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# The Oriental institute of Naples expedition to Petrie's South Town (Upper Egypt), 1977-1983: an interim report

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The archaeological expedition of the Instituto Universitario Orientale to Upper Egypt started the field-work in the autumn of 1977 in the Naqada region, encompassing the western bank of the Nile and the gravel plain along the Thebaid plateau between Ballas and Naqada. The Naqada region offers relevant archaeological information for the study of the formative period of the Egyptian State as regards the density of settlement, the wealth of the burials as well as the monumental buildings in Predynastic and Early Dynastic times. The impressive discoveries of W. H. Flinders Petrie at the site of Ombos (Nubet), J. E. Quibell at the site of Ballas and J. de Morgan at the site of Naqada at the end of the 19th century were first to point to this area as one of the cores of the Egyptian cultures through the 4th millennium B.C. Since then the main stream of information available has been to a great extent confined to burials and associated furnishings, whereas the lack of any substantial settlement excavation has constrained the growth of evidence. The intention of the I.U.O. project is to obtain this kind of information.

It seemed most appropriate to begin our project as a detailed re-investigation concentrated on the most impressive Predynastic site found in Upper Egypt: the South Town. The selection was then made quite independently of any tactical consideration and, in particular, of the site's present state of preservation.

The project aims in three directions:

1. Analysis of the topography, geomorphological setting and state of preservation of the early site;
2. Re-collection of a broad spectrum of data on resources, their exploitation and craftsmen's production in the Predynastic settlement;
3. Studies on the degree of social complexity reached by the Naqadian social group in the late 4th millennium B.C.

Six seasons of field-work have taken place so far (autumn 1977, spring 1978, autumn 1979, winter and autumn 1982, autumn 1983), involving the survey of the entire compound of the South Town and Nubet, the excavations of buildings on the eastern margin of the South Town and a geomorphological survey mainly monitored to ascertain local post-depositional processes of erosion.

### Description of the site

The site named the South Town appears today as a dense concentration of artefacts with very few structures; it thus bears the effects of the activity of sebakhim diggers. It is located on the lowest elevation of the gravel terrace, about 4 km to the west of the village of Zawaydah. It was originally explored by Petrie in 1896; he excavated a large cemetery with about 2000 graves in the vicinity and part of the settlement. After Petrie's excavations the site was examined by J. de Morgan in 1897 who made some surface collections, and by Loret and Gaillard in 1907, Kaiser and Butzer in 1958, Hays in 1976 and Fekri Hassan since 1978.

The area we were able to assign to the Predynastic settlement of the South Town is about 152 m N-S and 105 m E-W, rather elliptical in shape, and approximately extending over a surface area of 1.6 ha. Its surface is strongly affected by erosion and almost reduced to a deflation pavement of artefacts, while very little mounding has actually been taking place. As a result, the solid surface is extremely rich in terms of artefacts concentration, but very little context is available for any degree of spatial correlation. Probably, as a consequence of discoveries made by Petrie in the burial ground, its state of preservation had been further deteriorated by farmers searching for graves, which apparently took place the very day after Petrie's departure (according to his own witness). In more recent times some houses were built by farmers and further soil was removed through pitting to provide construction materials.

Both geomorphological research and archaeological observations have been facilitated by the great number of actual and refilled pits that shape all its surface. Artefacts are paved over different sedimentary formations that grade towards the alluvium exposing different kinds of surfaces. These areas are well visible against the whitish surface of natural sediments.

Surface evidence has been integrated by a number of small trenches dug at different spots at the eastern and southern limits of the site. As a result we may safely assume that notwithstanding the ubiquitous disturbances that occurred all over the site, its original shape and size have been basically preserved. Pit digging by farmers has taken place always in restricted areas and although it turned over the whole of the archaeological deposit, it moved the heavier materials over a small distance only. Historical and recent Nile floods have not reduced the deposit on its eastern edge. This was particularly evident on the W-E excavations section (northern face) prolonged a few meters into the alluvial plain.

The archaeological deposit is reduced to a sherd pavement that follows the hump-like layout of the gravel tongue, thickening at the western end, towards an ancient streambed where we could recover the only cultural series of some stratigraphical significance (ZWEA). From an archaeological point of view the South Town is then best approached as a surface site, considering how little can be said about its sedimentary history. The basic indicator for variability in human occupation have become pits and other alterations of the surfaces, and particularly the conglomerates at the eastern side of the site. To create minimal opportunities of recovery we have centered our research strategy on the recording of these alterations in their chronological, morphological and functional variability.

### 1979, 1982 and 1983 test excavations

In 1979, to investigate better the highly disturbed deposit, we carried out the excavation by two test trenches close to the eastern and western limits of the black-earth deposit, in the central part of the site. In 1982 and 1983 the eastern trench was enlarged in order to study the plan of the postholes found here in the previous season. The test trenches were excavated to meet our requirements for the reconstruction of the economy of the Predynastic site. Priority has thus been given to the sampling of the plant and animal remains and the excavations have been oriented towards total recovery through soil screening and floatation.

The whole area of the South Town has been covered by a  $2 \times 2$  m grid system oriented to the north, resulting in a network of squares labelled with the alphabetic code of four letters. The first two — ZW — are recurrent and indicate the sites name — Zawaidah. ZW is followed by the area indication: E for the eastern side and W for the western side. The last letter indicates the  $2 \times 2$  m square counted left-to-right, from A to Y, to cover a total area of  $10 \times 10$  meters.

The western trench ZWW, extended N—S for  $2 \times 8$  m, was excavated on the southern edge of a recent pit deeply cut into the upper lime deposit. In this trench plant and animal remains were abundant, with only little mud-brick and clay remains. Here the midden lies on the top of the upper lime deposit and non-organized alterations of its surface were evident, suggesting that the desert-facing western edge of the settlement was mostly utilized as a dumping ground, located at some distance away from the clusters of dwellings.

The eastern trench ZWE, originally intended to extend over an identical surface in E—W direction starting from the eastern edge of a deep ditch cut into the gravel of the lower lime deposit, had been progressively expanded in 1982 and 1983 with a total surface of about 300 sq m. The main morphological feature in this trench was the terrace built of basal conglomerate and yellow silt forming the ground on which traces of architectural structures were recognized. The area excavated

revealed an archaeological deposit only a few centimeters thick. A number of round postholes and other artificial features, aligned in different directions were brought to light, suggesting the existence of wood and clay buildings on the eastern edge of the site.

### **Stratigraphy of the South Town**

Layers of the Predynastic settlement were accumulated on the black earth which was superimposed on the lime and gravel of the Plio-Pleistocenic formations.

The stratigraphy of the site consists of a total of seven layers. Three of them are part of the natural formation. At the bottom is a hard yellow lime 2 to 4 m thick, underlying the whole archaeological compound and identified as a part of the Neo-Nilotic formation related to the last interpluvial phase and superimposed by the thick Dendera gravel. On the top of this layer there is a 0.25 to 1 m gravel sediment followed by a red lime formation now less than 1 m thick. Due to the uneven morphology of this topsoil, heavily affected by erosion, the archaeological deposit was accumulated on the surface of all three types of soils.

In the test excavation ZWE five different stratigraphic layers were recorded, from the top to the bottom:

1. Reddish brown soil, rich in artefacts and faunal remains, 5 - 10 to 50 - 60 cm thick, representing the disturbed archaeological deposit;
2. Red soil, with less disturbed archaeological deposit, 10 to 40 - 50 cm thick; it is the layer rich in architectural remains, mainly wattle- and-daub imprints and mud-bricks;
3. Grained dusty brown soil, with a few potsherds and lithic tools only slightly embedded in it; it formed a kind of crust, about 2 cm thick, covering the yellow lime and basal conglomerate over the wide parts of the trench;
4. Yellow silt, without any artefacts, forming a compact layer in the southern and western part of the trench; it represents the virgin soil of the site;
5. Basal conglomerate, with pebbles of probably fluvial origin, forming the basal sedimentary unit of the whole terrace; it is clearly visible in the central and northern part of the trench.

### **Chronology**

In the absence of samples suitable for the radiocarbon dating from well defined stratigraphical layers, it was the study of the pottery that has been used to build the chronological frame of different cultural phenomena recorded on the site. For this purpose the potsherds from the different layers of selected squares in the two main trenches were examined in detail during 1979 and 1982 seasons, and systematic

surface collections from different areas regularly distributed over the whole surface of the site was carried out in 1983.

Despite its discrepancies, Petrie's descriptive system was used in chronological studies in order to maintain a link with the sequence system — S.D. — used in dating the tombs from the graveyards to the west and south of the South Town. This sequence in fact still represents the basic chronological reference for the Predynastic town. Yet, the absence of any complete vessel prevented us from following in a proper way the S.D. system both in its original and modified versions. Some large potsherds were, however, tentatively identified with the Petrie's pottery types.

It was assumed that some classes of pottery are diagnostic of the main phases in the Predynastic period, as Petrie, Kaiser and Kemp have pointed out. The C, D, and L wares in particular appear to represent the Naqada I, II and III phases respectively. The P and B ware appears to be typical mainly of the Naqada I and IIa-b. The R ware seems to be characteristic of the Naqada IIc-d and III phases. Moreover, the general review of occurrence of the individual classes of pottery in the Predynastic tombs from Upper Egypt has made evident that the average frequency of P and B wares decreases from the Naqada I to the Naqada III times and the average frequency of R and L wares increases from the Naqada II to Naqada III times. A similar trend in the number of varieties of P, B, R and L types had been already emphasized by Petrie. Finally, attention was paid to the fact that vessels with fabric similar to R and L classes continued to be made into the Early Dynastic and Old Kingdom times.

For these reasons the study of the potsherds was mainly devoted to: 1. Identification of the main classes occurring on the site; 2. Testing their relative frequency on its surface and at different levels of the trenches; 3. Recognizing the rim shapes comparable to the types in the Petrie's Corpus.

It was then attempted to place the individual sectors of the site within broader chronological sequence of the predynastic period on the basis of the frequencies of occurrence of the classes of ware in each square as well as attempting the S.D. date of some larger potsherds.

In 1979 and 1982 twenty squares in ZWW and ZWE were examined. The most striking element found in them was a very high frequency of the utility ware (R) ranging from 69.91 % in ZWW.A.1 to 54.77 % in ZWE.WE.3. It confirmed our initial impression that this ware was the most common kind of pottery occurring on the surface of the site. At first sight this situation seemed to be anomalous when compared to the general trend of the frequencies of the classes of ware found in the tombs. Recent evidence from Jebel el-Tarif and at Hierakonpolis has revealed, however, that it was typical in the Predynastic settlements. It was then assumed that the utility ware might be regarded as a material lacking chronological validity. Only the different frequencies of P/B and L potsherds, and the possible occurrence of C and D fragments, were therefore maintained as chronological indicators.

The chronological evidence suggested at that stage that the South Town was

inhabited during the whole Naqada period. The higher frequency of P/B sherds and the occurrence of C sherds in the ZWW area supported the hypothesis, that the western and central sectors of the site were mainly occupied in Naqada I - II periods. The very high frequency of L sherds in the ZWE area suggested, on the contrary, an occupation of this part of the site in Naqada III and/or the early Dynastic times.

Such hypothesis was tested in 1983 by means of a systematic surface collection over the whole site. 51 smaller squares located at the SW corner of individual  $20 \times 20$  m squares forming the basic grid covering the site were examined in that season. The analysis of the collected potsherds is still in progress. The preliminary review of the different frequencies of the classes of ware has confirmed, however, the general trend observed in ZWW and ZWE. At the same time it has become possible to recognize a major concentration of Early Dynastic potsherds in the northern and northwestern part of the site, which was excavated by Petrie, and of Pharaonic pottery (Middle to New Kingdom) occurring along the southeastern edge of the site, confirming earlier statement of Petrie.

At the present stage of research the three main periods of habitation can be recognized at the South Town: 1. Predynastic occupation, corresponding to the whole surface of the settlement; 2. Early Dynastic occupation, centered in the northern half of the site; 3. Dynastic occupation probably contemporary to Nubet, located in the southeastern part of the site. It also seems that during the Predynastic period the settlement gradually shifted from the western side of the site to the edge of the present low desert.

### Architectural evidence

The identified man-made features on the surface of the ground include: 1. Postholes; 2. Notches and grooves; 3. Pits of different size; 4. Heaps of mudbricks; 5 Undefined structure.

1. Postholes. About 200 postholes dug in the basal conglomerate and the yellow lime have been found in ZWE. Their sizes range from  $3 \times 3 \times 2$  cm to  $40 \times 46 \times 27.5$  cm. Some of them are clearly arranged along the axes of E-W and N-S direction and might be the remains of structures. Most of the holes, however, do not exhibit any clear arrangement and probably are the remains of structures built in different periods and thus superimposed.

2. Notches and grooves. They are a) swallow-tailed notches, b) linear grooves, c) regular cuts in the sediment. At least the swallow-tailed notches may be contemporary with the holes. They might be attributed to enforcements of the walls.

3. Pits of different sizes. They are shallow, conical and roughly oval. Their function is still uncertain.

4. Heaps of mud-bricks. They are scattered along a main E-W axis in ZWE and probably represent the remnants of a collapsed wall; the size of the bricks ranges

from  $8 \times 7 \times 6$  cm to  $19.5 \times 12 \times 12$  cm. They rest directly on the basal conglomerate and the red soil filling a ditch at the western side of ZWE.

5. Undefined structure. A roughly round ditch,  $110 \times 115$  cm wide and 20 cm deep, is visible in the northern part of the terrace formed by the basal conglomerate in ZWE; it was originally paved with small blocks of oxidized clay, ranging from  $8 \times 7 \times 3$  cm to  $20 \times 11 \times 4.5$  cm in size.

The extensions of the excavations, both at ZWE and ZWW, is still too limited to have provided any house plan or sufficient set-up of features for a functional interpretation of different parts of the settlement. It seems, however, that two phases of construction can be distinguished in ZWE, as Petrie has already pointed out. The first one is represented by the arrangements of postholes and the wattle-and-daub clay imprints which seem to be the remains of the clay dwellings dated to the Predynastic period. The second phase is represented by the heaps of mud-bricks probably of Pharaonic age.

### “State authority” devices

To detect evidence for the state authority devices we have followed examples recently provided by researchers working on contemporary periods in South-Western Asia and Nubia. Thus we were searching for clay sealings on room-locking devices, vases, doors, leathers, packages as well as clay counters and, ultimately, records written on tablets. To our surprise a dozen of broken pieces of a light-coloured compact clay moulded over door-pegs, gags, pots and other objects have been found both at ZWW and at ZWE, in the latter in the red soil mixed with the slided remains of the wattle-and-daub dwellings. At ZWW they were found both in the thick coat of sherds and in the lower dusty red soil. We may describe them as almost ubiquitous.

It seems that the rooms of dwellings in the South Town were locked with similar peg-and-string device which was adopted in Southern Mesopotamia from Early-Middle Uruk (about 3,500 - 3,000 B.C.) and used from northern Syria to Eastern Iran by the end of the 4th millennium B.C. Considering the present device evidence from the South Town we may state that a similar system of the control of stored goods and their shipment was adopted at the same time in Upper Egypt. As compared to the Mesopotamian and the Iranian evidence of the Jemdet Nasr times (3,200 - 2,900 B.C.), the sealings of South Town bear very rarely impressions of seals. Out of some 300 *bullae* found, only half a dozen bear clear signs of having been sealed. They were signed with cylinder seals and only two of them have been well preserved. One of them was found placed on a wooden peg, the other on a pot rim that had been topped by a piece of cloth. Both seals reproduce rows of animals of the type known from the ivory handles of the flint knives typical for the Late Predynastic times. This is the first record of this kind found in the South Town and it seems to place the evidence from the South Town within the context of the incipient Egyptian State.