

# ITALIAN EXCAVATIONS IN THE NILE DELTA: FRESH DATA AND NEW HYPOTHESES ON THE 4TH MILLENNIUM CULTURAL DEVELOPMENT OF EGYPTIAN PREHISTORY

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The "Centro Studi Ricerche Ligabue" of Venice, started in 1987 a systematic program of archaeological investigations concerning the general problem of transition to State society in the Eastern Nile Delta. Such a project is part of a wider research program of the C.S.R.L. on State formation dynamics which already generated specific field activities in other regions of Asia (Iran, Oman) and Mesoamerica (Belize).<sup>1</sup> The main purpose of the project is to gather further informations and data concerning the role played by 4th millennium BC Eastern Delta human communities in the ancient Egyptian state formative process, and, incidentally, about the nature and quality of Egyptian contacts with near eastern cultural spheres.

The mission also aims at verifying the socio-economic organization of local communities on the

threshold of Upper and Lower Egypt unification and immediately after. The choice of the Eastern Nile Delta is due to its geographical location which seems to be particularly suitable for testing hypotheses on state formation dynamics, involving phenomena of long distance trade, external and internal conflicts, possible regional differentiation of social structures and specific processual trajectories. So far, scholars focused their researches on the late prehistory of Upper Egypt in order to understand the origins of the pharaonic state (KRZYZANIAK 1977; HOFFMAN 1980, 1982; EDESFELDER 1981; FATTOVICH 1984; TRIGGER 1983; HASSAN 1988). On the contrary, the possible contemporary evidence from the Delta was neglected for a long, mainly because of the conviction that preprotohistorical remains were practically absent or covered by meters of nilotic silt. Recent develop-

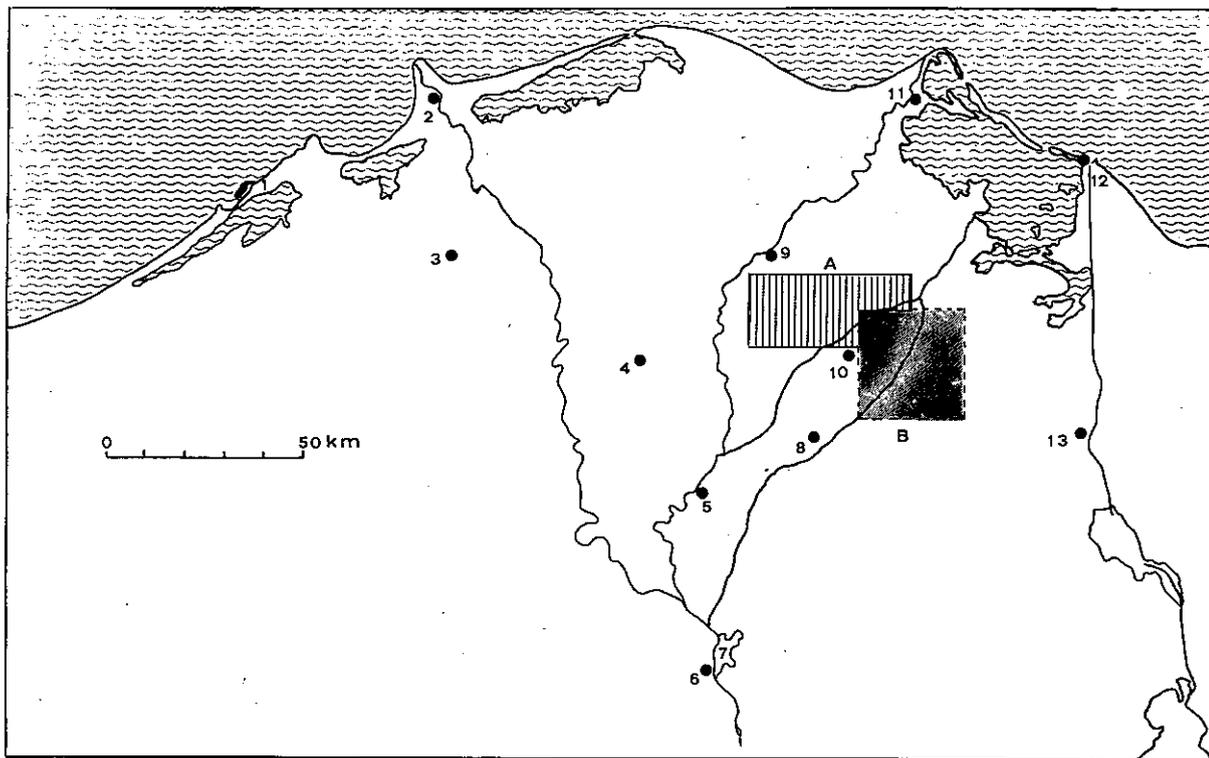


Fig. 1. - The Nile Delta with the Italian (A) and Dutch (B) survey areas. 1) Alexandria; 2) Rosetta; 3) Damanhur; 4) Tanta; 5) Benha; 6) Giza; 7) Cairo; 8) Zagazig; 9) Mansura; 10) Kafr Saqr; 11) Damietta; 12) Port Said; 13) Ismailia.

ments in the reconstruction of the geomorphological history of the Delta ( BUTZER 1976; SAID 1975, 1981) have emphasized the possibility that the region had already been inhabited in prehistoric times.<sup>2</sup> Moreover, recent archaeological investigations in the Delta have confirmed the occurrence of cemeteries and settlements going back to the 4th millennium BC both in the western and eastern Delta (MÜLLER 1975; WILDUNG 1981, 1984; KRZYZANIAK 1989, 1990; van den BRINK 1986, 1988a, 1988b, 1989; von der WAY 1984, 1987, 1988, 1989). Together with the intensification of the archaeological research a new chapter on the geomorphological history of the Delta has been opened (EL-GAMILI, SHAABAN 1988, EL-GAMILI, HASSANEIN, EL-MAHMOUDI 1990; van WESEMAEL 1988; WUNDERLICH 1988; WUNDERLICH, ANDRES 1990).

Therefore, on the basis of the data available since 1986, the C.S.R.L. mission decided to explore the region stretching from Mendes and Gezira Sangaha to San el Haggat, to the west of the ancient Tanitic branch of the Nile, in the modern Daqahliya and Sharqiya Provinces (Fig. 1). In fact, this region seemed to offer all the preliminary basic requirements for the development of the project: location along an ancient nilotic branch moving towards the Palestinian region and occurrence of recorded protohistorical and Old Kingdom sites along the eastern edges of the area.

The research has been planned in two main steps: 1. a general survey of the selected area; 2. location and excavation of one or more pre-protohistorical sites.

In 1987 the survey of the region was carried out resulting in the recording of more than 30 archaeological sites, dating between the 4th-3rd millennia BC and late Roman times (CHLODNICKI, FATTOVICH, SALVATORI n.d.).

The 1988 and 1989 seasons were spent to test the Tell el-Farkha site, which seemed particularly relevant to our general perspectives at the light both of the preliminary analysis of the surface collection and of its geomorphological setting.

#### *Tell El-Farkha excavations*

Tell El-Farkha is located immediately to the north of the modern village of Ghazala, along the southern side of the Ghazala Drain, about 14 Km. east of El-

Simbillawein (Markhaz: El-Simbillawein).

Its geographical coordinates are: 30°56' N - 31°36' E (map 1:100.000, 30.30/31.00, Tanta East).

The site extends (Fig. 2) over an area of c. 400 x 111 m (ca. 44.400 sqm), with a maximum height of 4.46 m over the level of the cultivated plain. It is actually marked by three main mounds along the northern edge of the gezira and a gentle slope delimited by the houses of the village, to the south. Originally it was possibly larger than today, stretching southwards below the houses.

Along the eastern edge the site was partly eroded by modern agricultural activities, while the area between the eastern and central mound is crossed and cut by a road. To the south, close to the village, a large excavation, about 50 m long, has been recently opened by the farmers.

The mounds rise respectively 4.36 m (eastern mound), 4.46 m (central mound) and 3.13 m (western mound) over the floodplain. The maximum thickness of the anthropic deposit, above the water table, can be evaluated at ca. 6 m.

In november 1988 and 1989, some test excavations have been carried out in order to check the depth of the archaeological deposit and its stratigraphical sequence. The excavation concentrated on the cleaning of a section (Operation 1000) and the opening of four trenches (Operation 2000, 3000, 4000, 5000).

#### *Operation 1000*

It consisted of the enlargement and cleaning of a section already exposed by the farmers along the southern edge of the slope in the central sector of the site, close to the houses of the modern village. The section was originally oriented along an approximate North-South axis, which was maintained for practical reasons. The operation appeared to be the best approach to a preliminary investigation of the lower, though marginal, layers of the site.

The exposed section was 7 m long and about 3 m deep (Fig. 3). At least three main strata have been made evident. The excavation was stopped at a depth of 3 m due to the reaching of the water table. The deposit has been more carefully investigated with the adjacent Operation 2000, a 4 x 4 m L-shaped trench.

The upper stratum, 0.30/0.40 m thick, was

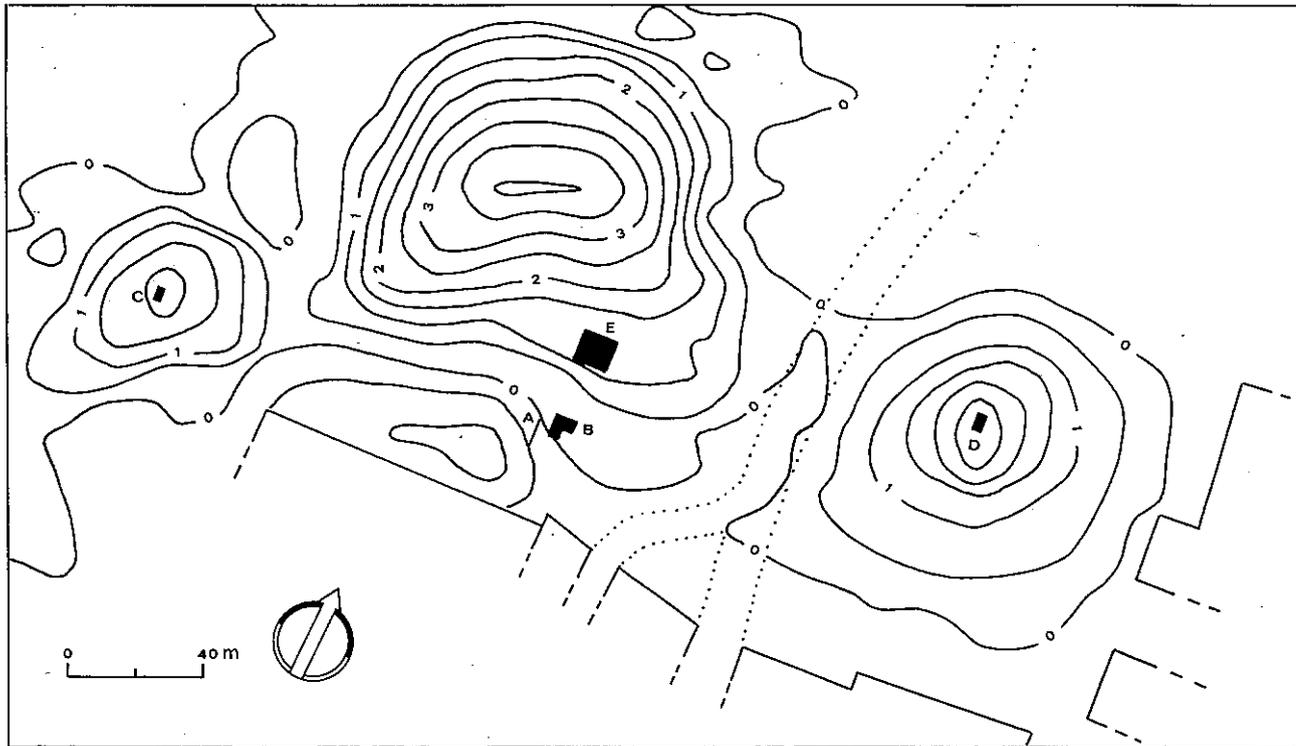


Fig. 2. - Map of Tell el-Farkha with trenches location.

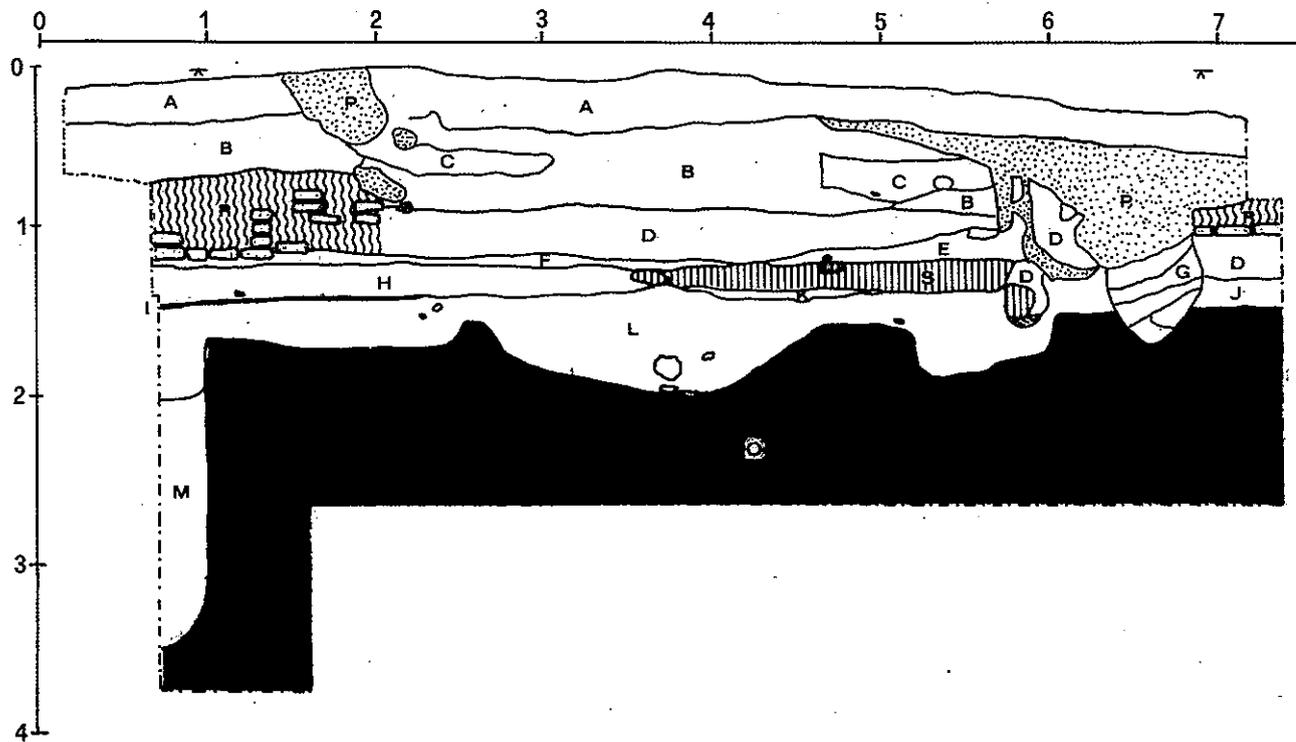


Fig. 3. - Operation 1000 section: A: Microstratified mud and sand. B: Hard yellow sandy mud. C: Light-brown loose soil with pottery sherds. D: As B but less compact. E: Broken mudbricks. F: Reddish microstratified soil with charcoal. G: Medium and coarse sand. H: Alternate mud and red soil. I: Charcoal lenses. J: Microstratified aeolic sand. K: Compact sandy clay. L: Brown fine sandy soil. M: Redepleted sand with clay lumps and sherds. N: Clear gezira sands.

characterized by a sequence of microstratified and compact thin layers of sand and soil redeposited through eolian activity. It was made compact by the continuous traffic of people, animals and carts on its surface.

The middle stratum, about 1 m thick, included two main levels. The upper one, deeply affected by animal and human disturbs, appeared as a quite compact yellow stratum of silt and sand. It covered a first structural level with evidence of mud bricks walls associated to a deposit of silt and sand, less compact than the upper one, with traces of charcoal. Another structural level was found below the previous one. It was connected to a clay floor, on the surface of which three complete pots of late predynastic age were collected.

The third and lower stratum, in two main levels, was characterized by a series of pits with different size and depth. A good amount of potsherds has been collected in the upper layers of these pits. This lower level and associated feature, according to the ceramic and lithic assemblage, belong to a predynastic phase of site occupation.

#### *Operation 2000*

It consisted of the digging of three squares 2 x 2 m in size, arranged in a L-shaped frame. They were opened immediately to the east of the previously described section.

Six levels to a depth of 1.70 m have been recognized:

Level 1 - It includes a microstratigraphic series of thin eolian layers, slightly sloping southwards, in a coarse sandy matrix. The average thickness was ca. 0.40 m. It was largely affected by natural and cultural disturbances (*sensu* SHIFFER 1976). The few potsherds from this level are heavily damaged by weathering. It was represented by a concentration of sherds associated with discarded fragments of mud bricks and traces of a clay wall.

Level 2 - It is a stratum, about 0.50 m thick, of possible eolian redeposition in a sandy matrix with lumps of soft brown sediment. The ceramic material was strongly weathered.

Level 3 - At the base of level 2, under a thin layer of clay lumps and mud bricks fragments, a large wall appeared with a NE/SW orientation. It was included in a dark brown sediment, with evidence of char-

coals and lenses of reddish burnt soil. The wall formed a corner with another perpendicular one to the south where a stone with a central cup-hole for the hinge was found.

At the base of this level a floor made of clay and bricks has been brought to light. The deposit provided a good amount of sherds, often blackened by fire, and burnt animal bone fragments. Moreover, it was characterized by plots of burnt soil and charcoal. The upper part of a big jar emerged from the floor at the northern edge of the trench.

Level 4 - It consisted of a microstratified series of thin layers to be ascribed to a sequence of living floors with lenses of charcoal and burnt clay and sand.

Level 5 - At a depth of 1.20/1.30 m the previous deposit covered an irregular clay floor associated with two stumps of wall at the NW and NE corners of the excavated area. It corresponds, both in stratigraphic and material assemblage terms, to a late predynastic floor detected in Operation 1000.

Level 6 - It consisted mainly of a sandy deposit with evidence of light clay installations. Two sublevels have been recognized (6a, 6b). The level 6a covered the whole of the excavated area and was characterized by the over mentioned clay features, including a possible oven structure (Fig. 4).

The level 6b is the filling of some pits opened in the sterile basal gezira sands. No one of those pits has been completely dug during the 1988 season. The pottery remains safely states a predynastic dating for this level as a whole.

#### *Operation 5000<sup>3</sup>*

Behind the data collected in Operation 2000 it was decided to open a formal 8 x 8 m square trench in the southern depression to attain the early layers without destroying the apparently well preserved Old Kingdom and Early Dynastic architectural structures encountered within Operations 3000 and 4000 opened in 1988 on the top of two out of the three very mounds of the site.

This trench, named Operation 5000, was opened in an area apparently affected by previous farmer excavations possibly related to sun-dried mudbricks manufacture. The surface of the chosen area was gently sloping from north to south with a more marked depression toward the south-western corner.

A very soft, loose and dusty sediment (SU 5001),



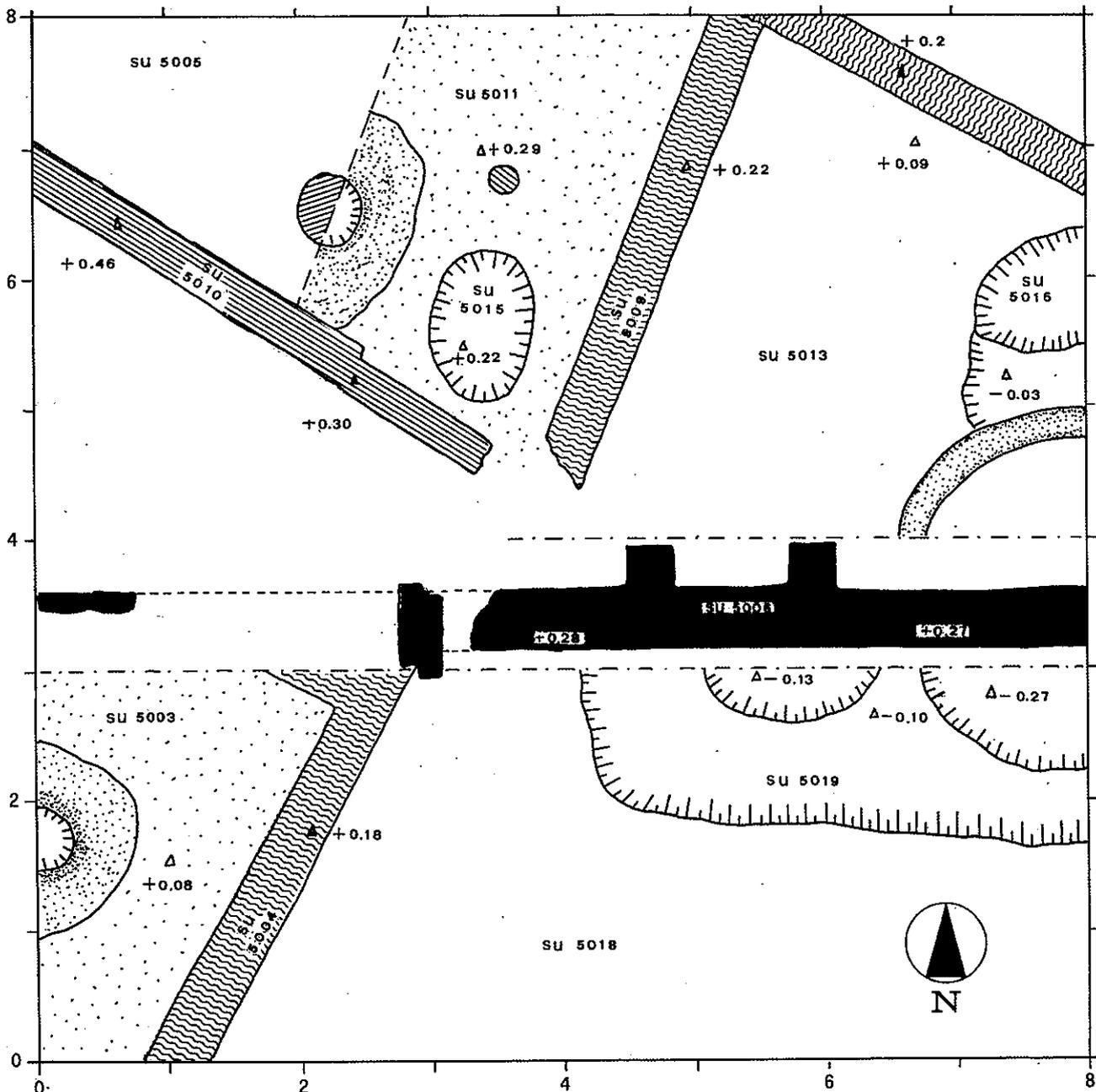


Fig. 5. - Operation 5000. Upper layers

and encompassing a fire installation (SU 5019) possibly connected to a similar feature (SU 5016) cleaned in the northeastern portion of the square.

The following SU 5018 (to the south-east) and 5021 (to the north-east) yielded no structural remains. Yet SU 5018 was lying on the remnants of very badly preserved sun-dried mud-brick walls and related clay floors.

Their bad state of preservation is possibly due to an artificial levelling as a mean of building the large fire installation built later on the spot.

No appreciable structural remain has been recognised in the deeper SU 5031, 5037, 5038 with the exception, at the base of SU 5031, of a cordon-like very low and narrow clay wall of unexplained functional significance, and a very compact and thick

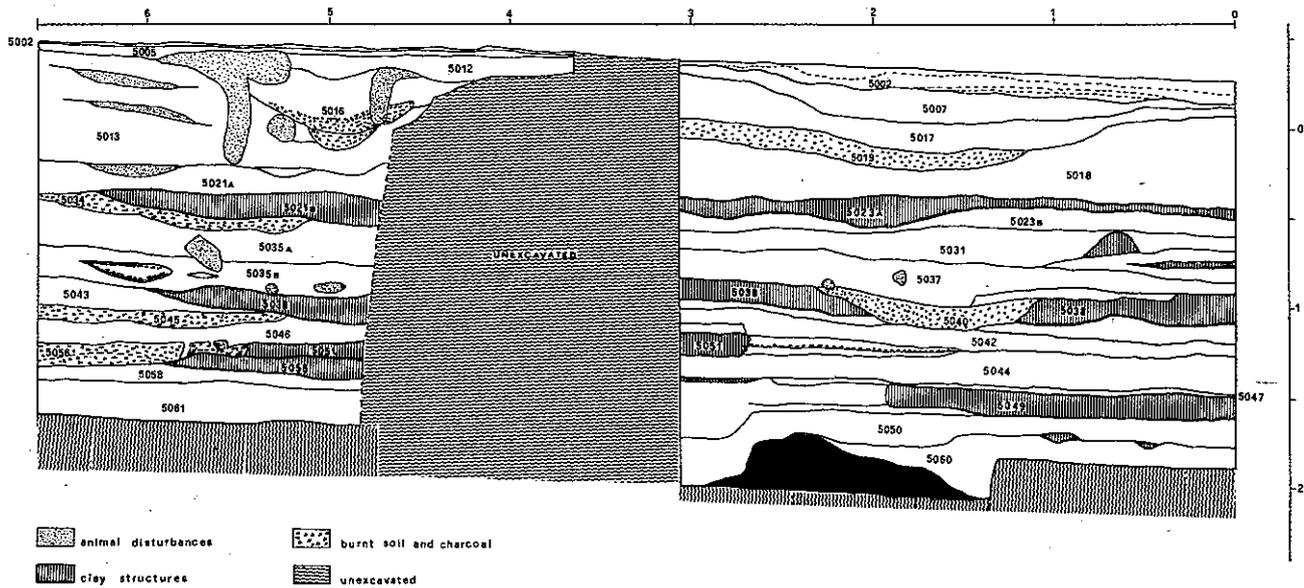


Fig. 6. - Operation 5000. Northeastern section.

clay floor (SU 5038) in which a large oval fireplace or oven (SU 5040) had been dug.

Below SU 5038 and 5040 it was possible to clean the compact and salty upper interface of SU 5042, literally covered up by sherds, characterized by a strong surface aeolian bed. Such a formation seems to point to a protracted exposition to natural erosional processes prevailing on the whole on depositional ones. The same phenomenon suggests a temporal gap in the habitation sequence as well as a prolonged abandonment of the spot if not of the entire settlement area. Anyhow it seems to point to a period of very strong and continuous windy action. We have to point out that this level marks a strong and drastic change in the ceramic assemblage in terms of both pottery fabrics and vessel shapes.

From this interface downward the stratigraphic sequence is characterized by a series of overlapping large and thick clay floors (SU 5051, 5049, 5059) with fireplaces of different size (Fig. 7). The relatively small excavation area doesn't allow us to know if these floors were or were not associated with wall structures. The largeness of fireplace points to an understanding of those clay floors as open air features. Nevertheless we have no evidence of structural boundaries to those clay floors in terms of both walls and/or posthole alignments. Furthermore nor a piece of mud-brick has been recognised in those deposits so that it seems possible to hypothesise a

settlement organized with huts and open air working areas conceived as thick clay platforms with large fireplace or/and oven structures.

The most ancient anthropic layers there recognised over the gezira sands give a still different picture. In fact, below the last (= older) clay floors (SU 5049, 5055) we encountered a main sandy layer dark brown in colour with an average thickness of ca. cm 20. This thickness increases in connection with the presence of several pits of different size dug in the basal clean gezira sands. Over and sometime inside the pits filling we encountered "fireplace" structures made from unbaked clay cordons often with internal partitions. The charcoal and ash deposits inside the fireplaces are surprisingly scanty (Fig. 8).

The upper part of pits filling was characterized by an organic sediment in a sandy matrix and relatively rich in pottery fragments. With the deepening of the excavation inside the pits ceramic finds were progressively less frequent but still present together with some lithic instruments like the two large side scrapers on blade recovered in SU 5060 (SALVATORI, USAI 1991). Surprisingly the pits filling become cromatically quite undistinguishable from gezira vergin sands while pottery fragments, although infrequent, were still present.

Being impossible to reach the pits' bottom because under the water table level, their function is left in doubt. The most attractive interpretive hypothesis

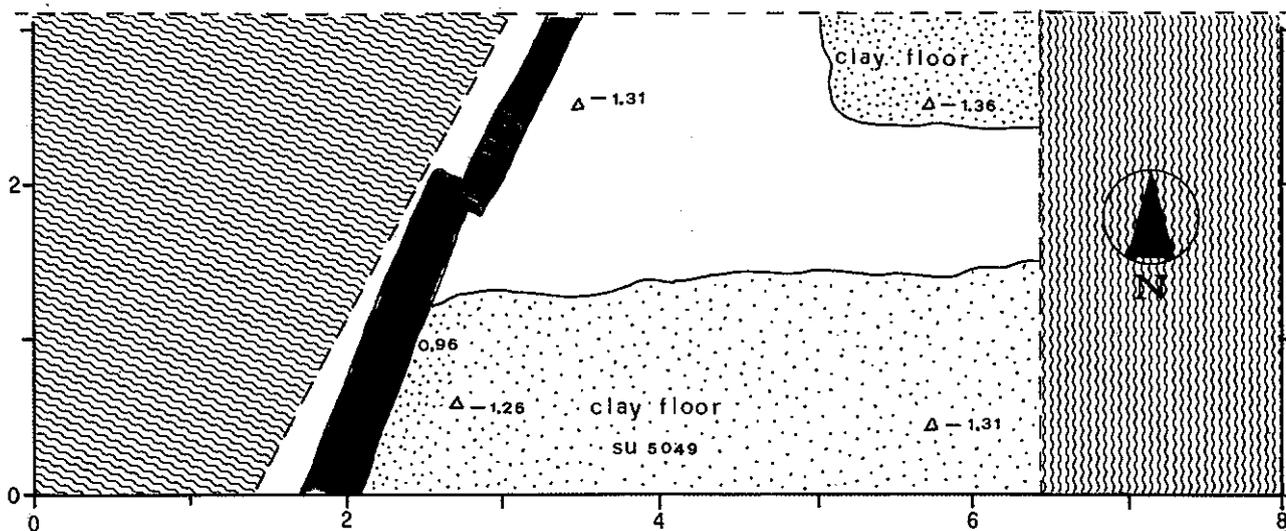


Fig. 7. - Operation 5000. Clay floor from upper predynastic levels.

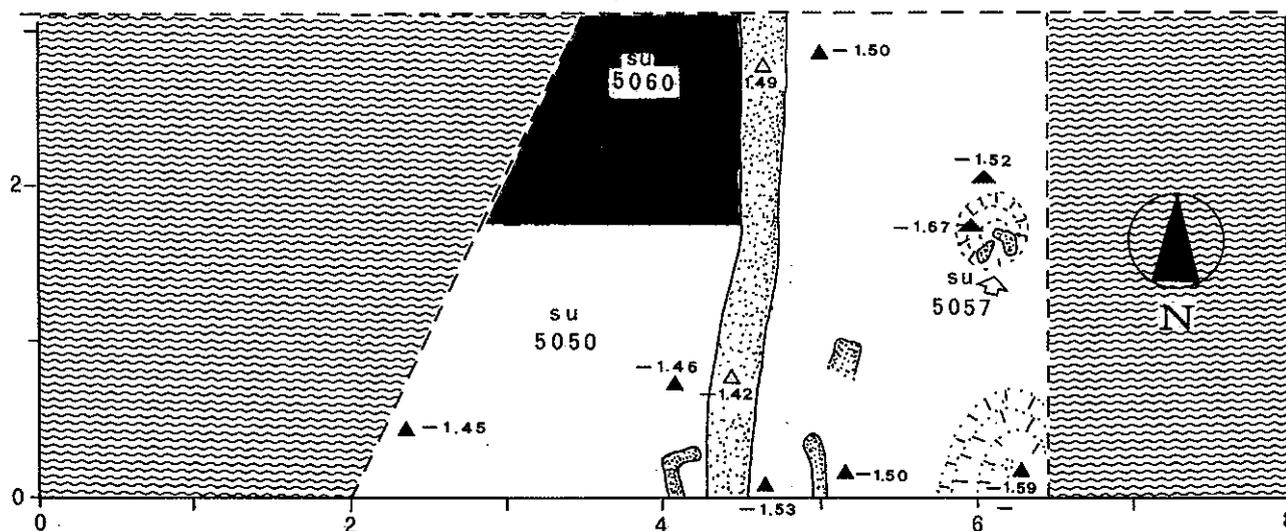


Fig. 8. - Operation 5000. Lower predynastic features.

we can formulate on the base of pit dimensions and filling composition is concerning the possibility those features are grave pits.

Within the next excavation campaign we will try to solve the technical problem of a deep sounding in the sandy sediment below the water table and make clear the nature of such intriguing features.

It has furthermore to be emphasized that the basal layers of the stratigraphic sequence (SU 5060, 5061, 5062) yielded a very distinctive pottery characterized by incised decoration mainly organized in vertical zig-zag bands: exactly the same kind of decoration

patterns at first found in the earliest layers in Operation 2000. This distinctive decoration pattern is at present known only from Tell el-Iswid (South) and Tell Ibrahim Awad (van den BRINK 1988a, 1989), two plustratified sites placed in the same general area of Tell el-Farkha (Id. 1986), and from late predynastic layers at Buto (von der WAY 1987).

#### *The pottery from Tell el-Farkha excavations*

The ceramic material can be divided into several groups according to fabric and surface treatment.

Almost all the pottery was made from Nile alluvial clays, while a very small percentage is from marl clays. Nile silt ware was divided into two groups according to the so-called Vienna system (Lexikon, 1986, VI, 630): Nile I.B and I.C. Only few sherds seem to fall outside those two groups. Nile fabric I.B, with fine-to-medium sand and fine straw temper, was used in the production of a finer kind of pottery. Much more abundant was the pottery made out of Nile fabric I.C, used in the production of almost every kind of vessel. This ware is not homogeneous. We have divided it into four groups, according to coarseness of temper, corresponding respectively to van den Brink groups B-E (1988: 68): 1) with fine (I.C1); 2) medium (I.C2); 3) coarse (I.C3); 4) and very coarse (I.C4) temper.

The marl clay ware (II) is represented by several variants of fine and sandy marl fabrics fired to a pink, pale or greenish grey colour. Because of the only cursory checking of the material during field work, its definite distinction from fine Nile silt ware was not always possible.

Fabric type joined with surface treatment is at the base of pottery taxonomy. Nile silt ware can be divided into five main groups according to surface treatment.

The largest group is represented by the rough ware within which we can distinguish more coarser (R1; Nile silt C. 3-4) and finer (R2; Nile silt I.B, I.C1-2) material. Rough coarse ware (R1) contains a high amount of coarse chaff temper and medium to coarse sand. External surfaces are rough, while the upper part of the pot is sometimes wet smoothed. Internal surfaces are usually better smoothed. The pottery is rather lightly fired and friable. Bread moulds and thick-walled storage bins are the main vessel types. All the bread moulds fragments recovered belong to type A (most probably A1) according to Jacquet-Gordon's classification (1981). Within the type morphological differences could be noted (Fig. 12:1-7).

Rough ware of R2 type is much fired than the previous one; the paste is less coarse and the walls are thinner.

A greater variety of vessel shapes was produced with this material than with the previous one. It was used in the production of big storage pots as well as of very small jars and bowls of different shapes (Figs. 9:1-2, 4-27, 28-35; 10:1-11, 13-28, 11; 12:8-23; 13).

A much finer red slip pottery displays some variability in temper, colour and surface treatment. It was made generally from Nile silt I.B and I.C1, but coarser fragments also occur. Red slip pottery (P) shows some differences in surface treatment. From Phase II layers we have gathered many potsherds bearing traces of vertical burnishing, a trait quite uncommon in Phase III materials. Brownish-red or brown (P3) burnished or polished pottery is less common. It shares the same general traits (except surface colour) as the red slip and the same typological variety. Moreover it has the same stratigraphical position of the red polished ware and in Phase II it also shows vertical burnishing. The fracture colour of P-ware is mostly brownish-red. The paste contains fine, sometimes medium sand and fine chaff temper. Fragments of thick-walled pots with coarse temper covered with red slip (fabric I.C3) are quite uncommon. The slip is applied on both surfaces or only inside or outside. Sherds slipped on both surfaces, or only inside, belong to bowls whereas those slipped outside belong only to jars. This kind of ware was used mostly in the production of bowls and only occasionally of jars. The most popular vessel shapes are simple open bowls with rounded or pointed rim. They are medium deep and rarely shallow (Fig. 14:1-14). Sometimes the red slip covers the interior of the pot and the upper part of the outside. Phase II bowls are often vertically burnished inside and present a burnished horizontal band just below the rim. On the outer surface they are horizontally burnished only on the upper part of the vessel. Pots horizontally burnished or polished over the whole surface are also common. Bowls with rims modelled into small rounded, external lips are very common shapes. They are mostly deep bowls with slightly bulging body of medium size, while bigger specimens occur too (Fig. 14:16, 18, 19, 22). Open bowls with concave profile and externally thickened rim are less common (Fig. 14: 25, 29). Vertical burnishing does not occur on pots with modelled rim. We have also found a few fragments of flat thick-walled bowls with red slipped surfaces (Fig. 14:15). Simple bowls with restricted mouth and jars are quite uncommon. The last are small or medium size pots with short neck and out-turned rim (Fig. 14:17, 20, 21, 23, 24, 26-28).

Dark (plum) red slip pottery occurs only in Predynastic layers. We can distinguish two different fabrics: the first one (Nile I.B), being a fine, thin

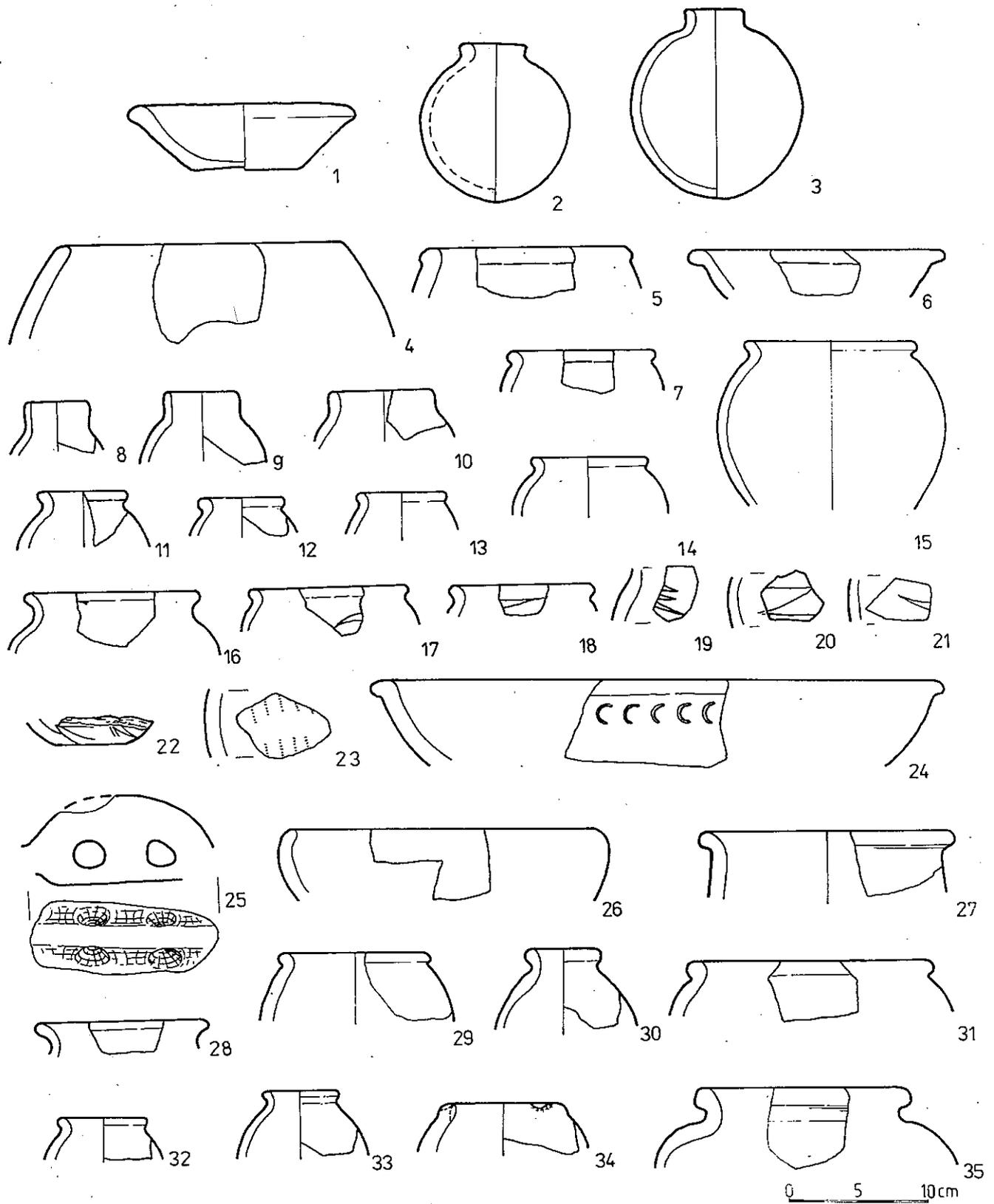


Fig. 9. - Pottery from Operation 1000 (1-3) and 2000 level 6 (4-24) and level 4 (25-35). Nr. 4 and 28: red slip ware; all the others: rough ware.

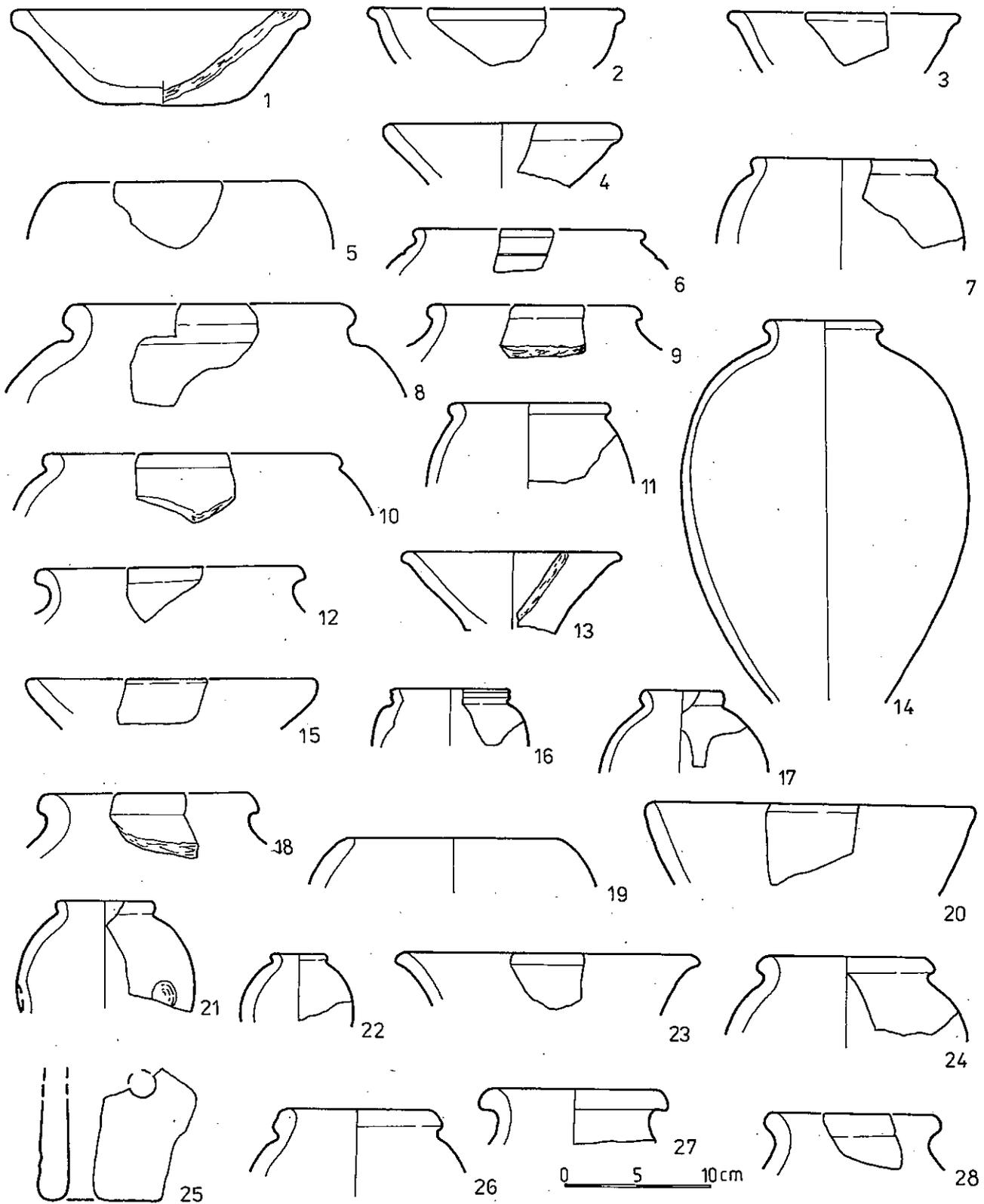


Fig. 10. - Pottery from Operation 2000, level 6 (1), level 4 (2-11, 14), level 3 (12-13, 15-24), level 2 (25, 27, 28), level 1 (26).  
 Nr. 12: red slip ware; all the others: rough ware.

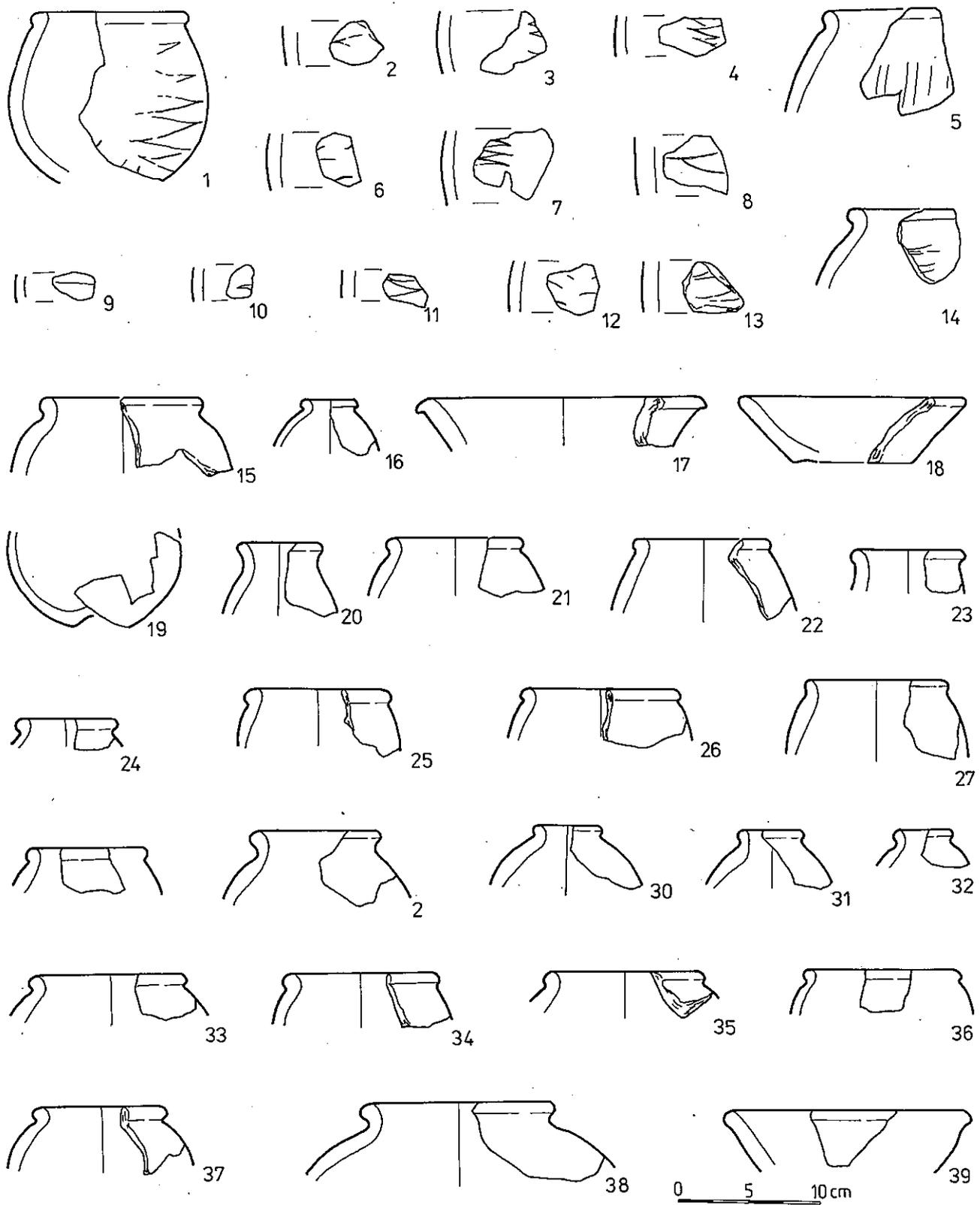


Fig. 11. - Pottery from Operation 5000; phase I, rough ware.



Fig. 12. - Pottery from Operation 5000; phase II (1, 16, 19, 21, 22) and phase III (2-15, 17-18, 20); rough ware.

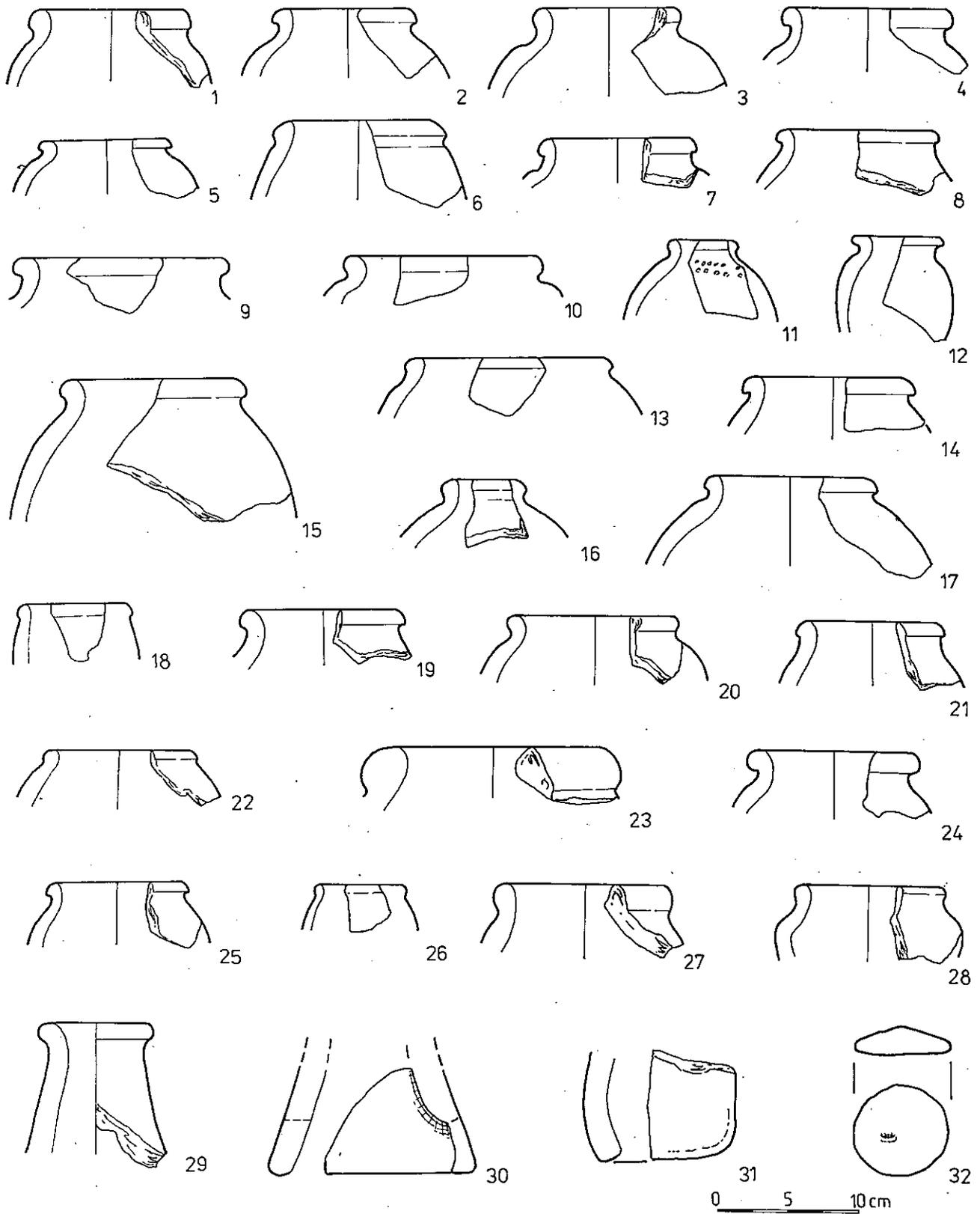


Fig. 13. - Pottery from Operation 5000, phase II (18-19, 21-22, 25-29) and phase III (1-17, 20, 23-24, 30); rough ware.

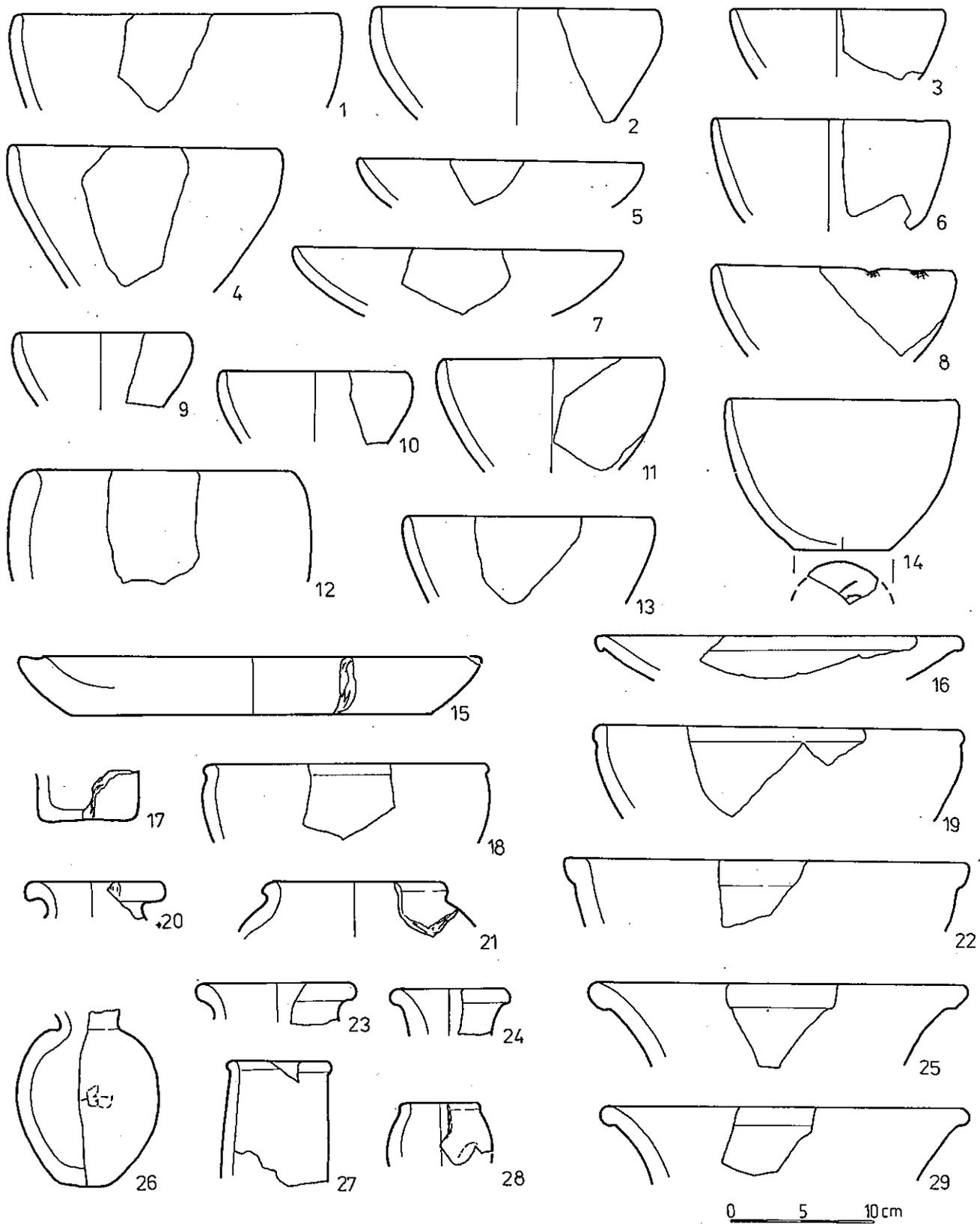


Fig. 14. - Pottery from Operation 5000; phase II (1, 7, 11-12, 18, 21) and phase III (2-6, 8-10, 13-17, 19-20, 22-29); red slip ware.

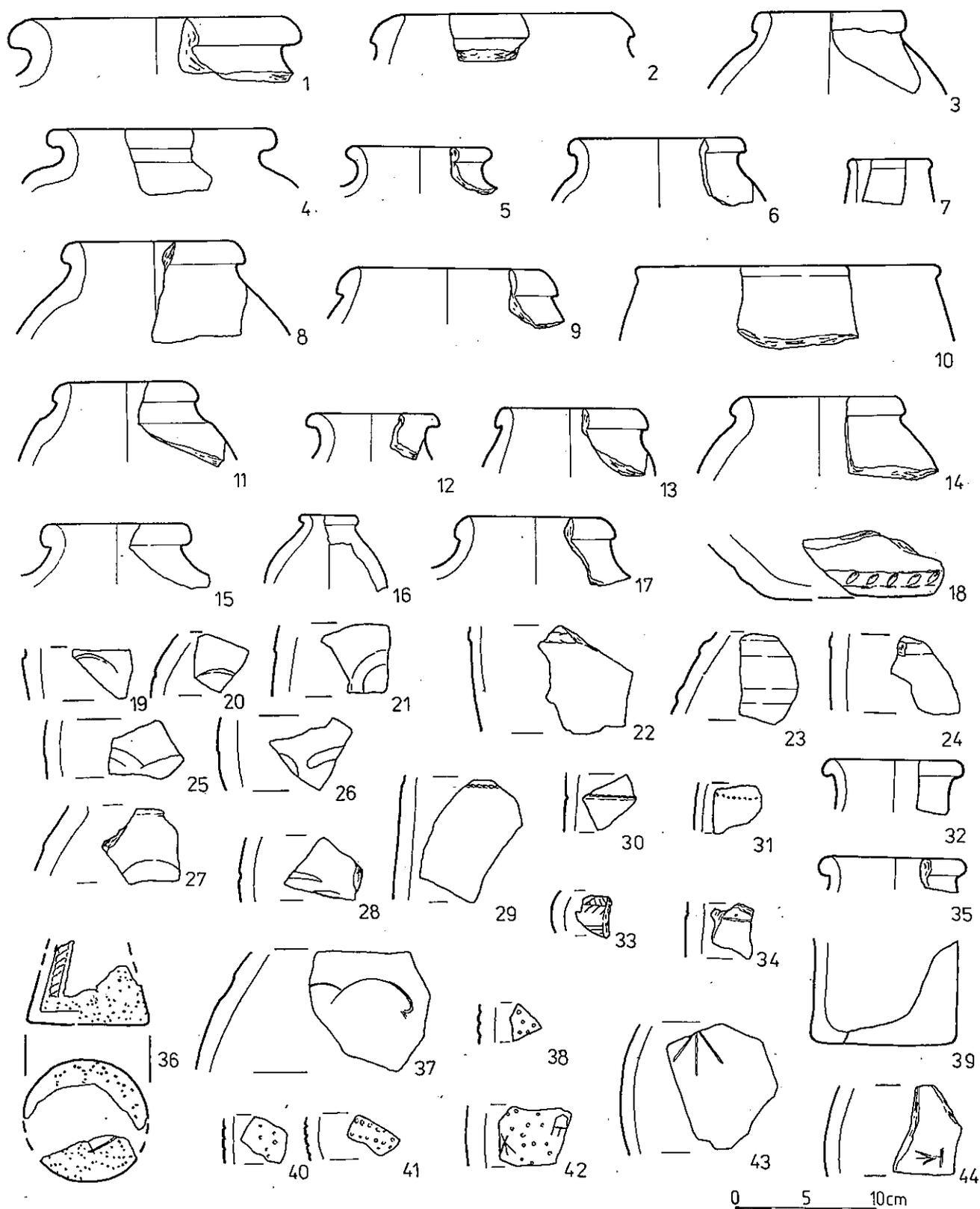


Fig. 15. - Pottery from Operation 5000; phase II (10, 13, 15-22, 24, 26, 28-29, 35-36, 39-43) and phase III (1-9, 11-12, 14, 23, 25, 27, 30, 31, 33-34, 37-38, 44); fine ware (S and M).

ware (PR) in the tradition of Upper Egyptian Naqada culture; the second is probably a local imitation (PR1). The fabric is similar to that used for the rough ware (fabric I.C 2).

In Phases II and III layers we have found few sherds of Nile silt B ware with black or almost black polished surface (BP and BP1). Black ware is known only from small bodysherds, so that we can say nothing about vessel shapes; other fragments of a rather dark grey colour are from pointed rim bowls.

Nile silt ware covered with a yellow slip is more abundant than the previous group but the sherds up to now recovered don't allow to recognize vessel shapes. Within the group we can distinguish two different fabrics. One has a coarse chaff temper (Nile I.C2), the other is much finer with a small amount of scattered temper (I.B). A few sherds from this kind of ware have been found in Phase II and III layers, but a larger group comes from the upper layers of Predynastic Phase Ib, especially from SU 5046.

A hard, well smoothed pottery (S) is quite common at Tell el-Farkha. This fine Nile silt ware is of good quality, with a very fine sandy temper (fabric I.B). The surface is usually brown. From a technical point of view and according to vessel shapes this ware is very close to the marl clay group (M).

The S-ware is only a very small fraction of the ceramic assemblage from the upper layers (Early Dynastic), while in much lower layers (Late Predynastic) it increases from 14 to 27%. It is completely absent from Predynastic layers. It was used mostly in medium to large size jars production not homogeneous from a morphological point of view. We have many types with different rim and neck shapes and heights. Even body shapes were highly variable. Mouth diameters varies from 10-13 cm to no more than 20 cm (Fig. 15).

Pots decorated with a lightly impressed or cut row of arches on the shoulder need a special attention. Unfortunately only small size sherds bear this kind of decoration (Fig. 15:19-21, 25, 28, 31). It is impossible to restore vessel shapes from Tell el-Farkha sherds, nevertheless some help can come from other sites. Pots of this general type were found in Minshat Abu Omar and Tell Ibrahim Awad. They are rather slim jars with out-turned rim and small, flat base (van den BRINK 1988, fig. 14; KROEPER 1988, figs. 91-95). At Minshat Abu Omar this kind of pot is connected with group 3c and 3d graves, generally dated to Ka-Narmer (KROEPER 1985). According to

van den Brink (1988), jars with arches decoration slightly predate Dynasty I. Generally however this kind of pot is connected with the beginning of Dynasty I. At Tell el-Farkha they are recovered from SU 5031 and above, while they are absent from the lowest Phase II levels.

Jar body-sherds with plastic rope (wine jars) are quite uncommon (Fig. 15:18, 22-24). They have a stratigraphic position being transitional between Phases II-III and above. The general type can be dated to the beginning and the first half of Dynasty I.

Another definite but much smaller group is represented by cylindrical jars. From the decoration point of view it can be divided into five types: a) plain; b) decorated with a horizontal incised line just below the rim (Fig. 15:34); c) decorated with a cord impression (Fig. 15:29); d) jabbed points arranged in a horizontal line (Fig. 15:31) and e) decorated with a groove and the upper edge pushed wavy (Fig. 15:30). The last mentioned decorative motif is the most distinctive from a chronological point of view being dated to SD 78-80 according to Petrie. At Minshat Abu Omar cylindrical jars are associated with groups 3b and 3c, but undecorated ones rather occur within group 3c (KROEPER 1985). At Tell el-Farkha pots with cord decoration and undecorated specimens occur in Phase II lower layers while the other types of decoration as well as undecorated jars occur in Phase II upper layers.

Marl clay ware decreases from 2-3% of Phase II to less than 0.5% of Phase III. Most sherds come from jars with short necks and rolled rims as well as from cylindrical jars. No one specimen is actually known from Predynastic layers.

The general chronological layout can be at best illustrated by Operation 5000 sequence. In Predynastic Phases I a-b about 95% of the ceramic material belongs to rough ware (B2), other kinds of pottery being quite uncommon.

The most characteristic shapes are small size jars with roll rim and undistinct necks. Shapes with both narrow and wide mouth occur. These rather small jars amount to about 37% of this kind of ware. The second type of R-ware consists of small, rather irregular, truncated conical bowls with plain rounded rims or small lips thickened outside. These shapes amount to ca. 25% of the ware. A similar figure is represented by simple or rounded rim bowls of medium deep, rarely shallow, or with slightly restricted mouth. Bigger bowls come only from up-

per Predynastic layers. On the other hand it is worth mentioning the presence of small jars with almost vertical neck, and sometimes with roll rim, from the lower layers, as well as small jars with out-turned neck. Bases are mostly flat but also pointed and lemon shaped bases do occur (Figs. 9:4-24; 10:1,3).

Peculiar, although not very common, of the Predynastic pottery (Ia), is a zig-zag decoration. It occurs on small restricted vessels with everted rims. Zig-zags are mainly plain (Figs. 9:17-22; 11:1-4, 6-14), and only one fragment with dotted zig-zag has been found (Fig. 9:23). A jar fragment was covered with incised oblique lines (Fig. 11:5) and a bowl is decorated with impressed semicircles (Fig. 9:24).

The Nile silt ware (I.C2) which we have labelled as PR1 is a rather coarse ware with a dark red slip. It amounts only to 1.3% of the Predynastic material but in Phase Ib units (5050, 5058, 5061) this type amounts to about 6.9% and in Phase Ia layers (5060, 5062) to about 20%. The second group of Predynastic pottery, unknown from later levels, is the PR ware from Nile fabric I.B. It amounts to about 1.2% in Phase Ia as well as in Phase Ib layers. The external surface is covered by a very dark red polished slip whereas the interior is mostly roughly smoothed. We have found mostly body sherds which probably pertain to rather small jars and few fragments of shoulders, necks and everted rims. Only two fragments of bowls with externally slightly thickened rims and red polished surfaces has been collected. Probably all the PR1 ware sherds come from a rather big jar with roll rim.

Yellowish slip ware (Y) is rare at the site. Almost 80% of the Y-ware comes from Phase Ib. Yet even there this pottery is rare amounting to only 0.3%. From SU 5046 a concentration of Y-ware sherds has been recovered, but only two simple rims fragments pertaining to open bowls.

From the cleaning of Operation 1000 section three complete pots have been collected: a small bowl and two small jars. The irregular conical bowl of R-ware has a shape distinctive of Predynastic pottery. One of the two small rounded jars with narrow neck is also from R-ware, while the other one, with higher neck, is covered in the upper part by a red burnished slip. If we accept a Predynastic chronology for this group of pots it could be contemporary rather with the upper Predynastic materials from pit 2000.

Phase II biggest group of pottery consists of bread moulds fragments (R1; 38%). Some big bowls with

roll rims as well as shallow irregular bowls have been found.

R2 ware follows (27%) with different kinds of bowls and plates of various size and depth. Jars are rather of small or medium size and with not very restricted mouth. The lower part of a big jar with modelled plastic band near the base is worth to mention. Much more abundant here is the fine (S and M) ware (respectively 21 and 3%). It was apparently used in jars production. All the specimens have roll rims and vary in shape from cylindrical to bulging with wide and narrow mouth and more or less distinct neck. Some of these jars (wine-jars) have rope bands or arches decoration. One cylindrical pot shows an impressed cord decoration (Fig. 15:29).

The P-ware increased to 10%. We can often observe traces of internal vertical burnishing. Fragments of simple, rounded bowls, rather deep, with rounded or pointed rims have been mostly collected. Shallow bowls also occur, as do bowls with slightly restricted mouth. Deep bowls with slightly restricted mouth and rims modelled into a lip on the outside are rare.

In Phase II layers we found also some simple bowl sherds with a brown slip (P3), as well as black-polished and similar ware (BP and BP1) and yellowish slip ware (Y).

Phase III is characterized by a high amount of thick walled pottery (Nile silt I.C4) with coarse chaff and sand temper, mostly bread moulds which amount to 2/3 of the material. Operation 5000 yielded simple bread moulds and very few shallow specimens. Some potmarks have been recorded on the external and internal walls of bread moulds, like incised parallel or crossing lines and impressed circles. Few fragments with deep dots going around the rim top have been found. To the same pottery class big storage vessels with roll rims pertain.

The second most frequent group is the R2 ware (19%). It is represented by thick open or slightly restricted bowls with roll rims as well as thinner ones with similar shape but much more differentiated depths. Simple rounded bowls or more shallow varieties have been collected. Plates with concave profile and medium to small jars with roll rims and undeveloped necks are quite numerous.

Fine P and S wares amount to about 6% of the material each. Red slip pottery consists mostly of rounded bowls or pointed rims of medium depth and size; rarely shallow. Rounded bowls with a lip and

plates with roll rim also occur together with thick walled red slipped shallow bowls. Jars are quite uncommon: we can remember here a few pieces of rather small jars with narrow neck and two neck fragments possibly from a more elongated jar type. Only occasionally fragments of very small jars with undistinct neck and probably of cylindrical jars were found.

S-type pottery consists mostly of jars of different shapes. They have more distinct neck than jars of R2 pottery but forms with undistinct neck also occur. We have a few fragments decorated with arches and a piece with two rope bands located on the shoulder. Cylindrical jars are plain or decorated with incised lines or lines of dots, with the upper edge pushed wavy. We have five fragments of black polished pottery (BP), one of which has a flat base, and a dozen body sherds of dark grey colour (BP1). Two yellowish slip (Y) sherds have to be mentioned.

It seems that differences in proportion between pottery of Phases II and III, especially the decreasing of fine pottery (S,M,P), seems to be rather the effect of different function of this area during the two phases than of internal developing trends in pottery.

In the upper strata of Phase II and lower of Phase III we found some fragments of pottery (Nile silt fabric I.B) decorated with impressed dots and incised lines (Fig. 15:36, 38, 40-42).

Potmarks on the pots of Phases II and III are quite common, but preserved fragmentarily. They occur on bread moulds (inside and outside) - parallel or crossing lines - as well as on fine pottery (S and P). The last ones are probably more differentiated but only partly preserved. We found potmarks of trident shape (Fig. 15:43-44) and more elaborated motifs (Fig. 14:26).

### *Comments*

A first hand attempt to a general cultural evaluation of the stratigraphic sequence recovered in Operation 5000 can be tried according to the stratigraphic units matrix (4) (Fig. 16) and through the meaningful information provided by the graphs of the data respectively referred to percent frequencies of pottery fabric types (Fig. 17) and wall thickness (Fig. 18) based on a sample of more or less 25.000 sherds. The resulting graphs, even if plotting a simple analytical variable, seem to be highly

informative on the main crono-cultural scanning of the stratigraphic sequence.

On a very general ground and at a first, obviously uncomplete, analysis the investigated area yielded in the upper part of the sequence the evidence of a transitional phase between Protodynastic (Naqada III/0-1 dynasties) and Early Dynastic/Old Kingdom periods. Furthermore the greatest part of the deposit excavated in 1988 within Operations 3000 and 4000 pertain to this last period. Protodynastic layers in Operation 5000 didn't yielded meaningful structural remains, yet the period seems to be very well definite, even if in a different way, compared with later and earlier periods. The bar graph data suggest a structural and processual link between Protodynastic and Early Dynastic periods evidenced by a clear positive trend in pottery fabrics. On the contrary a strong break is shown evident between Protodynastic and Predynastic layers. As previously stated such a break in pottery fabrics makes even more sense when correlated to a well definite stratigraphic marker as the aeolian bed at the upper interface of SU 5042. Moreover a physical break is recorded even at Tell el-Iswid marked there by a clean sandy deposit which separates predynastic from protodynastic layers (van den BRINK 1988a). Though different - depositional (Tell el-Iswid) vs. erosional (Tell el-Farkha) - it doesn't seem questionable that the same physical agent, e.g. a strong and prolonged wind action, was responsible for the discontinuity markers at both sites.

The settlement desertion reasons and abandonment length are problems of different scale and nature. The latter could be answered through a well planned program of C14 determinations. The former, though resting on historic and more speculative ground, will be surely much helped by a larger platform of radiometric determinations and a more comprehensive knowledge of the predynastic settlement pattern and cultural framework in the inner Delta. We suggest here that the paramount problem of predynastic cultures in the Delta has to be reviewed through the lenses of regionalisation and integration processes, e.g. a broader interpretive framework that could profitably utilize more complex but effective concepts as differential interrelation spheres. The still scanty but unquestionable evidence supplied by the fresh data from the eastern Delta and from Buto when put beside the former corpus of data from the southern fringe of the Delta

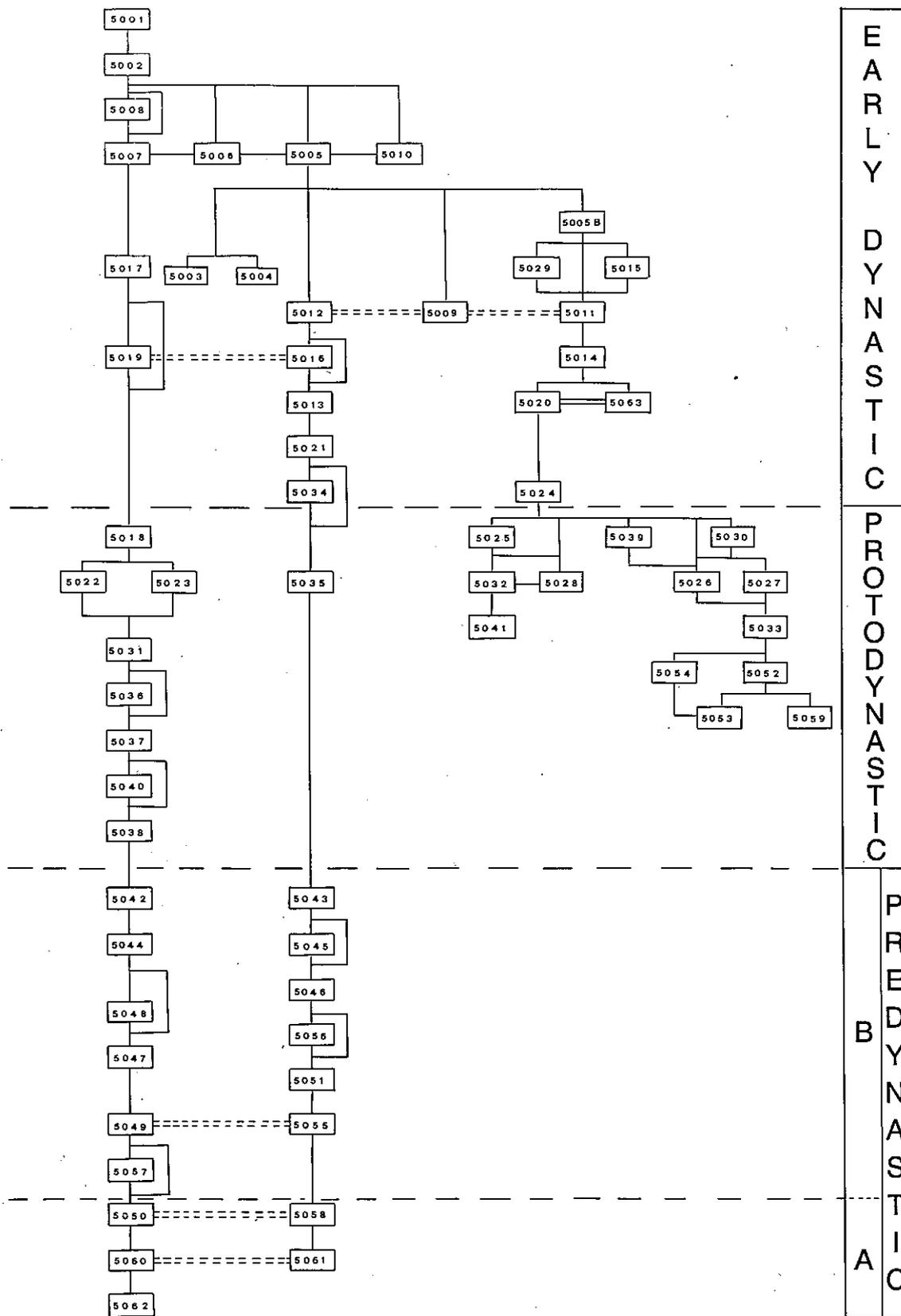


Fig. 16. - Matrix of Operation 5000 archaeological features and chronological ordering.

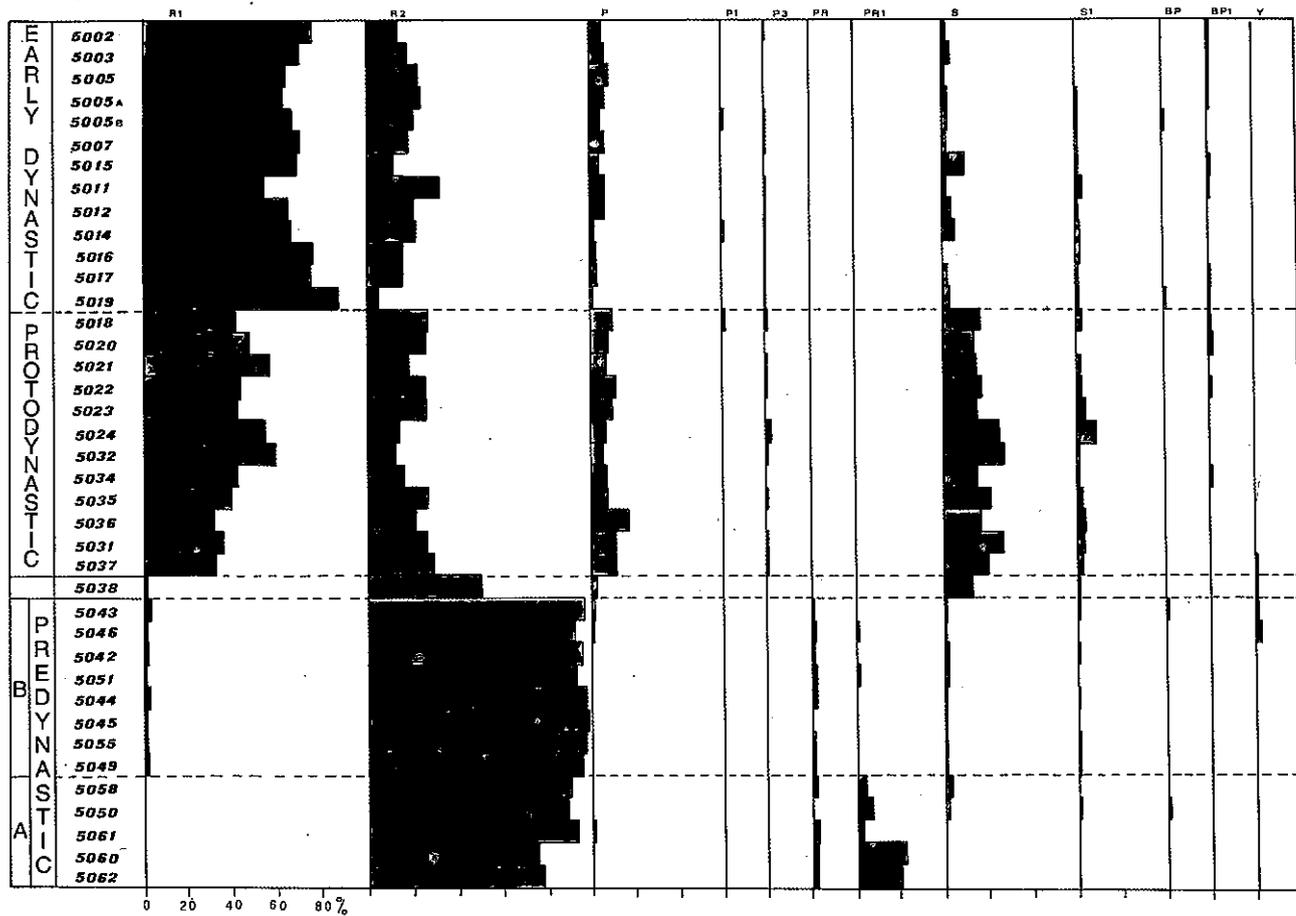


Fig. 17. - Fabric types percent occurrence.

seems to point to a really tricky picture.

The evidence provided by the still limited soundings carried out at Tell el-Farkha can throw new light on egyptian pre-protodynastic developments. Furthermore it makes possible to trace a new profitable grid within which reallocate the basic lines of northern Egypt late prehistory. New and often well collected data from excavations and regional surveys are now available for the eastern deltaic belt, northern Sinai and southern Palestine. Such a body of data allows old and scattered finds to be reexamined and to return them to a meaningful historical perspective.

First of all the still limited, but potentially huge, contribution the Nile Delta area is beginning to provide to predynastic Egypt has to be underlined. Up to now we have just a handful of tested and surveyed sites: Tell Farain'-Buto (von der WAY 1986, 1987, 1988, 1989), Minshat Abu Omar (KROEPER 1988, 1990; KRZYZANIAK 1990), Tell el-Farkha (CHLOD-

NICKI, FATTOVICH, SALVATORI, s.d.), Tell el-Iswid (South), Tell Ibrahim Awad (van den BRINK 1988a, 1988b, 1989, 1990), El-Beda (CLEDAT 1914; OREN 1989), Tell el-Ginn, el-Huseiniya, Gezira Sangaha, Tell Samara, Beni Amir (KRZYZANIAK 1989; for some out of these cfr. CHLODNICKI, FATTOVICH, SALVATORI n.d.), Tell el-Basta (AHMED EL-SAWI 1979:63), Mendes (KESSLER 1980:404), Heliopolis (DEBONO 1952), Tell Tinnis (KAISER 1964:112) and Tell Aga (Kufur Nigm) which is said to have a 3 meters deep stratigraphic deposit ranging from Naqada II to the end of the Old Kingdom (WILDUNG 1984:269; KRZYZANIAK 1989:277-280). A certain number of sites, which, as Tell el-Farkha, yielded Early Dynastic to Old Kingdom surface materials, can be added to the previous list (CHLODNICKI, FATTOVICH, SALVATORI n.d.; van den BRINK 1986). All the above mentioned sites, with the only exception of Buto, are located in the eastern Nile Delta. Nevertheless we will not be surprised by a similar picture

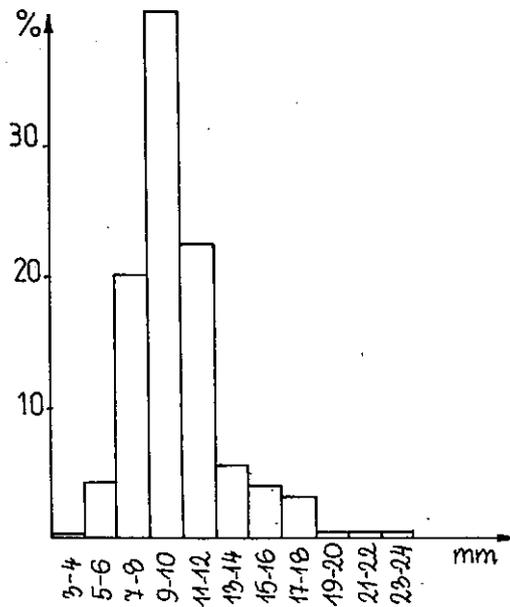
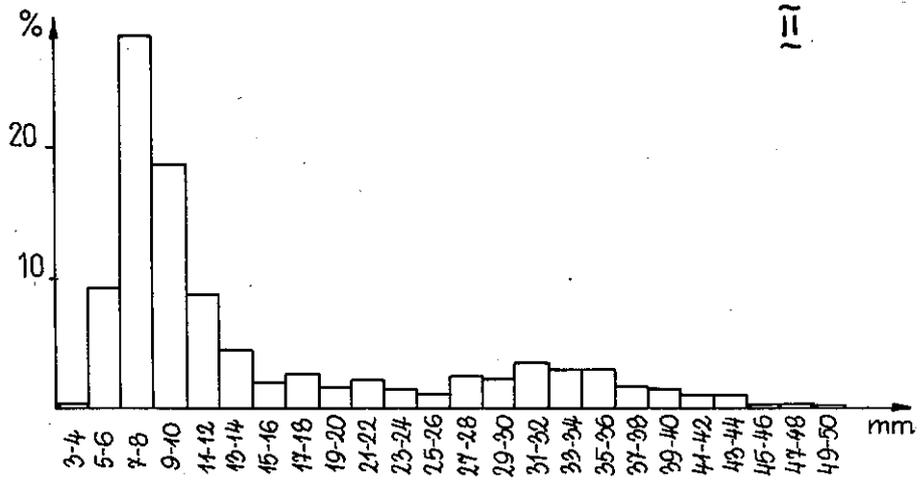
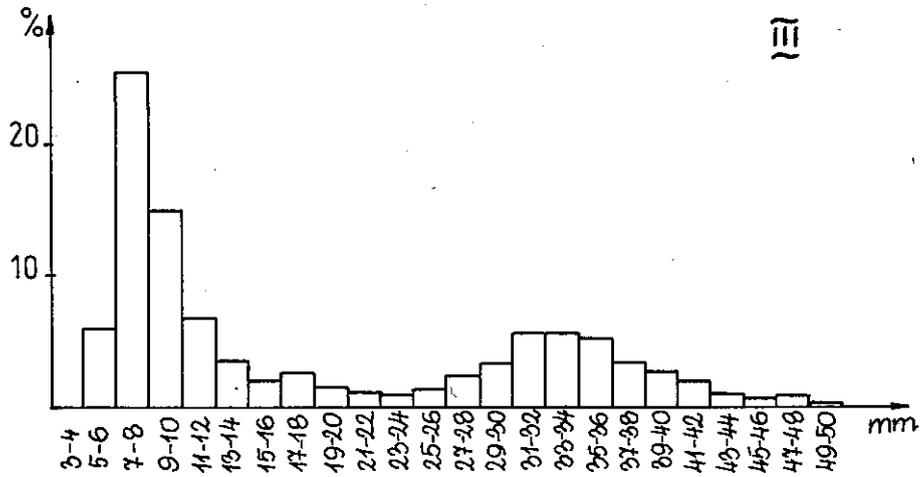


Fig. 18. - Sherds thickness percent occurrence through the sequence.

from the central and western deltaic sectors. The present lack of data for those sectors is quite certainly due, as even recently pointed out by Krzyzaniak (1989), to regional survey planning deficiency.

The eastern Delta predynastic horizon, as seen from Tell el-Farkha, has apparently no affiliation with Upper Egypt sequences, while it seems to share strong direct links with the late predynastic phase at Buto (von der WAY 1987). The Buto late predynastic is quite surely a regional variant (the "Buto-Maadi chalcolithic culture" as called by the excavator: von der WAY 1989) of a deltaic late predynastic horizon. Even the Minshat Abu Omar predynastic settlement still buried under the floodplain silt along the eastern border of the sand gezira (KRZYZANIAK 1990) might quite surely pertain to the same cultural horizon. With Buto layer III, according to the data recently provided by Ch. Koehler (1990), we see a progressive intrusion of Naqada IId1-III imports and a complete meridionalization of the Buto material culture. The characteristic zig-zag incised motif on the Farkha and Iswid pottery is present at Buto layer II while the few similar sherds known from southern sites seem to come from Naqada IIc contexts (ADAMS, FRIEDAMN 1990). All this helps to fix a chronological frame for the Farkha-Iswid-Buto late predynastic even if strictly archaeological reasons, ranging from stratigraphic to material assemblages idiosyncrasies, point to some degree of regionalization in the Deltaic area and to a different interrelationship with the southern Naqada II culture.

The stratigraphical anomaly noticed both at Iswid and Farkha (see above) between late predynastic and protodynastic layers, which could be equated to the gap singled out by Kroeper (1988, 1990) between grave groups 1-2 and 3 at Minshat Abu Omar, has not been reported from Buto. On the contrary, Buto layer III shows a gradual transitional phase from a local to a Naqada III material assemblage (von der WAY 1990; KOEHLER 1990).

It seems surely too early to face to problem of the Deltaic late predynastic horizon origin.<sup>5</sup> We know practically nothing about earlier cultural stages in the area but that something else do exists under the floodplain silt (KRZYZANIAK 1990). Nevertheless it is possible to trace some chronological correlation among the above mentioned deltaic sites (Tab. 1).

It seems even possible to state that during the Upper Egypt Gerzean phases the Delta was characterized by peculiar predynastic facies with a distinctive material culture. For sure, research intensification

TAB. 1

BUTO	ISWID	FARKHA	UPPER EGYPT
IV	VIII-X	III	ED
III	VII GAP	II GAP	N. III N. IId
II	IV-VI I-III	Ib Ia	N. IIc N. IIb
I	?	?	N. IIa

through the entire Deltaic region will provide a more articulate picture of the cultural mosaic we expect for the late predynastic period together with the spreading limits of each cultural coeval horizon. It is worth to say that the desirable Delta research intensification should be seconded by an equally necessary intensification of radiometric chronological measurements, as hailed more than once in recent years by several scholars (e.g. HASSAN 1985; WENKE 1989)

Before addressing us to Gerzean developments we like to explain our position on the role often attributed to Maadi as a key site in north-south trade relationships in late prehistoric times. The above mentioned site has been presented at times as a geographic knot or as the junction point between the egyptian predynastic "hearth" (Upper Egypt) and the siro-palestinian world. In our opinion Maadi has to take a beck seat in any tentative reconstruction of egyptian predynastic foreign relationships. This because, for explicit acknowledgment by the excavation editors (RIZKANA, SEEHR 1988), it is objectively impossible to retrace the contextual place of material assemblages at the site both for the excavation methods at the time in use and for the loss and destruction of the labels accompanying the materials in the storage room. For the above mentioned reasons no firm conclusive statement can be founded on the Maadi evidence alone (Cfr. HANBURY-TENISON 1986: 96-97).

It is obviously possible to think to Maadi, at a point of his sequence, as a Naqadian (IIcd/III) site, but it would be hazardous to go further on debating its role on a supposed trade route with the east. We are looking forward to the renewal of excavations at the site by a team from the Rome University for new and stratigraphically organized data to understand transformations and reconsider the significance of the imported material at the site together with an articulate description of level by level assemblages. Unfortunately the published data from the more recent investiga-

tions at the site are still few and scarcely detailed (CANEVA, FRANGIPANE, PALMIERI 1989).

If a side of the problem is a more precise and firm definition of the absolute chronological position of the traditional cultural phases of Egyptian late prehistory (HASSAN 1985), the other one rests on a correct evaluation of the greatness of the socio-economical and political transformations which took place during the Gerzean period (ARKELL, UCKO 1965; TRIGGER 1983).

For an understanding of the cultural and social transformations undergone by the Naqadian society we are lived with pluristratified gerzean graveyards (FATTOVICH 1988) and very limited archaeological evidences from settlement sites like Hierakonpolis (HOFFMAN 1982; HOFFMAN, HAMROUSH, ALLEN 1986).

In fact the results of recent archaeological investigations at the eponymous site, while of great general interest, failed in the aim of contextualize a class of data of paramount importance for the knowledge of state organization formative processes. We are explicitly thinking to the more than three hundred clay sealings (cretulae) which, *per se*, may be considered strongly significant indicators of administrative control. Their presence at Naqada would have been of the greatest interest if found in a stratigraphic context. This is not the case: clay sealings bearing seal impressions were ubiquitous on the surface of the site and in the disturbed deposits of the low mound (BAROCAS, FATTOVICH, TOSI 1989), so that it is impossible to assign them, on a stratigraphic ground, to any cultural subphase of the site sequence which, on the base of surface collections, covers a very long time span. Burial site studies indicate an increasing of social distance among individuals, as proved by the accompanying furniture, during the Naqada II period (FATTOVICH 1984, 1988; HASSAN 1988; WENKE 1989). Moreover the archaeological evidence shows a notable increase in the presence of both "international relationships" and prestige or status indicator goods (FATTOVICH 1984). As Kaiser (1956, 1957) has pointed out, the boundary line between quantitative vs. qualitative change has to be placed between Naqada IIab and IIcd and his subphase divisions of the Gerzean period retain all its intrinsic significance. Such a process has undergone a second intensification phase corresponding to the Naqada III period: a climax that, as a continuum in material culture transformation and as a stepped cumulative curve, brought to a real early state formation stage. The time span of the complex "ingrowing" phenomenon is now well defined by recent reassessments of C14 determinations provided by

Hassan (1985: 109-110) whose work established a rough date for Naqada II between 3650 and 3300 BC., for Naqada III between 3300 and 3150 BC. The above mentioned chronological frame fits well with the cultural processes archaeology is step by step resewing around old and new data on late Egyptian prehistory.

The most recent research activities are providing a good amount of evidence about the presence of Naqada II (at least IIcd) cultural elements in the Delta area, from Buto (von der WAY 1987, 1989) to Minshat Abu Omar (KROEPER 1985, 1988) and el-Beda (CLEDAT 1914; OREN 1989) pointing to a gerzean expansion towards and "colonization" of that general area (WILDUNG 1984:269). The presence of Naqada II materials at southern Palestinian sites like Erani (BRANDL 1989; KEMPINSKI 1990) and Azor (PERROT 1961: p. 76, Fig. 40:14-15; AMIRAN 1974 p. 8, Fig. 2: 1-2; BEN TOR 1975) as well as many other sites of the area (BRANDL 1990) has to be connected with the above mentioned expansionist tendency of late Naqada II culture.

It seems possible to understand such an expansion, at least in the eastern Delta, firstly as a territorial occupation and only secondly as a bridge-head towards the east in an international trade perspective. On the contrary, late Naqada II and Naqada III materials presence outside the Delta, e.g. the northern Sinai corridor and Canaan, seems to us to find some parallel in terms of general processual dynamics, with the "colonization" mechanisms in act at the same time in different but related geographical areas, like the late Uruk expansion toward northern Siria (ALGAZE 1989), or the protoelamitic one toward the Iranian plateau (WEISS, YOUNG, 1975; ALDEN 1982) and beyond to Tepe Yahya and Shahr-i Sokhta in the second half of the IVth millennium BC. Naqada II and III phases show a sure increasing presence of imported materials from Palestine, Mesopotamia (KANTOR 1965; KROEPER 1989; TUTUNDZIC 1989) and beyond (i.e. lapislazuli: CROWFOOT PAYNE 1968) quite surely due to a direct link with the trade networks controlled by Mesopotamian colonies in northern Syria (ALGAZE 1989).

After a first expansionist phase a consolidation one can be seen to occur at the very end of Naqada II and during Naqada III (Dynasty 0) through a larger presence in the Delta (certainly in the eastern sector where a large number of sites show firm establishments mainly during to so called Dynasty 0 period; in the central and western Delta, as formely pointed out, we still suffer a research shortage even if Buto shows a progressive cultural occupation by southern standards: KOEHLER

1990), along the northern Sinai corridor (OREN 1973, 1989) and Palestine. Here EB I sites yielding evidence of Egyptian materials are impressive in number. Among these we can mention Rafah (GOPHNA 1970), En Besor (Id. 1976, 1980), Tell Halif (JACOBS 1984; SEGER 1978, 1983, 1987), Ma'ahaz (SCHULMAN, GOPHNA 1981; GOPHNA 1987), Erani (BRANDL 1989), Arad (AMIRAN 1978; AMIRAN, BAUMGARTEL 1969), Azor (BEN-TOR 1975), Farah N. (VAUX 1951, 1961), Jericho etc.: for an up-to-date site list see now BRANDL 1990).

The picture furnished by the above mentioned data compels to review the traditional theory of a dynastic conquest of the Delta, but probably not a too much hurried liquidation of conflictuality (HASSAN 1988) as an acting force in the unification processes (WILDUNG 1984: 269). The archaeological evidence mentioned above covers a very long span of time during which socio-political organization of the supposed Naqada II chiefdoms could have undergone so strong evolutive pressures to make necessary more articulate and changing sceneries.

An early Deltaic Colonization phase during early Naqada II period within a political frame still far from state and even protostate organization levels was followed by a territorial consolidation accompanied by an increasing definition and institutionalization of dominating powers in the gerzean communities (Naqada II cd/Naqada III).

It is possible to hypothesize phenomena of regional integration generating more steady and formally structured political institutions. One of the dynamic variable responsible for some level of conflictuality (cfr. HASSAN 1988: 165-166) among the late gerzean territorial "provinces" could have been the control on exchange activities with the east, mainly the Palestinian sector. Such a view imply antagonism acting at the level of culturally similar communities accounting for the cultural continuum characterizing gerzean developments. With the time being it protracted conflictuality could have generated more and more structured political institutions and an overall scenery not far from that depicted by traditional records which show one of the poles prevailing on the others. The consequence would then have been the political unification much improved during the Early Dynastic period.

If the former one is the general picture or a plausible reference grid, then a dynamic developmental process of the Egyptian state formation would have enough time span and a coherent cultural frame. The state

would be the output of a process starting with a territorial expansion of "tribal" communities whose political organization must have found reasons of structural strengthening under a growing regional conflictuality pressure bringing to a serie of decisive encounters and to the political unification of the country.

Going back to the first step of the process, the wavelike progressive south-north population movement (a very similar expansionistic attitude was moving even to the south<sup>6</sup>), could have had diversified forms of coping with deltaic local populations from a simple side by side cohabitation to a superimposition at different rate of conflictuality.

According to our yet too limited knowledge of eastern Delta late prehistoric developments we can just remind the presence of a physical gap between pre-and proto-dynastic layers both at Tell el-Farkha and at Tell el-Iswid. Obviously we need further investigations and above all new radiometric measurements helping to set in a correct chronological frame the Delta late pre-dynastic and providing a measurement of the settling gap. This seems to be fundamental to an understanding of the forms taken by the southern populations entering the Delta, but on the other side to be able to set the problem on the base of archaeological evidence instead of speculative thought alone seems to be a good starting point.

On the other side of the problem something seems to be sure: the Egyptian state formation process, previously regarded as a so sudden phenomenon to allow some scholars to hypothesize the coming of a Dynastic race from outside, has implied a time span of more than 500 years (cfr. HASSAN 1988: 166).

Furthermore, as others pointed out (cfr. KROEPER 1988: 19 nota 22), the historian and the archaeologist have to reconsider the data concerning the ca. 100 deltaic sites recorded by written sources to the end of the Old Kingdom, because a Delta population as an integrated Naqada IIcd/III phenomenon could well justify the presence of such a number of sites since the oldest phases of the pharaonic state.

#### *Acknowledgments*

We are grateful to Dietrich Wildung, Lech Krzyzaniak and Karla Kroeper of the Munich East Delta Expedition for the kind help and advices in the organization of our mission. Many thanks, too, are due to the President and the staff of the E.A.O. in Cairo and Mansura for the permit to work in the Delta and the help in solving all the logistical problems. We are particularly grateful to Mr. Ibrahim M. Elsaady, Inspector for Archaeology, Mansura Inspectorate, for his help in the field.

<sup>1</sup> AA.Vv. 1977; A. A. Vv. 1983; COPPA A. MACCHIARELLI R., SALVATORI S., SANTINI G. 1985; BIAGI P., SALVATORI S. 1986.

<sup>2</sup> However, the occurrence of a low desert prehistoric site at Merimde-Benisalâme on the southwestern margins of the Rosetta Nile confirmed that at least the southern part of the Delta was inhabited in the 5th-4th millennia BC.

<sup>3</sup> We are not dealing here with Operations 3000 and 4000 because their cultural remains are largely out of the aims of the present paper.

<sup>4</sup> According to HARRIS 1977

<sup>5</sup> The characteristic incised zig-zag and dotted line decoration from Iswid, Farkha and Buto (cfr. van den BRINK 1989: 70-71) has been tentatively linked to Upper Nile and Saharan ceramic traditions (CANEVA 1990) well known from Mesolithic to Neolithic horizons (c. 5500-3000 BC).

<sup>6</sup> At present, we can distinguish four main phases of Egyptian economic and political expansion along the Nile towards Nubia: *Phase 1* (Naqada I c) - At this time, only the region around the First Cataract (Asswan) seems to have been included in the area of Egyptian trade activity, as we can infer from some evidence found at Kubanieh and Bahan (KAISER 1956: 81, fig. 5).

*Phase 2* (Naqada II) - In Naqada II times, the trade bet-

ween Egypt and Nubia become more intense, as a result of the development of a complex society in Upper Egypt. In fact, substantial quantities of Egyptian hand-made vessels and other objects occur in many graves of the Nubian A-Group, since the very beginning of this culture (ca. 3500 BC). The earliest evidence goes back to Naqada II ab. Most of it, however, can be dated back to Naqada II cd.

So far, there is no safe evidence supporting the hypothesis of a colonization of Nubia in so ancient times. It is possible, however, that a few localities were frequently used as bartering places. Large quantities of pottery have been found at Khor Daud, near Wadi Allaqi, and in a rock shelter near Wadi Halfa. At Khor Daud, in particular, they go back to Naqada IIa - Naqada III.

In Naqada II times, only the lower part of Lower Nubia, as far as Sayala, was included in the Egyptian commercial area.

*Phase 3* (Naqada III) - In this period, the whole Nubia, as far as Wadi Halfa, was included in the Egyptian area of commercial activity. The evidence from Cemetery L at Qustul might suggest that an Egyptian colony at chiefdom level existed at the farthest border of Egyptian area of influence.

*Phase 4* (Early Dynastic) - In the first two dynasties, the trade with Nubia increased. At this time, there were, too, the first attempts to extend military and political control over the region.

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