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The Predynastic site of Halfiah Gibli, Upper Egypt, and interconnections within the Nagada network

In 1898-99 Sir Flinders Petrie excavated a number of cemeteries in the Hu-Semaineh region of Upper Egypt, dating from the Predynastic to the Graeco-Roman period (Petrie 1901). Following a 1989 reconnaissance survey for Predynastic settlements in the vicinity of Petrie's excavated Predynastic cemeteries, two Predynastic settlements, HG at Halfiah Gibli and SH at Semaineh were located (Bard 1989). These sites were the focus of excavations in 1991.

Site SH

Site SH was thought to be a late Predynastic settlement because of the Nagada III grave goods excavated here by Petrie. One calibrated radiocarbon date of ca. 3780-3530 B.C. (OxA-2184) was obtained on a charcoal sample from a test pit (Bard 1991: 130). Ceramics collected on the surface at SH in 1989 were of Predynastic wares with some Old Kingdom sherds. Excavations at SH, however, revealed a site with a great mixture of ceramics, predominantly dating to the Old Kingdom, but mixed with a few Predynastic and New Kingdom sherds. No evidence of domestic structures was found at SH, and the site is deflated, without stratified deposits above the paleosol, and part of the site had been disturbed by recent activities of a farmer. At the north end of the site was an Old Kingdom mastaba where fragments of mud-brick are still visible. A calibrated radiocarbon date of ca. 2860-2460 B.C. (OxA-2185) obtained from a charcoal sample from this feature would place it firmly in the Old Kingdom (Bard 1991: 130). Because of the predominantly Old Kingdom component at this site, excavations were discontinued here.

Site HG

The main focus of excavations during the 1991 fieldwork was at Site HG. Nine units were excavated, mainly in areas not previously cultivated. No evidence of houses or any kind of residential structures was found, and it is pre-

sumed that cultivation in the 1950s and 1960s on the main spur destroyed any such features.

Excavations at HG were undertaken in areas that had not been previously cultivated, i.e., to the north and east margins of the main spur, and on a small spur to the east of the main village site. Unit 1 was excavated in a low-lying depression to the southeast of the main spur, where cultural material, consisting of sherds, lithics, and much charcoal, had washed down from the main settlement.

Ceramics consisted of an assemblage expected of a Predynastic settlement: large quantities of chaff-tempered ware (Rough class) intermixed with smaller quantities of polished red, black, and Black-topped red classes. Sherds of Predynastic bread molds were also identified by the ceramicist, Dr. Sally Swain. These ceramics probably date to late Nagada I and early Nagada II, but with the possibility that there may be a small later (mid-Nagada II) component. Three unusual ceramic items were found in Unit 1:

- 1) a pot-stand, consisting of a pinched ring of clay, tapered at the top,
- 2) a loop handle of Nile mud-clay, imitating imported (Palestinian) wares,
- 3) a large, globular ceramic bead, unpolished, 3.2 cm long and 3.2 cm in diameter.

Lithic tools from Unit 1 consisted of sickle blades (some with polish), some bifacial tools, flakes, and grinding stone fragments. No projectile points or other hunting/fishing tools were found, and there were relatively few scrapers. The stone tools, then, were those of an agricultural village. Numerous grinders and grinding stone fragments were also found on the surface of HG.

Paleobotanical evidence from Unit 1 also confirmed the agricultural subsistence base. Evidence was found for the major Predynastic (and Dynastic) cereal crops, emmer wheat and barley, in the form of carbonized grains and segments of cereal heads, as identified by the project's paleobotanist, Dr. Wilma Wetterstrom. On the northeast of the main spur at HG, two 2 x 2 m test units (2 and 3) were excavated, both with few cultural remains. Excavations continued in Unit 3 when the remains of durum wheat (*Triticum durum*) were recovered there through flotation, along with the remains of emmer wheat and 6-row barley. Further evidence of *durum* wheat, consisting of fragments of the stem and the cereal head, was subsequently recovered from this unit.

This was an unusual discovery because *durum* wheat has not been reported from Upper Egyptian Predynastic sites before, and it is only questionably known for this period from the site of Merimda in Lower Egypt (Zohary & Hopf 1988: 189). Subsequent to the Predynastic, the cultivation of *durum* wheat is not known in Egypt until Graeco-Roman times.

Although the samples of durum wheat were collected in a stratum in which Predynastic sherds were found, the remote possibility that the *durum* wheat remains may have been intrusive nonetheless needs to be addressed. The samples, though very small, are being sent to the Oxford radiocarbon laboratory, where they can hopefully be dated by accelerator dating.

To the east of the spur on which the main Predynastic settlement at HG is located is a smaller spur separated by a small wadi in which the washed material of Unit 1 was excavated. Predynastic sherds were found above, embedded in, and beneath the surface of soft calcium carbonate clasts. Mixed with the calcium carbonate clasts was a hardened ash-rich silt that had been cemented by water, probably natural rainfall during the period of site occupation.

Throughout the two excavation units (5 & 7) in this area were numerous pits with much wood charcoal and ash. Burned and firecracked rocks and cobbles were also found, as well as a number of heat-treated flakes and tools of chert. Abundant lithic debris from all stages of manufacture was also excavated, and it is thought that this was an industrial area for chert working (by heat treating). Considerably fewer sherds were excavated in these units than in Unit 1, although one unusual rim sherd of a White crosslined bowl (Nagada Ic) was found in Unit 5. Lithics have yet to be analyzed, and will be shipped back to Boston for analysis in 1993.

Paleobotanical evidence from Units 5 and 7 also suggests an industrial area. Unit 7 contained abundant remains of wood charcoal and very little other botanical remains. Other evidence from Units 5 and 7 also suggests stone working. A carnelian bead (Unit 5) and an unfinished agate bead (Unit 7) were recovered through flotation. An unworked green stone, identified as green felspar, was found in Unit 5. Green felspar was used for beads beginning in Predynastic times (Lucas and Harris 1989: 394).

Also in Unit 7 was a small ground stone palette of hard sandstone, slightly trapezoidal in shape with rounded corners. Its size (6.0 x 4.1 cm) suggests domestic use, as it is not of the larger, more elaborate types found in elite Predynastic burials. An end fragment of a large rhomboid slate palette (late Nagada I, early Nagada II) was also excavated in Unit 7, as was a polishing stone. No ground stone maceheads or chipped chert "lances," such as Petrie found in the nearby Cemetery B (Petrie 1901: 33-34), were excavated in Unit 5 or 7.

Beneath the levels with Predynastic artifacts in Unit 1, at level 7, an *in situ* semi-circular hearth was excavated with no associated sherds or lithics. A fragment of a mandible (tentatively identified as a small herbivore, such as a gazelle) was found between two hearth stones. This hearth is thus earlier than the levels with Nagadan sherds, and may be Epi-paleolithic.

Evidence for trade and exchange

A preliminary analysis of the material found at HG suggests a widespread exchange network in which even a relatively small farming village (ca. 3 ha.) was engaged. Agate is found locally in wadi deposits, but the green felspar and carnelian come from the Eastern Desert (Lucas & Harris 1989: 387, 391, 394). Two very small lumps of copper were recovered through flotation (Units 1 and 3), and the nearest copper mines are also in the Eastern Desert (Lucas & Harris 1989:

210). A (pierced?) cowrie shell from the Red Sea was also found in the stone tool workshop.

Grinding stones collected on the surface of HG consisted of igneous rocks (rhyolite, porphyry, basalt, granite) and metamorphic rocks (marble, quartzite). Marble is found in the Eastern Desert, and the red and grey granites come from Aswan (Lucas & Harris 1989: 58, 414). The other igneous and metamorphic rocks are found near Aswan, as well as in the Eastern Desert (Lucas & Harris 1989: 61, 63, 416). Fekri Hassan (personal communication) has suggested that prehistoric Beduins living in the Eastern Desert would have known the sources of various hard stones and minerals, but the grinding stones from Aswan suggest exchange within an Upper Egyptian network.

Complex economic interaction is also suggested by another artifact excavated in Unit 1 at HG: a fragment of a mud-sealing. The sealing was created when a mud lump was impressed over three loops of string tied around a jar (or some kind of container). The existence of such a sealing suggests the exchange of valued goods in a regional or long-distance, and probably not local, exchange network. Such economic evidence from the settlement at HG would also correlate with grave goods excavated by Petrie in sometimes exotic materials, such as lapis lazuli and gold, from the nearby Cemetery B (Petrie 1901: 34).

Although the 1991 excavations at HG and SH did not uncover the remains of any domestic structures, a corpus of pottery from a Predynastic settlement, quite unlike that from Predynastic burials, is being prepared, and will be extremely useful for Predynastic settlement studies. No "Hard Orange Ware", as identified at Hierakonpolis, was excavated at HG, and Dr. Swain thought that such a ware at Hierakonpolis was a substitute for the preferable marl wares, only available farther north where the marl clays are found.

Coring was conducted at several locations along the floodplain by Dr. Eberhard Zangger. But coring on the floodplain near HG and SH revealed a sequence of intercalated river sand and floodplain alluvium with a total lack of sherds or other indications of human activity. It is likely that there was a large Predynastic site in the Hu region located on high ground of the floodplain closer to the river, but the alluviation here has been too deep to locate it.

Although much cultural material at the settlements of HG and SH had been disturbed, it was important to conduct these excavations because such settlements have been ignored by earlier archaeologists working in Egypt. As industrial and agricultural development increases in Egypt, such settlements are being destroyed, including evidence for the economic base which supported the rise of complex society and the early state in Egypt.

References

- BARD, K. A. 1989. Predynastic settlement patterns in the Hu-Semaineh region, Egypt. *Journal of Field Archaeology* 16: 475-478.
- BARD, K. A. 1991. Egypt, Halfiah Gibli and Semaineh H, Hiw. *Archaeometry* 33: 129-130.
- LUCAS, A., & J. R. HARRIS. 1989. *Ancient Egyptian Materials and Industries*. London: Histories & Mysteries of Man.
- PETRIE, W. M. F. 1901. *Diospolis Parva. The Cemeteries of Abadiyeh and Hu*. London: Egypt Exploration Fund.
- ZOHARY, D. & M. HOPF. 1988. *Domestication of Plants in the Old World*. Oxford: Clarendon Press.