

Material Cosmopolitanism: The Entrepot of Harlaa as Islamic Gateway to Eastern Ethiopia

Timothy Insoll (1), Nadia Khalaf (1), Rachel MacLean (1), Hannah Parsons-Morgan (1), Nicholas Tait (1), Jane Gaastra (1), Alemseged Beldados (2), Alexander J.E. Pryor (3), Laura Evis (3)

1. Institute of Arab and Islamic Studies, University of Exeter, EX4 4ND, UK, T.Insoll@Exeter.ac.uk
2. Department of Archaeology, Addis Ababa University, Ethiopia
3. Department of Archaeology, University of Exeter, UK

Abstract

Islamic archaeology in Ethiopia has been neglected until recently. Excavations at Harlaa, a large urban centre in eastern Ethiopia are redressing this, through establishing occupation and material sequences, and assessing the chronology and material markers of Islamisation. The results are also challenging assumptions of cultural homogeneity, instead indicating cosmopolitanism. The archaeological data permits recognition of cosmopolitanism, and a possible historical identity for Harlaa is also suggested, as Hubät/Hobat, the capital of the Hārälä sultanate.

Introduction

Archaeological research on Islamic sites in Ethiopia, and more generally in the Horn of Africa has been limited, a significant omission, as Ethiopia was in contact with the earliest Islamic communities, and Muslims were soon established there (cf. Insoll, introduction). Excavations at Harlaa in eastern Ethiopia, completed as part of the *Becoming Muslim* project (ERC-2015-AdG BM694254) are redressing this, and are establishing occupation and material sequences, reconstructing the chronology of Islamisation, and assessing its material markers. In so doing, the results have also challenged assumptions of cultural heterogeneity and Islamic teleological conversion process, instead indicating cosmopolitanism, perhaps best defined by a willingness to engage with “the Other” (Hannerz 1990: 239). As such, they contribute to the emerging image of wider Medieval Ethiopia, as being similarly cosmopolitan, less constrained by religious, ethnic, and territorial particularism than might once have been thought (see Insoll, introduction), based perhaps on historical sources filtered and viewed through a more partisan prism (see Insoll, Introduction).

Harlaa

Harlaa (9°29'10.22"N, 41°54'36.96"E) has provided the first significant evidence for medieval Islamic settlement, commerce, and manufacturing in Ethiopia. It is located at 1700 m ASL on the edge of the main fault escarpment of the southern Afar margin underneath the modern Oromo village of Ganda Biyo, approximately 40 km northwest of Harar and 15 km southeast of Dire Dawa (Khalaf and Insoll 2019) (**Figure 1**). The accepted archaeological name, Harlaa, is related to the common appellation ‘Harla’ given to ruined stone-built towns and funerary monuments in the region, whose origins are ascribed by the current inhabitants, the Oromo, to a legendary ancient people of giant status (Chekroun et al. 2011: 79), and who occupied the region before the Oromo arrived (Joussaume and Joussaume 1972: 22), beginning in the mid-16th century (all dates are AD, unless otherwise specified). Limited survey had been undertaken at Harlaa (Chekroun et al. 2011), but no excavation prior to 2015 (Insoll et al. 2016). Survey has indicated that the settlement was built over two main and several smaller, hills and slopes running north, in a series of terraced blocks (**Figure 2**). It is composed of several elements including a central settlement area, workshops, at least three early mosques, wells, lengths of fortification wall, and cemeteries to the north, east, and west (Insoll et al. 2016, 2017; Insoll in preparation) (**Figure 2**).

Excavations and Architecture in Harlaa

Since 2015, over five fieldwork seasons, excavations have been completed in a mosque (Area A), workshop complex (Area B, except labelled A in 2016), cemeteries (Areas C and D), a house with associated industrial/kitchen facility (Area E), and part of an extensive building complex, probably with a civic function (Area F) (**Figure 2**). 27 AMS dates have been obtained so far from six areas of the site (mosque, cemetery, jeweller’s workshops, large civic building, housing, and agricultural terraces) indicating occupation between the mid-sixth and fifteenth centuries (**Table 1**). There was a highpoint in trade and manufacturing, based on the C14 dates and diagnostic ceramics, discussed below, between the twelfth-thirteenth centuries (Insoll in preparation).

The architecture is similar across the site. Walls were constructed from inner and outer courses of locally sourced blocks of limestone with a rubble fill. Blocks varying in size between c.30 cm x 30 cm to 10 x 10 cm were cut to shape and finished on their external face, or on two faces where they formed a corner (**Figure 3.1**). An exception was provided by the mosque (A) (**Figure 4.1**), where the walls were built of limestone blocks, and the mihrab from cut travertine blocks (**Figure 3.2**). This may have been to facilitate the requisite curvature, but also suggests Red Sea and Swahili coastal influences, resembling, for example, the eleventh-twelfth century mosque at Kilwa Kiswani in southern Tanzania (Pradines and Blanchard 2016: 14), or the undated ‘Mosque with Two Mihrabs’ at Zeyla, Somaliland (Fauvelle-Aymar et al. 2011: 46). This is significant in exploring both cosmopolitanism and Islamisation in suggesting intra-African relationships which may have contributed both to Islamic practice and population composition.

Other architectural techniques were also recorded. A mixture of larger (up to 100cm length) partly worked and unworked stones were utilised in the defensive wall (**Figure 3.3**). Mortar was generally not used, but plaster was sometimes applied, as to the interior of the civic building (F). Two fragments of decorated wall plaster incised with a geometric or vegetally derived pattern were also recovered from the domestic building (E) (**Figure 3.4**). Plaster was also used for floors (**Figure 4.2**). Stone floors were laid, of slabs (**Figure 3.5**), and schist blocks in the workshop complex (B). Earth floors laid on packing layers of faunal remains, hearth pits and hearth stones, anvils, including one with a cupule carved on top, and postholes were found inside the four small cell-like rooms recorded in the south of the workshop complex (**Figure 4.3**). Postholes suggest the use of wooden pillars to support roofs (A, B, E), and stone-lined pits possibly supported column bases for a similar purpose (F). Where funerary architecture was employed, as opposed to more simple burial, tombs were demarcated by large flat slabs of travertine laid on edge to form cell-like structures (C) (**Figure 3.6**). Pits were extensively employed for storage and waste disposal (**Figure 4.4**).

Trade and other Contacts

Harlaa was an entrepot receiving and supplying goods and materials via both maritime and land-based trade networks over a significant geographical area. Material attests contacts, direct and indirect, with the Red Sea, western Indian Ocean, China, South and Central Asia, Egypt, the Ethiopian Interior, East African coast, and Persian/Arabian Gulf. Whilst operating these networks, social relationships were presumably maintained, combining the local and transnational, and contributing to creating Harlaa as a locality of cosmopolitanism.

Beads appear to have been an important commodity with evidence for agate, glass, and shell bead-making found, particularly in the workshop complex, where 1,952 beads of a site total of 2,441 were recovered (**Table 2**). Glass beads were present in large quantities (c. 2000 beads) (**Figure 5.1**). LA-ICPMS analysis of an exploratory sample of four beads from the workshop complex indicated that some were imported, with Central Asian, Middle Eastern (possibly Mamluk Egyptian), and Sri Lankan/South Indian glass beads represented in red, yellow, and an indeterminate glass colour (Dussubieux 2018). Others were locally made. Portable XRF analysis of four crucible fragments (of 216 total) from the workshop complex attested that one had been used for glass working or making and contained traces of a copper-based colourant, likely from the processing of blue glass beads (Santarelli and Rehren 2018). Glass beads, including blue glass, are extensively found in medieval non-Muslim contexts in eastern, southern, and central Ethiopia, as at Koticha Kesi, abandoned c.1550 (Kinahan 2013), Nora

(Fauvelle-Aymar et al. 2017), Raré and Sourré-Kabanawa, eighth-twelfth centuries (Joussaume 1980, 2014), and Meshalā Maryam, and Tātār Gur, ninth-fourteenth centuries (Fauvelle-Aymar and Poissonnier 2012; Fauvelle and Poissonnier 2016). Some were possibly from Harlaa, and analysis of their composition will be a focus of the next phase of research to assess if they match the beads from Harlaa.

Approximately 400 other beads were agate and quartz (**Figure 5.1**). The agate bead-making traditions resemble western Indian, Gujarati ones (cf. Kenoyer et al. 1991; Roux et al. 1995; Roux 2000; Bhan et al. 2017), in the same use of heat treated carnelian, bow drilling, and diamond drill bits (cf. Kenoyer 2017). The heat treatment of agate in Harlaa was indicated by both orange and red (treated) and white (untreated) agate in debitage, part-finished bead, and finished bead, forms. LA-ICPMS analysis of four samples of agate debitage and bead fragments from Harlaa indicated varied sources with two from Mandek Bet and Ratanpur in Gujarat, one from Shahr-i-Soktar in Iran, and the other from an unknown source (Dussubieux 2018), possibly Ethiopia. Bow drill use was directly attested by a discarded hand guard made of part of a femur from a large equid that had five holes on the underside (2.2 to 4.3 mm diameter) caused by the drill spindle (**Figure 5.2**). Double diamond drill bit use was confirmed by dental moulding paste impressions of drill holes in part finished and discarded agate beads (J.M. Kenoyer pers. comm. 19/5/19).

Shell working was another major activity. An assemblage of 2,429 worked and unworked marine shells and shell fragments, of Red Sea origin, was recovered from Harlaa, with the majority, 1,787, from the workshop complex. The shell was worked in several ways, into short and long bicone beads from *Strombus tricornis*, pierced for adornment (*Cypraea moneta*, *Cypraea annulus*, *Oliva bulbosa*, *Engina mendicaria*), or cut into sections (*Oliva bulbosa*, *Conus erythraeensis*, *Anadara antiquata*), and made into bangles (*Strombus tricornis*) (**Figure 5.3**). The bangle manufacturing is identical to that recorded at Mantai in Sri Lanka in contexts dated to the sixth-twelfth centuries, with the same sawing of the ends of shells to remove circular sections and discarding of broken sawn shell rings (cf. Waddington and Kenoyer 2013: 386), though *Turbinella pyrum* was used at Mantai, not *Strombus tricornis*. The piercing of the predominantly cowry material is related to a ubiquitous way of processing such shells for stringing and sewing found in sub-Saharan Africa (e.g. Haour and Christie 2019: 305-306). However, it appears to have been achieved using an indigenous technology at Harlaa, obsidian blades, with 1377 cowry backs found indicating this process (**Figure 5.4**).

Access to raw materials seems to have been crucial at Harlaa and may have been a reason why the settlement developed where it was situated. Extensive networks of mining galleries have been identified at the top of the mountain opposite Harlaa, Gara Harfattu (1888 m ASL, N09.49617° E041.90630°). These comprise both vertical and horizontal shafts, a technique for following mineral veins known in other Islamic contexts (al-Hassan and Hill 1992: 236). The vertical shaft entrances appear to have been reinforced with stone blocks (**Figure 6.1**). The horizontal gallery entrances may have been similarly reinforced (**Figure 6.2**), but awaits confirmation pending specialist analyses of the mining complexes. The material mined is also currently unknown. Surface collected sherds suggest the complex was potentially utilised at approximately the same time as the highpoint of Harlaa between the twelfth-thirteenth centuries.

Imported finished goods were also recovered. Glass vessel fragments were generally small, monochrome, and undecorated, and in various colours; clear, blue, green, brown, pink, and yellow. LA-ICPMS analysis of five fragments suggested a possible Central Asian provenance

based on the v-Na-Al, high alumina soda plant ash glass composition (Dussubieux 2018). The assemblage of 145 sherds of Middle Eastern ceramics (**Table 2**) was also of varied types. Those that can be more precisely identified are of overall eleventh/twelfth to fourteenth/fifteenth centuries date, and include 22 sherds of white, purple red, light green and yellow, lustrous silvery-grey, black, and turquoise glaze wares, likely from bowls, and probably of Yemeni/southern Red Sea provenance (S. Priestman pers. comm; cf. Cuik and Keall 1996) (**Figure 6.1**); 25 sherds of black-on-yellow or ‘mustard’ ware bowls of between 17-19 cm diameter and of Yemeni provenance (cf. Lankester Harding 1964: Pl. V. 10; Horton 1996: 291) (**Figure 6.2**); three sherds of silver lustre glazed frit, two from bowls, one shaped into a disc, one off-white lustre glaze frit scalloped bowl rim sherd (**Figure 6.3**), and one turquoise monochrome glazed frit sherd, all of Iranian provenance. Additionally, four sherds of Indian Red Polished ware were found (**Figure 6.4**).

From further east were 160 sherds of Chinese and Southeast Asian/Chinese origin (Parsons-Morgan in preparation) (**Table 2**). 57 of these sherds were from ‘Martaban’ storage jars (**Figure 7.1**), with 51 from the domestic building and six from the workshop complex. At least two different jar types are present, suggesting more than one site or date of manufacture (eighth to late fourteenth centuries). Of the remaining 103 sherds, 93 are green-glazed, the majority classic celadon types from the Longquan kilns in Zhejiang Province, southeast China (eleventh to late fourteenth centuries), as well as Yaozhou ware from the Yaozhou kilns, Shaanxi Province, north China (tenth to twelfth centuries), possible Yue ware from Shanglinhu, Zhejiang Province, southern China (tenth to eleventh centuries), and Guangdong Celadon Group 1 (GDC.1 after Priestman’s classification, 2013: 666) from Guangdong Province, southern China (**Figure 7.2**) (late thirteenth to fifteenth centuries). Four sherds are likely from the Dehua Kilns, Fujian Province, southern China (**Figure 7.3**) (eleventh to thirteenth centuries), and three white glazed and one grey glazed are as yet uncategorised. All identified forms fall are from dishes, mostly bowls and some plates (11cm to 27cm diameter), apart from the ‘Martaban’ sherds which are from jars. Unusually, 55 of the sherds show definite signs of modification and a further 15 are possibly modified. Modification is principally in the form of rounded disks or shaped into polygons (**Figure 7.4**), potentially intended to be set in jewellery, as bezels, or sewn into clothing (Insoll et al. 2017: 38; Parsons-Morgan in preparation).

Imported objects, Chinese ceramics, were being modified to suit local tastes. Other imported artifacts were being consumed in Harlaa, unaltered, glass wares for example. Whilst other categories of object were being made to meet, presumably regional demand, such as Indian style agate beads, South Asian style shell beads and bangles, and glass trade beads. Harlaa was a cosmopolitan hub with merchants, carriers, consumers, craftspeople from different regions, ethnicities, and traditions, servicing varied tastes, and exchanging not only goods and commodities, but also knowledge and beliefs.

Islam, Islamisation, and other Religions

Muslim belief was a key part of this interchange. The establishment of a Muslim community at Harlaa, the earliest in eastern Ethiopia, can be reconstructed based on the AMS dates from the mosque and burials as in existence by the mid-twelfth century (Insoll in preparation). Additional correlation is provided by Arabic inscriptions, with one with a date of 657 AH (1259-1260 AD) (Bauden 2011: 296) and another the partial date of 44x AH (Schneider 1969: 340), calculated as 1048-1057 AD (Chekroun et al. 2011: 79). An additional twelve undated Arabic building and funerary inscriptions have been found including a building inscription that

suggests that Shi'a Islam was present in Harlaa, through a reference to the names of the fourth and sixth Imams; Ali (ibn Husayn - al-Sajjad) and Ja'far ibn Muhammad (as-Sadiq) (S. Almahari pers. comm. 29/3/19) (**Figure 8**). It is possible that this was linked with Fatimid Shi'a Isma'ili influence as suggested for the cemetery at Bilet in Tigray (see Loiseau et al., this volume). The Fatimids re-opened Red Sea commerce after gaining power in Egypt in 969 (Tamrat 1972: 45), and the presence of Shi'a at Harlaa indicates another dimension to the cosmopolitan community, that of Muslim heterogeneity, whilst today Shi'ism has disappeared in Ethiopia.

The early evidence for Islam at Harlaa suggests it was a context for conversion and from here Islam spread through the wider region, via the agency of trade and other interaction. Harlaa was abandoned seemingly by the early fifteenth century and Harar, the most important extant Islamic city in Ethiopia was founded, or at least Islamized after this date by the descendants of the people of Harlaa. Excavations in settlement areas (Gey Hamburti and the Amir's Palace), and mosques in Harar (Abdal mosque, Aw Abadir shrine, Aw Meshed mosque, Dine Gobena mosque, Fakhredine mosque and shrine, Jami mosque) indicate that they were all established after the late fifteenth century. The results from Harar, besides suggesting a direct chronological link with Harlaa, affirm the continued importance of the urban environment as a context for Islamic conversion (Insoll 2017; Insoll and Zekaria 2019).

Islam co-existed with indigenous religions that were followed by the majority of the local population. What these religions were, is little understood, their having left no historical records and having only been partially investigated archaeologically with reference to their most tangible aspect, funerary practice. No indications have yet been found in Harlaa, unless dietary remains indicate such, but some of the circular chambered stone tombs in the Tchercher Mountains are contemporary, as with Sourré-Kabanawa, 40km southwest, where two were C14 dated to Cal AD 980-1180 (monument 1), and Cal AD 770-950 and Cal AD 930-1080 (monument 3) (Joussaume 1980: 102). East of Harar non-Muslim burials persisted even later with an AMS date of Cal AD 1275 to 1385 (2 Sigma calibration; Beta-421104) obtained from a burial mound excavated at Sofi, near Ganda Harla (Insoll, MacLean, and Engda 2016: 30).

Whether Christians also formed part of the cosmopolitan population at Harlaa is unknown, but there are suggestions that contacts were maintained with Christian communities, and historically, Muslims were traders in Christian areas (Ahmed 1992: 20). A copper coin, a Byzantine trachy of the Emperor Theodore Komnenos Doukas (1224-1230) minted at Thessaloniki, was recorded as a surface find (**Figure 9**). None have previously been found outside the southern Balkans, southern Greece, southern Italy, or western Anatolia, and it is possible that it reached Ethiopia via Egypt (J. Baker pers. comm. 23/4/18). A single sherd of Egyptian Red Slip ware, a variant of African Red Slip Ware, manufactured at Aswan, and of possible fifth century date (D. Mattingly pers. comm. 14/11/19), was another surface find, and would be suggestive of much earlier contacts with an area of Africa that was then Christian.

Towards Understanding the Population of Harlaa

The population of Harlaa was likely part-Muslim, and non-Muslim with both constituted by local and non-local components. Where foreign elements were from is currently not known, but it can be suggested, based on the evidence just discussed, that these could have included Arabs, Indians, Persians, and any number of groups from the wider region such as Somali, and perhaps Swahili. The results of strontium isotope analysis of human teeth from three Muslim

burials suggest varied origins. The upper burial from a double grave (HAR[C]), a child of 2.5-3.5 years age at death, had strontium isotope ratios in milk teeth indistinguishable from the Harlaa signature indicating the infant and pregnant mother had lived in the area. The lower burial, a child of 4.5-6.5 years age at death, had strontium isotope profiles with ratios also indistinguishable from the local Harlaa one. A third single burial (HAR[D]), again a child of 2.5-6.5 years age at death, had a different more radiogenic signature, suggesting they were non-local (Pryor, Insoll, and Evis in preparation).

It is likely, however, that a local element dominated in Harlaa. The ceramic data suggests interaction with the local population or, more likely, a local population using ceramics they were familiar with, for 20,534 sherds of locally made pottery were found compared to 305 sherds of imported pottery. All the local ceramics were handmade and appear to have been fired in open bonfires. They have a similar fabric composition, with poorly sorted coarse inclusions up to 1mm in size, and rarer larger inclusions up to 5mm. While a source has not yet been identified, the ceramics appear to have been produced using local clays. Earthenware/Plainware (**Figure 10.1**), usually red, made up the largest proportion of wares (77.8%; 9725 sherds), with burnished wares also relatively common in Black/Brown (18.0%; 2250 sherds), and Light Brown (3.0%; 369 sherds) (**Figure 10.2**). Other wares included Black Slipped with a red fabric (5%; 58 sherds) and Light Brown Slipped with a black fabric (nine sherds) (Tait 2020). 380 sherds (2.46%) were decorated. Incised decoration (125 sherds), of simple horizontal lines or rows of dashes, or punctate (dot) decoration (73 sherds) were found on all ware types. The most common decorative style (140 sherds) was of unburnished straight or zig-zag lines on burnished wares (**Figure 10.3**). Vessel forms included carinated bowls (**Figure 10.2**); bowls, jugs and jars with ring bases, large storage vessels (**Figure 10.1**), and bowls with multiple legs attached to a flat plate or ring, so-called 'stand bases' (**Figure 10.4**). Nine broad rim categories were identified, with simple (656 sherds; 40.9%) (**Figure 10.3, 9.5**), and flat (459 sherds; 28.6%) rims (**Figure 10.1, 10.6**), the most common (Tait 2020). Ceramic affinities exist with assemblages from both non-Muslim and Islamic sites. Carinated bowls and globular bodied jars were of types found at the Raré and Sourré-Kabanawa burial tumuli in the Chercher Mountains (Joussaume 1980: 102; 2014: 103-104). Pierced lug handles and grooved and pricked rim decoration resemble those on local ceramics from the ruined medieval Islamic town sites in Somaliland on the trade route from Harlaa to the Red Sea coast (cf. Curle 1937; González-Ruibal et al. 2017).

The edible crops identified at Harlaa, such as *Hordeum sp.* and *Triticum sp.* are suggestive of further population complexity. Missing are crop remains which are indigenous to Ethiopia, like *Teff* and finger millet. This is comparable with cultural development in northern Ethiopia, where the agricultural system is dominated by the cultivation of wheat, barley, legumes (e.g. *Pisum abyssinicum*, *Lens culinaris*, *Cicer arietinum*) and oil crops (e.g. *Sesamum indicum*, *Linum usitatissimum*), which are all of Middle Eastern origin (Beldados et al. 2019), perhaps suggesting some contact with northern Ethiopia. Zooarchaeological evidence also support the existence of a cosmopolitan religious community or religious non-observance through the presence of either warthog (*Phacochoerus sp.*) or bushpig (*Potamochoerus sp.*), which was unlikely to be consumed by observant Muslims. The proportions of goat, cattle, and sheep, and butchery evidence concurring with that found across multiple Islamic period sites in Arabia, Mesopotamia, and Iberia, is also suggestive of other people following a more orthodox Muslim diet in Harlaa (Gaastra and Insoll 2020).

Conclusions

The evidence from Harlaa, be it glass, burials, faunal remains, inscriptions, architecture, technology or ceramics, confirms that cosmopolitanism emerges from the translation of cultural difference, through, “regular economic, social, and interpersonal encounters with people who were culturally foreign; the habitual adoption and circulation of far-away goods and distant ideas; and the development of new cultural forms and material practices in the realm of architecture, foodways, and religion”, as Richard (2013: 44) has described for Senegambia in the 17th to 19th centuries. The archaeological data permits recognition, but adding historical detail is more difficult for identifying Harlaa within the limited corpus of medieval Arabic sources is testing. These range from al-Ya‘qūbī (d. 897) to al-Maqrīzī (fourteenth century) (e.g. Vantini 1975; Huntingford 1989: 76-77), but are mostly based on second-hand observations, repetitive, and concerned with the Red Sea coast, not the Ethiopian interior (Ahmed 1992: 23; Insoll, introduction). Challenges admitted, the most likely conclusion is that Harlaa was Hubät/Hobat, the capital of the Hārālā sultanate, described by Stenhouse (2003: 69), as a “small tributary territory east of Šawā (Shoa), affiliated to Ifat”, one of the much larger medieval Ethiopian Islamic polities (c.1286-1435/36). Topography would appear key in identification, for Hussein (pers. comm. 11/3/20) has made the brilliant deduction that the Somali word *hoobat* and the Arabic *hubuut*, both mean to descend a slope from an upland point, i.e. a reference to the mid-point between the highland and the low-land, exactly where Harlaa is. Thus, the move from the recognition of cosmopolitanism to “*identifiable* histories” (Richard 2013: 60) can be made, with archaeology indicating that Harlaa/Hubät/Hobat was central within the complex processes of identity negotiation both within Medieval Ethiopia and the wider Islamic and non-Muslim worlds.

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Figure Captions

1. The location of Harlaa within Ethiopia (prepared by N. Khalaf).
2. Harlaa survey plan and excavation locations (prepared by N. Khalaf).
3. Architectural elements at Harlaa. 3.1. Cut limestone blocks used on a corner and inner wall face. The external face is a recent Oromo field terrace wall (HAR[F]). 3.2. Mihrab made from cut travertine blocks (HAR[A]). 3.3. Defensive wall made from large stone blocks. 3.4. Decorative plaster fragment (HAR[E]). Section of stone slab floor (HAR[B]). Travertine slabs used to construct tombs (HAR[C]) (photos. T. Insoll).
4. Plans of the excavated buildings. 4.1. The mosque (HAR[A]). 4.2. The civic building (HAR[F]). 4.3. The workshop complex (HAR[B]). 4.4. The domestic building (HAR[E]).
5. Beads and shell. 5.1. Examples of glass, quartz, and agate beads. 5.2. Bow drill hand guard made from a large equid femur. 5.3. *Strombus tricornis* end whorl cut off during bangle manufacture. 5.4. Backs cut from *Cypraea moneta* and *Cypraea annulus* cowry shells (photos. T. Insoll).
6. Imported Middle Eastern ceramics. 6.1. Degraded lustrous white glazed rim, probable Yemeni origin (HAR19[B]10.2) (not drawn). 6.2. Black-on-Yellow Yemeni rim (HAR15[B]8.5). 6.3. Off-white lustrous glazed scalloped rim fragment, Iranian frit (HAR19[E]25.4). 6.4. Indian Red Polished Ware rim (HAR19[E] 24.1).
7. Imported Far Eastern ceramics. 7.1. Martaban storage jar (HAR18[E]7a). 7.2. Guangdong celadon (HAR17[B]10a). 7.3. Possible Dehua whiteware (HAR15[B]8d). 7.4. Celadon disc (HAR19[E]6a) (photos. H. Parsons-Morgan).
8. Building inscription. Double sided (reverse illegible). Part of a large frieze with names of fourth and sixth Shi'a Imams, Ali (ibn Husayn - al-Sajjad) and Ja'far ibn Muhammad (as-Sadiq) (photo. T. Insoll; translation courtesy S. Almahari).
9. Byzantine trachy of the Emperor Theodore Komnenos Doukas (1224-1230). 10.1. Obverse. 10.2. Reverse (photos T. Insoll).
10. Examples of locally made ceramics. 9.1. Large red/brown earthenware/plainware storage vessel with flat in-turned rim (HAR17[B]6-27). 9.2. Light brown burnished carinated bowl with simple rim (HAR17[B]18-8). 9.3. Black/brown burnished simple rim with unburnished line decoration (HAR17[B]14-2). 9.4. Earthenware/plainware stand base (HAR15[A]2-6). 9.5. Black/brown burnished bowl with simple rim and grooved decoration (HAR17[B]5-8) (photos. N. Tait).

Context Number	Date and Laboratory Number
HAR 15 (A) 10	Cal AD 1155-1255 (2 sigma calibration; Beta - 419525)
HAR 15 (B) 6	Cal AD 1155-1260 (2 sigma calibration; Beta - 419526)
HAR 15 (B) 10	Cal AD 1165-1265 (2 sigma calibration; Beta - 419527)
HAR 16 (A) 6	Cal AD 1290 to 1410 (2 sigma calibration; Beta - 451581)
HAR 16 (A) 7	Cal AD 1255 to 1290 (2 sigma calibration; Beta - 451582)
HAR 16 (A) 9	Cal AD 1190 to 1275 (2 sigma calibration; Beta - 451583)
HAR 17 (B) 6 - Hearth	Cal AD 1220 to 1285 (2 sigma calibration; Beta - 461299)
HAR 17 (B) 10	Cal AD 1035 to 1215 (2 sigma calibration; Beta - 461300)
HAR 17 (B) 15	Cal AD 535 to 620 (2 sigma calibration; Beta - 461301)
HAR 17 (B) 24 - Hearth	Cal AD 775 to 975 (2 sigma calibration; Beta - 461302)
HAR 17 (B) 24 - Under Wall	Cal AD 1015 to 1050 and Cal AD 1080 to 1150 (2 sigma calibration; Beta - 461303)
HAR 18 (B) 6	Cal AD 1256 to 1306 (2 sigma calibration; Beta - 490904)
HAR 18 (B) 13	Cal AD 1152 to 1260 (2 sigma calibration; Beta - 490905)
HAR 18 (B) 24	Cal AD 776 to 971 (2 sigma calibration; Beta - 490906)
HAR 18 (B) 26	Cal AD 684 to 780 (2 sigma calibration; Beta - 490907)
HAR 17 (C) Burial 1 - Upper	Cal AD 1330 to 1340 and Cal AD 1395 to 1440 (2 sigma calibration; Beta - 461292)
HAR 17 (C) Burial 2 - Lower	Cal AD 1220 to 1285 (2 sigma calibration; Beta - 461293)
HAR 17 (D) 1	Cal AD 1165 to 1265 (2 sigma calibration; Beta - 461294)
HAR 18 (E) 8	Cal AD 1039 to 1210 (2 sigma calibration; Beta - 490908)
HAR 18 (E) 9	Cal AD 1154 to 1264 (2 sigma calibration; Beta - 490909)
HAR 19 (E) 30	Cal AD 1028 to 1184 (2 sigma calibration; Beta - 522144)
HAR 19 (F) 6	Cal AD 1169 to 1270 (2 sigma calibration; Beta - 522142)
HAR 19 (F) - (Cut Section) Below Plaster Floor (2)	Cal AD 1165 to 1265 (2 sigma calibration; Beta - 522143)
Harlaa Valley Section 1 - 10cm	Cal AD 1015 to 1050 and Cal AD 1080 to 1150 (2 sigma calibration; Beta - 461295)
Harlaa Valley Section 1 - 110cm	Cal AD 780 to 785 and Cal AD 880 to 990 (2 sigma calibration; Beta - 461296)
Harlaa Valley Section 2 - 20cm	Cal AD 1165 to 1265 (2 sigma calibration; Beta - 461297)
Harlaa Valley Section 2 - 90cm	Cal AD 1035 to 1215 (2 sigma calibration; Beta - 461298)

Table 1. Cumulative AMS radiocarbon dates from the Harlaa excavations

Site	Beads	Middle Eastern Glazed Ceramic Sherds	Chinese Ceramic Sherds	Southeast Asian/Chinese Martaban Jar Sherds	Glass Vessel Fragments
HAR (B)	1953	114	88	6	353
HAR (E)	338	27	13	51	207
HAR (F)	151	4	2	0	38
Total	2441	145	103	57	598

Table 2. Distribution of examples of luxury materials from Harlaa (beads can be both locally made and imported, all other materials listed are imported).