

Newsletter

OF THE AMERICAN RESEARCH CENTER IN EGYPT



Number 158/159

SUMMER/FALL 1992

**PRELIMINARY REPORT:
THE 1991 BOSTON UNIVERSITY EXCAVATIONS AT HALFIAH GIBLI
AND SEMAINEH, UPPER EGYPT**

Kathryn A. Bard

With contributions by Abdel-Moneim Mahmoud, Arlene M. Rosen, Sally Swain,
Stephen Savage, Wilma Wetterstrom, and Eberhard Zangger

Editor's Note: Kathryn A. Bard is a professor of archaeology at Boston University.

In July-August, 1991, excavations were conducted at two sites (HG, SH) in the Hu-Semaineh region, near Nag Hammadi. Mr. Yaseen Mohamed Mahmoud was the field representative of the Egyptian Antiquities Organization (EAO) office in Qena, under the direction of Mr. Hussein el-Afiuni. The principal investigator wishes to thank Professor Dr. Mohamed Ibrahim Bakr, Chairman of the EAO, and Mr. Mitawi Balboush for their cordial cooperation on this project. Funding for the project was provided by the National Geographic Society.

Background

In 1898-1899 Sir Flinders Petrie excavated a number of cemeteries in the Hu-Semaineh region (Petrie 1901). These included five Predynastic cemeteries, nine pharaonic cemeteries, and two Roman-period cemeteries. Petrie also excavated a Roman fort, which had been converted from a Ptolemaic temple.

In 1989 Bard did a reconnaissance survey for Predynastic settlements in the vicinity of Petrie's excavated Predynastic cemeteries (Bard 1989). Two Predynastic settlements, HG at Halfiah Gibli, and SH at Semaineh were located. HG and SH are situated on spurs of the low desert above the floodplain, and to the south of the El Ranan canal. Surface surveys were conducted at these two sites, and artifacts (mainly potsherds and some lithics) were collected in a random sampling strategy.

Site SH

Site SH was thought to be a late Predynastic settlement because of the Nagada III grave goods excavated here by Petrie, and because of one calibrated radiocarbon date of ca. 3780-3530 B.C. (OxA-2184) obtained on a charcoal sample from a test pit (Bard 1991: 130). Ceramics collected on the surface at SH in 1989 were of Predynastic sherds with some Old Kingdom sherds. The test pit from which the sample

(OxA-2184) was obtained was near what is now thought to be an early (Nagada I-IIa?) cemetery area, excavated by Petrie to the southwest of the site. Indicative of an early Predynastic date for this cemetery area, a White Cross-lined class sherd was excavated in another test pit in this cemetery in 1989, and a fragment of a ceramic anthropomorphic figurine was found in a grave pit in 1991. Although he did not differentiate two cemeteries, Petrie excavated another cemetery area (H) on a small spur east of the village site, and this area is probably where the mainly Nagada III grave goods were found. In area H a square grave outlined on the surface in mud-brick was excavated in 1991 and fill from this was sieved, but it had been very thoroughly excavated by Petrie's workmen, and no artifacts were recovered.

In 1991 a topographic map was made at SH, and a 5 x 5 m unit was excavated. 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. What was thought to be an industrial area was excavated in Unit 1 at SH, but part of the site had been disturbed by recent activities of a farmer, who had piled fodder there. A hard, compacted surface 2-7 cm below the desert surface was excavated, and consisted of mud mixed with calcium carbonate clasts, and burned soil with concentrations of ash and charcoal.

Large chunks of vitrified clay were found on the surface of SH around Unit 1, and were thought to be the remains of a pottery kiln(s), but no kiln structures were found in the excavations. The ceramics from Unit 1 consisted mostly of sherds of very gritty-tempered Old Kingdom bread molds, and SH may have been a kiln site for the production of Old Kingdom bread molds. No other domestic pottery was found, and the few Meydum bowl sherds (Old Kingdom) that were excavated there probably came from an Old Kingdom mastaba at the north end of the site 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).

As SH seemed to be predominantly an Old Kingdom site, excavations were discontinued there.

Site HG

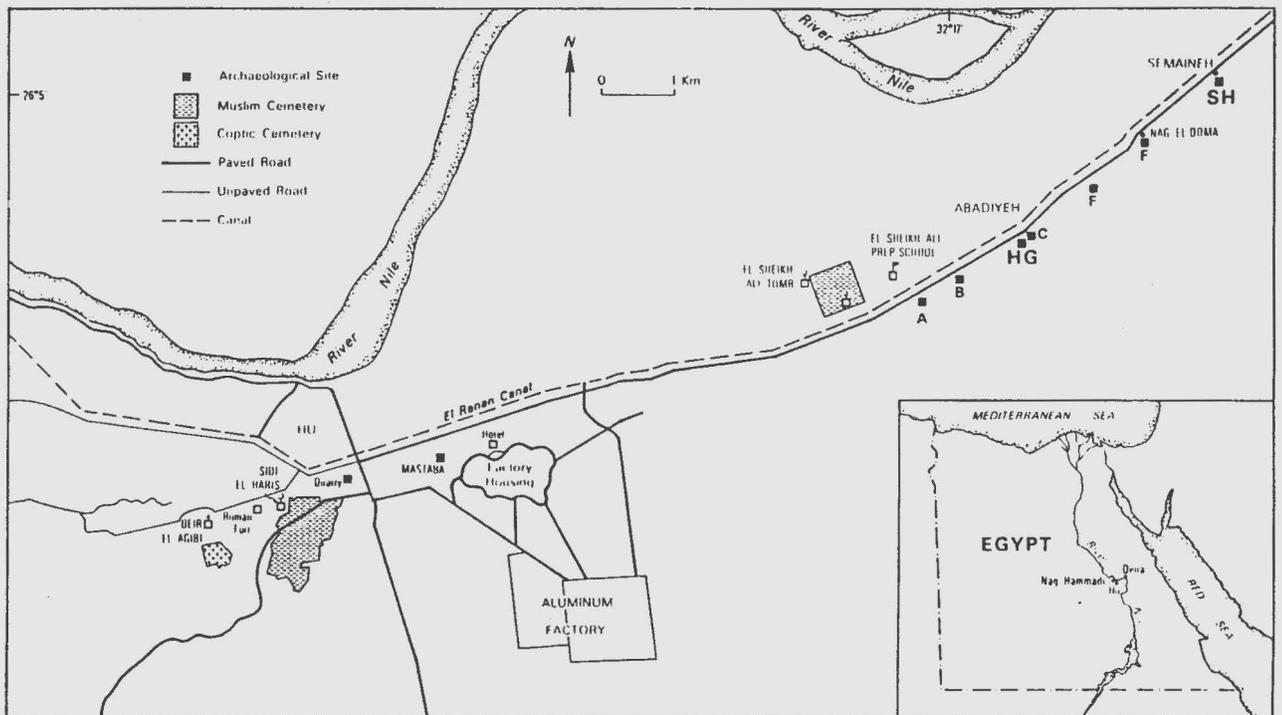
The main focus of excavations during the 1991 fieldwork was at Site HG. A topographic map of the site was made, and nine units were excavated, mainly in areas not previously cultivated. No evidence of houses or any other structures was found, and it is presumed that cultivation in the 1950s and 1960s on the main spur destroyed any such features. A 2 x 2 m test unit (6) was excavated in the previously cultivated area and very few sherds and lithics (but some charcoal) were found above the paleosol, indicating much disturbance. When Petrie visited this site in 1898 he stated that it was "entirely plundered" (Petrie 1901: 32). If there had been any remains of mud-brick walls Petrie would probably have noted them. It is assumed that this settlement was constructed of more ephemeral (organic) materials, which could only be recognized by more recent archaeological methods of

recovery, but such features were probably destroyed by the recent cultivation.

HG, Unit 1

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, in the area of the four limestone blocks noted in the 1989 survey. In this area cultural material, consisting of sherds, lithics, and much charcoal, had washed down from the main settlement. Therefore, the Predynastic strata in this unit do not represent primary deposition of artifacts on any kind of living surfaces.

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 class. The Rough-class represents large and smaller storage jars, and cooking vessels and bowls, while the fine polished classes represent a better quality material, possibly for serving food. Sherds of Predynastic bread molds were also identified. 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.



1. Location map of Pre-dynastic sites in the Nu-Semaneh region

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. Numerous grinders and grinding stone fragments were also found on the surface of HG—the stone tools were those of an agricultural village.

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.

Beneath the levels with Predynastic artifacts in Unit 1, in 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.

HG, Unit 3

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 (*Triticum aestivum*) and cf. 6-row barley (*Hordeum vulgare*). Further evidence of durum wheat, consisting of fragments of the stem and the cereal head, was subsequently recovered from this unit. The deposits of Unit 3 contained charred plant remains and very few artifacts, suggesting that ash deposits had been swept out of hearths in houses and dumped on the edge of the village.

The durum wheat was an unusual discovery because this species of 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). Although emmer wheat and barley have been found in Dynastic contexts, such as in baskets in



2. A fragment of a mud-sealing impressed on string that had been tied around a jar (or other container), from HG

Tutankh-amen's tomb (Germer 1985: 212), no durum wheat is known from a Dynastic context. 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.

Also excavated in Unit 3 were several sherds of marl clay not found in other excavated units at the site. It is of interest that marl clays were used in this region, and not a false 'hard orange' ware, as found at the Predynastic site of Hierakonpolis farther south. HG is within the limestone geology where marl clays were available, but no such formations exist in the Hierakonpolis region, where the more desirable marl wares may have been imitated by the 'hard orange' ware.

HG, Units 5 and 7

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. Several *sebakh* pits had already been excavated there, probably because of the abundant amount of charcoal in the soil. To the north of the *sebakh* pits, however, was an undisturbed area with Predynastic artifacts on the surface. Excavations were conducted in this area in two units (5 and 7).

Soft friable calcium carbonate clasts 1-2+ cm thick appeared in the excavations squares of Unit 5,

and at first it was thought that these were living floors. The calcium carbonate clasts, however, were not contained in any discrete areas that could be considered house floors, and the surface was very uneven and pitted (from rodent activity). Predynastic sherds were found above, embedded in, and beneath the calcium carbonate surface. 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. Further investigation of the composition of these deposits is pending.

Throughout Units 5 and 7 were numerous pits with much wood charcoal and ash. Burned and fire-cracked 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 Units 5 and 7 represent an industrial area for chert working (by heat treating).

As the small spur where Units 5 and 7 are located is downwind from the main settlement area, with prevailing winds from the northwest, this would have been a good location for an industrial area. Considerably fewer sherds were excavated in these units than in Unit 1, although one unusual rim sherd of a White cross-lined class bowl (Nagada Ic) was found in Unit 5.

Paleobotanical evidence from Units 5 and 7 also suggests an industrial area. Unit 7 contained abundant remains of wood charcoal but very few other botanical remains. Unit 5 contained some desiccated emmer rachis segments, possibly from dumps of straw, but no carbonized remains, as found in food processing areas. If this area was an industrial area, the presence of large mammal bones in Units 5 and 7, which have yet to be analyzed, remains unexplained.

Other evidence from Units 5 and 7 also suggests stone working. A carnelian bead was recovered through flotation from Unit 5, and an unfinished agate bead was recovered from Unit 7. An unworked green stone, identified as green felspar, was found in Unit 5. Green felspar was used for beads beginning in Predynastic times, as were agate and carnelian (Lucas & Harris 1989: 387, 391, 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.

Evidence for Trade and Exchange

A preliminary analysis of the materials found at HG suggests a widespread exchange network in which even a relatively small farming village 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 small lumps of copper were recovered from 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 Unit 7.

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).

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 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).

Conclusions

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 by Dr. Swain, and will be very useful for Predynastic settlement studies. Analysis of the lithics from the lithics workshop at HG is planned for later in 1993. The lithics study will also be useful, as only the unusual or elaborate lithic tools were kept by earlier archaeologists working at both Predynastic and Dynastic sites.

Nine charcoal samples from Sites HG and SH were sent for dating to the radiocarbon laboratory at Southern Methodist University, and these dates will be available in 1993.

Dr. Eberhard Zangger directed auguring taken from the floodplain near the desert edge at SH and HG (to 3-4 m depths), but this revealed a sequence of intercalated river sand and floodplain alluvium with a total lack of sherds or other indications of anthro-

pogenic impact. Excavations trenches by the EAO near SH produced intercalated wadi/desert/floodplain/river deposits with no occupational horizons in between and containing only a few sherds.

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, Kathryn A. 1989. Predynastic settlement patterns in the Hu-Semaineh region, Egypt. *Journal of Field Archaeology* 16: 475-478.

Bard. 1991. Egypt, Halfiah Gibli and Semaineh H, Hiw. *Archaeometry* 33: 129-130.

Germer, Renate. 1985. *Flora des pharaonishcen Agypten*. Deutsches Archäologisches Institut Abteilung Kairo, Sonderschrift 14. Mainz: Philipp von Zabern.

Lucas, A., & J.R. Harris. 1989. *Ancient Egyptian Materials and Industries*. London: Histories & Mysteries of Man Ltd.

Petrie, W.M. Flinders. 1901. *Diospolis Parva. The Cemeteries of Abadiyeh and Hu*. London: Egypt Exploration Fund.

Zohary, Daniel, & Maria Hopf. 1988. *Domestication of Plants in the Old World*. Oxford: Clarendon Press.

THE CAIRO CENTER LIBRARY FUND - 1991-92

We acknowledge with thanks donations from the following members for the Cairo Center Library Fund for the year 1991-92:

Dr. Elie M. Abemayor
Dr. Richard H. Adams
Dr. Kathryn A. Bard
Mr. Edwin Brock
Mrs. Lily M. Brown
Ms. Joyce S. Cohrs
Ms. Jeanne K. Cooke
Mrs. Nita Logan Dawson
Mr. Leo Depuydt
Mr. Mark Michael Easton
Dr. Wolfhart P. Heinrichs
Mr. Frederick and Billye Kolb
Dr. and Mrs. Francis Niedenfuhr
Ms. Barbara Pleskow
Mrs. Polly S. Price
Ms. Shang-ying Shih
Mr. Paul Stanwick
Ms. Janet D. Thorpe
Mr. Robert L. Toth
Ms. Lynn Van Duyne
Mr. Prescott J. Van Horn