.

The main differences come when the external slip is considered. Two groups can be distinguished, one bearing a light-orange to red-brownish slip, and the other covered with a pale brown slip.

The latter group comprises only two sherds (plate 7, 70 and 75). These bear a similar black painted decoration which comprises the ladder motif, in one case associated with paired straight lines. They could actually belong to the same vessel, and they can generally be compared with the black-on-buff ware defined in the northern Oman Peninsula. This association of decoration and fabric is known from Hili, where buff to orange sandy ware (“domestic ware”) starts to become predominant in the assemblage in phase IIC2 (CLEUZIIOU 1989: 57 ff.), around the mid-third millennium BC.

Of the red-slipped sherds, all the decorated finds display combined straight and wavy black lines on the upper part of the body. It is again probable that at least three sherds were part of the same vessel (plate 7, 68, 69 and 76). Similar decoration on red-slipped vessels can be found at Umm an-Nar (FRIFELT 1991: 67, fig. 96.BA,DF), and Hili (CLEUZIIOU 1989: 65, fig. 6.6-8, 15-16 etc.), and can be dated to the final part of the third millennium BC. The fragments from the FP site, however, somehow differ from the quoted examples in that the decoration looks more “flourishing”, with a double wavy line between pairs of horizontal straight lines instead of the more common single line, with dead branches of decoration appearing here and there, giving the impression of a more complex, and to some extent more irregular, lines interlacement. Some examples of a similar decoration can be found also at Hili (MERY 2000: 145, fig. 85.2; CLEUZIIOU *et al.* 2011: 129, fig. 153, top row; etc.), but remain a minority. Perhaps significantly, the best comparisons can be found at Bat (FRIFELT 1975: 420, fig. 30.a,e) and above all at Maysar-1 (WEISGERBER 1980: 84-85, figs. 42 and 45; WEISGERBER 1981: 194, Abb. 17.2,5). Interlacing lines are not absent at Hili, where they would seem to characterize phases IID and IIE, but the decorative pattern chosen here is different and favours couples of intertwining lines between parallel single lines (CLEUZIIOU 1989: 63, fig. 6.3-5, 11-12).

It should be noted that, with few exceptions, the majority of the pottery from the Early Bronze Age tower, ST1, near Salut, bears the same kind of decoration found at the FP site. Likewise, the red fabric found at ST1 can be compared with the red fabric found at the FP site. It appears different, however, from the “fine red Omani” ware found more frequently in the northern part of the Oman Peninsula. The latter is actually absent in the FP site assemblage,

but this might be of little significance, given the restricted sample size. That said, also at ST1 only a few sherds can be attributed to the “fine red Omani” category. This could indicate a different regional trend for central Oman, which more data and studies might confirm.

The shapes represented at the FP site all belong to medium size globular vessels and jars, with more or less everted rims, which are mainly rounded but in one case triangular in section (plate 7, 66). Such shapes are known from numerous sites throughout the Oman Peninsula, and do not appear to be clearly associated with a specific period. At Hili, the only observation was a reduction in jar size between period IIC2 and IID (CLEUZIOU 1989: 62).

Two sherds of ridged ware were collected at the FP site, one being a body sherd (plate 7, 72), and the other belonging to a red-slipped globular jar, with out-curving rim, made with a slightly sandy red-orange fabric (plate 7, 67). The shape of the first vessel can be compared with a few smaller examples found at Hili (CLEUZIOU & VOGT 1983: 48, fig. 5.5, though in a grey ware), Umm an-Nar (FRIFELT 1991: fig. 82, with painted decoration) and Al Sufouh (BENTON 1996: 105, figs. 127-128), dated to the last centuries of the third millennium BC.

Leaving aside the question of where it was produced, it appears from what has been said above, that all of the Bronze Age pottery collected from the FP site can be safely dated to the final few centuries of the third millennium BC. And what also appears clear, is that none of it can be compared with subsequent, second millennium «Wadi Suq» types, neither in terms of fabric, shape or decoration.

Discussion

The oasis of Bahla is one of the largest in the region and it is hardly surprising that it hosted a widespread human occupation dating back at least to the Third Millennium BC. Evidence for Bronze Age occupation was reported by the Harvard Archaeological Survey in 1973, namely at the site recorded as BB-6 (HUMPHRIES *et al.* 1975: 11, fig. 2). The lack of excavations at the site prevents any further interpretation of its nature, as well as a definition of its extent.

In the case of the Bronze Age material collected at the FP site, its paucity and concentration appears more consistent with the presence of a tomb, rather than a settlement site. This would be in line with the general picture in south east Arabia during the Early Bronze Age, for which a few settlements are the meagre counterpart to tens of thousands of tombs. Of the settlements, the majority is represented by large round «towers» for which the definite use cannot yet be fully understood. As noted above, there appears to have been evidence for one such tower (Findspot 2) a short distance north of the FP site, and two important groups of such towers are located along the Wadi Sayfam and Wadi Bahla, close to their junction, not far from the site of Salut (see ORCHARD-ORCHARD 2006).

The Bronze Age pottery collected from the FP site is important at least because, together with the yet unpublished assemblage coming from the Bronze Age tower ST1 near Salut⁶, it could point to the existence of a regional ceramic production with distinct features that distinguish it from the production more typical of sites found further north, such as Hili. It

⁶ See DEGLI ESPOSTI-PHILLIPS 2012 for a preliminary presentation of the site and *ibid.*: 94, fig. 7, for an illustration of the most common shapes.



Fig. 6 - A view of Wadi Bahla from the westernmost hill of the Football Pitch site.

should be stressed, however, that the pottery from the FP site, and ST1, clearly belong to the pottery tradition that extends throughout southeast Arabia in the latter part of the third millennium BC.

The presence of both Early Bronze Age and Iron Age, as witnessed at the FP site, is comparable to what has been reported at Salut (DEGLI ESPOSTI & PHILLIPS 2012). In the area of the FP site there is likewise an absence of definitively early second millennium (i.e. Wadi Suq) remains. The choice of the same location for settlement in both the Early Bronze Age and the Iron Age no doubt relates to the limited availability of fertile land, capable of being irrigated, and suitable places for house construction. What still needs to be fully explained is the reason for the apparent break in settlement pattern from c. 2000 to 1300 BC. At Salut, this period where settlement appears lacking is nevertheless represented amongst the tombs excavated on the nearby Jabal Salut, in particular in tomb JS2. Tombs containing unmistakable second millennium objects have also been excavated beneath the old mosque in Bahla (not published). It cannot simply be said, therefore, that large areas of south east Arabia were abandoned sometime in the second millennium BC because the funerary remains provide evidence to the contrary. If a less favourable environment was a factor in the abandonment of sites at the end of the third millennium does it mean that more favourable conditions returned towards the end of the second millennium? And was it the development of new technologies that enabled the re-colonisation of previously fertile lands? Which ever explanation is the more likely will only be confirmed by the accumulation of more precise environmental and archaeological data and this will remain one of the main objectives of the IMTO's research at Salut.

References

- AVANZINI A. (ed.), 2010, *Eastern Arabia in the first millennium BC*, International Conference, Pisa 12th-13th May 2008, l'Erma di Bretschneider, Roma.
- AVANZINI A., PHILLIPS C., 2010, «An outline of recent discoveries at Salut in the Sultanate of Oman», in AVANZINI A. (ed.) 2010, 93-108.
- BENTON J.N., 1996, *Excavations at Al Sofouh. A third millennium site in the Emirate of Dubai*, Abiel I, Brepols, Leyden.
- BOUCHARLAT R., LOMBARD P., 1985, *The Oasis of Al Ain in the Iron Age: Excavations at Rumeilah, 1981-1983, Survey at Hili 14*, *Archaeology in the United Arab Emirates* 4, 44-73.
- CLEUZIQU S., 1989, «The chronology of protohistoric Oman as seen from Hili», in COSTA P.M., TOSI M. (Eds.), *Oman Studies. Papers on the archaeology and history of Oman*. Serie Orientale Roma LXIII, Is.M.E.O., Roma, 47-78.
- CLEUZIQU S., MERY S., VOGT B. (eds.), 2011, *Protohistoire de l'oasis d'al-Ain, Travaux de la Mission archéologique française à Abou Dhabi (Emirats Arabes Unis)*, BAR International Series 2227, Archaeopress, Oxford.
- DEGLI ESPOSTI M., PHILLIPS C., 2012, *Iron Age impact on a Bronze Age archaeological landscape: results from the Italian Mission to Oman excavations at Salūt, Sultanate of Oman*, *Proceedings of the Seminar for Arabian Studies* 42, 87-100.
- FRIFELT K., 1975, *On prehistoric settlement and chronology of the Oman Peninsula*, *East and West* 25, 359-424.
- FRIFELT K., 1991, *The island of Umm an-Nar. Vol. 1 - Third millennium graves*, Jutland Archaeological Society Publications 26/1, Aarhus University Press, Aarhus.
- HASTINGS A., HUMPHRIES J.H., MEADOW R.H., 1975, *Oman in the Third Millennium BCE*, *Journal of Oman Studies* 1, 9-55.
- HUMPHRIES J.H., 1974, *Harvard archaeological survey in Oman: II - Some late prehistoric sites in the Sultanate of Oman*, *Proceedings of the Seminar for Arabian Studies* 4, 49-77.
- KROLL S., 1998, «Characteristics of the pottery assemblage from Lizq», in MOUTON M. (ed.), *Assemblages céramiques des sites de l'Age du Fer de la péninsule d'Oman, Documents d'Archéologie de l'Arabie I*, Maison de l'Orient Méditerranéen, Lyon. [CD-Rom]
- MAGEE P., 1996, *The chronology of the southeast Arabian Iron Age*, *Arabian Archaeology and Epigraphy*, 7, 240-252.
- MAGEE P., 2005, *Investigating cross-Gulf trade in the Iron Age III period: chronological and compositional data on Burnished Maroon Slipped Ware (BMSW) in southeastern Arabia and Iran*, *Arabian Archaeology and Epigraphy* 16, 82-92.
- MÉRY S., 2000, *Les céramiques d'Oman et l'Asie moyenne. Une archéologie des échanges à l'Âge du Bronze*, CRA monographies 23, CNRS Editions, Paris.
- ORCHARD J. and J., 2006, «The third millennium BC oasis settlements of Oman and the first evidence of their irrigation by aflaj from Bahla», in ORCHARD J. and ORCHARD J. (Eds.), *Proceedings Of the International Symposium Archaeology of Arabian Peninsula through the Ages, 7th-9th May 2006*, Muscat, 143-173.
- PHILLIPS C.S., 2010, «Iron Age chronology in South East Arabia and new data from Salut, Sultanate of Oman», in AVANZINI A. (ed.) 2010, 71-80.
- PHILLIPS C., CONDOLUCI C., DEGLI ESPOSTI M., 2010, *Archaeological survey in Wadi Bahla (Sultanate of Oman): an Iron Age site on Jebel al-Agma, near Bisayah*, *EVO XXXIII*, 151-168.

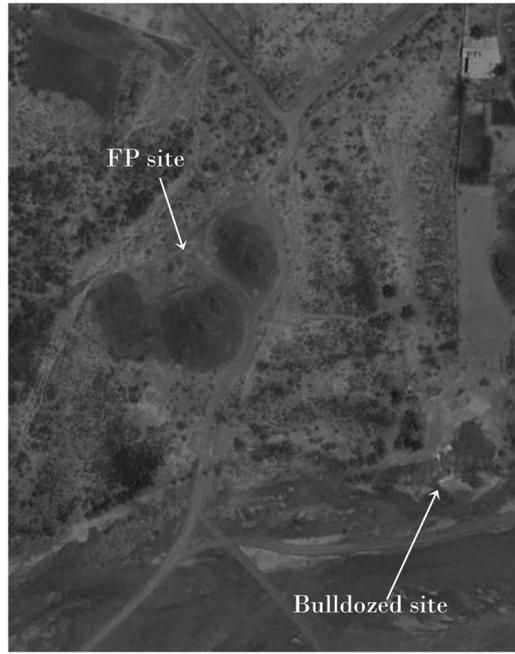
- WEISGERBER G., 1980, «...und Kupfer in Oman» - *Das Oman-Projekt des Deutschen Bergbau-Museum*, Der Anschnitt 32, 62-110.
- WEISGERBER G., 1981, *Mehr als Kupfer in Oman - Ergebnisse der Expedition 1981*, Der Anschnitt 33, 174-263.
- WEISGERBER G., YULE P., 2003, *Al Aqir near Bahlā - an Early Bronze Age dam site with planoconvex «copper» ingots*, *Arabian Archaeology and Epigraphy* 14, 24-53.

Plate 1

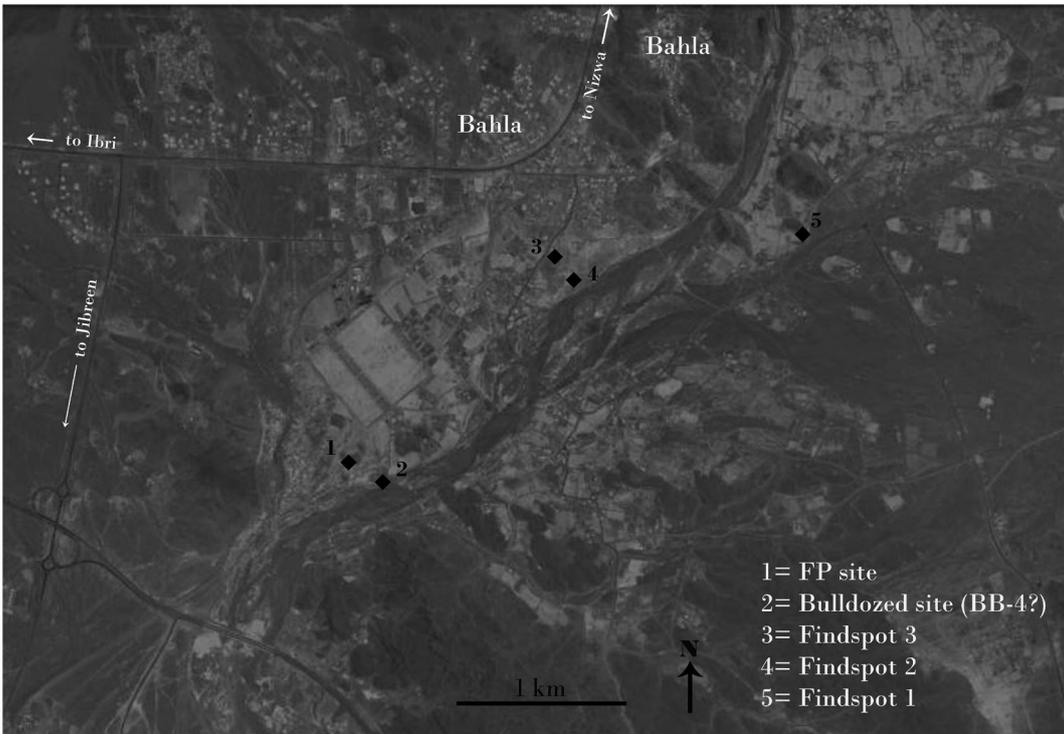
- a) The location of Salut and the Bahla oasis
- b) A satellite image showing the closeness of the FP site with the supposed BB-4 site, now bulldozed
- c) A larger satellite image showing the location of all the findspots mentioned in the text



(a)



(b)



(c)

Plate 2 - Bahla Football Pitch Iron Age pottery: Painted shards and carinated cups

1. Fine red fabric with sparse black grits and vegetable temper. Dark red slip exterior/interior. Black painted decoration exterior and interior.
2. Fine red fabric with occasional mica grits and sparse vegetable temper. Dark red slip exterior/interior. Black painted decoration exterior and interior.
3. Medium red fabric with red, black and white grits and occasional vegetable temper. Slightly smoothed, dark brown slip exterior and interior. Painted dark brown decoration exterior.
4. Fine orange-red fabric with sparse red and black grits and sparse vegetable temper. Dark brown slip exterior, dark red interior. Incised decoration exterior.
5. Fine red-orange fabric with vegetable temper. Dark red slip exterior and interior. Black painted decoration interior and rim.
6. Medium red fabric with pale brown and grey grits and vegetable temper. Dark red slip exterior and interior. Black painted decoration interior and rim.
7. Fine red fabric with occasional mica grits and vegetable temper. Grey core. Dark red slip exterior and interior. Black painted decoration exterior.
8. Fine/medium red fabric with rare black grits and abundant vegetable temper. Dark red slip exterior, more brownish interior. String cut base.
9. Fine brown fabric with occasional small white grits. Dark brown slip exterior and interior.
10. Fine brown fabric with black and white grits and rare vegetable temper. Dark brown-reddish slip exterior and interior.
11. Medium red fabric with red, black and white grits and vegetable temper. Dark grey core. Red-brown slip exterior and interior.
12. Fine orange-red fabric with rare small white and black grits and rare vegetable temper. Grey core. Dark red slip exterior, brown interior.
13. Fine orange fabric with rare black grits and sparse vegetable temper. Dark red slip exterior and interior.
14. Fine orange fabric with small black and white grits and vegetable temper. Thin grey core. Red slip exterior, darker interior.
15. Fine pale brown fabric with small white grits and vegetable temper. Grey-greenish slip exterior, light brown interior.

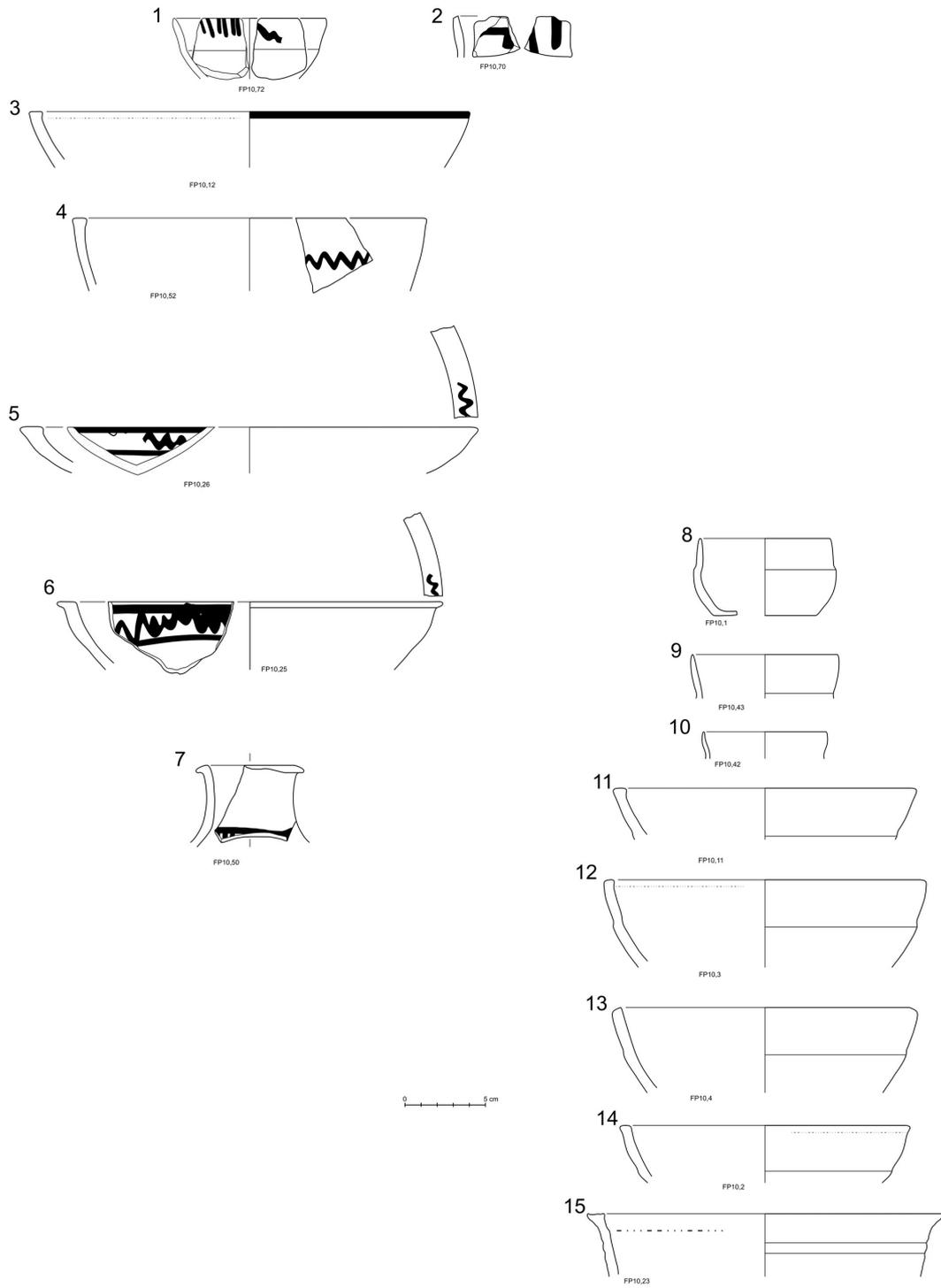
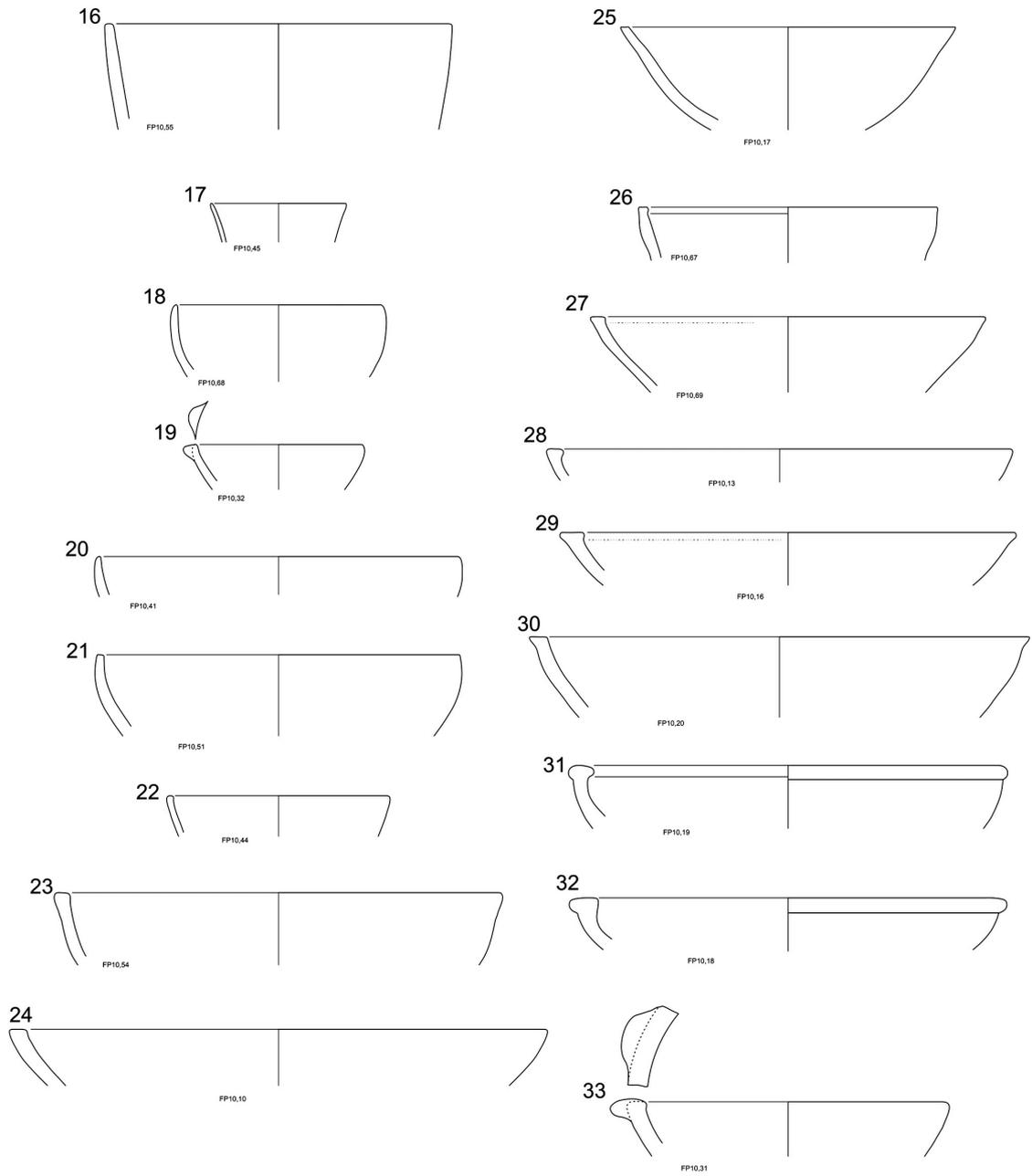


Plate 3 - Bahla Football Pitch Iron Age pottery: bowls

16. Medium red-brown fabric with white and red grits, some large, and vegetable temper. Dark red slip exterior and interior.
17. Fine orange fabric with small white and black grits. Rare vegetable temper. Red slip exterior and interior.
18. Fine orange fabric with sparse small white and black grits and vegetable temper. Sparse mica grits. Dark red slip exterior and interior.
19. Medium dark red fabric with black and abundant red grits and vegetable temper. Dark brown slip exterior, darker interior.
20. Fine red fabric with occasional small white grits and vegetable temper. Dark red slip exterior and interior.
21. Medium brown fabric with abundant small black grits and vegetable temper. Dark brown slip exterior, dark red interior.
22. Fine red fabric with small black and white grits and vegetable temper. Grey core. Red slip exterior and interior.
23. Medium sandy orange fabric with abundant red grits and occasional vegetable temper. Dark red slip exterior and interior.
24. Medium/coarse orange-pinkish fabric with white and red grits, some large. Dark brown slip exterior, red-brown interior.
25. Fine brown fabric with white grits and vegetable temper. Black core. Burnished dark brown slip exterior; brown-red interior.
26. Fine red orange fabric with sparse dark grey and red grits and vegetable temper. Red slip exterior and interior.
27. Coarse brown fabric with abundant large black, white and red grits and vegetable temper. Dark brown slip exterior (worn) and interior.
28. Fine red-lilac fabric with rare small white grits. Dark red-brown slip exterior and interior.
29. Medium brown-orange fabric with red and white grits and occasional vegetable temper. Rare vegetable temper. Light brown slip exterior, dark brown interior.
30. Fine red-orange sandy fabric with small white grits and vegetable temper. Dark red slip exterior, red-brown interior.
31. Medium light brown-greyish fabric with black and white grits and vegetable temper. Light brown slip exterior.
32. Medium brown fabric with abundant white, grey and black grits and vegetable temper. Brown slip exterior and interior.
33. Medium/coarse red fabric with black and white grits and vegetable temper. Grey core. Dark red slip exterior, brown interior.



0 5 cm

Plate 4 - Bahla Football Pitch Iron Age pottery: large bowls, spouted bowl

34. Medium brown fabric with red grits and vegetable temper. Dark brown slip exterior, darker interior.

35. Medium red-orange fabric with red grits and vegetable temper. Red slip exterior and interior. Incised decoration exterior and upper rim, done before firing.

36. Medium pale brown-greyish fabric with black grits and vegetable temper. Black slip exterior, dark red interior. Traces of burnishing on exterior.

37. Medium brown-orange fabric with small red and white grits and vegetable temper. Pale brown-whitish slip exterior and interior.

38. Fine pale red fabric with rare small black grits and sparse vegetable temper. Pale brown slip.

39. Fine red fabric with small white and black grits and sparse vegetable temper. Light red-orange slip exterior and interior.

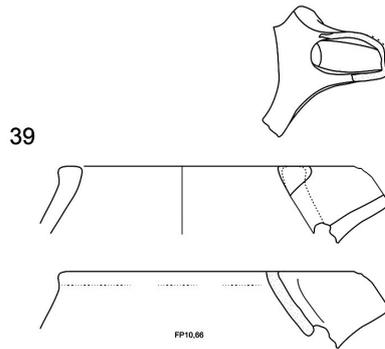
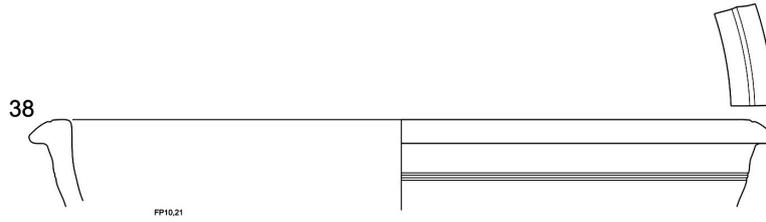
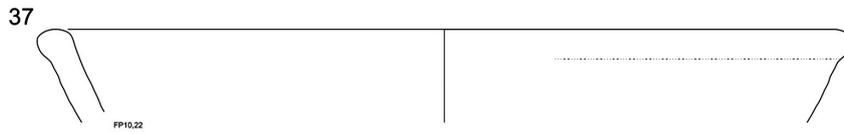
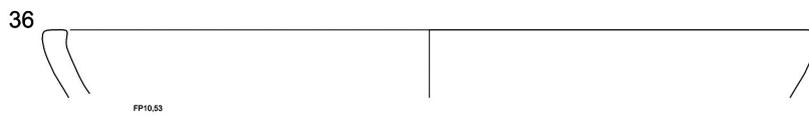
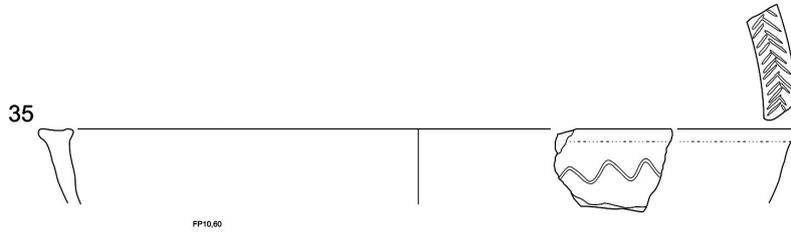


Plate 5 - Bahla Football Pitch Iron Age pottery: Necked jars, globular jars, hole mouth jars, lid

40. Fine red fabric with rare small black grits and vegetable temper. Dark red slip exterior, red-lilac interior.
41. Fine sandy red fabric with rare small white and black grits. Red slip exterior and interior.
42. Medium/fine dark red fabric with sparse black and white grits and vegetable temper. Dark red slip exterior, dark red-lilac interior. Traces of burnishing on exterior.
43. Medium red fabric with red, black and white grits and vegetable temper. Dark red-brown slip exterior and interior.
44. Fine brown-reddish fabric with rare small white grits and vegetable temper. Black slip exterior, dark red-lilac rim and upper interior, pale red interior.
45. Coarse red fabric with large red, black and white grits and vegetable temper. Red-brown slip exterior, darker interior.
46. Fine red-orange fabric with rare small white and black grits and occasional vegetable temper. Red slip exterior, red-brown interior.
47. Fine red fabric with rare red grits and vegetable temper. Dark brown slip exterior, red-brown interior.
48. Medium brown fabric with red, black and white grits, some large, and vegetable temper. Dark red slip exterior, red-lilac interior.
49. Medium red fabric with abundant red, grey and white grits and occasional vegetable temper. Dark red slip exterior. Incised decoration exterior.
50. Medium/coarse red-pinkish fabric with dark grey and red grits, some large, and vegetable temper. Thick grey core. Red slip exterior and interior.
51. Medium orange-pinkish fabric with abundant small white and black grits, and larger red grits. Vegetable temper. Pale brown-yellowish slip exterior. Incised decoration exterior, done before firing.
52. Medium sandy red-orange fabric with red grits and vegetable temper. Dark brown slip exterior and internal rim.
53. Coarse pale red fabric with abundant red, black and white grits and vegetable temper. Thick grey core. Dark red slip upper surface, pale brown side and underside. Incised decoration on upper surface, done before firing.
54. Coarse red fabric with grey core and abundant red and white grits, some large. Vegetable temper. Red slip all over.

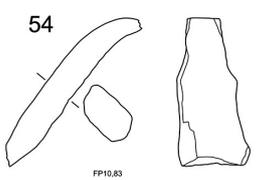
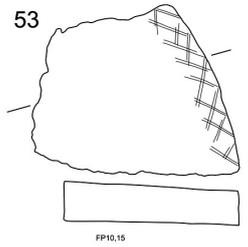
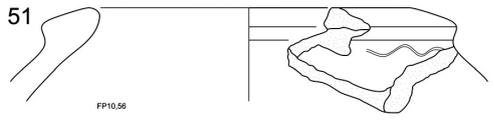
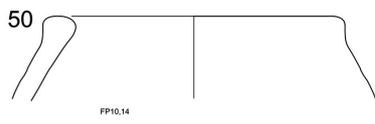
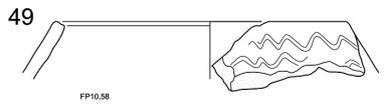
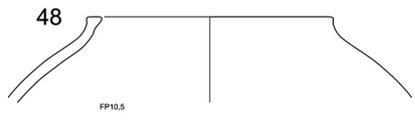
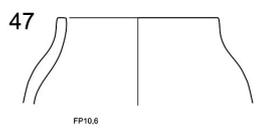
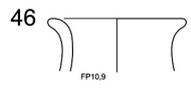
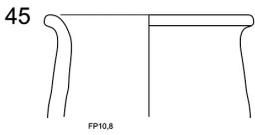
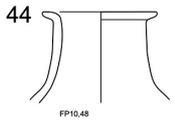
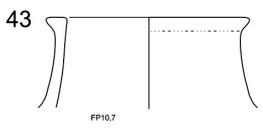
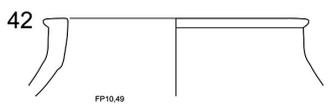
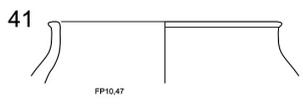
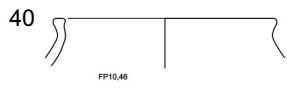


Plate 6 - Bahla Football Pitch Iron Age pottery: Large storage jars

55. Medium red fabric with large red and black grits and vegetable temper. Dark red slip exterior and interior.
56. Coarse red-pinkish fabric with abundant large black and red grits. Abundant vegetable temper. Red slip exterior. Incised hatching on exterior cordon.
57. Medium red fabric with black and white grits. Rare vegetable temper. Pale brown slip exterior, darker interior.
58. Coarse orange fabric with black and abundant large red grits and vegetable temper. Dark red slip exterior and interior.
59. Coarse red-lilac fabric with abundant red and black grits and vegetable temper. Grey core. Dark red slip exterior.
60. Coarse red fabric with abundant large red, black and white grits and abundant vegetable temper. Grey core. Pale brown slip exterior.
61. Coarse dark red-brown fabric with abundant black and white grits and occasional vegetable temper. Dark red-brown slip exterior, dark brown interior. Slightly smoothed interior and exterior. Finger impression decoration exterior, on cordon and rim.
62. Medium red fabric with small black and white grits and abundant vegetable temper. Pale brown slip exterior and interior.

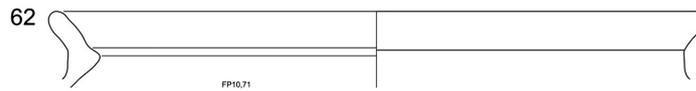
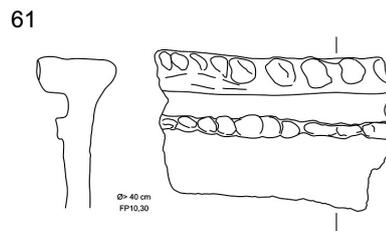
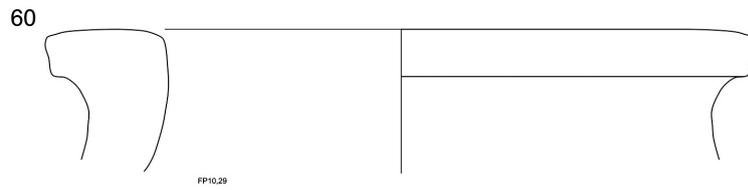
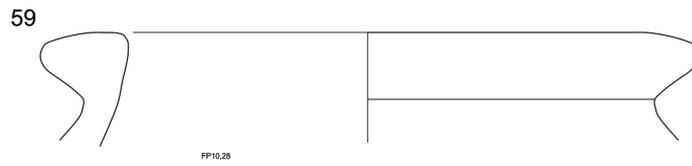
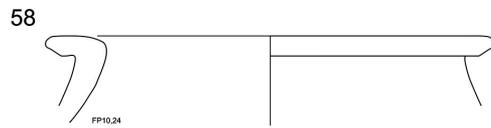
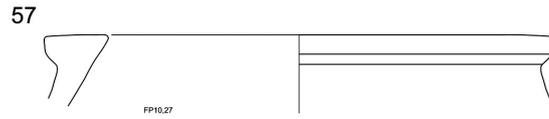
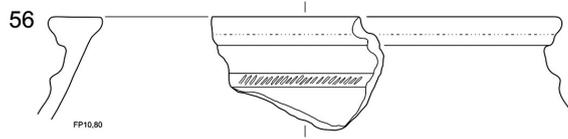


Plate 7 - Bahla Football Pitch: Bronze Age pottery and additional Iron Age pottery from 2012 survey

63. Medium red-orange fabric with large red and black grits and vegetable temper. Thick grey core. Red slip exterior and interior.
64. Fine sandy red fabric with rare small white grits. Light orange slip exterior and interior. Black painted decoration exterior.
65. Fine sandy dark red fabric with small red and white grits and sparse vegetable temper. Brown red slip exterior and interior.
66. Fine sandy orange fabric with rare small white and mica grits. Pale brown slip exterior, dark brown interior. Black painted decoration exterior.
67. Fine orange-red fabric with small white and grey grits and occasional vegetable temper. Thick grey core. Light orange slip exterior and interior.
68. Fine sandy red-orange fabric with sparse small white grits. Red-orange slip exterior, light brown interior. Black painted decoration exterior.
69. Fine sandy red fabric with rare small white grits. Orange-brown slip exterior, pale brown interior. Black painted decoration exterior.
70. Fine brown-red fabric with sparse small red grits and rare vegetable temper. Pale brown slip exterior, brown interior. Black painted decoration exterior.
71. Fine red fabric with rare vegetable temper. Grey core. Red-orange slip exterior, brown interior. Black painted decoration exterior.
72. Fine sandy red-orange fabric with small white grits and vegetable temper. Red slip exterior and interior.
73. Fine red fabric with rare vegetable temper. Grey core. Red-orange slip exterior, brown interior. Black painted decoration exterior.
74. Fine light brown-orange fabric with abundant mica grits and occasional vegetable temper. Orange slip exterior and interior. Black painted decoration exterior.
75. Fine brown-purplish fabric with occasional small red, black and white grits. Pale brown slip exterior. Black painted decoration exterior.
76. Fine sandy red-orange fabric with small white grits. Red-orange slip exterior, light brown interior. Black painted decoration exterior.
77. Medium/fine red fabric with small black and occasionally pink grits. Occasional vegetable temper. Red slip interior and exterior.
78. Fine brown-reddish fabric with sparse small white grits. Dark brown slip interior and exterior.
79. FP10,82: Fine/medium sandy orange fabric with sparse red grits, some larger. Sparse vegetable temper. Dar red slip interior and exterior.
80. Medium red fabric with black-reddish grits, some large. Abundant vegetable temper. Red slip interior and exterior.
81. Medium/fine sandy brown fabric with small white, black and red grits and occasional vegetable temper. Red slip interior, dark brown exterior.
82. Fine, hard fired brown fabric with sparse small brown grits, some larger. Occasional vegetable temper. Red slip interior and exterior.

