Early Meroitic in Northern Sudan: The assessment of a Nubian archaeological culture

V. M. Fernández - Madrid

[The object of the paper is to summarize the archaelogical and historial contributions that the excavations of the Amīr 'Abdallah cemetery between 1978 and 1981 have made to the correct understanding of the early Meroitic period in Northern Nubia. A new archaeological culture is confirmed, extending from the Second to the Fourth Catarcts during the centuries III-I B.C., wich was also indicated in the published reports from other cemeteries in the area (Kerma, Soleb, Irki Saab) and in the fortified site of Qasr Ibrim. The arrival in Northern Sudan of a new ethnic group, possibly coming from Northern Kordofan and already Nubian-speaking, is suggested; after his complete meroitization, the same group would be responsible for the repopulation of Lower Nubia during the first century A.D.]

I. Introduction

The purpose of this paper is to present, in a concise but comprehensive way, the result of my work as co-director (with Prof. Almagro) of the Spanish Archaeological Mission of the Foundation Duran-Vall Llosera in the Sudan[1]. This expedition has acted as a continuation to the South of the work of the *Comité Español para Nubia* which, as a member of the international team of the Nubian Salvage Campaign during the sixties, played an important role in the recovery and study of the archaeological remains of Lower Nubia, now permanently flooded under the waters of Lake Nasser. Our field work was carried out around the small town of Abri (Northern Province), from 1978 to 1981, on funerary remains of Pharaonic to post-Meroitic times, but the most important and challenging discovery comes from the complete excavation of a big early Meroitic cemetery of 377 graves, on the top of the alluvial terrace near a place called Amīr 'Abdallāh (A. A. for short).

1. I wish to expres my appreciation to the Durán-Vall Llosera Foundation for providing the financial support to the expedition. I am very much indebted to Prof. M. Almagro Basch and Dr. F. Fernández Gómez, field director in the first campaing of 1978. The discussions with Profs. W. Y. Adams and M. Almagro-Gorbea, and Drs. A. Vila and Ch. Bonnet are appreciated, but I alone am responsible for the contents as published. Drs. Negm-Ed-Din- M. El Sheriff and Akasha M. Ali, directors of the Sudan Antiquities Service, Dr. F. Geus, Arbab H. Hafiz and the Magazzi family in Abri, made available the facilities for the expedition in the Sudan. Drs. R. Izquierdo and M. Betés, D. Oliva, C. de la Casa, E. Terés, M. López, E. Baquedano and R. de la Rosa participated in the fieldwork programme.

Although some preliminary reports on the dig have already been presented to the recent international meetings on the matter (Grenoble, Berlin, Heidelberg; Cf. Fernández 1979; 1980; 1983 b; in press a, b; Fernández, Hainsworth 1981), the complete study of the site, which includes the final excavation report and the global interpretation of the culture with a reassessment of the few known sites and the historical problems involved, was the subject of my Doctoral Dissertation (Fernández 1983 a), which I try to summarize here.

It was in the course of digging when the internal chronology of the site became evident (from western-oriented chambers with hand-made pottery to eastern and lateral-oriented chambers with wheel-made pottery) and during my attendance to the international congresses (thanks to the aid of Prof. Adams), that I became aware of the uniqueness of some of the material I was dealing with (specially wheel-made burnished jars and bottles) that was in some way rather different from what was hitherto considered as "Meroitic" (late Meroitic in Lower Nubia), in spite of many other recurrent features (grave types, hand-made pottery as a whole, or bronze bowls). So it seemed advisable to make the most of the sample and, after a comprehensive survey of the published excavation reports from the area, try to define a new archaeological culture, which is internally coherent and fits rather well with the data from A. A. and other places. After this choice, our site proved to be representative enough of the cultural area, that extended from the Second Cataract to possibly the Fourth, during the first centuries B. C. I believe that this preliminary synthesis can be a beginning toward filling in, in a systematic way and with sure material evidence, the enormous gap existing in the area between the Napatan (VIII-VI centuries B. C.) and late Meroitic (I-IV A. D.) periods. All the previous information available was supported merely on the basis of scanty textual references, of somewhat confused deciphering and sometimes in irritating contradiction to the most patent archaeological data (Cf. the debate in Adams 1976).

The ritual and material information from A. A., together with the chronological seriation of its time interval, as coming from the first completely excavated large site (and only as long as this condition prevails), becomes a reliable basis to the understanding of the period. Forthcoming data from future excavations will have to be confronted with it.

The theoretical basis for our task was provided by the work which is perhaps still the most extensive attempt in arranging, in a coherent way, all the ingredients of the archaeological analysis (Clarke 1978). Here an archaeological (i. e. material) culture is defined as "a polythetic set of special and comprehensive artefact-type categories which consistently recur together in assemblages within a limited geographical area" (*Ibid.*, 247). Two characteristics of the assemblages grouped into cultures are that they share with each other a large number of specific artefact-types, although each assemblage need not contain all the types in the shared set, and the artefact-types represented comprise a broad selection of the material spheres of cultural activity (*Ibid.*, 245-6). Since almost all our data come from cemeteries, our definition of culture will be actually of a *funerary* culture, but this shortcoming could be soon partially overcome as a result of recent field work.

II. Northern Nubia: historical and archaeological problems

In Nubian and in general Sudanese archaeology, the current research is still far from obtaining a complete description of cultural evolution in all areas, the ideal "Bradshaw", which Wheeler (1956, 38) stressed the need for, being almost totally unrealistic for the moment. A gradual piecing together of the information of different sites into a coherent and cumulative pattern is the obvious way to approach it, yet in some areas (specially Central Sudan, the heartland of Meroitic cultures) the gap is really discouraging[2].

2. Even here there is room for hope: the Franco-Sudanese team headed by Francis Geus has recently discovered some interesting "provincial" Meroitic cemeteries at El Kadada and Gereif East (Geus 1977; 1980; Lenoble in *The Society for Nubian Studies Conference, Heidelberg Sept. 1982;* Cf. also in *Nyame Akuma,* 23, Dec. 1983, 26).

Referring to the northern country, there is a natural region, Lower Nubia, where an extra-archaeological reason (the construction of river dams near Aswan) has originated an unusual and intensive effort of surveying and digging from 1907 to the recent sixties, finally showing the complete cultural sequence (Reisner 1910, 313-48; Wendorf 1968). This very uneven distribution of research has had a bewildering effect, for the Lower Nubian paradigm has frequently been projected on the unknown South to construct premature and precarious syntheses. Perhaps the area most adversely affected by this was the northen half of Upper Nubia, from the Second to Fourth Cataracts, which, being put half way between Meroitic North and South, finally got no definite place in the sequence[3]. During the New Kingdom times, the region became a part of the viceroyalty of Kush, and apparently its aboriginal culture was completely overshadowed by the Egyptian ritual and artefacts. The alleged problem of Nubian permanence (what became of the Nubians?: Adams 1977, 235-40) which afterwards mysteriously reappeared at the Napatan period, probably again originates in the biased investigation, for the acculturation might possibly have been total in Lower Nubia, but not further south. Once the archaeologists look away from the magnificent temples to the humbler funerary remains, the continuity becomes tangible (New Kingdom cemetery with contracted burials in Kerma: Bonnet 1980, 16-20).

There is no archaeological evidence in the northern region for the time between 1070 and 850 B. C., and the first tumuli from Kurru (Dunham 1950) show a rather archaic aspect, typically Nubian (yet they are so much plundered that an accurate comparison with the older ones from Kerma is not feasible). Most sholars today accept the origin of the Napatan dynasty as coming from a keen indigenous group that knew how to profit from the support of the Jebel Barkal priests. Recently discovered linguistic evidence suggest that the local population was already Nubian speaking (Priese 1973), and since there was no apparent dynastic rupture during all the Kushite period (Napata-Meroe), the ruling class might have come from the south, the Shendi district where the second capital was then to be installed, and possibly they already spoke the Meroitic language (Trigger 1976, 142-4).

Archaeologically, the Napatan period in the North is under-represented and very poorly known. Until recently, only the royal tombs from El Kurru and Nuri, and the common cemeteries of Sanam had been investigated. It must clearly be stated here that no one sure Napatan settlement nor funerary remains was recovered during the exhaustive campaigns in Lower Nubia: notwithstanding, some temples are known to have been erected during that time (Semna, Buhen, Qasr Ibrim), perhaps for the use of small and temporary garrisons guarding the route to the North.

Sometime during the VI century the royal residence was changed from the vicinity of Sanam to Meroe, yet the Kings continued to be buried there and it is not until the dynastic burials interrupted in the North that the Meroitic period properly began (ca. 270 B. C.). Other facts that make a change in the designation for the new phase advisable are the appearance of the Meroitic writing and the rise of indigenous and Hellenistic influences in the crafts and official art, which where destined almost completely to replace the until then predominant old Pharaonic aspects (Priese 1978, 75; Adams 1970, 275).

By the time the change of capital was produced, perhaps as a consequence of it (Arkell 1961, 145), a military raid by the army of Psamtik II (591 B. C.) ravaged the northern country. A fatal defeat of the Nubians surely took place at the Third Caratact region (Sauneron, Yoyotte 1952, 190-1); although these authors manifestly put in doubt its arrival to Kurgus (Arkell 1961, 145), it appears clear that the incursion caused great damage and brought about a movement of population to the South (Goedicke 1981, 198; Cf. Desanges 1978, 221-5).

In this matter the archaeological data seem to agree with the textual information: there is positive evidence of cultural discontinuity in the known northern sites (Adams 1964b, 115-7). The Sanam cemetery is

3. Yet this is not the case for the prehistoric third and second millennium B.C.: Cf. Reisner 1923 and specially Gratien 1978.

interrupted after Amtalqa (*ca.* 550 B. C.: Griffith 1923: 73) and much the same occurs in Kawa (Macadam 1955, 231-7, 241); notwithstanding, this idea was opposed by the late B. G. Haycock (1967, 108-9, n. 8). Recent data come to confirm the gap: the Napatan cemetery of Missiminia (Abri), just in the nearby of Amīr 'Abdallāh, also stops its sequence during the VI century (Vila 1980 a, 169-70) and its material culture is so different to the early Meroitic finds from A. A. that only a chronological *hiatus* can explain it satisfactorily. The ceramic finds from the recent excavations at Qasr Ibrim also prompt us to believe in the same fact, for the typical early Meroitic hand-made ware does not appear until the late Ptolemaic levels, where the whole ceramic complex has nothing to do with the one found below in the deeper strata, believed to be Napatan (Adams *ms.* 2, 12; Adams in press, 10). The same idea of stagnation in the Napatan area is also reflected in the contemporary Greek written sources (Burstein 1979, 101-4). Whereas the only fact alleged by the opponents to this idea is the unbroken sequence, funerary and stratigraphic, shown to exist in the royal cemeteries and in the southern capital Meroe (Haycock 1967; 1972).

The historical knowledge about Meroe during the three last centuries B. C. is almost completely reduced to the changing interest of the Ptolemaic power in the southern region, but before the hieroglyphic writing was finally abandoned, the last Napatan stelae inform us of a renewal of royal activity in the North, some military expeditions in view of controlling the activity of the nomad groups there, by Harsioted (*ca.* 404-369 B. C.) and Nastasen (*ca.* 335-310 B. C.) (Haycock 1972, 229; Arkell 1961, 155-6). Perhaps the outset of new settlements as Amīr 'Abdallāh sometime later was related to these official enterprises.

The Ptolemaic first military concern with the South seemingly began with an expedition by Philadelphus (*ca.* 279-278 B. C.) during the reign of Arikakamani, whose burial shows for the first time a great quantity of Hellenistic imported objects (specially in bronze: Haycock 1972, 229-30, indicates this fact as the possible origin of the Meroitic liking for the bronze bowls, which are plentifully found in the first tombs constructed at A. A.). Nevertheless, political relations between the two countries appear to have been mostly peaceful or at least no dramatic consequences are reflected in the known archaeological records from the North until the end of the Ptolemaic dynasty. On the other hand, the alleged Egyptian occupation of Lower Nubia in the time of Ptolemy VI (180-145 B. C.) does not rely on actual archaeological sanction: Greek graffitti on the walls of Buhen temple only indicate that the region was eventually crossed by pilgrims, and the hand-made impressed pottery from the same place (Randall MacIver, Woolley 1911, 17) rather suggests an early Meroitic than Ptolemaic presence. Even Bevan (1968, 294) and Desanges (1978, 283-6) put in serious doubt the effectiveness of that occupation.

After Philometor the Ptolemaic kingdom entered an era of instability that was to endure until its final breakdown after the death of Cleopatra VII (51-30 B. C.) Haycok (1972, 240) goes on to suggest the seizure of the Ibrim fortress by the Meroites around 100 B. C., although the recent dig of strata from that period rather indicates the presence of a Ptolemaic garrison during the first century B. C. (Adams in press, 10; Adams *ms.* 2, fig. 2: only a small percentage of the ceramic complex can be considered as undoubtedly Nubian at those levels; this together with numismatic and textual data, not yet published). The southern limit of Egyptian influence then possibly was somewhere between Aniba and Faras, for the latter show some archaeological evidence of early Meroitic occupation (see later), whereas the Karanog cemetery does not (Cf. Haycock 1972, 240, n. 2).

An alternance of historical and dark periods seems to typify well the cultural sequence of Nubia (here by historical we mean the knowledge of a series of –normally cultural– facts, even if it comes mainly from archaeological sources). It appears as if the cultural change was always brought about somewhere away from the Nile, the main scenery of Nubian life. By and large, the most important of the dark periods in Nubia is the now accepted depopulation of Lower Nubia during the first millennium B.C. This fact was already pointed out by the first nubiologists (Woolley, Randall-MacIver 1910, 5-6; Griffith 1924, 115-7), but after the salvage campaign of the sixties it became undeniable; in spite of this, a complete international conference was devoted

to discussing the antagonistic (archaeological and textual) data (Adams 1976). Since no one sure funerary remain was registered from that time in all the area, the temples, isolated finds (Cf. Hoffmann 1978, 193) and textual references to places have to be understood as proof of political and religious interest in the area, which was surely frequently crossed by and eventually provided with small military garrisons. The cause of that abandonment was perhaps the drop of the river level that did not permit the irrigation with *shaduf;* for the same reason, the reoccupation at the beginning of late Meroitic times should have been stimulated by the newly introduced *saqia,* but the discussion of this rather harassing problem is outside the scope of this article.

Many scholars now believe that the newcomers to Lower Nubia during the first century A. D. were already a Nubian-speaking people of western (Adams 1977, 356, 418-21) or southern origin (Hintze 1978, 100-5), although a general agreement is far from being achieved (Trigger 1978, 319-21). A Nubian place-name, *articula,* is already mentioned in the New Kingdom and Napatan official itineraries, indicating a location with an island. Priese (1973, 156-7) suggests its place somewhere north of Pnubs (Argo), possibly Sai or Arduan, yet Pliny's account of the journey of Nero's emissaries to Meroe puts it half way between Syene and Meroe (*NH,* VI, 35).

Whatever it may be, the archaeological evidence from Amīr 'Abdallāh shows at the beginning of its occupation a people partially meroitized (grave-types in the Egyptian tradition, bronze bowls), but still endowed with many indigenous features. During the first phase of the cemetery the whole ceramic complex belongs to the hand-made impressed black ware, which has somewhere been called the "ethnicity mark" of the later newcomers to Lower Nubia, perhaps the only non-meroitized craft that they brought with them on their arrival (Adams 1976, 23; Arkell in *Ibid.,* 28). Haycock (1967, 117) suggested the persistence of some sentimental links to the South, after the occurrence of incised giraffes on a number of pots from Karanog and other sites (curiously, not in A. A.). The quantitative weight of this kind of pottery goes down slowly after the beginning of phase B, at the same time as other Meroitic features appear: offering-tables, Ba-statues, Meroitic graffitti, pyramids and, significantly, a pottery ware (wheel-made, burnished slipped) that does foreshadow the famous painted one from Lower Nubia, in addition to conspicuous signs of social stratification in the grave differences in goods and dimension.

It is a hard problem to decide about the ethnicity and language of the people buried at Amīr 'Abdallāh, but the archaeological facts here clearly suggest them as the ancestors of the Lower Nubia settlers, or at least as an important component of that population. The evidence also does not preclude the possibility of them being already a Nubian speaking group, although this is logically difficult to ascertain solely on a material basis.

The last important historically known fact at the end of the early Meroitic period is the attack on the northern region by the second Roman prefect of Egypt, C. Petronius, in 23 B. C. After Strabo and Pliny's account of it, we may take for granted that a large area was devastated, and perhaps it cannot be considered a casual incident that the burials in A. A. terminate aproximately at the same time.

There has also been much controversy about the date for the late Meroitic reoccupation of Lower Nubia. Griffith (1924, 120, 144) and Emery (1965, 227) claimed for a Meroitic splendour before Petronius' raid, but the great majority of the authors agree that the bulk of population came at the end of the I or beginning of the II century A. D. (Woolley, Randall MacIver 1910, 84; Haycock 1967, 109-10; Adams 1977, 345, etc.). Unhappily, the answer, that was to be found in the material evidence from cemeteries and villages, has become unfeasible since the flooding of the area, but continuous excavation at Ibrim corroborates the previous idea (Adams in press, 12). Nonetheless, older contributions did probably exist, as some pottery finds from Southern sites in Lower Nubia (Faras, Gemai, etc.) strongly recall the early Meroitic wares introduced in this paper. It was seemingly during the first century A. D., therefore a short time after the abandonment of Amīr 'Abdallāh cemetery, that the southern people began their gradual displacement to the North.

III. The Amīr 'Abdallāh cemetery: its chronological position

III. 1. Evidence of internal evolution (fig. 1).

Both the funerary patterns and the material culture of the site unmistakably show evidence of relative dating, which I will expound here briefly (see Fernández 1983 a). In all the eastern area of the cemetery the graves belong almost exclusively to the axial western chamber type, whereas the western part is crowded with the remaining classes: eastern and lateral (north and south) chambers, and single niche graves. Many other features, related to the general type, as the access ramps, ground floor or closing-wall also change statistically in accordance with this pattern. The burial conformation is by and large the same, but archaic features as contracted adult corpses or *angarib* are only found in the eastern area; mud-brick superstructures were only conspicuous in the western part.

Four out of eight pottery wares distinguished in the grave goods came only from the western area (Aswan pink, Hellenistic, archaic wheel-made and coarse hand-made), as is also the case with the bulk of the typical wheel-made, burnished slipped wares. The plentiful hand-made decorated pottery, with its two variants of smoothed and burnished surfaces, is represented in the two areas, but their sub-types are not the same. Bronze bowls are also very abundant in A. A., lotiform and parabollic shapes coming from the eastern and the semicircular type from the western part; bead necklaces are much more abundant and varied in the latter. The same pattern is observed in the distribution of sherds found in the filling of the graves (mostly "spade sherds") and in the surface refuse.

So there seem to be enough reasons to think in terms of two *consecutive* areas, that is to say *phases* in the cementery, phase A to the east and B to the west[4]. On the whole, the cultural and ritual appearance of phase A is to be considered as "older" than that of phase B; the grave types are more of the "classical" type (standard in the royal cementeries) and the corpse disposal also looks more old-fashioned. The same occurs with the grave goods, hand-made pottery being normally considered as a survival of older Nubian traditions (C-group and in general from an African or Saharan background). The process of progresive meroitization which is conspicuous as going from phase A to B also accounts for this conception. There are no grave superposition in A. A. (since the available room was inexhaustible), as in Faras or Gemai where the excavators were able to detect a more or less clear temporal pattern (Griffith 1924; 1925; Bates, Dunham 1927), but a simple visual inspection of the spatial disposition can be useful to discover it.

Irrespective of this, there are at least two sets of options disagreeing with this interpretation: the two areas can be understood as related to two different ethnic or religious groups, or as the disposal facilities reserved for the lower and upper strata of the social group. Griffith (1923, 88) believed that the two kinds of grave furnitures and corpse disposal found at Sanam were in fact representative of the traditional and egyptianized Nubians (see Adams 1977, 288, for a sexual interpretation) buried at the Napatan cementery. Reisner thought in similar terms as referring to the difference in burial practice for the Meroitic aristocracy and the Egyptian scribes and craftsmen at Meroe South and West (Cf. Shinnie 1967, 148-50). Recently, Vila (1980 b) prompted a further hypothesis about the Napatan tombs *sans mobilier*, allegedly being those of priests from Amon temples. As can easily be proved, none of the assumptions existing at those sites is relevant at Amīr 'Abdallāh. The ritual of internments shows an absolute uniformity (archaic survivals after the initial stages being mainly seen in women and children's graves) and the artefacts are more or less equally distributed.

The second possible objection could interpret phase A as the burial ground for the poor and, conversely, the B for the richer people. Woolley and Randall-MacIver (1910, 81) understood in this way the

4. I have abandoned my previous idea of three phases, I to III (Fernández 1980 and in press a), now thinking that the transition area (II) is not representative enough and darkens the main pattern.

Karanog cementery, being followed by Adams (1977, 375) in their explanation of burial differences in Lower Nubia. Abdallah (in press, 18-23) believes that in every Meroitic cemetery there was a special area for the upper social class, yet his alleged data are not extremely convincing. At least five reasons can be adduced to reject this view in A. A.: 1) the cultural discontinuity, specially as regards the pottery finds, 2) phase A lies in the upper part of the alluvial terrace, whereas the tombs of phase B were dug in a not very suitable terrain, crossed by several small wadis, 3) the average dimension of graves is bigger in phase A than in phase B, this being in contradiction to the known fact that relates energy expenditure to social rank (Tainter 1978, 125), 4) internally to phase B there is conspicuous evidence of stratification: bigger chamber graves with superstructures and wealthy furnishings, besides poorly provided niche graves, and 5) the rate of plundering is greater in phase A, where most of the graves had no goods at all, than in phase B, theoretically the richer area.

III.2. Seriation

Grave seriation in Archaeology is an enhanced field of research at present, specially after Kendall (1971) study and completion of Petrie's basic principles with a seemingly very reliable computer program (improved MDSCAL). In fact, the chronological ordination of Amīr 'Abdallāh graves was not a complicated matter, as the spatial organization of the cemetery was very much in accordance with the temporal pattern of its construction.

Just a glance at the map of the area (fig. 1) suffices to see that the sequence follows a linear pattern, the tombs being arranged in aproximately straight rows in a north-south direction. Put at its simplest, our hypothesis says that they were begun at the north end and advanced through time to the south, and that no one tomb could have been dug before its adjacent one to the north. It is possible that these lines did correspond to some particular kinship groups, perhaps a lineage of commont descent, as has been demonstrated in Unetician cemeteries of Central Europe (Coles, Harding 1979, 39, 79). Similar rows are also known in other Meroitic cemeteries (Sedeinga: Leclant 1973, 33; Kerma: Bonnet 1978, fig. 7).

Afther this initial statement, the next step was to confront this time-space system with the "substantial" system defined by the attributes from the ritual and cultural items present in each grave (Goldstein 1981, 67). A methodological simplification must be made for the procedure to be reliable, assuming that the rate of interments was a constant during all the time of the cemetery and the same for all the rows. In accordance with this, the position of each grave in the line is a linear function of the time of its deposition and so the axis north-south can be viewed as a time axis. The only unknown quantity is then the initial point (time) for each row, for its whole construction was surely independent with respect to the others. This is where the substantial data come in, providing the opportunity of making the position (time) of the rows compatible one with each other. If the typology of graves and artefacts is "chronologically significant", then the graves must be ordered in such a way that the items representative of each cultural type turn out to be clustered at maximum (the "sequence-date" range minimized), but "in some communal way", that is to say, all the types must be considered simultaneously (Kendall 1971, 217).

In this particular case, minimizing each sequence-date range is to be obtained by permitting the rows (since the position of each tomb in its row is fixed) to "slide" one with respect to each other until the condition is satisfied. As the graves are very numerous and the number of types was not excessive, a manual procedure proved to be advantageous over a mathematical one, which had to be specially designed for the case. The final outcome is, to some degree of approximation, satisfactory enough: the rows in phase A did not substantially shift from their initial relative position, and, as might have been expected, phase B "moved" to the right (south) in such a way that its initial tombs at north lie under the last tombs at south of phase A.

The next step was to establish a finer division in the sequence, that is time intervals smaller than phases, that can be useful to express the most gradual order of development (see Rouse 1967, 197-91). I decided to

divide the continuous funerary record taking a constant number –3– of graves per row in each period at the time when the maximum of them were constructed, that is at the middle of the sequence. As we reach the ends, the "width" of the periods increases, as we try to incorporate in them an appropiate (not much smaller than in the centre) number of graves. The final result was of eleven divisions, of 26, 31, 32, 35, 37, 41, 49, 37, 31, 25 and 33 tombs in each. Divisions 1 to 7 correspond to phase A, and 8 to 11 to phase B.

A preliminary and approximate evaluation of the total duration of the cemetery is of about three centuries (see III. 3). An estimation of the mean population after the number of interments (389 individuals) can be made by the formula of Acsádi and Nemeskéri (1970, 65-6): $P = (389 \times 35 / 300) \times (1 + 0.20)$, 35 being the life expectancy in years for the individuals (Hassan 1981, fig. 7.9) and 0.20 a corrective factor; P should thus be of about 55 persons as a mean. This means that in a generation of 25 years, a number of about 33 individuals should have been buried and we can then take the eleven divisions as "generations" of 25 years each one.

III.3. External setting

It is necessary to merge a number of pieces of information of different sorts in order to obtain the result closest to reality about absolute dating for the cemetery.

The historical data about the two known Egyptian raids, of Psamtik II (591 B.C.) and Petronius (23 B.C.), in the northern region are confirmed, as we have already said, by the archaelogical evidence from Abri: there is a sound discontinuity in material culture, first from the Napatan cemetery of Missiminia (Vila 1980a) to Amīr 'Abdallāh, and then between this cemetery and the late Meroitic one also at Missiminia (Vila 1982), less than one kilometer from the alluvial terrace. An intensive survey of the area by the Franco-Sudanese team did not find any other complementery evidence, for the small cemetery of Dambo (Vila 1978 a, 50-9) showed not significant cultural differences from the New Empire tradition. There are therefore sound reasons for thinking that the A. A. temporary sequence can be placed in between two periods of possible disoccupation of the area.

The first users of the graveyard brought with them a cultural compound that undoubtedly can be labelled as "Meroitic": hand-made pottery of the so-called African tradition, and bronze bowls of Hellenistic inspiration, a medley of indigenous and Greek components that are said to have been crucial for the formation of the new culture during the III century B.C. It is near the end of the cemetery (generations 9-11) that a new pottery ware appears, the well-known pink Aswan vases, which until recently were dated after 200 A.D. (Adams *ms.* 1; Adams 1967-68, 39). Newly published reports from the excavations at Ibrim have changed this image, as it has been recorded at the Ptolemaic levels, supposedly from between 100 and 25 B.C. (Adams *ms.* 2, 2, 44).

All this led me to think that the whole duration of the cemetery can be confidently put between 300 and 25 B.C. in general terms. The last date has a historical support in Petronius' attack and can so be considered fixed; the first could be more flexible and displaced perhaps half a century back or onwards. In this way the eleven generation limits fit rather well and can also be somewhat lengthened or shortened (30-20 years each).

III.4. Radiocarbon dating

When this attempt of seriation was made, the only absolute date available was a radiocarbon analysis from a charcoal sample found in the wall of grave 331 (intact, generation 5) made at the Teledyne Isotopes laboratory in New Jersey (I-II.561); the result was of 230 ± 90 B.C. Recently four new samples, all of coffin wood from intact graves, were analyzed in the laboratory of the Spanish University of Granada: 1) grave 506 (Ugra-153), a tomb in the small cemetery of 9 graves around the "gubba" of Amīr 'Abdallāh, 200 mts. to the north from the big cemetery (those graves were called generation 0): 370 ± 90 B.C., 2) grave 426 (Ugra-152,

generation 1): 180 ± 90 B.C., 3) grave 234 (Ugra-151, generation 4): 180 ± 100 B.C., 4) grave 199 (Ugra-150, generation 7): 270 ± 120 B.C. (all the dates with the half-life of 5568 years)[5].

These datings confirm without doubt the early Meroitic chronology of the cemetery, but contradict the way of internal evolution in the big cometery as has been explained above. Anyhow, the maximum difference (between tombs 199 and 426) is of 90 ± 150 years and there is a probability of 27% that 426 was actually earlier than 199 (using the normal distribution tables), yet the chance of tomb 426 being 175 years (or more) older than the 199 falls to only 4% (see Orton 1980, 89-95 for the method and specially 94-5 for the fact that radiocarbon has its limitations for sorting out detailed phasing in this way: there are numerous examples of reverse dating in a clear stratigraphic context)[6].

Another question is the fact that for the method of 14C to be totally reliable in our case, the tree had to be cut at a time contemporary of the construction of the grave, and this surely was not true in every case, specially in an area where timber is not abundant and so is re-used for a long time before its final deposition in the grave. This fact, together with special contamination, has made Egyptian radiocarbon dates generally earlier than expected by historical data (Kemp 1980, 27). Moreover, calibration curves for this time have an apparent kink that makes more uncertain the precision of the calendar date (Clark 1975, fig. 1, tab. 8). Recent investigation on this matter (Klein *et al.* 1982) has established a consensus table that puts the calendar dates for our results (with 95% of confidence) between 760-170 B.C. (Ugra-153), 545-20 B.C. (Ugra-150), 415-1 B.C. (I-II.561) and 400 B.C. -35 A.D. (Ugra-151, 152).

IV. The Amīr 'Abdallāh Cemetery: ritual and cultural analysis

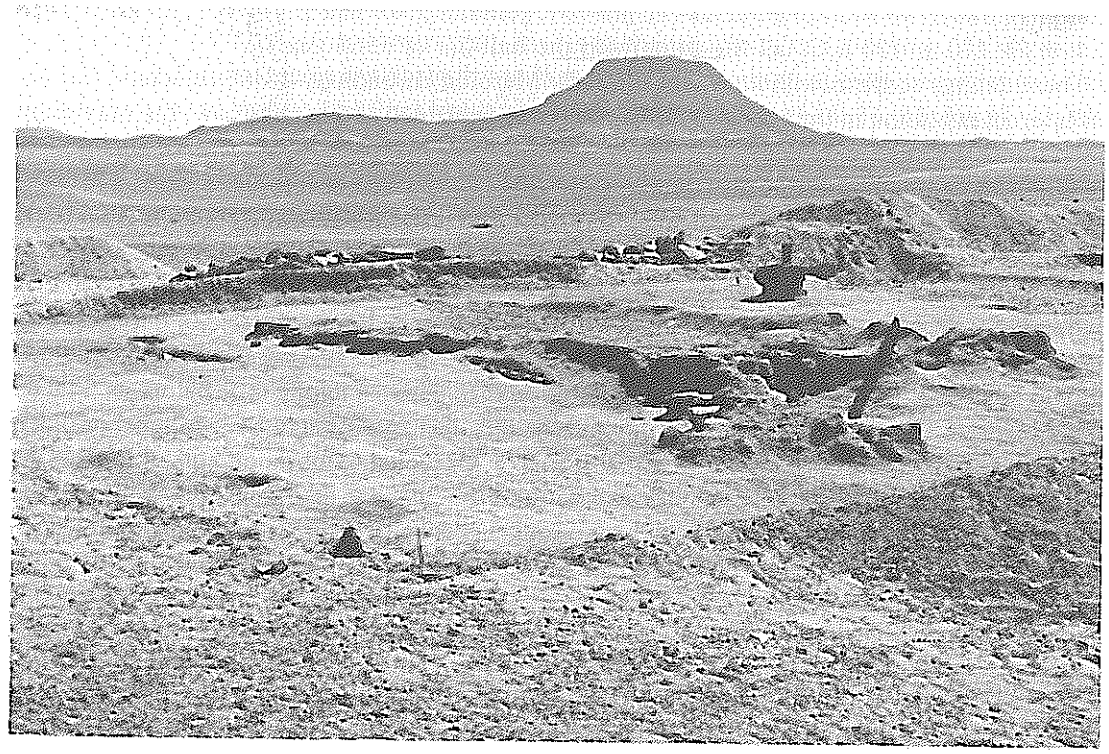
IV. 1. The funerary ritual

Here we attempt an analytical study of the archaeological context in the cemetery, the basic unit of analysis being the funerary "artefact" or grave. Every grave was adequately registered during the excavation and then reduced to a list of 24 attributes embracing its chronological, anthropological, structural, ritual and cultural data. The patterned combination of some of these variables will give us the most appropiate idea of the early Meroitic funerary sphere. A bivariate contingency table was tried for every possible pair of related events, discriminating by means of the chi-squared test.

Although the mortuary evidence is by no means an exact reflection of the whole social organization, as this is never completely translated into the ritual, this ritual does not always produce a "physical change" in the grave and finally the archaeological record is usually partially preserved (O'Shea 1981, 39-40), after Binford's work (1972), most archaeologists agree that funerary data are an important source of information about the "social persona" of the deceased, including sex, age, social position and affiliation, and so on. Even Ucko (1969, 270) in his challenging and often quoted article accepted that differences in ritual were surely related to differences in status of the deceased during his life. The bulk of the anthropologically oriented recent studies of necropolises are focused on detecting the social rank differences (Cf. Chapman, Randsborg 1981, with a comprehensive and critical bibliography), usually following Tainter's (1978) idea of the energy expenditure in the grave being proportional to the rank of the dead individuals.

5. Another radiocarbon dating is now available for the nearby Kerma cemetery (Fernández 1982): 3.400 ± 100 B.P. (Ugra-149), with the Libby half-life. The recent calibration table (Klein *et al.* 1982) put this date (with 95% of confidence) between 1965 and 1540 B.C. (with 68% of confidence: 1752 ± 106 B.C.); the mean value is totally in accordance with previous chronology based on cultural data, for the cemetery was constructed approximately during the transition from Middle to Classic Kerma (*ca.* 1750 B.C.: Gratien 1978).

6. An Analysis of variance test (F-test) shows that the five dates can be considered as significantly contemporary (Cf. Long, Rippeteau 1974).



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Pl. I.- 1) Surface view of the Meroitic grave 400, with remains of a mud-brick superstructure; this grave was under the supposed *gubba* of the Sheikh Amīr 'Abdallāh; Jebel Abri in the background. 2) The shape of the pits appeared after the surface cleaning; phase A.

Although I feel in substantial agreement with this approach, a previous caution is necessary, for the Meroitic culture was in general extremely conservative and therefore variation in the tomb contents is not very apparent, ritual practices seem to have been much inclined to the same effect, and finally the human group of Amīr 'Abdallāh surely was rather poor, as is reflected in the graves. All these factors will of course hinder the social picture that we can actually get.

About Meroitic funerary religion, almost all the information is to be obtained by comparative study with what is well known in the contemporary Egypt. Religious observance was common to all levels of Meroitic society and not just to the court and nobility. Possibly even the humbler people deserved a burial, this being a very similar situation to the "democratic" practice known to have existed in predynastic Egypt (Murray 1956, 86-7). Also a widespread vulgarization of the original northern rite is to be appreciated: the "simple-minded" Meroites understood the afterlife very pragmatically[7], for food and objects of everyday life are lavishly found inside the graves (Griffith 1925, 72-3). Personal piety and beliefs are attested by amulets (of Bes, Amon, etc.) found specially in the children's graves (A. A. tombs 106, 138, 159) (Cf. Seguenny in press; Bonnet 1980, 60 for a present day survival of the practice). Two crudely made offering tables were registered in the filling of plundered tombs 21 and 400, and Ba-statues were already present at this early moment (in their three varieties: bird, human-headed bird and reserve head: graves 2-w/3/1, 103, 400 and surface refuse).

An anthropological study of the skeletal remains has shown that the deceased population at A. A. numbered 151 males, 137 females, 68 children and 33 adults of indeterminate sex. The somewhat unequal distribution for both sexes is perhaps caused by the fact that some very damaged remains (from plundered graves) were given an approximate sex in the field, according to only one criterion (sciatic notch: Brothwell 1972, 52; Cf. Shennan 1975, 282). There are only 9 cases of multiple interments in the same grave, usually adult and child, this unusual fact being explained by the large amount of available ground to make new graves, far from the alluvial crops. Notwithstanding, in graves 267 and 276 were registered two cases of reoccupation, the earlier corpses (aged woman and man) were replaced by new occupants (young and adult women) and their remains were found more or less mixed up over the ground of the pit.

Out of 271 analyzed individuals, 68 were infants, 25 youths, 139 adults, 20 mature and 39 senile. More than three quarters of the population died before the mature age. As for the influence of sex in the age of death, the greater percentage of women (61%) died during the adult age, possibly due to the risks of pregnancy. There also existed a greater mortality of adults in phase A than in the B (69-48%), this relation being inversed with regard to mature individuals (3-21%); this can perhaps be interpreted as a consequence of the higher standard of living that is also apparent in the cultural record during the second period.

The graves are structurally divided in five types: 1) axial chamber to the west, 2) *id.* to the east, 3) lateral chamber to the north, 4) *id.* to the south, 5) single niche. There is no relationship between this division and the sex or age of the deceased, yet slightly more senile individuals were buried in tombs of type 1 than in the other types, as if the more aged persons preferred the classical kind of interment. Otherwise the general pattern of grave differentiation is clearly chronological, since in phase A there are 225 tombs of type 1, together with 13 of 2, 8 of 3, 1 of 4 and 4 of 5, whereas is phase B there were 20 of type 1, 61 of 2, 25 of 3, 4 of 4 and 13 of 5. Further on I will try to demonstrathe that this change took place for functional (to avoid plundering) and social reasons.

The threefold division of the grave structures (axial-lateral-niche) is already attested in Nubia during the New Empire (Emery 1965, figs. 33-5) and Napatan times (in Sanam: Griffith 1923, 76-8; in Missiminia: Vila 1980 a, 122). The known early Meroitic sites equally show the same pattern as Amīr 'Abdallāh, yet some brick-vaulted examples are recorded in Kerma (with a functional explanation, by disintegrated ground:

7. There is in Amīr 'Abdallāh an illustrative example of this fact: the child of tomb 140 was "obliged" to eat the food placed in a bronze bowl, his head being fastened by a cloth tie to the recipient.

Bonnet 1978, 122). During the late Meroitic times in Lower Nubia the evidence looks rather bewildering since there is not a single pattern for the area and each cemetery seems to have had its own evolution. In Faras and Nag-Shayeg early hand-made pottery appears in the western axial chambers (Griffith 1925, 58-61; Pellicer 1963, 13-7, 63-9), but in Gemai the sequence goes from niche to axial chambers (Bates, Dunham 1927, 19-28) and in the cemetery 220 of Qustul and 221 of Ballana from eastern to western chambers (Seele 1974, 7, 20), whereas no sign of change has been recorded in other places. Adams (1977, 375-6) thought of eastern chambers as being a late and aberrant development and brick-vaulted a functional solution in unsuitable ground (and for the same reason of later age).

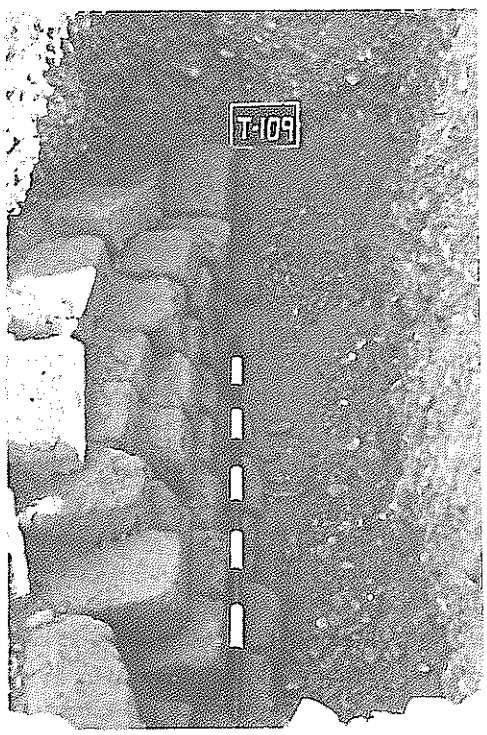
The fact is that the clear preponderance of western axial chambers in early Meroitic sites is to be related to a more strict observance of the classical Egyptian rules (already seen in Kerma by Bonnet: 1978, 122) as was performed in the royal cemeteries (Dunham 1950, 121-32). Subsequent changes in this norm must be interpreted as a means to deter plunderers (eastern chamber) or roof collapsing (brick-vaulted), and as a reflection of increasing social differences (lateral chambers and niche graves). The registered fact of the many dislocations of the "normal" sequence in Lower Nubia might possibly be explained because the cemeteries were not begun at the same time and the practices at the previous site would without doubt influence the actual ones at the new location. Here is perhaps another reason for thinking that the new inhabitants of Lower Nubia had been practicing the Meroitic funerary ideology for centuries.

With regard to shape of the grave pit, access to the chamber could be had by a vertical wall, a ramp or a stairway. The ramp is statistically associated to the western chamber grave type of phase A, whereas the upright wall to the eastern chamber type. A number of classes were recognized in the shape and slope of the pit and chamber floor. More than half of the floors have either a step or a conspicuous change of slope after the wall entering the chamber. Western axial graves are usually associated with ramp floors and the eastern ones with flat ones.

The closing structure for the burial chambers was normally a mud-brick or stone wall, and up to 21 different kinds were recognized, even if the patterns did not comply very rigorously. The types were different depending on the grave class, walls in lateral chambers being normally of a more flimsy character. After a bivariate analysis it became evident the more elaborated construction of western chamber graves, where the walls are usually thicker, with different arrangements of headers and stretchers, stressing again the greater structural importance of phase A, though the furnitures were then so poor.

Formal typologies of closing funerary walls are missing in the literature on Nubian sites, but a rare case of brick bonding in A. A. (forming angles) appears only in late and Graeco-Roman Egypt (Spencer 1979, 138, tab. 8: A17). Brick dimensions are by no means uniform and do not show any evolutionary pattern; the limit values are 33 × 17 × 10 and 37 × 20 × 11 cms., in accordance with the average values of Ptolemaic and Roman Egypt (Ibid., pl. 42) and in the contemporary levels of Meroe (Bradley in press, 7-8). Lower Nubian examples seem smaller in Gemai (Bates, Dunham 1927, 20) and bigger in Karanog (Woolley, Randall-MacIver 1910, 8).

Mud-brick superstructures were erected during the end of phase A (9 cases) and in phase B (26). The total heigth of the supposed pyramids could be estimated according to the slope observed in the first two courses of bricks, preserved in some cases, varying between 1,50 and 7 mts., yet the method is perhaps not very reliable since the distances between bricks might not be constant (and in fact they were not along the perimeter of the same pyramid). Men and women were statistically represented in the burials under pyramids, but these were usually of greater dimension in the masculine tombs. Superstructures were undoubtedly indicative of upper social rank, since the graves under them were well supplied with goods and normally belonged to the axial chamber type (29 out of 35). The multiple grave association under or around the same structure can hardly explain which kind of social group was represented, as in several cases there were two men, but the abundance of children's graves around suggest some kind of kinship patterning. Even if the possible function for the superestructures as a deterrent to plundering has normally been dismissed as useless



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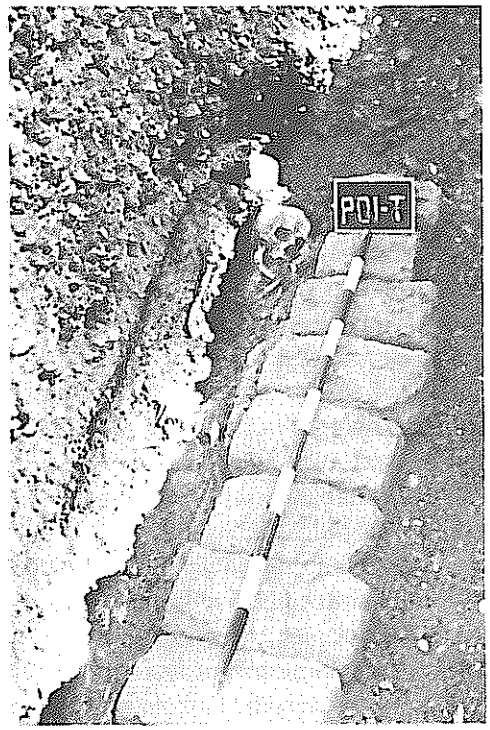

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Pl. II.- 1) Lateral chamber grave before removing the wall. 2) The same grave, from the opposite direction, after removing the upper bricks of the closing structure; the line of the wooden coffin is at right of the corpse (phase B). 3) Closing wall (mud-brick and mortar) of an axial chamber grave. 4) The same chamber after opening: the pottery vase in the foreground, remains of the wooden coffin over the cranium (phase A).

(Adams 1977, 156), in Amīr 'Abdallāh the ratio of robbed tombs with superstructure is lower (14,8 %) than in the whole phase B (27,5 %).

The grave dimension is an important variable for it is usually related to the social importance of the deceased, but this assertion has not been proved in A. A. The grave length, attribute taken as a measure of the total magnitude, has a normal (gaussian) variation in phase A and in B, the mean value being greater in the first thus showing a chronological pattern as the only one detected, since there is not relationship to sex, age (only the children's graves are smaller) and the quantity of grave goods.

As we have already said, the ritual in itself is very uniform along the cemetery. With regard to the body arrangement, the modal case is extended face upward, and the exceptions to this rule (contracted or with arms and legs apart) are to be found only during phase A in adults and children, or in children in phase B. Aberrant cases (up to 8) with the head placed towards the east are specially concentrated in generation 8, when the aforementioned ritual changes (of chamber orientation) took place and perhaps can be explained as simple statistical errors. An abnormal case must be referred to: half a leg (the femur broken) inside a small wooden coffin in the tomb 214. After the bivariate study of face direction and arm and leg position, the detected types seem to be at random in relation to the variables age, sex and chronology within the cemetery. The modal position of hands is crossed over the pelvis and the few (12) exceptions with the legs crossed were seen mostly in women and children.

A great number (226) of burials in A. A. were put into a wooden coffin or on a wooden bed *(angarib)*. Some analyzed samples of wood revealed it was dum palm *(Hyphaene Thebaica)*, with one case of sycamore *(Ficus sycomorus)*. Some coffins were made out of a hollowed trunk or of plates assembled with wooden nails or vegetable strings, but the bulk of them were too much decayed to recognize their method of construction. The coffin or bed and corpse were introduced into the chamber by means of a wooden stairs (as the one found in the pit of grave 327) or a system of ropes (many fragments found, made of dum palm leaves). Different types of coffin (rectangular, trapezoidal, anthropomorphic, etc.) were independent of any other ritual variable, but the *angarib* type was found mostly in feminine graves, specially at the beginning of the cemetery. The evolution of this class is from a wooden framework of trunks with post supports at its corners to a simple framework without supports, curiously in the inverse way to that observed in the Kerma culture from its Middle to Classic phases, 1500 years before (Gratien 1978, 169, 194; Fernández 1982, 292). Wooden accomodations must be considered as a sign of social prestige, since they normally were associated with the presence of grave goods. The subsistence of the *angarib* during the Meroitic period had already been attested (Trigger 1965, 127) and later it will strongly reappear in the post-Meroitic period (Adams 1977, 428; Garstang *et al.* 1911, 32). A wooden human mask was registered in the coffin from tomb 331, of a very crude workmanship and much like a phallic figure from Elephantine, possibly contemporary (Shorter 1930, pl. XLI: 1-2). Leather wrappings around the waist and sex were detected in 23 masculine corpses, specially during phase B, and cloth shrouds were seen in a number of graves.

The grave goods, mostly pottery and bronze vessels, follow very closely a general rule: they were put near the entrance to the chamber, near the feet of the body in phase A and at the head in phase B; the sex and age had no influence in its positioning. Some cultural classes (wheel-made burnished slipped pottery) were slightly more frequent in men and others (bronze vases) in women. The sex had no influence in the relative importance of grave goods, but this is not the case with the age, mature and aged deceased being proportionately better supplied; this fact perhaps points to a greater prestige of elder persons. Bead necklaces were normally found in feminine and children's corpses.

Plundered tombs were easily detected on the surface, for their filling in the pits consisted mainly of sand. We classified two kinds of plundering, the fast and "economic" one, where only a part of the wall was removed and the body slightly disturbed (head and arms: the usual place of necklaces), and the intensive performance, totally dismantling the wall and mixing up the bones. Women and children were more intensively investigated by the robbers, that possibly came to the site during the night (a fire was found in

front of a plundered chamber, tomb 372), but it seems that they did not previously know the sex of the deceased. The data from Amīr 'Abdallāh clearly show a fall in the rate of plundered graves during the time of the cemetery as we go from generation 1 to 11. If we compare this decrease with the decrease in the proportion of graves of the western chamber type, also during the 11 generations, a strong correlation between these two series of numbers appear (Pearson's r = 0.92). That is why I put forward (Fernández in press b) the idea of the universally observed fact of axial chambers changing of orientation (from west to east and perhaps also conversely) being actually an attempt to deter plundering: the robber's work surely was a hard one and hastily made, using pottery sherds (usually found in the plundered graves) as spades, thus employing a lot of time (three workers with modern shovels spent two ot three hours during the excavation), and if the burial chamber was not at the expected place, this could without doubt discourage them. Some examples of this anticipated failure are seen in Mirgissa (Venot 1974, 44) and El Kadada (Geus 1980, 12); in Aksha the only two intact graves of axial chamber type showed it to the east (the rest were to the west: Vila 1967, 28), and Griffith (1925, 67) seemed to conjecture the same. Notwithstanding, the first tombs at A. A. with the new orientation (in generations 5, 6 & 7) did not prove successful, for they were intensively plundered, and perhaps the leap of the burial area to the east after generation 7 also had some influence.

Another aspect of the funerary ritual still lacks mention: the sherds in the filling of the graves. Most of them were "spade sherds" (Myers 1956), but others come undoubtedly from ritual offerings that consisted in breaking the pots during the interment (their edges were not worn). A curious act deserved our attention: putting a sherd (possibly the one that served to the dig) on the top of the closing wall, stuck to the mortar, as an attempt to "seal" it or to leave a mark of the diggers. Most of the sherds were of contemporary wares, but a special one (hand-made with a thick, red burnished slip) perhaps is more recent in part, medieval or modern.

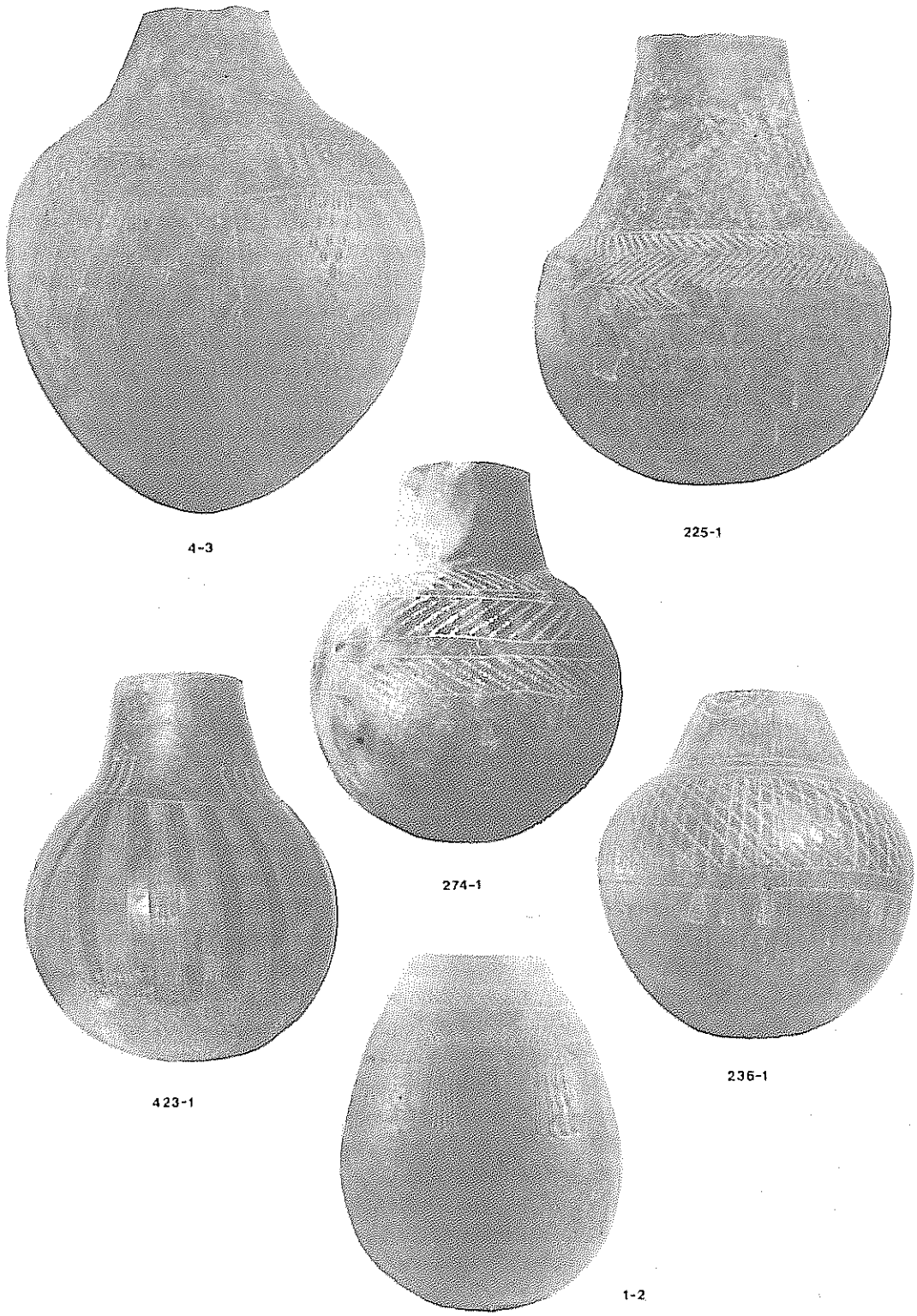
III. 2. The material culture

The Amīr 'Abdallāh cemetery was not specially rich in grave goods, if compared with the lavishly supplied sites from Lower Nubia, yet its exceptional condition of being only partially plundered and its early chronology makes it extremely interesting for its ritually patterned culture, mostly pottery and bronze vases. A short survey will be presented here, and for more detail see Fernández 1983 a[8].

Hand-made decorated pottery is the most represented kind of ceramics (89 complete vessels out of 177), this fact being a characteristic feature of the site, specially in the first phase A. A number of types (24) have been recognized, each of unequal coherence since the vases come from the funerary (i. e. selected) record covering three centuries. Its fabric was made of Nile mud with much vegetable temper (but in vase 4-4 it was mainly quartz) and the surface treatment was of two classes: burnished and smoothed; as decoration was rather better executed in the first group, perhaps the second was a local imitation. The contours were very simple, bottles and bowls, without handles or feet. A total of 107 decorative motifs were differentiated, impressed, incised or combining both techniques.

The list of references about this pottery would be endless, as its origin and phyletic relations have been always one of the most intriguing questions in Nubian archaeology. It was first recorded, in small quantities, in a few sites of Lower Nubia: Shablul, Karanog and Faras (specially in the first phase of this cemetery, and I think that Griffith was right when he seriated so the site), and then mistaken with the post-Meroitic Alwa ware from the common cemeteries of Meroe (yet not all was Alwa: Garstang *et al.* 1911, pl. LII, from the tells of the city). Curiously, the pottery was never found in its modal phase, being scarce in Lower Nubia (after 100 a. D.), in Musawwarat and the royal cemeteries of the South (after 300 B. C.: Otto 1967, 23; Shinnie 1971, 97) and almost unknown in Napatan times (only two vases in Sanam: Griffith 1923, pl. XXXIV: 1-2; none in

8. An offset publication of this work is expected to appear at the beginning of 1985, but a version in microfilm will be available in a few months.



Pl. III.- Hand-made decorated pottery, all with burnished surface; 4-3 and 1-2 form the beginning of phase B, the rest from phase A. Approx. 1:4.

Missiminia; the sherds from Kurru and Nuri seem intrusive). It was usually referred to as of C-Group tradition (but there are so many relations as to say of "African" tradition) or related to the southern site of Jebel Moya (Addison 1949; see Bates in *Jea*, 3, 1916, p. 30). Adams (1964a) labelled it as V. D., stressing its low occurrence in late Meroitic sites and its condition of "clue to social and ethnic distributions" (Adams 1973, 184); he subsequently put it within a strict late Meroitic chronology (after 100 A. D.: H. 11, Adams *ms.* 1), but the recent finds of Ibrim moved it backwards to 100 B. C. (HBB, Adams *ms.* 2). The evidence from Amīr 'Abdallāh is that the modal phase of this special ware is to be placed before, during centuries III and II B. C., and that the Nubians that lived in Northern Sudan at this time can be culturally defined by this artefact-type, which afterwards loses its modal condition as the process of meroitization occurred and specially when those people moved to the North. The problem of its origin is equally difficult and related to the aforementioned question of the etnhic origin of the group, but the close parallels with the pottery of Jebel Moya strongly suggest that its heartland was somewhere south of the Nile.

The 24 types recognized in this ware (M. 1 to M. 24) are defined by a combination of both similar shape and polythetic occurrence of decoration types. This was a somewhat subjective classification, since the number of decorative attributes was greater than that of vessels and a computer program (BMDP 2M) with the numerical attributes of shapes gave not significative clusters; some groups are less coherent than others, in order to avoid an excessive number of one-vessel types. The classes with smoothed surface (M. 3, 4, 9, 11, 15) appear generally later in the cemetery than the finer ones. Figures 2 to 4 show a representative example of each type.

For the most part, the types and specimes are unique to the site and no parallels were found in the revised literature references; this might be expected as A. A. is the first completely excavated early Meroitic site in the area, but some exceptions are worth emphasizing: the vessel 4-3 (M. 1) is very much like others known in Gemai, Kerma (Reisner 1923, 54), El Kadada and Jebel Moya, in such a way that Addison (1949, 223) said that "all the pots might almost have been decorated by the same hand". Types M. 3 (113-2) and M. 5 have also close parallels in Soleb, cemetery now thought to be of early Meroitic date (see later) (Schiff Giorgini 1971, figs. 748, 684). The small botlle M. 22 is also recorded, with related decoration, in Musawwarat, Meroe, Faras and in a number of sites in Lower Nubia. Chronologically, the types, in accordance to their occurrence in the generations of the cemetery, can be so classified: M. 6, 7, 8, 12, 14, 15 and 20 in phase A, M. 1, 4, 9, 11, 13, 18, and 19 between the two phases and M. 2, 3, 5, 10, 16, 17, 21, 22, 23 and 24 in phase B.

The 107 decoratives attributes were studied after their occurrence in the cemetery and the known parallells from outside. Two important consequences follow: the motifs that combine incision and impression seem earlier in dating (only appear in phase A) and the published parallels are more frequent in the Central Sudan; 56 types are found in Lower Nubia (from Karanog to Shelfalk), 49 in the area between the Second and Fourth Cataracts (from Ginis to Tanqasi), and 84 in the south (from Meroe to Jebel Moya, including extra-Nilotic sites as Faragab and Kassala). Incised-impressed attributes are also more abundantly registered in the latter area.

Coarse hand-made pottery (fig. 5) without important decoration was also abundant in the graves (31 vessels) and profusely represented in the sherds from refuse and grave fillings. Its fabric is very rough, with plenty of plant and mineral temper, the surface being slightly smoothed or untreated. The shapes were bottles, rim-incised wide-ovoid jars and feeder-cups. A great number of sherds suggested different domestic forms (big-mouthed bowls). The funerary specimens were mainly found in graves of phase B and they all belong to a widely spread Nubian tradition (Adams H. 1 in Lower Nubia, HTU in Qasr Ibrim).

Another kind of hand-made pottery has a thick red slip covering its whole external surface, usually well burnished and represented in both phases only by four complete vases: bowl, bottle and two handled jars (one from phase A imitating a wheel-made Hellenistic amphora: fig. 5). A great number of broken sherds coming from the filling of the graves perhaps are representative of a long tradition in the area for domestic utility recipients.

The most important group of finds from A. A. is undoubtedly the wheel-made, slipped burnished pottery type (figs. 6 & 7), made up of 36 vessels (20,3%), mostly found at the end of phase A and specially in phase B (centuries II and I B. C.). This ware is perhaps destined to become the *type-fossil* of the early Meroitic culture in the area, for it has not yet been registered at any other region or time. Its fabric is of Nile-mud, with mineral and chopped straw temper, the surface horizontally burnished leaving the usual stroke marks over a consistent slip of red (10R 5/6), orange (2,5 YR 6/6) or cream (5 YR 8/4) colour in order of decreasing importance. The contours are varied, perhaps revealing an external origin (Kerma ?), the big ovoid or spheric jars with short necks predominating. The decoration is painted over the slip, usually of white-purple combined horizontal or undulating strips on the upper half of the body.

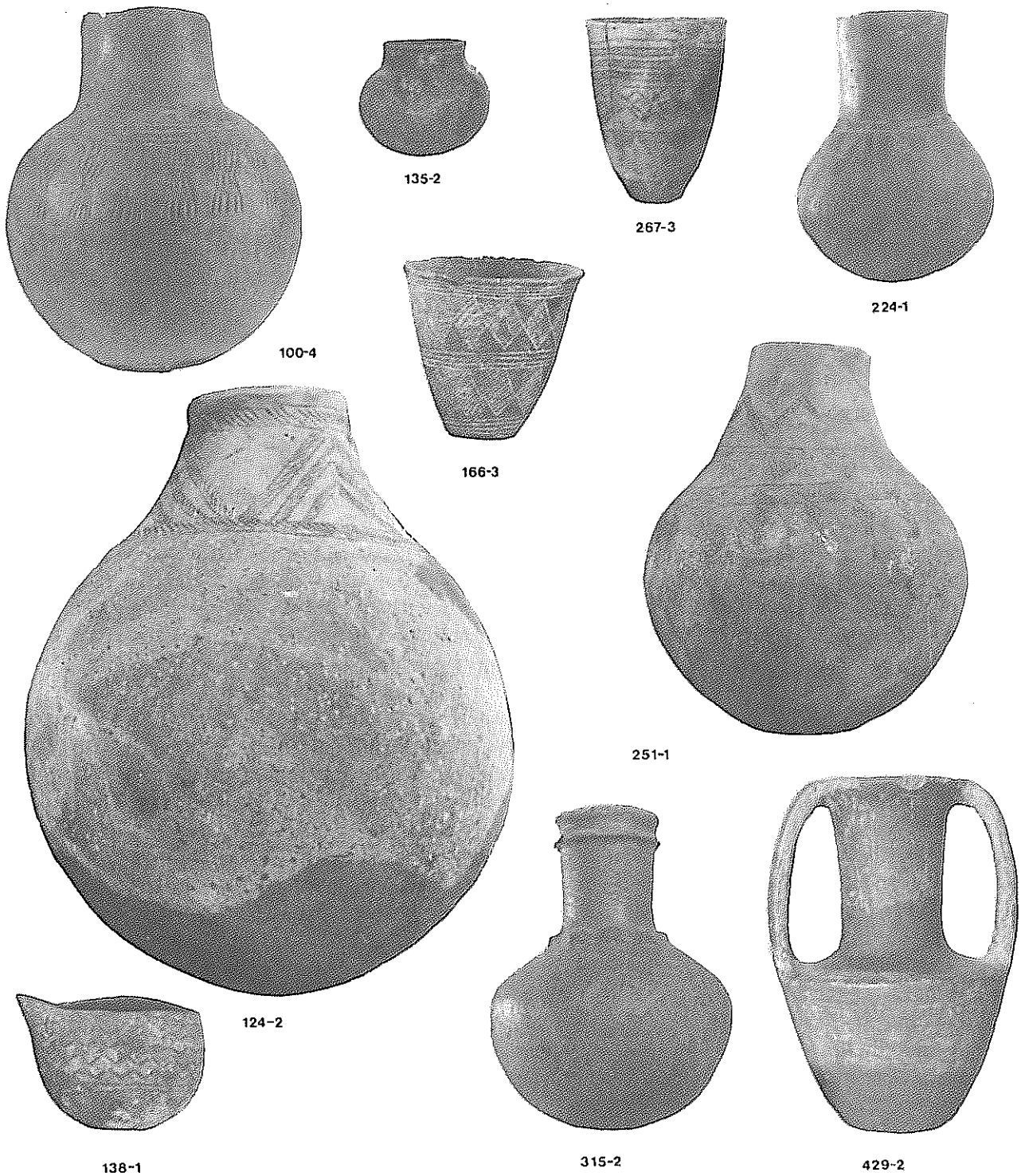
Curiously, this ware was recorded and published almost at the same time by the Spanish Mission at A. A. (Fernández 1980, type 1.a), the Swiss Mission at Kerma (Bonnet 1978) and the Anglo-American expedition at Ibrim (Adams *ms.* 2, presented in Berlin, Dec. 1980), this being the standard reference where it is labelled ware RB, burnished variety of the group R (common wheel-made wares of Nile-mud); the RH variety with richer painted decoration and smoothed surface is not yet known in the South and perhaps came from the Dodekaschoenos. Following Adams' ideas, the red variety, RBB, will later develop into the R. 32 ware profusely found in Lower Nubia (Meroitic ordinary ware) and the cream (RBW) into the W. 25 (white), no counterpart existing for the orange class. Other occurrences in the northern area are the cemeteries of Soleb (Schiff Giorgini 1971) and Irki Saab (Vila 1978 b), where it was described simply as "Meroitic" since material reference was still lacking at that moment, but similar shapes appeared in Gemai, Faras (periods A and B) and Nag-Shayeg (Pellicer 1963, fig. 7: 1, 3, 4), again insinuating an early arrival of population to Lower Nubia before the outburst of the II century A. D., when the characteristic pottery bears a different and exuberant painted decoration (Adams N. I. A., Meroitic fancy style).

Unfortunately, there is no evidence in the early Meroitic data from the North of early examples for the later fancy style. Band-painted decoration, also found in late Meroitic vessels, is similar to that known from Napatan times, specially in the royal cemeteries of Kurru and Nuri. Only some handled jars from A. A. (179-2, fig. 8), irki Saab (Vila 1978 b, figs. 14, 53) and Kerma (yet unpublished) are of sure early Meroitic date and show an odd style perhaps anticipating the later one. The "hadroid" amphora 265-1 from A. A. (fig. 8) also correlates with the alleged influence of the Alexandrine hydriae. Recently, Wenig (1979) has suggested a more southern origin, supported by a few finds from Musawwarat. My opinion now is that all this, since the new population of Lower Nubia came from the South, could have some weight, but perhaps the specific origin for the fancy style came from the North, as seems to be demonstrated by the R style (late Ptolemaic and early Roman, centuries I B. C. - I A. D.) detected at Ibrim (Adams *ms.* 2) and not in the South, with reminiscences of the Hadra vases decoration and posibly originated in the Dodekaschoenos.

An important feature of the cemetery is the presence in its final phase of the well-known Aswan pink pottery (fig. 8), previously dated by Adams between 200-500 a. D. in Lower Nubia (Aswan Graeco-Roman red ware, Adams *ms.* 1) but newly found in the Ptolemaic levels at Ibrim (although with different shapes to the few registered in Abri: Adams ms. 2, 44-8, figs. 14-5, ARA ware, Aswan pink clay). Five vessels were recovered from tombs in generations 9 and 11: lekythos, klepsydra, handled jar and two cooking pots; all these types are well known from late Meroitic sites in Lower Nubia.

A total of 23 graffiti had been incised after fire on the A. A. vases, of the types offering-table, pyramid, altar support (Török 1972, 43) and geometric. They were mostly made on burnished slipped wheel-made jars (RB type) during phase B and in items assigned to masculine interments. They indicate special funerary symbols and possibly were made to represent the new functional character of the vases (Bonnet 1980, 59). A graffito in the 165-2 (generation 9, fig. 7) was made of two signs of the Meroitic alphabet (*bl*, Cf. Fernández, Hainsworth 1981).

The bronze bowls were very abundant in the grave furnitures of A. A., a total of 31 were recovered (fig. 9), 23 in phase A and 8 in phase B. The fact that they come mostly from the first phase, where almost no trace



Pl. IV.- Hand-made decorated pottery, with burnished surface: 100-4, 135-2 and 166-3 from phase B, 267-3 and 224-1 from phase A. Hand-made decorated pottery with smoothed surface: 124-2 and feeder-cup 138-1 from phase A. Hand-made red-slipped pottery from phase A: 315-2, 429-2; the latter is surely an imitation of imported Hellenistic vases as 265-1. Approx. 1:4.

of external importations was found, possibly reveals its condition of locally made items, perhaps coming from the important nearby site of Kerma. This fact is more in accordance with Török (1972) and Haycock's (in Adams 1976, 41) opinions about the existence of indigenous workshops than with Adams' (1977, 372) about them as being traded objects from Egypt, although some examples from A. A. bear a clear Hellenistic decoration. Parabolic contours seem older than hemispheric ones, as they appear respectively in phases A and B; other shapes (lotiform, shallow, and hemispherical with slightly everted rims) were found only in phase A. The parabolic bronze vases look in general older as is reflected in other sites: Sanam (Napatan), Kerma (early Meroitic) and "early" sites of Lower Nubia (phase A of Faras, Nag-Shayeg, etc.), but for the most part these items have a long tradition without appreciable changes, yet the abundance seen in the early Meroitic sites as A. A. suggests that the modality came about at this time.

Ba-statues (fig. 9, see also Vila 1978 a, figs. 26, 31) were recovered from the cemetery graves and surface refuse, thus establishing the earliest appearance of these items, later very popular in Lower Nubia. Crude statues of a bird with a rough human face came from surface, and their original position must have been in the mud-brick superstructures, but two human heads ("reserve heads": cf. Wenig 1978, 88-9) were found *in situ*, deposited in the filling of two intact infant graves. Two offering-tables, without inscription, had no archaeological context and bore crude representations of four bread loaves.

An important find from the necropolis is the iron axe (fig. 9) from tomb 367 (end of III century B. C., according to the seriation chronology), for it represents an early occurrence of this kind of artefact, also registered in a similar context in the nearby cemetery of Soleb (Schiff Giorgini 1971, fig. 691), resting on the chest of a masculine burial as in Amīr 'Abdallāh.

Other material finds not examined here include necklaces, leather sandals, cloth, basketwork, wood and a number of archaic and neolithic sherds found in the filling of some graves.

V. Other early Meroitic sites in Northen Nubia (fig. 10).

The greater part of this article has been dedicated to summarize the analysis of the data from Amīr 'Abdallāh since this is, for the moment, the "site-type" of the early Meroitic culture in the area, but they must be now confronted with the proofs from other known sites. Unhappily, not only is this evidence very fragmentary but also it is of a very unequal nature: Soleb, Irki Saab and Kerma have been only excavated in part or the work is still in progress, yet the archaeological data seem fairly sure; Dawki Dawi and Sanam (Meroitic reoccupied graves) only show debatable data and the material has to be reexamined or the excavation retaken. From other sites (Sai, Sedeinga, Tabo and Kawa) there are only published references about a possible early Meroitic horizon, whereas two sites in Lower Nubia have surely an early Meroitic dating: Gezira Dabarosa 6-G-9, with a radiocarbon date of 100 B. C. but with an atypical culture, and Qasr Ibrim, a Ptolemaic military post that received some Meroitic cultural influence from the South. Finally, a part of the artefacts published from Faras and Gemai clearly suggests a cultural connection with the early Meroitic sites here referred to.

From all the data furnished by the important site of Ibrim we have obviously chosen those seemingly contemporary to the early Meroitic times. Recent excavations of the midden levels inside the girdle wall have been of importance to the understanding of the history of Kush in that period (Adams in press; Adams *ms.* 2). The possible Napatan and/or early Meroitic occupation is represented by the lower level 6, whose material has not been yet published; my opinion is that since there is no hand-made decorated pottery in this level (characteristic of southern early Meroitic A), that horizon must correspond only to Napatan times (it has coarse undecorated pottery: Adams *ms.* 2: 12) and a historical hiatus or absence of population in the site can be inferred there from perhaps Psamtik II's raid to the arrival of Ptolemaic troops sometime around 100 B. C.

(the gap is suggested by Adams in press, 10). Another important fact comes from the pottery complex found in those levels: the R wares (RH smoothed, RB burnished) seem to me of a double origin: RH with a fine painting decoration might have come from the North, possibly the Dodekaschoenos (Cf. Reisner 1910, fig. 329: 1-3), and a reexamination of the old material from the first survey of Nubia again must be seen as an unavoidable task; RB wares are undoubtedly of Meroitic origin and similar to the burnished slipped ware found in A. A., Kerma, Irki Saab, and Soleb (Adams, pers. comm. Jan. 1981). So the significance of Ibrim as a point of contact between North and South in this dark period does not need to be stressed and the continuation of the archaeological work there surely will offer a promising future for the whole research of Nubian history and archaeology.

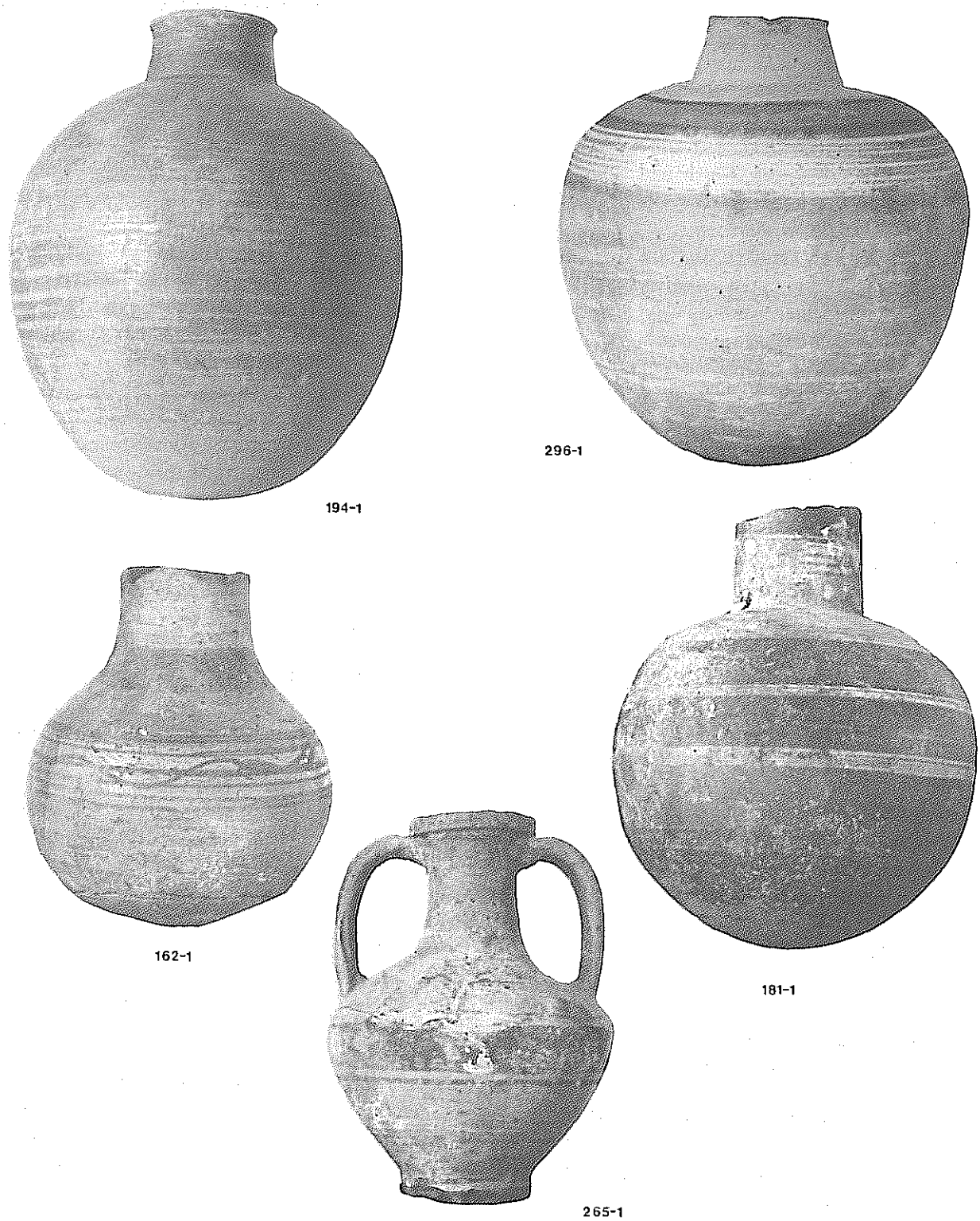
Irki Saab and Dawki Dawi are two small cemeteries partially excavated (one tomb in each) by the French-Sudanese team in the seventies (Vila 1978 b, 48-51; Vila 1977, 53-4). Being placed in the Abri region, its future complete dig appears as very necessary in order to compare the whole finds with the results from A. A. The grave goods of Irki Saab can be accurately paralleled to phase B of our site, precisely with generation 9, whereas the only hand-made vessel of Dawki Dawi strongly recalls the types found at the end of phase A.

The important site of Soleb was properly dug (though in part) and published by the late Michela Schiff Giorgini (1971), ascribing the later remains to a generic Meroitic period. The big cemetery between the temple and the Pharaonic necropolis clearly seems contemporary to the phase A of Amīr 'Abdallāh and the same evolution from western to eastern axial chambers is here registered in a radial direction, from the centre to the periphery of the graveyard. The scarce grave finds (two hand-made pottery vessels, lotiform bronze bowl, iron axe) come possibly from the same workshops as the ones found in Abri. The secondary interments found in and around the New Empire graves, even if showing a somewhat archaic funerary ritual (single pits with some contracted corpses), yielded grave goods clearly pertaining to the early Meroitic B horizon: RB jars and bottle, Hellenistic amphora and hand-made items very similar to the ones found in phase B of A. A.

Although the site is still in course of excavation (with promising results) and has only been reported in part, since the main effort of the Swiss mission was made on the Middle and Classic Kerma remains, the early Meroitic graves of Kerma clearly show that this was a very important town-site of northern Nubia during the first centuries B. C. A total of 56 tombs have been referred to in publication (Bonnet 1978; 1979; 1980), of the western axial type and lavishly supplied with RB jars and bronze bowls, and in some cases with bronze anklets placed on the middle of the tibiae in feminine graves, as in Soleb. Even if the chronology of this horizon is not completely clear (the tombs surround a rich Napatan grave of a priest of Amon, but this is not a completely unknown fact in later cemeteries as Sedeinga: Schiff Giorgini 1965), the material facies is totally like the typical ones of phase B in A. A., yet the Aswan pottery was not found, possibly indicating an earlier date or the more southern position of the site. Another "abnormal" feature is the absence of hand-made decorated pottery, which I tend to interpret as a consequence of the metropolitan character of the town, surely with a more proper "Meroitic" character whereas Abri might have been a more "Nubian" or provincial village (although hand-made pottery is found everywhere in the Meroitic centres of the South after 300 B. C.). I am also inclined to think of Kerma as the point of origin for the "meroitization" of the whole northern region, and that the RB wares could have spread from here.

The controversial and much cited site 6-G-9 of Gezira Dabarosa (Hewes 1964; Lister 1967, 61-4) has an early Meroitic date only on the basis of radiocarbon analysis, three samples with a mean around 100 B. C. (but with an standard deviation of nearly 200 years !), and its material culture has been only very fragmentarily reported (four vases in Lister 1967, fig. 23). The conclusion points to a very atypical site, possibly made by a marginal pastoralist group which eventually approached the Nile. Some vases found are of intrusive character, possibly Napatan, and the others belong to the crudest hand-made variety, which was produced all along the Nubian protohistory (yet the combination of both gives the site a suspicious Napatan aspect).

Now that a glimpse is available of what was the look of the northern culture immediately preceding the later outburst in Lower Nubia, it is also feasible to trace the path of the "missing links" or transitional forms



Pl. V.- Wheel-made slipped pottery with burnished surface and painted decoration (Adams RB) from phase B. Hellenistic amphora from the end of phase A (265-1). Approx. 1:4.

between both archaeological cultures. Although this work would require a long-range reexamination of published (or unpublished) material, which is beyond the reach of this article, an initial advance was made on two important sites with fairly suggesting evidence: Faras and Gemai.

The periodization alleged by Griffith (1924, 144-5) in Faras has been for a long time the only essay in seriation of the late Meroitic culture in the North, almost universally accepted, yet recent disqualification by Adams (1965; 1977, 368, 375) appeared as a somewhat fatalistic way of facing the discouraging fact that no evidence of temporary variation existed at all in the area, this being finally explained by the short duration of the Meroitic culture there (less than two centuries: Adams in press). I have attempted a short approach to the published data (the complete list of graves and finds is not available, yet it was once prepared: Griffith 1925, 85) and the following facts became apparent: feminine corpses with bronze anklets ("to increase the home-keeping qualities of the Meroitic ladies", as Griffith said) were seen only in phase A, and Haycock (1972, 240) agreed with the generally archaic character of that item; from the partial grave inventory available (Griffith 1925, 85-171) it was clear that the pottery types with characteristic late Meroitic fancy decoration (the "Karanog types": Adams R. 35, W. 26, W. 27) were never found in phase A, but appeared in small numbers in phase B and were extremely abundant in the brick-vaulted chambers of phase C. Conversely, the types registered in the so called "cave-graves" (axial chamber to the west) of the first phase (3. a, b, c, h, j; 32; 36. a, b; 37. d, e, f; 42. j; 44. a; 51. q; 56. a, d; 57. a; 86. a, b, and the hand-made black 2. b, c, h, j) strongly recall the RB, Aswan and hand-made decorated forms seen in Amīr 'Abdallāh (specially 3. a-c; 51. q, Bl. 2. b, c); the shape 57. a is like a RB jar from Ibrim (Adams *ms.* 2, fig. 6: 2). After a study of spatial distribution of graves according to types in the cemetery (Fernández 1983 a, fig. 90), it was also stimulating to see that western axial chambers were mainly placed west and eastern chambers east, lateral chambers north, whereas brick-vaulted tombs were equally distributed but a great cluster existed at the southeast corner in the mastaba field. Therefore it is apparent that not all the variations in Faras can be explained by social or functional reasons, which perhaps were more effective at the later site of Karanog, but also that an evolutionary condition existed.

The grave complex at Gemai seems a little more confusing than that from Faras, specially because its seriation (made by a somewhat inconclusive method of "index of plundering") puts brick-vaulted tombs before the cave graves (Bates, Dunham 1927, 111); but a re-examination of the published material in the light of the new discoveries in the South also makes evident an older horizon: hand-made decorated pottery (*Ibid.*, items 115/3, 115/5) shows a remarkable similarity to specimens of A. A. and Jebel Moya, and some wheel-made jars (specially U33/4, T10/1-2, 115/4) strongly recall RB ware forms. There were at Gemai only four cups and a spheric jar published, with the typical late Meroitic fancy style in decoration, mainly coming from brick-vaulted graves.

VI. Conclusions: a new historical pattern for the area

Our aim was to present an archaeological culture, using this term as defined in the introduction and is accepted by most archaeologists. This early Meroitic material evidence must be contrasted with other contemporary (e. g. early Meroitic in Central Sudan) and late facies (e. g. the "classical" late Meroitic mainly known in Lower Nubia), for all of them compose the whole Meroitic "culture group" (Clarke 1978, 300) between centuries III B. C. - IV A. D., occupying the big area from Maharraqa to Sennar. The material and ritual artefact-types of this culture have been described above and here it only needs to be stressed that many of them are shared by other related cultures and so belong to the same tradition; only the hand-made decorated pottery must be considered as "typical" (in the most widespread use of the term, as group modal type) of Early Meroitic A, and wheel-made burnished pottery (RB) as typical (in the previous sense and also as emphasizing group idiosyncracies) of Early Meroitic B (Cf. *Ibid.*, 29). Both categories must be therefore considered as "type-fossils" for the period and area.

The following table shows the polythetic distribution of the elements in the known sites; the key-numbers for the former being: 1) hand-made decorated, 2) hand-made coarse, 3) hand-made red slipped, 4) wheel-made burnished (RB), 5) Hellenistic imitation, 6) Aswan pottery, 7) bronze bowls, 8) metal anklets:

	1	2	3	4	5	6	7	8
Amīr 'Abdallāh A	X	–	X	–	–	–	X	–
Amīr 'Abdallāh B	X	X	X	X	X	X	X	–
Soleb A	X	–	–	–	–	–	X	X
Soleb B	X	X	X	X	X	–	–	–
Irki Saab	X	–	–	X	–	–	X	–
Dawki Dawi	X	–	–	–	–	–	–	–
Kerma	–	–	–	X	X	–	X	X
Qasr Ibrim	X	X	X	X	–	X	–	–

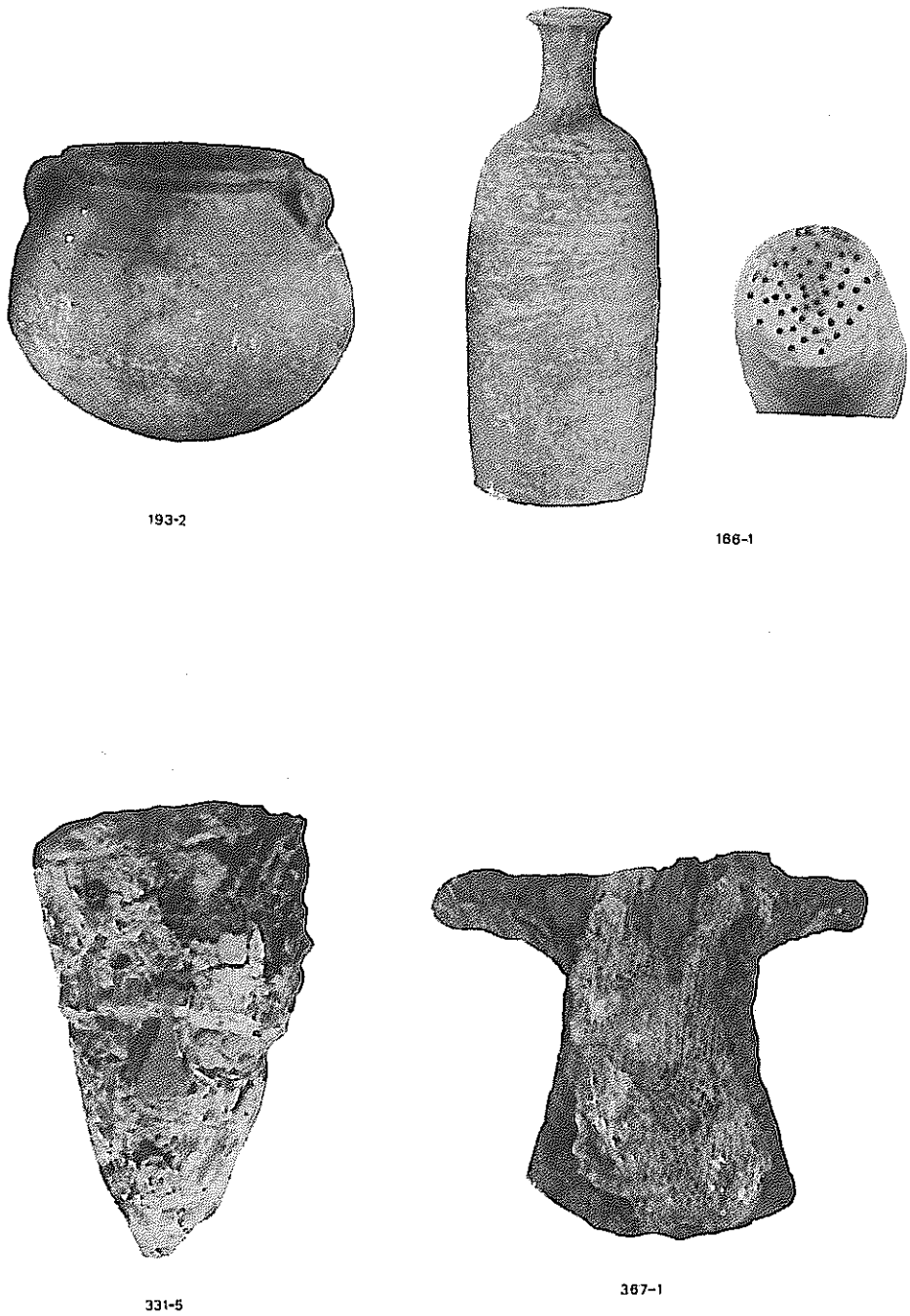
In accordance with the previous statements, the sites can be classified after their phase assignment:

	EARLY MEROITIC A	EARLY MEROITIC B
Amīr 'Abdallāh	X	X
Soleb	X	X
Dawki Dawi	X	–
Irki Saab	–	X
Kerma	–	X
Qasr Ibrim	–	X

The alleged cultural continuity between the people that lived south of the Second Cataract during the last centuries B.C. and the late Meroitic settlers in Lower Nubia after 100 A.D. can be established thanks to Adams' work on the Ibrim and Lower Nubian pottery, and is here stated in figure 11. The transitional period has been approximately put during the first century A.D., yet available proof is scarce and limited to Ibrim and perhaps the cited sites of Faras, Gemai and a few others. No definite evidence exists for the sameness of hand-made coarse and red burnished pottery, but this fact can be considered as very likely; hand-made decorated pottery wares are surely related, and a conspicuous waning of its abundance is fairly manifest. Following Adams' evaluation, the wheel-made RB (R & W) is connected to the red and white numerous wares of Lower Nubia (R. 32, 33; W. 25), yet an external admixture of possibly Egyptian influence (the RH wares) might have existed. Conversely, it seems that no option for the orange variety (RBO) continued and its tradition was interrupted during I century A.D. A continuous ocurrence of Aswan pink and red ware importations also appears to the South, increasing its importance to a climax during X-Group times. There continues nonetheless the long-standing mystery as to the origin of the famous and idiosyncratic "eggshell" fancy decorated ware (W. 26) of Lower Nubia; perhaps a local influence can be traced in the Hellenistic imitation of early Meroitic times, of scarce ocurrence however, together with a more direct weight from Roman Egypt as we have already said, unhappily without any known sure proof.

In spite of this more or less clear transition pattern, in fig. 11 the enormous gap existing at the beginning of the period is also apparent, for there is almost nothing indicating any kind of cultural continuity after the Napatan age. Here there is a clear need for a higher level historical interpretation, integrating every piece of information not only archaeological but also textual, linguistic and racial. Even if this is a triky ground for an archaeologist and the information is fragmentary and possibly subjected to partial or total revision, one must face up to the whole problem and try to find a model that explains the present data.

As previously stated, I feel inclined to believe in an at least partial desertization of northern Nubia



Pl. VI.- Aswan pink pottery: cooking-pot and klepsydra (end of phase B). Wooden mask from the coffin of grave 331 (phase A). Iron axe from grave 367 (phase A). Approx. 1:2.

between the Second and Fourth Cataracts during the VI-IV centuries B.C.; the former population could have migrated to the South (Goedicke 1981, 198) where the material culture shows a much more archaizing character in places such as Musawwarat and Meroe. So the question now is if the newcomers to Abri and other places during the III century B.C. were really new in the alluvial valley or merely the descendants of the former inhabitants. The first option is obviously related to the traditional alternance of pastoralists in the desert and farmers on the river that has been alleged to explain some cultural transformations and ruptures in the Nile cultures (Adams 1977, 54, 135). The fragmentary information of different sorts available on the relations between the Nile and desert during the first milennium B.C. can be briefly summarized here. On the one hand, there is rather conclusive evidence about the origin of Nubian speaking people in the Darfur and Kordofan areas (Trigger 1977, 427-8) and recent studies have cast considerable doubt on the older theories that placed its arrival at the Nile (Priese 1973) during the Middle Ages. Of somewhat uncertain character is nevertheless the evidence from cultural contacts registered in the abundant rock engravings (Cf. Huard, Leclant 1972; Červiček 1974), yet recent excavations in Wadi Howar look very promising (Cf. reports of Ali Haken and Abbas Mohammed in *Nyame Akuma* 2 and 10). Conclusive archaeological evidence is to be found in the published data of Faragab (Seligman 1916) and specially Jebel Moya (Addison 1949) or in the recent excavation of the University of Khartoum in Sarura and Bauda (Ali Haken 1979), where the typical early Meroitic A hand-made decorated pottery appears at an early date, confirming itself as the true mark of some Meroitic "pastoral element"[9]. Classical texts constantly refer to nomadic tribes living *in continuum* between desert and river, including Nobadae in the North and Noba in the South, later destined to be responsible for the Ballana and Tanqasi cultures, once definitively installed (?) in the corridor. Yet they must have lived in close contact with the river before that date (Trigger 1978, 319-21; Adams 1976, 22-3; Arkell in *Ibid.*, 28).

Therefore it appears more tempting to think in terms of the arrival of some new (perhaps not so new) ethnic group in the northern Nile valley sometime around 300 B.C. On the other hand, there are at least two kinds of proof for the opposite hypothesis claiming for a Nilotic origin of the new settlers. The first is the conspicuous "Meroitic" aspect of the funerary patterns since the beginning, even if a clear increase in it occurred as time elapsed. The other comes from the now somewhat outmoded racial data: even if a more pronounced negroid admixture has been admitted as a characteristic of Meroitic and specially X-Group cranial traits (Batrawi 1946, 154-5), recent approaches have been very critical about the idea of an extensive gene flow (Cf. Armelagos *et al.* 1981, 34-5) and, on the other hand, a multivariate analysis has shown that the population from Jebel Moya is at considerable distance (with much more negroid features) from the old Nubian generic group (Mukherjee *et al.* 1955, 85).

Anyhow, the evidence is clear for the arrival of a new group in the northern Nile at the beginning of the Meroitic centuries. The difficulty lies in the fact that we do not actually know where its place of origin was, but an area outside the Nile seems more likely. A fit model for this movement of population can be borrowed from the study of the Bantu expansion of the Iron Age in sub-Saharan Africa, where a fast migration that left behind very scarce cultural traits in the land between its original and final places has been described (Collet 1982). This has been called the "shotgun model" (Huffman 1970), or the "leap-like" migration (Klein 1963) referring to the origin of the catacomb culture of the early Bronze Age in the Southern Ukraine. Pastoralist groups are more apt to be suspected of this kind of movements, but for a working model it is necessary to be familiar with the cultures both at the places of departure and arrival, together with chronological data indicating that a short time elapsed between. This is not the case in our problem but anyhow the pattern can be verified with future data from the Nile (more excavated sites in the northern region) and specially the adjacent areas (Northern Kordofan), and I hope that further research along these lines will prove fruitful.

9. The same aspect seems to show, after a preliminary report, some of the pottery from the Gereif East (Khartoum) Meroitic graves, with reminiscences of types from Jebel Moya (though the site is reported as *late* Meroitic: Cf. Geus, Lenoble in *Nyame Akuma*, 23, Dec. 1983, 26 and Geus in *Nubian Letters*, 2, Feb. 1984, 9).

Even more uncertain is the assumption that those groups were the introducers of the Nubian language in the valley, for although new pottery could mean new people, linguistic evidence suggest an earlier date of arrival (yet on the basis of only one place-name: Priese 1973). If this were so, such people could be labelled as Nobadae, likely ancestors of late Meroitic and X-Group settlers in Lower Nubia. During the II and I centuries B.C. this population was undeniably meroitized, perhaps from the nearby important centre, Kerma, where hand-made decorated pottery is not known, and this possibly was caused by a resumption of the royal activities in the North after Philometor's death (Haycock 1972, 240). Afterwards all the evidence points to the date of the end of I century B.C. (after Petronius' raid) as the time when Abri was again deserted, possibly coinciding with the outset of the great population movement to the North that was to repopulate the new "promised land" of Lower Nubia.

POST-SCRIPTUM

When this paper was in the press, the Fifth International Conference on Meroitic Studies was held in Rome (2-7 July 1984), and some of the new discoveries and ideas advanced there are important for the subject. First of all, the hand-made impressed ware appears now clearly as a consistent feature of the early Meroitic horizon in Central Sudan, specially in the rural areas outside Meroe (excavations in Saggai, Gereif and Kadada, by Isabella Caneva and Patrice Lenoble), indicating that the new facies in the North can be related in the next future to the Meroitic heartland. Secondly, the work in progress at Kerma seems to suggest a likely continuity between the Napatan and early Meroitic periods, though the proof of uninterrupted cultural tradition is not at hand, and for the case of Abri the opposite evidence is outstandingly clear. Even if the lack of information existing for large areas recommends a cautious approach to far-reaching synthesis, the beginning of the Meroitic period in the Sudan shows very specific material characteristics, though possibly the time is not yet ripe for its complete understanding.

BIBLIOGRAPHY

Abdallah, Abdelgadir: in press "Meroitic social stratification", in *Meroitica 7*. Berlin (DDR).

Acsádi, G.- Y.; Nemeskéri, J.: 1970 *History of Human Life Span and Mortality*. Budapest.

Adams, W. Y.: 1964 a "An Introductory Classification of Meroitic Pottery", *Kush*, 12, 126-73.

— 1964 b "Post-pharaonic Nubia in the light of Archaeology. I", *Journal of Egyptian Archaeology*, 50, 102-20.

— 1965 "Sudan Antiquities Service Excavations at Meinarti. 1963-64", *Kush*, 13, 148-76.

— 1967-68 "Progress Report on Nubian Pottery. 1. The Native Wares", *Kush*, 15, 1-50.

— 1970 "A Reappraisal of Nubian Culture History", *Orientalia*, 39, 269-77.

— 1973 "Pottery, Society and History in Meroitic Nubia", *Meroitica 1*. Berlin (DDR).

— 1976 *Meroitic North and South. A Study in Cultural Contrasts (Meroitica 2)*. Berlin (DDR).

— 1977 *Nubia, corridor to Africa*. London.

in press "The 1980 Excavations at Qasr Ibrim: Implications for the History of Kush", *Meroitica 7*. Berlin (DDR).

— ms.1 *Hand-book of Meroitic, X-Group and Christian Pottery Wares*.

— ms.2 *Pottery Wares of the Ptolemaic and Roman Periods at Qasr Ibrim*. Qasr Ibrim Expedition - University of Kentucky.

Addison, F.: 1949 *Jebel Moya. The Wellcome Excavations in the Sudan, vols. I & II*. Oxford.

Ali Haken A.M.: 1979 "University of Khartoum Excavations at Sarura and Bauda, North of Omdurman", *Meroitica 5 (Africa in Antiquity)*. Berlin (DDR).

Arkell, A.J.: 1961 *A History of the Sudan from Earlier Times to 1821* (2nd Ed.). London.

Armelagos, G.J.; Jacobs, K.H.; Martin, D.L.: 1981 "Death and Demography in Prehistoric Sudanese Nubia", in Humphreys, S.C.; King, H. (Eds.), *Mortality and Inmortality: the anthropology and archaeology of death,* 33-57. London.

Bates, O.; Dunham, D.: 1927 "Excavations at Gammai", *Harvard African Studies,* 8 (Varia Africana IV). Cambridge, Mass.

Batrawi, A.: 1946 "The Racial History of Egypt and Nubia", *Journal of the Royal Anthropological Institute of Great Britain and Ireland,* 76, 131-56.

Bevan, E.R.: 1968[2] *The House of Ptolemy. A history of Egypt under the Ptolemaic Dinasty* (Revised reissue of the 1927 Edition). Chicago.

Binford, L.R.: 1972 "Mortuary Practices: their Study and their Potential", in Binford, L.R., *An Archaeological Perspective.* London.

Bonnet, Ch.: 1978 "Fouilles archéologiques à Kerma (Soudan). Rapport préliminaire de la campagne 1977-78", *Genava,* 26, 107-34.

— 1979 "Remarques sur la ville de Kerma", in *Hommages à la Mémoire de Serge Sauneron,* vol. I (Institut Français d'Archéologie Orientale). Le Caire.

— 1980 "Les fouilles archéologiques de Kerma (Soudan)", *Genava,* 28, 31-72.

Bradley, R.: in press "Meroitic Chronology", *Meroitica 7.* Berlin (DDR).

Burstein, S.M.: 1979 "The Nubian Campaigns of C. Petronius and George Reisner's Second Meroitic Kingdom of Napata", *Zeitschrift für Aegyptische Sprache und Altertumskunde,* 106, 95-105.

Červiček, P.: 1974 *Felsbilder des Nord-Etbai, OberAegyptens und UnterNubiens.* Ergebnisse der VIII DIAFE nach Aegypten 1926. Wiesbaden.

Chapman, R.; Randsborg, K.: 1981 "Approaches to the archaeology of death", in Chapman, R.; Kinnes, I.; Randsborg, K. (Eds.), *The Archaeology of Death,* 1-24. Cambridge.

Clark, R.M.: 1975 "A calibration curve for radiocarbon dates", *Antiquity,* 49, 251-266.

Clarke, D.L.: 1978 *Analytical Archaeology* (2nd Edition, revised by R. Chapman). London.

Coles, J.M.; Harding, A.F.: 1979 *The Bronze Age in Europe.* London.

Collet, D.P.: 1982 "Models for the Spread of the Early Iron Age", in Ehret, Ch.; Posnansky, M. (Eds.), *The Archaeological and Linguistic Reconstruction of African History,* 182-98. Los Angeles.

Desanges, J.: 1978 *Recherches sur l'activité des Méditerranéens aux confins de l'Afrique (VI siècle avant J.C. - IV siècle après J.C.)* (Collection de l'École Française de Rome, 38). Rome.

Dunham, D.: 1950 *Royal Cemeteries of Kush. Vol. I. El Kurru.* Harvard.

Emery, W.B.: 1965 *Egypt in Nubia.* London.

Fernández, V.M.: 1979 "Rapport sur la poterie du cimetière méroïtique d'Emir Abdallah", *Bulletin de Liaison du Groupe International d'Étude de la céramique égyptienne,* 4, 14-5.

— 1980 "Excavations at the Meroitic Cemetery of Emir Abdallah (Abri, Northern Province, The Sudan). Some Aspects of the Pottery and its Distribution", *Meroitic Newsletter,* 20, 13-22.

— 1982 "El cementerio kerma de Abri - Amīr 'Abdallāh (Provincia del Norte). Excavaciones de la Misión Arqueológica Española en El Sudán", *Trabajos de Prehistoria,* 39, 279-334.

— 1983a *La cultura alto-meroítica del Norte de Nubia (Evolución de la cultura material y el ritual funerario en el Norte de Nubia del siglo III al I a.C.: la necrópolis de Amīr 'Abdallāh).* Tesis Doctoral inédita presentada en la Universidad Complutense de Madrid. 1380 pp.

— 1983b "Spanish excavations in the Sudan", *Nyame Akuma,* 23, 20-2.

in press a "The Meroitic Cemetery of Amir Abdallah (Abri, Northern Province, The Sudan). A Preliminay Outline of the Funerary Patterns", *Meroitica 7.* Berlin (DDR).

in press b "Early Meroitic in Northern Nubia", *Society for Nubian Studies, Fifth International Conference, 20-25 September 1982.* Heidelberg.

Fernández, V.M.; Hainsworth, M.: 1981 "Un grafito sobre cerámica, de la necrópolis de Emir Abdallah (Sudán)", *Meroitic Newsletter,* 21, 27-8.

Garstang, J.; Sayce, A.H.; Griffith, F.Ll.: 1911 *Meroe, city of the Ethiopians.* Oxford.

Geus, F.: 1977 *Rapport annuel d'activité 1976-77* (Service des Antiquités du Soudan. Section Française de Recherches Archéologiques). Khartoum.

— 1980 *Rapport annuel... 1978-79.* Khartoum.

Goedicke, H.: 1981 "The Campaign of Psammetik II against Nubia", *Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo,* 37, 187-98.

Goldstein, L.: 1981 "One-dimensional archaeology and multi-dimensional people: spatial organization and mortuary analysis", in Chapman, R.; Kinnes, I.; Randsborg, K. (Eds.), *The Archaeology of Death,* 53-69. Cambridge.

Gratien, B.: 1978 *Les cultures Kerma. Essai de classification.* Lille.

Griffith, F.Ll.: 1923 "Oxford Excavations in Nubia", *Liverpool Annals of Archaeology and Anthropology,* 10, 73-171.

— 1924 "Oxford Excavations...", *Liverpool Annals...,* 11, 115-25, 141-80.

— 1925 "Oxford Excavations...", *Liverpool Annals...,* 12, 57-172.

Hassan, F.: 1981 *Demographic Archaeology.* London.

Haycock, B.G.: 1967 "The later phases of Meroitic Civilization", *Journal of Egyptian Archaeology,* 53, 107-20.

— 1972 "Landmarks in Kushite History", *Journal of Egyptian Archaeology,* 58, 225-44.

Hewes, G.W.: 1964 "Gezira Dabarosa: Report of the University of Colorado Nubian Expedition, 1962-63", *Kush,* 12, 174-87.

Hintze, F.: 1978 "The Kingdom of Kush: the Meroitic Period", in *Africa in Antiquity: the Arts of Ancient Nubia and the Sudan. I. The Essays,* 89-105 (The Brooklyn Museum). New York.

Hoffman, I.: 1978 *Beitrage zur Meroitistischen Chronologie* (Studia Instituti Anthropos, vol. 31). St. Augustin bei Bonn.

Huard, P.; Leclant, J.: 1972 *Problèmes archéologiques entre le Nil et le Sahara,* Études Scientifiques, Sept-Oct. 1972. Paris

Huffman, T.N.: 1970 "The Early Iron Age and the Bantu", *South African Archaeological Bulletin,* 25, 3-21.

Kemp, B.: 1980 "Egyptian radiocarbon dating: a reply to James Mellaart", *Antiquity,* 54, 25-8.

Kendall, D.G.: 1971 "Seriation from abundance matrices", in Hodson, F.R.; Kendall, D.G.; Tăutu, P. (Eds.), *Mathematics in the Archaeological and Historical Sciences.* Edinburgh.

Klein, L.S.: 1963 "A brief validation of the migration hypothesis with respect to the origin of the catacomb culture", *Soviet Anthropology and Archaeology,* 1/4.

Klein, J.; Lerman, J.C.; Damon. P.E.; Ralph, E.K.: 1982 "Calibration of radiocarbon Dates. Tables based on the consensus data of the Workshop on Calibrating the Radiocarbon Time Scale", *Radiocarbon,* 24/2, 103-50.

Leclant, J.: 1973 "Les recherches archéologiques dans le domaine méroïtique", *Meroitica 1.* Berlin (DDR).

Lister, F.C.: 1967 *Ceramic Studies of the Historic Periods in Ancient Nubia* (Department of Anthropology. University of Utah. Anthropological Papers No. 86; Nubian Series No. 2). Salt Lake City.

Long, A.; Rippeteau, B.:1974 "Testing contemporaneity and averaging radicarbon dates", *American Antiquity,* 39,205-15.

Macadam, M.F.L.: 1955 *The Temples of Kawa II. History and Archaeology of the Site* (The Griffith Institute, Ashmolean Museum). Oxford.

Mukherjee, R.; Rao, C.R.; Trevor, J.C.: 1955 *Ancient Inhabitants of Jebel Moya.* Cambridge.

Murray, M.A.: 1956 "Burial Customs and Beliefs in the Hereafter in Predynastic Egypt", *Journal of Egyptian Archaeology,* 42, 86-96.

Myers, O.H.: 1956 "'Spade' sherds", *Kush*, 4, 86.

Orton, C.: 1980 *Mathematics in Archaeology*. Cambridge.

O'Shea, J.: 1981 "Social configurations and the archaeological study of mortuary practices: a case study", in Chapman, R.; Kinnes, I.; Randsborg, K. (Eds.), *The Archaeology of Death*. Cambridge.

Otto, K.H.: 1967 "Zur Klassification der Meroitistischen Keramik von Musawwarat es Sufra (Republik Sudan)", *Zeitschrift für Archäologie*, 1, 1-32.

Pellicer, M.: 1963 *La necrópolis meroítica de Nag-Shayeg (Argín, Sudán)*. Comité Español de la Unesco para Nubia. Memorias de la Misión Arqueológica II. Madrid.

Priese, K.H.: 1973 "Articula", *Etudes et Travaux*, 7, 155-62.

— 1978 "The Kingdom of Kush: the Napatan Period", in *Africa in Antiquity: the Arts of Ancient Nubia and the Sudan. I. The Essays*, 75-88 (The Brooklyn Museum). New York.

Randall-MacIver, D.; Woolley, C.L.: 1911 *Buhen*. Eckley B. Coxe Jr. Expedition to Nubia, vol. II (University Museum). Philadelphia.

Reisner, G.A.: 1910 *The Archaeological Survey of Nubia. Report for 1907-1908*. Cairo.

— 1923 "Excavations at Kerma. Parts I-III & IV-V", in *Harvard African Studies*, 5-6 (Peabody Museum of Harvard University). Cambridge, Mass.

Rouse, I.: 1967 "Seriation in Archaeology", in Riley, C.L.; Taylor, WW. (Eds.), *American Historical Anthropology. Essays in Honor of Leslie Spier*. Carbondale, Il.

Sauneron, S.; Yoyotte, J.: 1952 "La campagne nubienne de Psammétique II et sa signification historique", *Bulletin de l'Institut Français d'Archéologie Orientale*, 50, 157-207.

Schiff Giorgini, M.: 1065 "Première campagne de fouilles à Sedeinga 1963-1964", *Kush*, 13, 112-30.

— 1971 *Soleb II. Les nécropoles*. Firenze.

Seele, K.C.: 1974 "University of Chicago Oriental Institute Nubian Expedition: Excavations between Abu Simbel and the Sudan Border, Preliminary Report", *Journal of Near Eastern Studies*, 33, 1-43.

Seguenny, E.: in press "Quelques elements de la religion populaire du Soudan ancien", *Meroitica 7*. Berlin (DDR).

Seligman, C.G.:1916 "A Prehistoric Site in Northern Kordofan", *Liverpool Annals of Archaeology and Anthropology*, 7, 107-14.

Shennan, S.: 1975 "The social organization at Branč", *Antiquity*, 49, 279-88.

Shinnie, P.L.: 1967 *Meroe, a Civilization of the Sudan*. London.

— 1971 "The Sudan", in Shinnie, P.L. (Ed.), *The African Iron Age*, 89-1P7. Oxford.

Shorter, A.W.: 1930 "A phallic figure in the British Museum", *Journal of Egyptian Archaeology*, 16, 236.

Spencer, A.J.: 1979 *Brick Architecture in Ancient Egypt*. Warminster.

Tainter, J.A.: 1978 "Mortuary Practices and the Study of Prehistoric Social Systems", in Schiffer, M.B. (Ed.), *Advances in Archaeological Method and Theory*, vol. I, 105-41. London.

Török, L.: 1972 "A special group of Meroitic Property Marks from the lst to the 2nd centuries A.D.", *Meroitic Newsletter*, 10, 35-44.

Trigger, B.G.: 1965 *History and Settlement in Lower Nubia*. Yale Publications in Anthropology, 69. New Haven.

— 1976 *Nubia under the Pharaohs*. London.

— 1977 "The Classification of Meroitic: Geographic Considerations", in Endelsfelder, E.; Priese, K.H.; Reinecke, W.F.; Wenig, S. (Eds.), *Aegypten und Kuch* (Schriften zur Geschichte und Kultur des Alten Orients, Nr. 13. Fritz Hintze zum 60. Geburtstag gewidmet). Berlin (DDR).

— 1978 "Nubian ethnicity: some historical considerations", in *Études Nubiennes. Colloque de Chantilly, 2-6 Juillet 1975* (Institut Français d'Archéologie Orientale. Bibliothèque d'Étude, t. 77). Le Caire.

Ucko, P.J.: 1969 "Ethnography and Archaeological Interpretation of Funerary Remains", *World Archaeology*, 1, 262-80.

Venot, Ch.: 1974 "Le cimetière MX-TD de Mirgissa", *Cahiers de Recherche de l'Institut de Papyrologie et d'Egyptologie de Lille*, 2, 29-49.

Vila, A.: 1967 *Aksha II: le cimetière Méroïtique d'Aksha*. Paris.

— 1977 *La prospection archéologique de la vallée du Nil au Sud de la cataracte de Dal (Nubie Soudanaise)... 5. Ginis*. Paris.

— 1978a *La prospection archéologique...9. Arnyatta. Abri. Tabaj*. Paris.

— 1978b *La prospection archéologique... 10. Koyekka. Morka et Hamid. Nilwatti*. Paris.

— 1980a *La prospection...12. La nécropole de Missiminia. I. Les sepultures napatéennes*. Paris.

— 1980b "Les tombes napatéennes sans mobilier", *Meroitic Newsletter*, 20, 29-41.

— 1982 *La prospection... 13. La nécropole de Missiminia. II. Les sepultures méroïtiques*. Paris.

Wendorf, F.: 1968 *The Prehistory of Nubia* (Fort Burgwin Research Center and Southern Methodist University). Dallas.

Wenig, S.: 1978 *Africa in Antiquity: the Arts of Ancient Nubia and the Sudan II. The Catalogue* (The Brooklyn Museum). New York.

Wheeler, R.M.E.: 1956 *Archaeology from the Earth*. London.

Woolley, C.L.; Randall-MacIver, D.: 1910 *Karanog. The Romano-Nubian Cemetery*. Eckley B. Coxe Jr. Expedition to Nubia, vol. III (University Museum). Philadelphia.

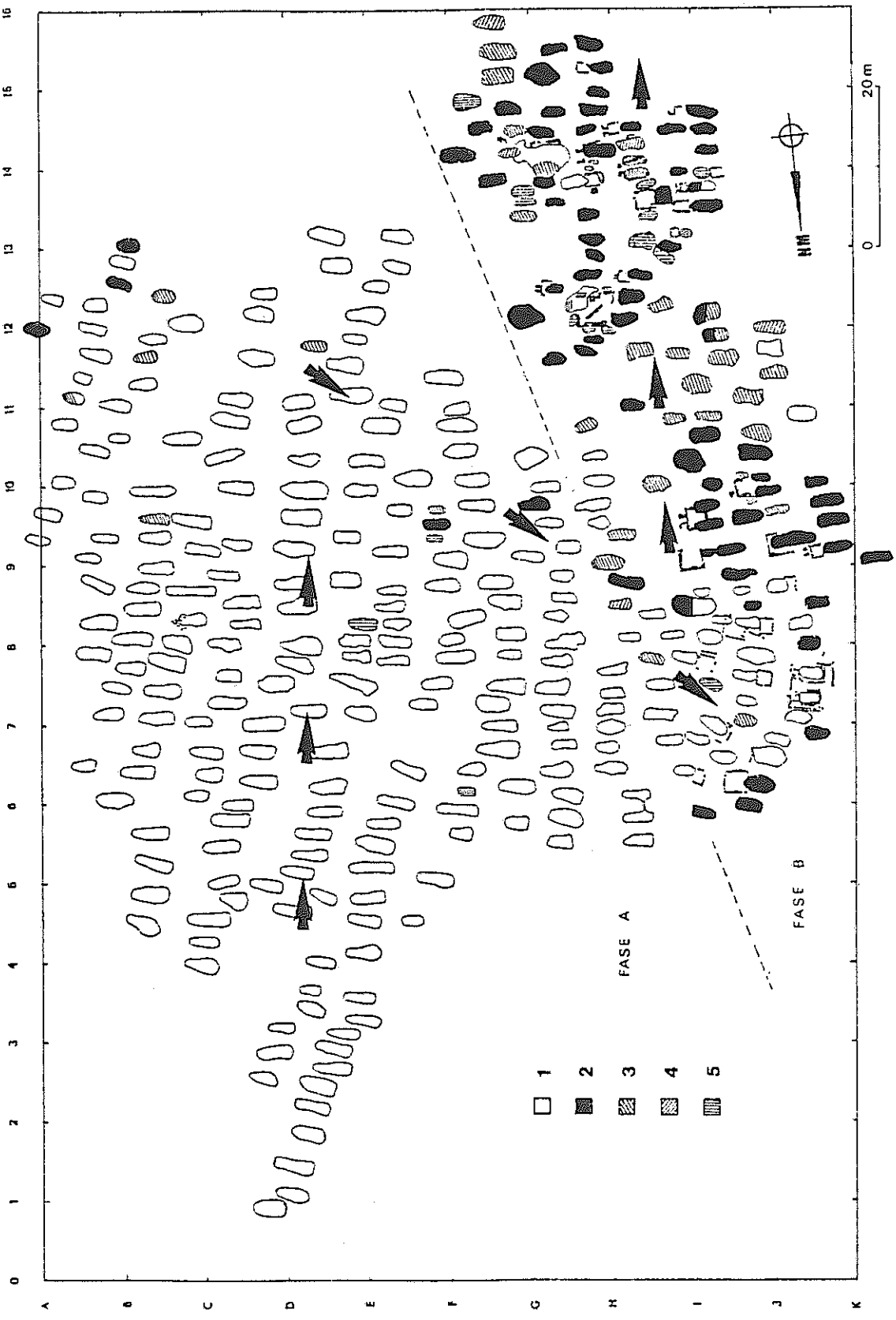


Fig. 1. Plan of the cemetery of Amīr 'Abdallāh. Distribution of tomb types: 1) axial chamber to the west, 2) axial chamber to the east, 3) lateral chamber to the north, 4) lateral chamber to the south, 5) single niche. The arrows mark the way of the chronological evolution.

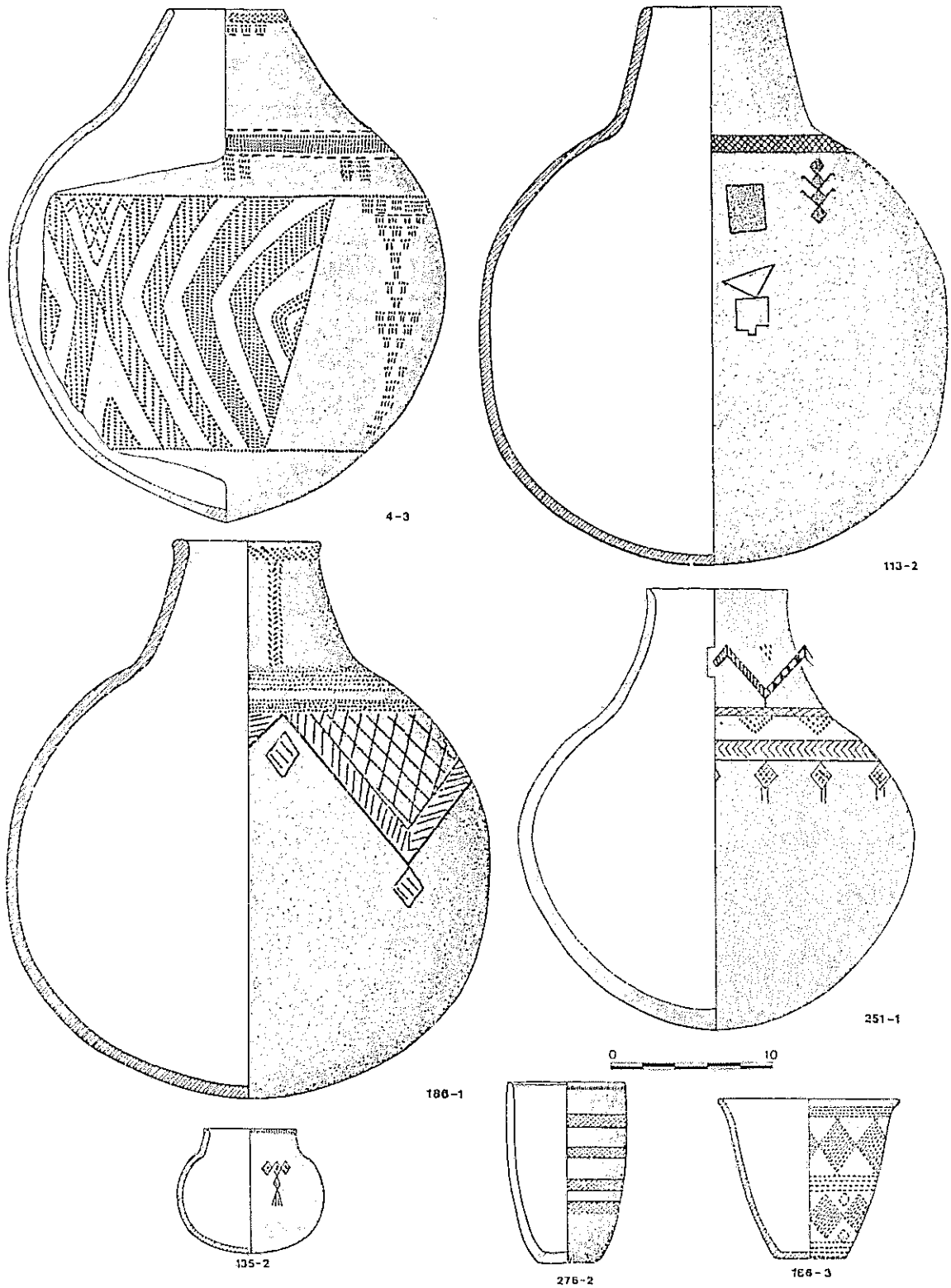


Fig. 2. Hand-made decorated pottery: types M. 1 (4-3), M.2 (186-1), M.3 (113-2), M.4 (251-1), M.22 (135-2), M.23 (166-3), M.24 (276-2).

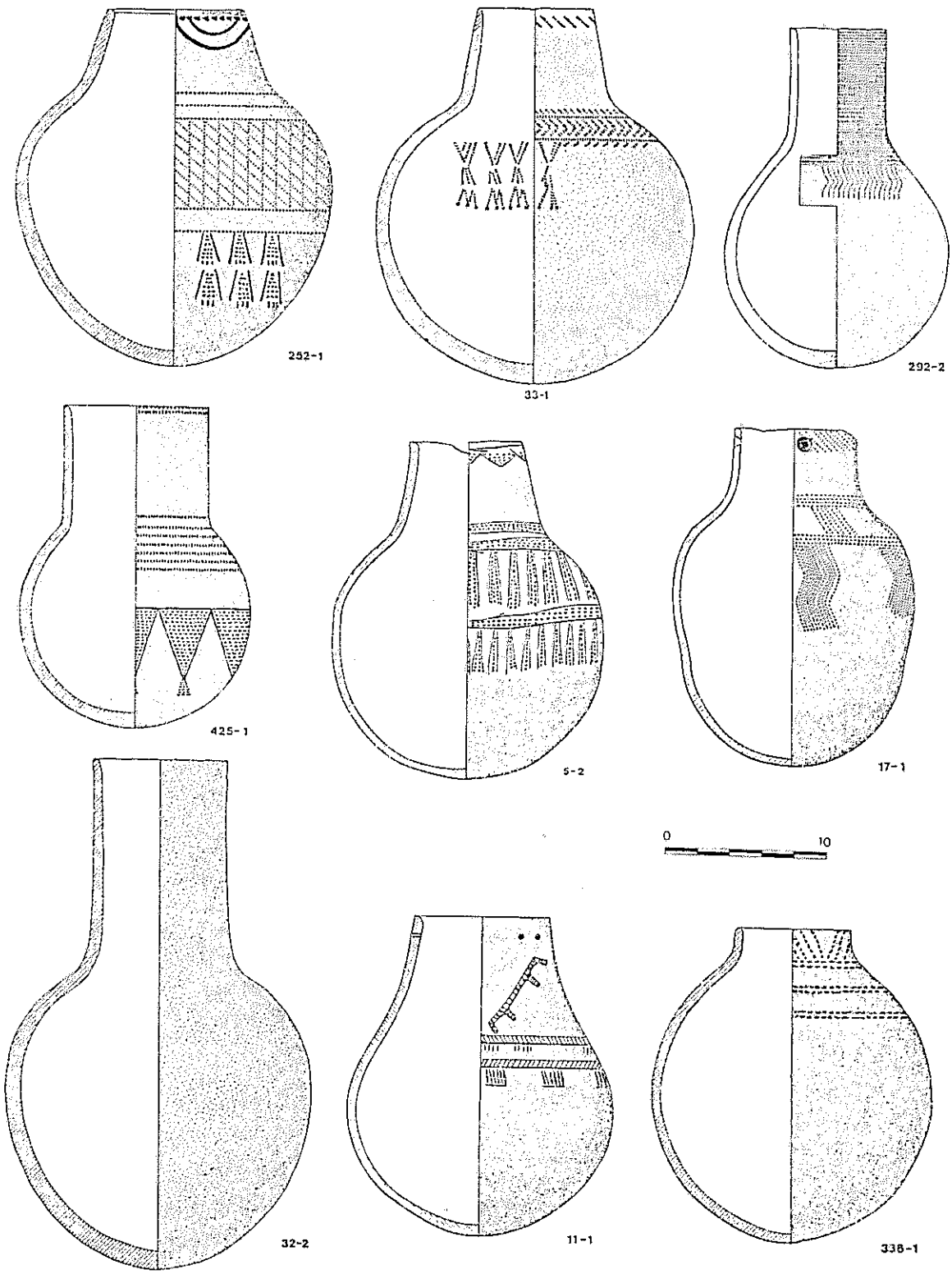


Fig. 3. Hand-made decorated pottery: types M.14 (252-1), M.5 (33-1), M.8 (292-2), M.7 (425-1), M.6 (5-2), M.9 (17-1), M.10 (32-2), M.11 (11-1), M.13 (336-1).

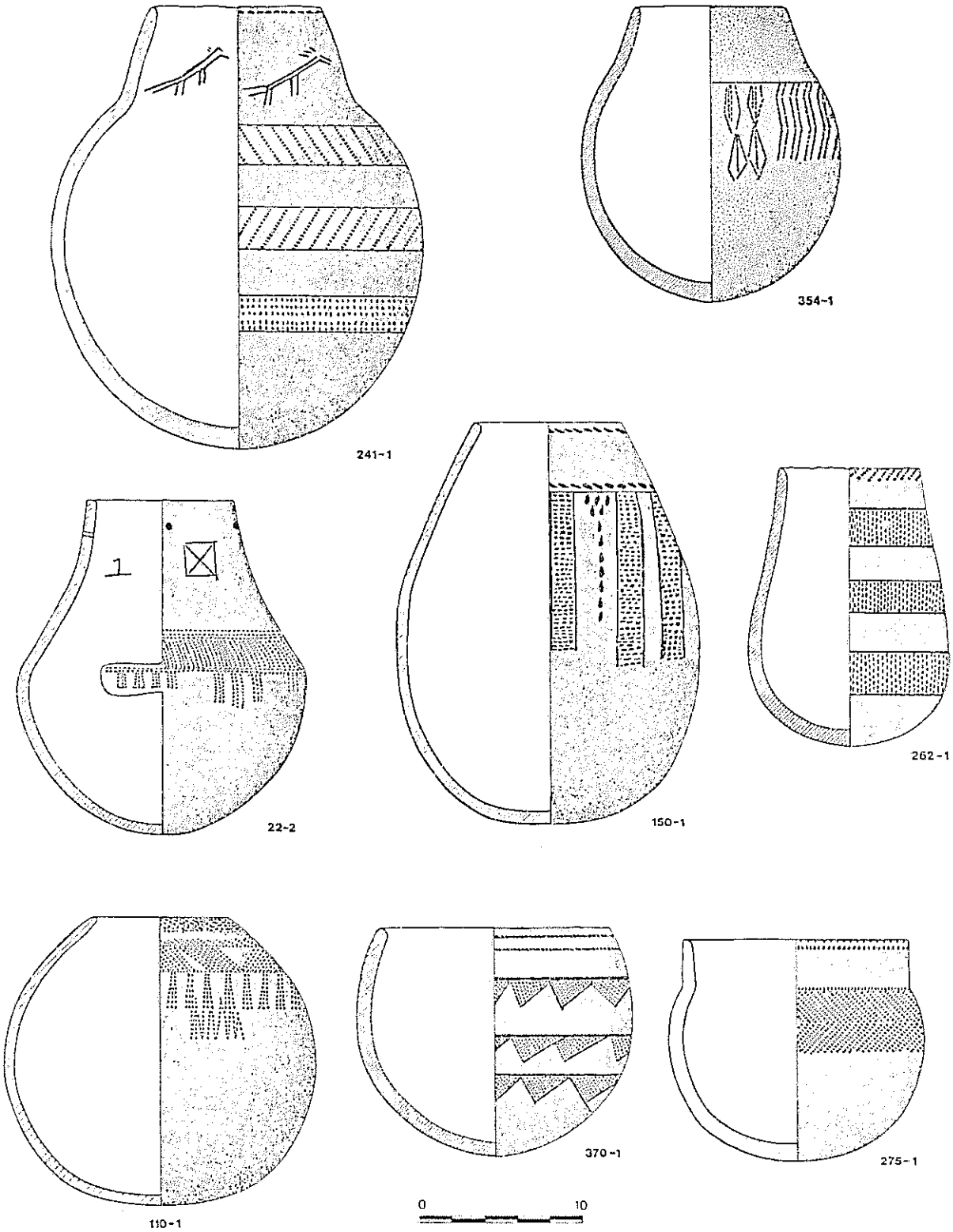


Fig. 4. Hand-made decorated pottery: types M.12 (241-1), M.15 (354-1), M.16 (22-2), M.17 (150-1), M. 18 (262-1), M.19 (110-1), M.20 (370-1), M.21 (275-1).

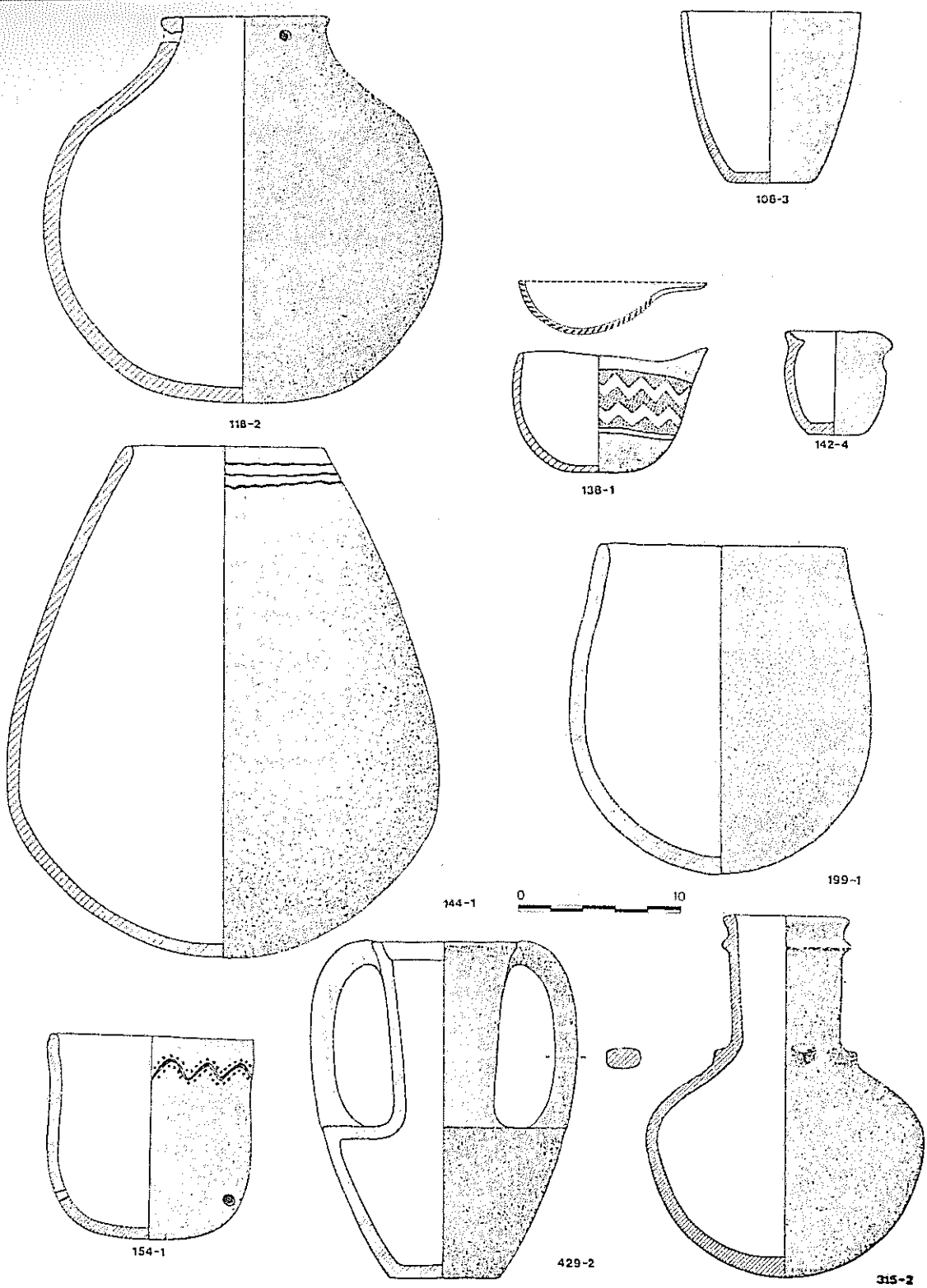


Fig. 5 Hand-made coarse pottery: bottle, feeder-cups (138-1 is the only well decorated item in this group, and it has a smoothed surface), and big ovoid jars. Hand-made red-slipped burnished pottery: bowl, handled jar and bottle.

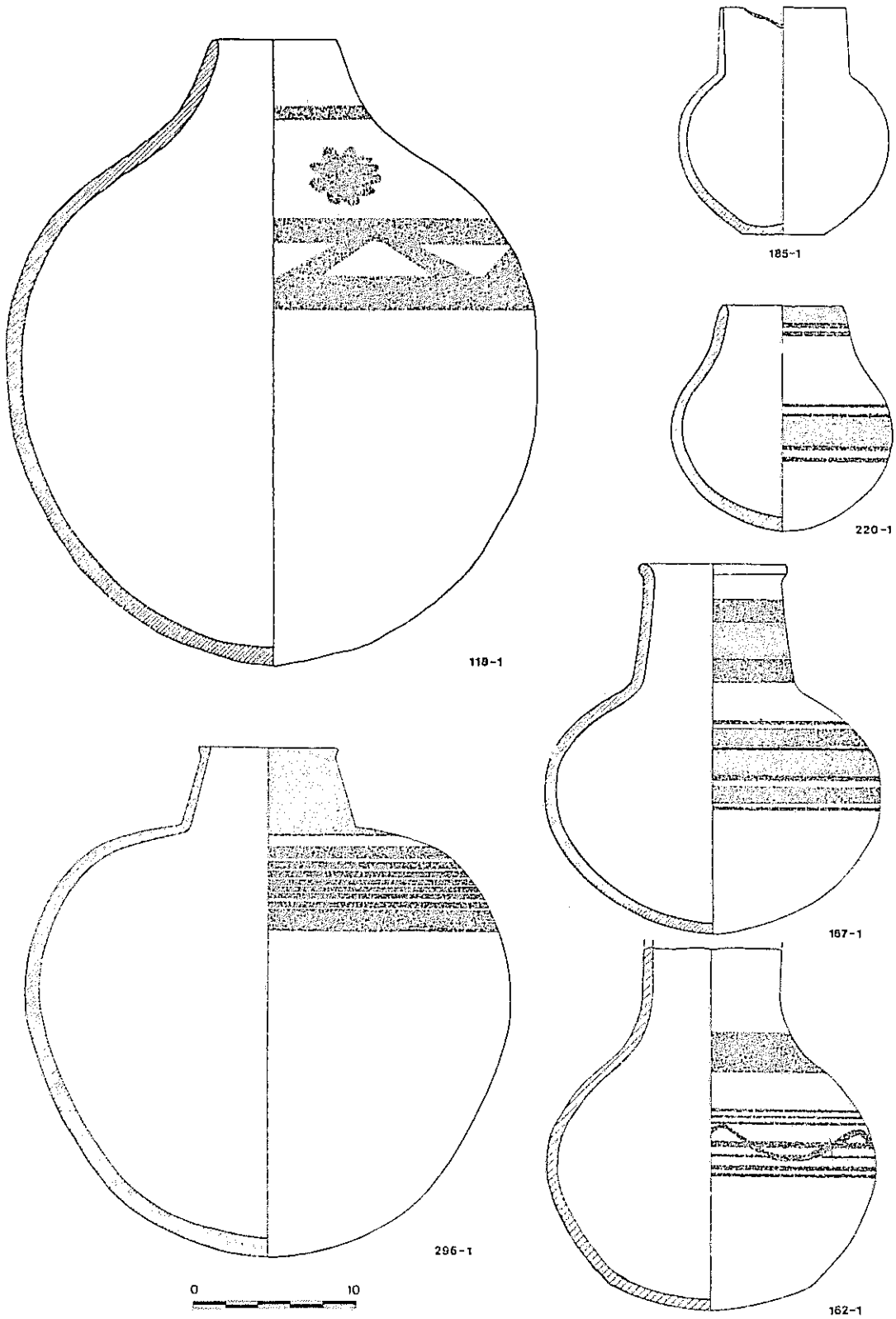


Fig. 6 Wheel-made slipped burnished pottery (Adams RB): jars and small bottles.

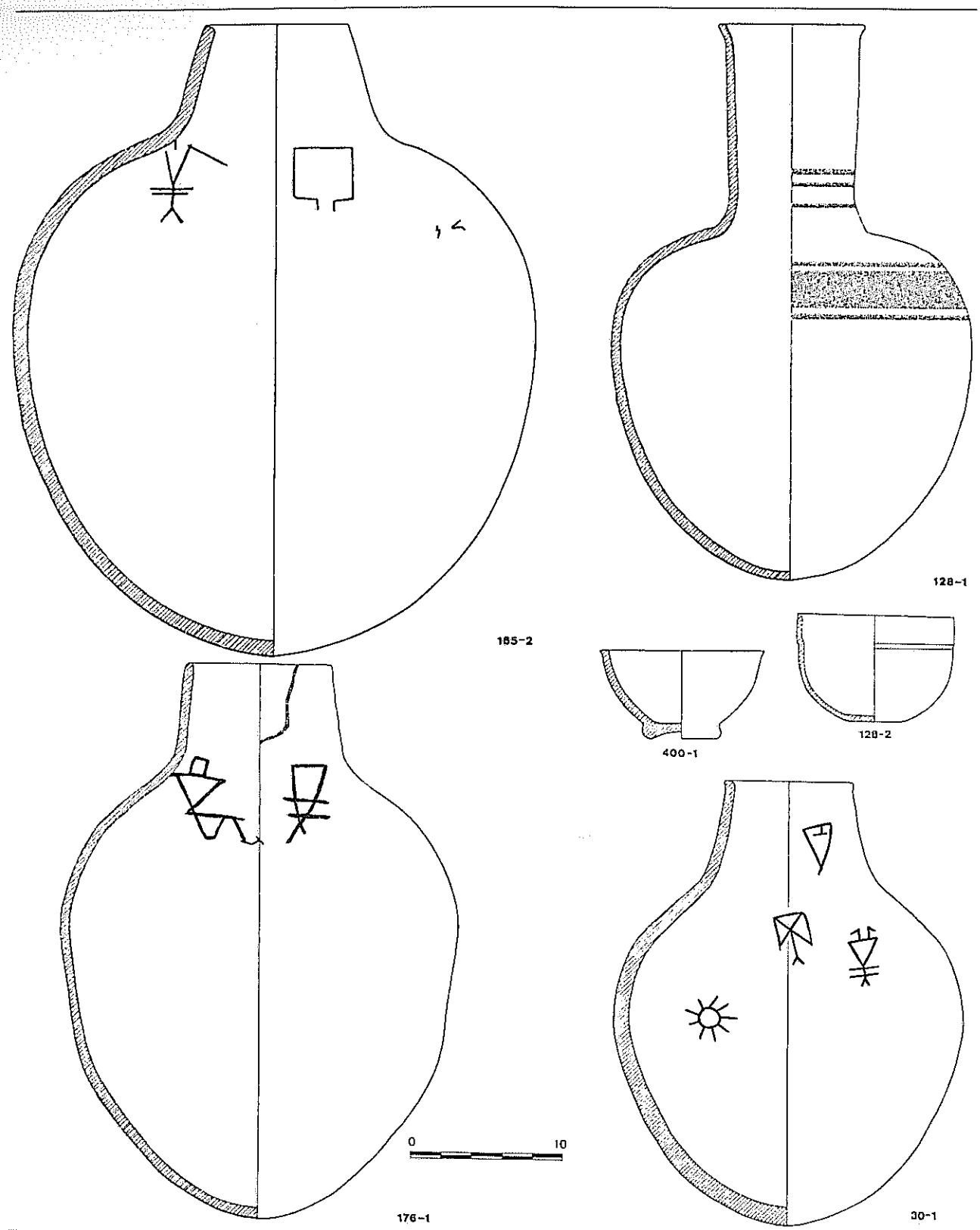


Fig. 7 Wheel-made slipped burnished pottery (Adams RB): jars, bottle and cups.

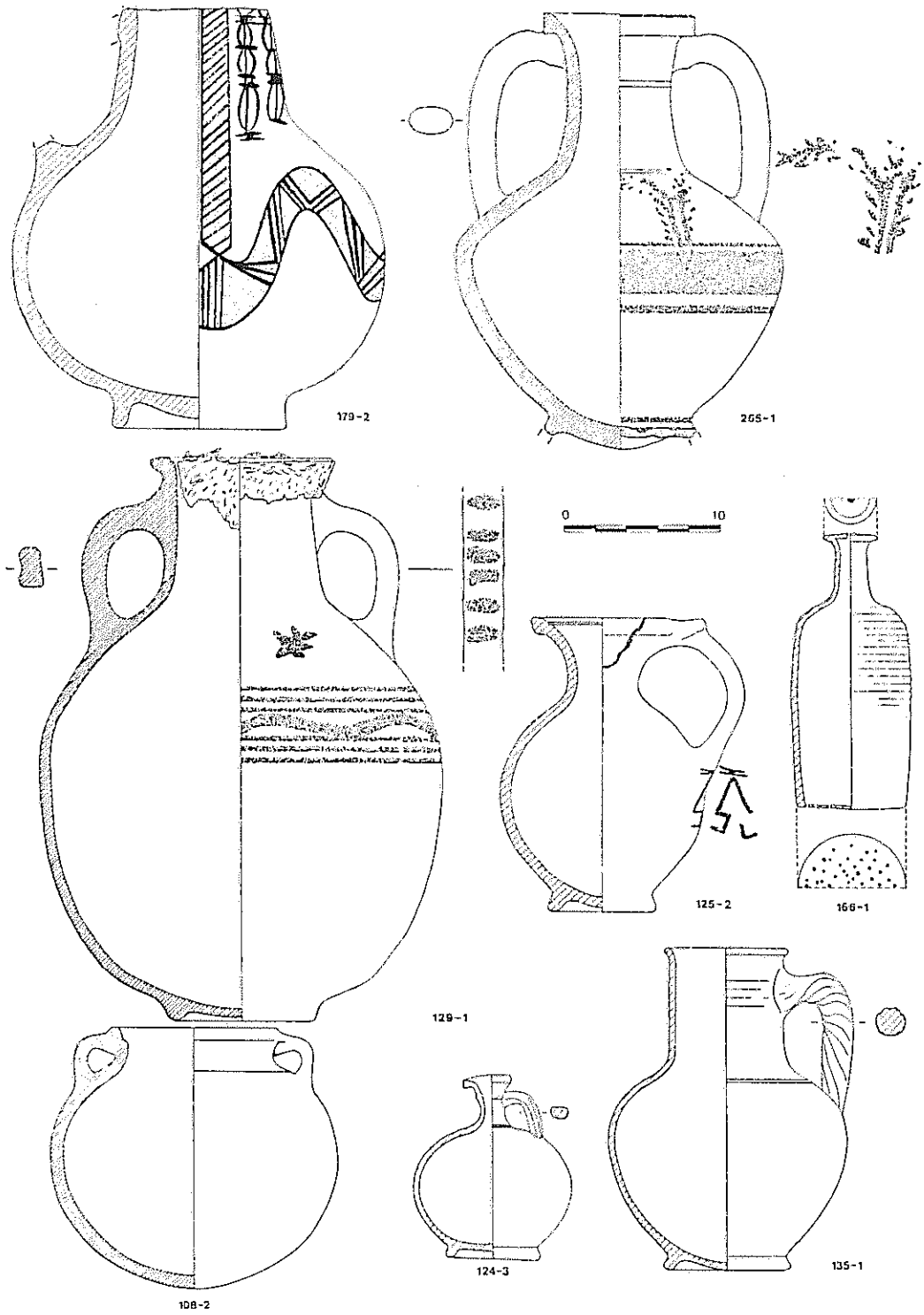


Fig. 8 Hellenistic imitation pottery: jars and amphora-like vessels, the small handled jar 125-2 has a painted graffito. Aswan pottery with pink slip, surface smoothed: klepsydra (166-1), cooking-pot (108-2), lekythos (124-3) and handled jar (135-1).

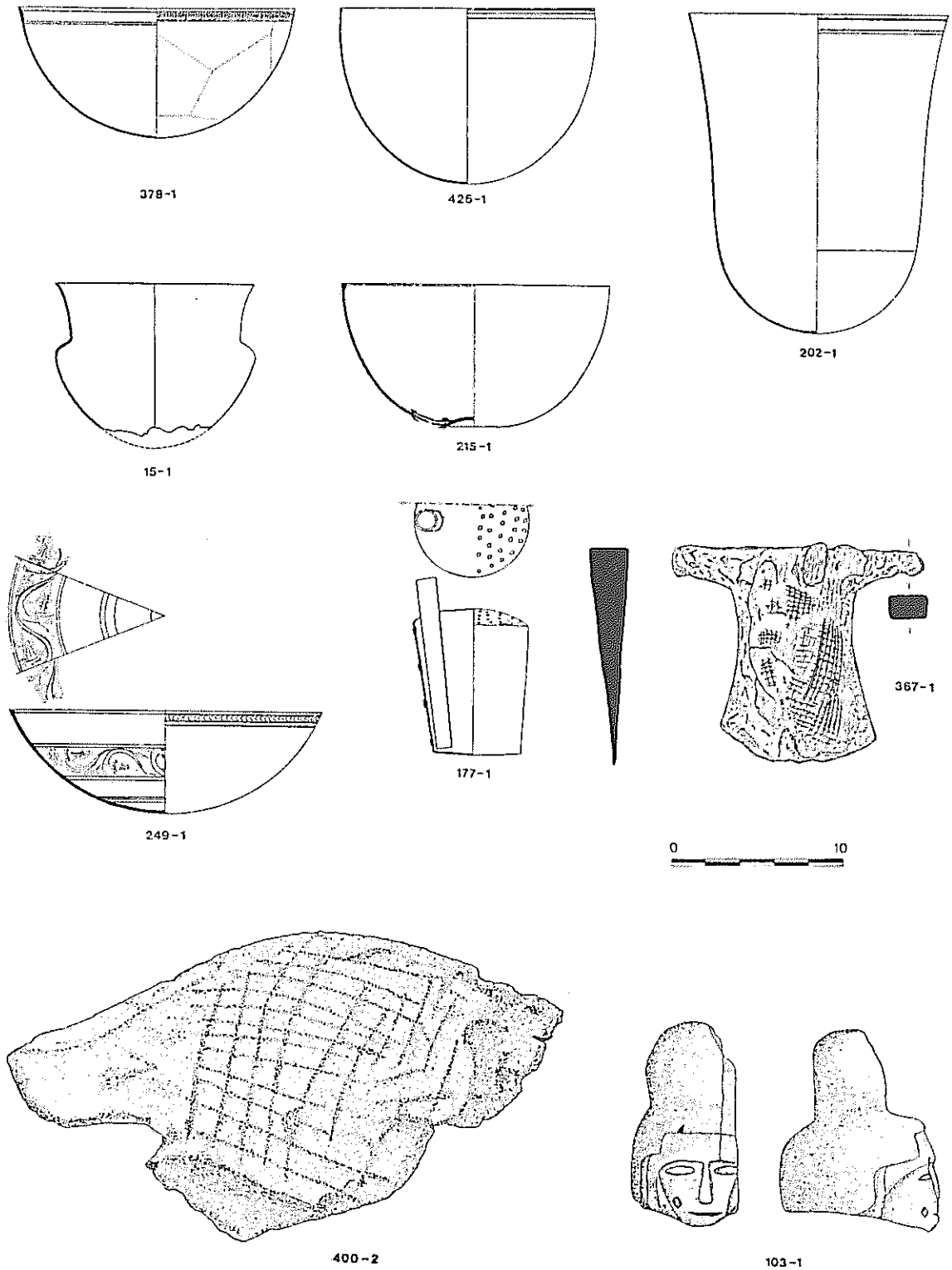


Fig. 9 Bronze bowls of different shapes; 15-1 is a phial-like unique specimen from generation 6; 177-1 is a rare saltceller-like bronze recipent, it had inside several seeds of *Ricinus Comunis* L. Iron axe fron grave 367. Bird-like Ba statue from refuse filling near the superstructure of tomb 400; reserve-head from an infant grave (103-1).

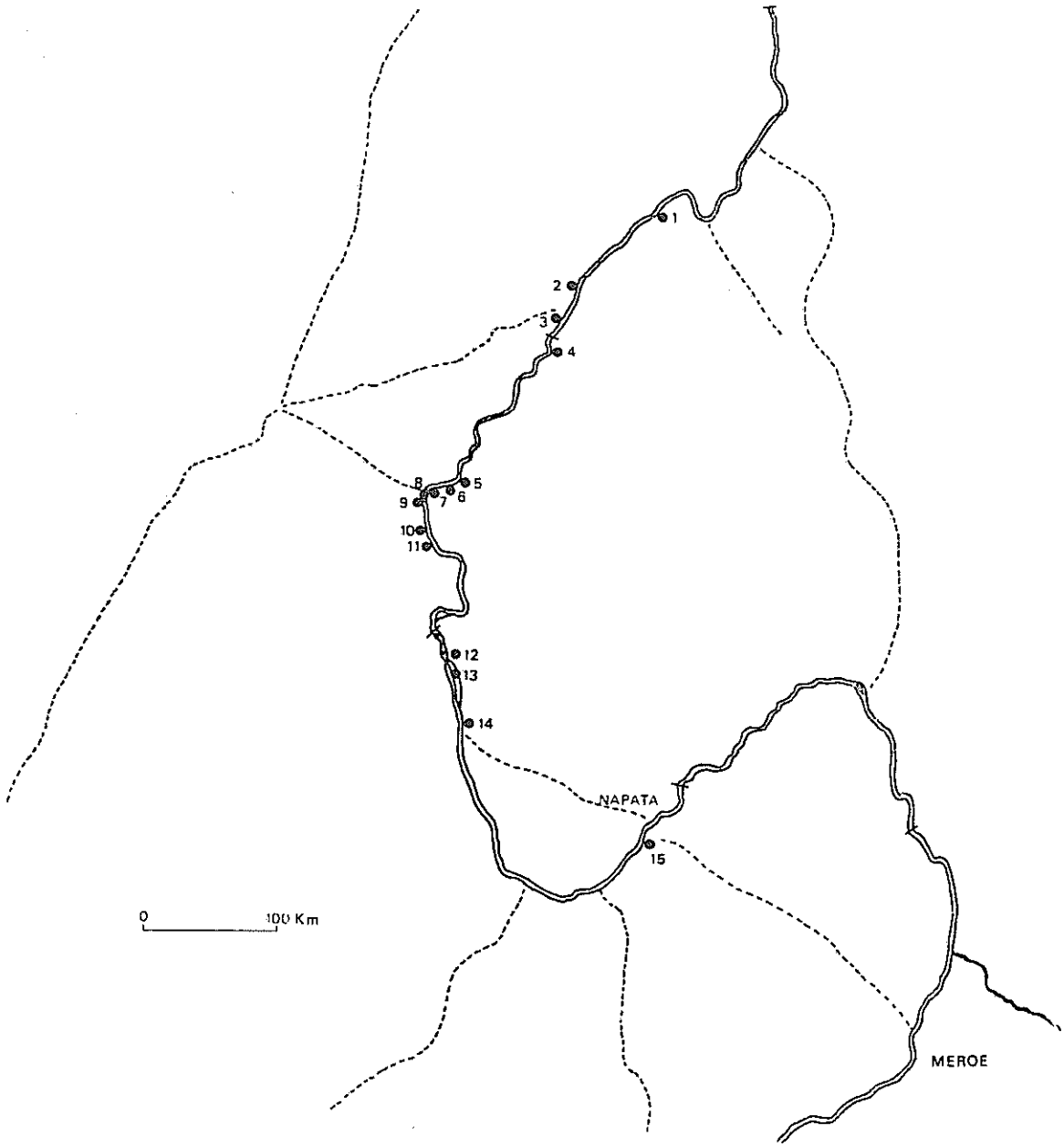


Fig. 10 The known sites of early Meroitic chronology or with related phases in Northern Nubia: 1) Qasr Ibrim, 2) Faras 3) Gezira Dabarosa, 4) Gemai, 5) Firka (?), 6) Dawki Dawi, 7) Amīr 'Abdallāh, 8) Sai, 9) Irki Saab, 10) Sedeinga, 11) Soleb, 12) Kerma, 13) Tabo, 14) Kawa, 15) Sanam.

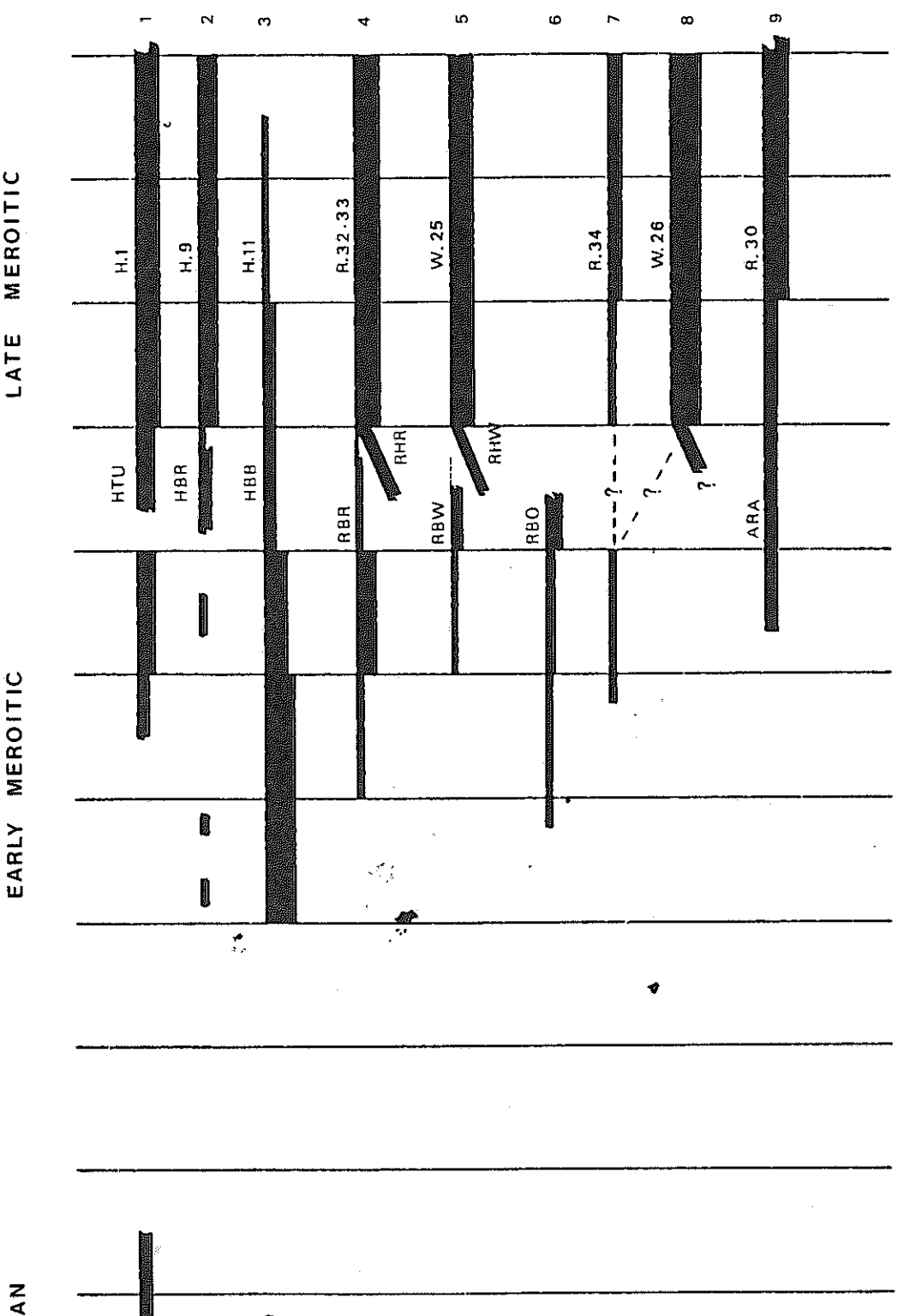


Fig. 11 Possible scheme for the evolution of the main pottery types during the early and late Meroitic periods in northern Nubia: 1) coarse hand-made, 2) red-slipped hand-made, 3) hand-made decorated, 4) wheel-made red slipped, 5) wheel-made white or cream slipped, 6) wheel-made orange slipped, 7) Hellenistic imitation, 8) fancy decorated "eggshell", 9) Aswan pottery. From 300 B.C. to the Christian era, data from Amīr 'Abdallāh; first century A.D. data from recent excavations at Qasr Ibrim (Adams *ms.* 2); after 100 A.D. data from Lower Nubia (Adams *ms.* 1).