THE FUNERARY SACRIFICE OF ANIMALS DURING THE PREDYNASTIC PERIOD

by

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A thesis submitted in conformity with the requirements for the degree of Doctor of Philosophy
Graduate Department of Near and Middle Eastern Civilizations
University of Toronto

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ABSTRACT

The Funerary Sacrifice of Animals during the Predynastic Period

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Two principal categories of animal burial have been identified for the predynastic period, those animals buried in human graves and those buried independently within the confines of human cemeteries. This study is an attempt to marshal all the available contextual evidence for the independent animal burials, with the intention of providing a cultural framework within which interpretations for such burials may be adequately evaluated. Explanations for the independent animal burials may be formulated within two distinct interpretive frameworks. One assumes a religiously symbolic significance for the species that occur. The other assumes the burials were an aspect of mortuary practices and suggests the possibility of differing species-specific intent for the burials.

A review of the archaeological evidence for the two categories of animal burial reveals that the distribution of each conforms to the geographically circumscribed territories of the contemporary, but culturally diverse, cultures of the predynastic period. The available evidence also suggests that the phenomenon of independent animal burial vanished from the cemeteries of the Nile valley north of the Second Cataract with the demise of the Badarian, Maadi (variant), and A-Group as discrete archaeologically detectable cultures.

The results of an intersite comparison of the animal and human burials as well as of an investigation of the iconography of each of the cultures with which the independent burials were associated reveal no unequivocal evidence in support of an interpretation of such burials as concrete manifestations of a contemporary attitude of reverence for the animals that occur, either individually or as representatives of their species. In conjunction with the geographically circumscribed and apparently culture-specific distribution of the phenomenon of animal burial, this lack of evidence for reverence for the relevant species suggests that the independent burials, like those in human graves, should be viewed within the context of the traditional burial customs of each of the cultures with which they were associated.

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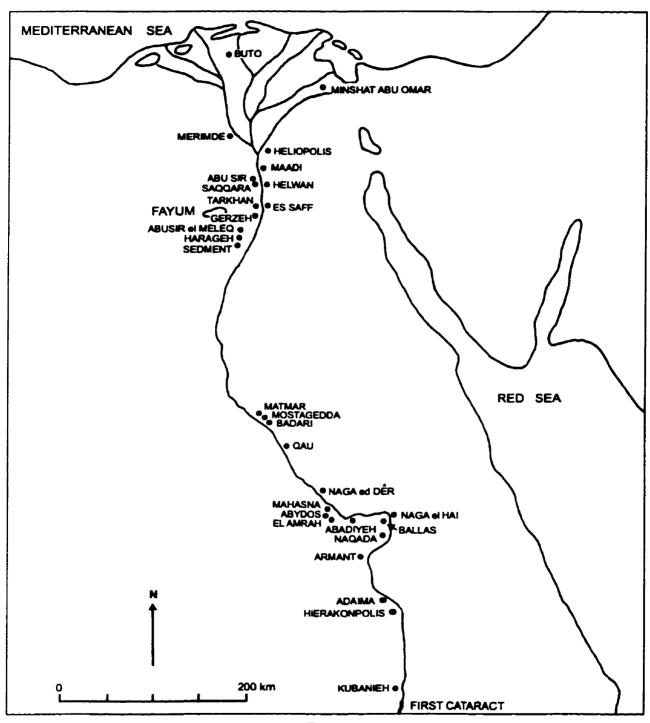
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Egypt

Chapter 1

Introduction

Two distinct categories of animal burial have been recognized for the predynastic period: "those [animals] placed sacrificially in human graves and those given a burial separately and apparently unconnected with human death" (Brunton & Caton-Thompson 1928:92). The distinction is both one of location and motivation. The first category is clearly considered a funerary sacrifice, the second is defined by what it is not. This is primarily due to the absence of obvious intent. In the past, this has often led to an interpretation of the phenomenon as early evidence for "a cult of sacred animals or of divine powers in animal form" (Hornung 1971:101).

Certainly, the origins of the animal aspect of specific deities and of the sacred animal cults are intriguing questions. In an attempt to discover these origins, a number of scholars have assumed a direct correlation between the independent animal burials of the predynastic period and the later concrete manifestations of the cults. Two basic assumptions appear to lie behind this premise: the supposition that the burials in and of themselves provide evidence of reverence for these animals and a presumption of cultural continuity between the earlier and later phenomena. In order to adequately evaluate the validity of these assumptions, the predynastic burials must be viewed within their original context. To that end, the issues of who, what, where, and how need to be investigated, before any interpretation can be accepted as a legitimate attempt to answer the question why.

The issue of when, presumably qualified at the outset as the "Predynastic Period", is not as straight forward as it at first appears. The period was not a unified whole. Both temporally and geographically, several distinct culture complexes occupied the banks of the Nile river from the Delta in the north to the Second Cataract in the south. Only one of these is generally accepted as the origin of dynastic culture (see, e.g., Kantor 1944:135-136; Bard 1994:26). Thus the question of who, necessitating the identification of the culture complexes with which these burials were associated, becomes crucial to determining whether or not the assumed cultural continuity may have existed. Although there are few aspects of the relative chronology and cultural development of the predynastic period about which proponents of alternate theories are not willing to argue, there is a generally accepted "sequence" that can be used to

delineate the cultural and chronological relationships of these various culture complexes.

The question of what, addressing as it does both the presumed object of reverence as well as the detectable demonstration of that reverence, requires, in lieu of textual evidence, an analysis of the archaeologically accessible remnants of material culture that may be indicative of a reverential attitude toward each of the species that occur in the burials. Two avenues of investigation are open. One involves a review of the relevant iconographic animal imagery in search of evidence that might imply the attribution of numinous qualities to the species depicted. The other, an attempt to delineate a clear definition of the characteristics of postmortem reverential treatment, incorporates the answers to the third and fourth questions, where and how.

In the absence of any evidence for predynastic cemeteries dedicated exclusively to the burial of sacred animals, the assumption of reverence for some scholars is based simply on the occurrence of the burials within the confines of human cemeteries and for others on the fact that the animal burials appear to resemble some of the human burials among which they lay (see, e.g., Brunton & Caton-Thompson 1928:94; Baumgartel 1955:23; Murray 1956:92; Hornung 1971:101; David 1982:24; Debono & Mortensen 1988:47-48; Seeher 1990:133). Beyond this superficial similarity, however, the specific evidence from the burials must be evaluated within the context of the cemeteries in which they occur. This entails an investigation of the customary standards for signifying status employed by each of the culture complexes with which the animal burials were associated.

Unless the answers to these questions can be shown to support the assumptions behind the premise described above, such a cultic motivation for the independent burial of animals remains only one possible interpretation. This means that alternative interpretations are equally worth investigating. In this light, the definition given above for this category of burial should, perhaps, be qualified. The separate burial of an animal within the confines of a human cemetery is only "apparently unconnected" with a specific human death, it does not necessarily follow that it need be unconnected with the funerary customs of the local population in whose cemetery it occurs. If such animal burials are viewed as a characteristic of culturally variable mortuary practices, both the equally legitimate possibility of culture-specific determinants for the burials in general as well as the possibility of widely differing motivations for the burial of each species that occurs in these cemeteries may be considered. In this context, the role of the various species in the economic life of the community may contribute to the formulation of alternative suggestions for the motivations for these burials.

Thus two quite different interpretive frameworks emerge within which explanations for the independent animal burials of the predynastic period may be formulated. One assumes a religiously symbolic significance for the species that occur and suggests the burials were the interments of objects of veneration — either incarnations or generic representatives of the divine. The other assumes the burials were an aspect of mortuary practices and suggests the possibility of differing intent for the burial of the different species that occur. The first, by its presumed knowledge of the motive for the burials, offers one

all-encompassing answer to the question why. The second, by allowing for a variety of motives, tends to generate further questions and only tentative explanations. However, as this option allows for the widest range of possible interpretations, it will be the working hypothesis of this study that the animal burials were one aspect of typical mortuary practices, unless demonstrated to be otherwise.

There are three aspects of archaeologically accessible material culture that, once investigated, should firmly fix the animal burials in their original cultural contexts and thus allow for an adequate evaluation of the validity of proposed motivations formulated within both interpretive frameworks. These are: social status differentiation as evidenced by variations in the quality and possibly the distribution of the human burials, animal imagery represented in a variety of media, and the faunal component of the subsistence economy as evidenced primarily by the faunal remains retrieved from settlement sites. The conclusions drawn from each of these three avenues of investigation entail certain basic assumptions concerning what constitutes evidence either indicative of a species' revered status or suggestive of its role in the associated community of the dead.

- A delineation of the customary standards of postmortem status display, based on the assumptions:

 a) that if a species were revered its burial might exhibit the same characteristics indicative of high-status observable in the burials of privileged members of the human community;
 b) that the spatial relationship between animal burials and those of humans displaying differing levels of status might reveal a pattern of association suggestive of the motive for the burial.
- A review of the iconographic evidence, based on the assumption that if a species were revered its depiction in the repertoire of animal imagery might reflect that venerated status.
- A reconstruction of the faunal component of the subsistence economy, based on the assumption that the burial of a species might in some way reflect its role in the economic life of the community.

The principal focus of this study will be the "independent animal burials", as these are the ones most often indiscriminately interpreted as early evidence for a religiously symbolic significance of the species that occur. Such a cultic interpretation is only rarely offered for the other category of burial, those of animals interred in or, in its later developed form, directly associated with human graves. These animals have generally been considered merely another form of grave goods. However, this type of animal burial, in the form of subsidiary burials, can be tracked into the early First Dynasty and beyond. Thus the diachronic development of this category of burial must be investigated as it exhibits an uninterrupted continuity between the predynastic and early historic periods.

As the cultural continuity between the early burials and the later manifestations of the cults is one of the issues this study will address, the debate over, on one hand, the cultural diversity or, on the other, the essential cultural unity of the population occupying the banks of the Nile and the Delta during the predynastic period should at least be acknowledged (see Köhler 1995; rebuttal by Kaiser 1995; summary by Wilkinson 1996:5-7). The question is: In what way is one culture distinguished from another? Differences in several categories of archaeologically detectable material remains — such as ceramic

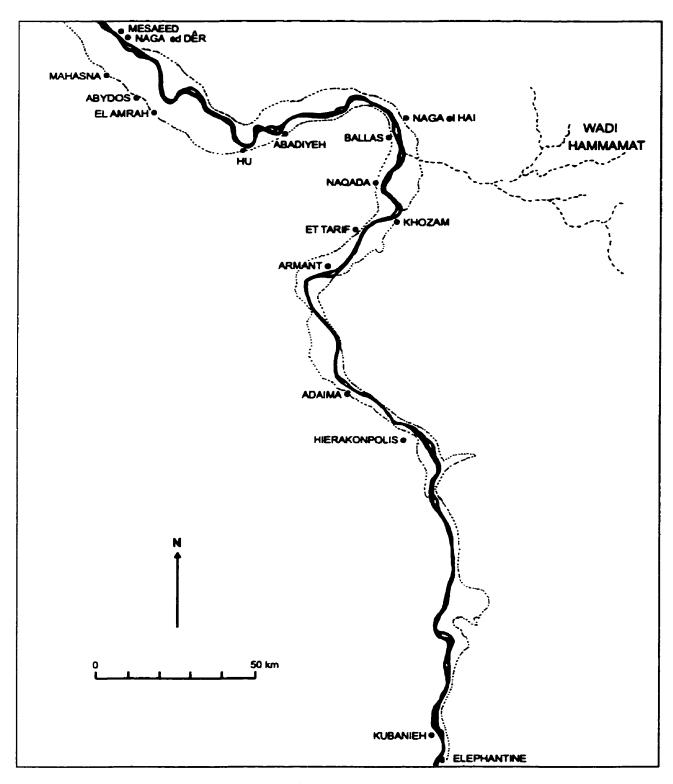
assemblages, architectural characteristics, and burial practices, among others — are generally accepted as legitimate distinguishing factors. Concentrations of sets of similar characteristics within a geographically circumscribed territory contribute to an identification of the material remains as representative of a distinct culture complex.

Differences in burial practices are particularly relevant to the present study. The primary distinction between those of Upper and Lower Egypt is the difference in the customary outfitting of the dead. The validity of this specific difference as a distinguishing characteristic has been contested on the grounds that it might be attributed to differing "religious conceptions", or economic factors, or levels of social complexity, all presumably permissible variations within one "cultural unit" possessing regional variants (Köhler 1995:85). Nevertheless, even if differing religious conceptions alone were not sufficient justification in the context of this investigation for acknowledging a distinction between communities exhibiting such heterogeneity, the regionally circumscribed pattern in mortuary practices involving the burial of animals that can be recognized in the cemeteries of the period also contributes to an acceptance of the cultural diversity among the population occupying various segments of the Nile valley north of the Second Cataract.

¹See Köhler 1995:85 for a dismissal of this difference as inconsequential: "The question is only whether it mirrors simply differing religious conceptions or economic backgrounds in terms of prosperity or the level of social complexity, which can differ within cultural units (e.g. urban vs. rural society/center vs. provincial areas)" (1995:85). Concerning the second point, considering the evidence for foreign exchange detected at the Maadi settlement site (Rizkana & Seeher 1989:78-80) there is no reason to assume offhand a lower level of prosperity than that enjoyed by the population of Upper Egypt. The only legitimate point made here is the possibility of differences in the level of social complexity (see Chapter 5).

Another point Köhler mentions is the absence of presumably culturally indicative Upper Egyptian body orientation at "Naqada culture" cemetery sites in the Delta. "One would assume that if a certain culture migrates from one area to the other it would also bring its burial customs, but e.g. the burial orientation in the North did not change after the assumed overlap" (1995:85). This observation might be legitimate if the presumably indicative "head south face west" orientation was not merely the more generally (as opposed to strictly) observed orientation in Naqada culture cemeteries in Upper Egypt. It would appear that in these cemeteries orientation often tended to be based on the local direction of the river rather than on the cardinal points (see, e.g., Mond & Myers 1937:10). Moreover, the only extensive evidence for presumably indicative Lower Egyptian body orientation derives from the cemetery at Wadi Digla where during Phase I orientation was irregular and Phase II orientation appears to have standardized as "head south face east" (Seeher 1992:228-229). This would presumably be the orientation that "did not change" in the "Naqada culture" cemeteries in the north. And yet the body orientations in the only Naqada culture cemetery in the Delta sufficiently published to offer in comparison, that at Minshat Abu Omar where the orientation was "head north face west" during the first two phases and "head north face east" during the last two phases (Kroeper 1989), are similar to neither the presumably indicative Upper Egyptian orientations is too slender a thread on which to hang any culture's identity.

In contrast, Seeher (1992), in a discussion of Lower Egyptian burial practices, compares them to what he terms the "purity" of indicative Naqada culture burial customs – apparently "unaffected by local traditions" – in the northern cemeteries attributed to that culture.



Upper Egypt

Chapter 2

Upper Egypt

Two principal culture complexes have been identified for the Upper Egyptian predynastic cultural sequence.¹ Along with the debated recognition of a prior distinct cultural entity, the cultural relationship between the two principal cultures is also a point of contention. The partial chronological precedence of one of the two is, however, generally acknowledged.

BADARIAN CULTURE

Cultural Sequence

The earliest predynastic culture complex identified for Upper Egypt is the Badarian. The validity of the Tasian as a distinct culture preceding the Badarian remains a matter of debate. Although it has been argued by some that the limited evidence with which the Tasian was originally defined is more than just quantitatively inadequate for its identification as an independent cultural entity² (Baumgartel 1955:20-21; Kantor 1992:8), others have argued to the contrary³ (Kaiser 1985a:71ff). However, the results of

¹A fairly lengthy chronological gap exists between the archaeologically detectable epipalaeolithic (see Wetterstrom 1993:183ff for a review of the known epipalaeolithic industries) and predynastic occupations in Upper Egypt. It has been suggested that this may be due to an intervening period of low Nile floods, during which the population would have moved closer to the river channel. If such were the case, sites associated with this period would now be obscured by later silt deposition (Butzer in Arkell & Ucko 1965:157; Hassan 1988:142-143). This gap, however, also marks an apparent cultural discontinuity between the two.

The Tarifian, known from sites on the west bank of the river between Gurna and Armant, is a late ceramic phase of the local epipalaeolithic. It has been dated to the very beginning of the fifth millennium BC. Based on comparisons of the lithic and ceramic materials, however, there appears to be no cultural continuity with either the Badarian or Naqada cultures (Ginter & Kozlowski 1984, 1994:134-135; Holmes 1988:82).

²The Tasian was defined based on artifactual evidence from ca. 50 graves and a small number of settlement "groups" near Mostagedda in the Badari district (Brunton 1937). Moreover, in reference to the distinction between Tasian and Badarian burials, Brunton states: "It is quite possible that in many cases the description as Tasian is not warranted; but it was thought desirable to keep separate any graves which showed an affinity, however slight, with the definitely Tasian" (1937:5).

³See Kaiser's argument for the recognition of the Tasian as an independent (and possibly wide-spread) culture complex (1985a:71-79). Acknowledgment of this position is demonstrated by the appearance of the Tasian culture on chronological charts such as Rizkana & Seeher 1990:103, Figure 33 and by Ginter & Kozlowski's acceptance of the Tasian as a phase of the

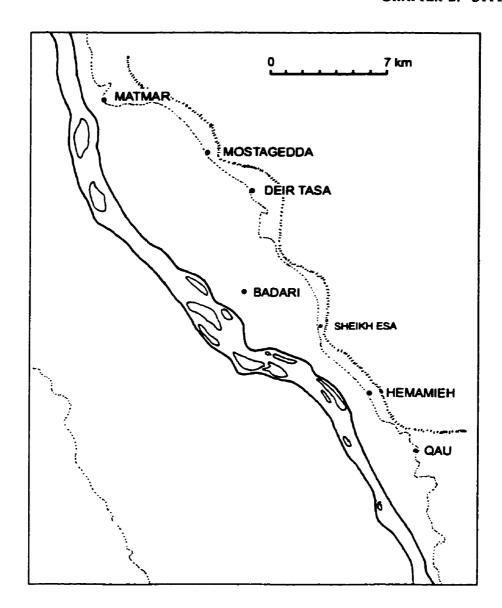


Figure 2.1: Badari Region

a recent archaeological survey of the region from which the original evidence for the Tasian culture derived tend to support the argument against its recognition (Holmes 1996:184).

Geographic Distribution

The majority of sites identified with the Badarian culture lie in the vicinity of the type-site of Badari, located on the east bank of the Nile in northern Upper Egypt.⁴ Its full geographic extent, however, is

cultural development of Upper Egypt (1994:134-135).

⁴The Badari region encompasses ca. 35 km of the east bank of the Nile from Qau (el Itmâniya) in the south to the vicinity of Matmar in the north. Although this geographical area is often considered the southern portion of Middle Egypt, it is here

presently unknown. Although no settlement or cemetery sites have been found upriver, artifactual evidence has been used to suggest that it may have extended to the south, possibly as far as Hierakonpolis⁵ (Hassan 1988:153; Trigger 1983:27; Kantor 1965:4, 1992:8). The presently available archaeological evidence suggests that the Badarian culture did not extend further to the north of its principal area of concentration. Due to the geomorphic features of Middle Egypt, however, natural forces such as erosion caused by the shifting river channel, and millennia of silt deposition and dune activity may have either destroyed or made inaccessible any archaeological evidence for predynastic settlement in the valley between the Badari district and the entrance to the Fayum (Butzer 1960:1621-1623). It has alternatively been suggested that the broad width of the flood plain created particularly large natural flood basins, which "would have required massive labor to bring under control", thus seriously limiting the desirability of this stretch of river for settlement (Butzer 1978:16). Nevertheless, due to the strictly artifactual nature of the present evidence for the proposed southern extension and the lack of evidence to the north, the possibility that the Badarian culture was limited to the Badari district must remain a consideration.⁶

Cemetery Evidence

The cemeteries of this culture complex provide the earliest archaeological evidence for mortuary practices involving the burial of animals in Egypt. The four principal sites from which this evidence derives are Badari, Mostagedda, Deir Tasa, and Matmar, all encompassed within the "core area" of this culture's presently documented geographic distribution. Despite the intersite variation in the type of animal burials noted in the cemeteries at these sites, together they may be considered representative of Badarian mortuary practices.

At Badari, only independent burials have been documented. Bos, sheep/goats, and a dog(?) were buried in separate graves within the confines of human cemeteries. Two similar burials were noted at Deir Tasa. At Matmar, no independent burials were reported. The only animals documented, "gazelles(?)", were buried at the feet of the humans whose graves they shared. The evidence from

considered the northern portion of Upper Egypt.

⁵Ginter & Kozlowski suggest the presence of indicative Badarian sherds (in what they consider secondary position) in conjunction with later ceramic materials at Naqada culture settlement sites south of the Badari district as possible evidence of an earlier Badarian occupation of the area (1994:134). See also Hassan 1988:153, for a brief review of what he considers "mostly unconfirmed" occurrences of Badarian material outside the region of Badari, including the Wadi Hammamat and Red Sea coast. However, based on the evidence of characteristically Badarian Rippled Ware sherds at a number of valley sites (Armant and Naqada region), he suggests the presence of "local variants of the Badarian". In contrast, see Holmes 1988:83 for a discussion of the absence of evidence for what she considers the characteristic Badarian lithic industry outside the region of Badari.

⁶See Trigger 1983:27-28. It has been suggested, moreover, based on the desert "spur" location of Badarian settlements, that the culture complex may have existed "both geographically and culturally on the fringes of a more advanced society" that contemporaneously occupied the valley flood plain. The evidence for the presence of this "more advanced society" (presumably that of the first developmental stage of the Naqada culture) would now be archaeologically inaccessible due to silt deposition (Trigger 1983:10). For the sparsity of Naqada I remains in the Badari district, see Holmes 1996 and Holmes & Friedman 1987, where the evidence is interpreted as a lack of Naqada culture presence in the area.

Mostagedda is less clearly defined. While a number of animals tentatively identified as gazelles and possibly a cat accompanied humans in their graves, the report of the only dog noted in the cemeteries in this vicinity leaves its status as an independent burial in question. It may have originally been part of a human interment, in which case the only independent animal burials documented for the Badarian culture would be those at Badari and Deir Tasa. (see Appendices A and B)

NAQADA CULTURE

Cultural Sequence

The various "alien invasion" theories formerly proposed as explanations for the changes in material culture documented for the predynastic period in Upper Egypt are no longer popular (see, e.g., Trigger 1983:2-3). It is now generally accepted, at least for the Naqada culture, that the observed continuities between the phases reflect a cultural evolution. Two main developmental stages have been proposed, while a third and final stage encompasses the transition between the predynastic period and the rise of the First Dynasty. Each of these three stages has been divided into subphases, reflecting the developmental continuity of the whole (Kaiser 1956, 1957; also Kantor 1992:7; Hassan 1988:138; Needler 1984:23; for a breakdown of phases see Appendix B).

Whether the first developmental stage, Naqada I, was "collaterally related" or derived from the Badarian culture remains an open question. It has been suggested that the two may have been regionally circumscribed partially contemporary parallel cultures. Excavation of a settlement site at Hemamieh has established, however, that the Badarian was at least in part antecedent, if not ancestral, to the Naqada culture⁸ (Brunton & Caton-Thompson 1928:73-79; Needler 1984:22).

Geographic Distribution

Nagada I

The question of cultural sequence impacts the proposed northern boundary of the first developmental stage of the Naqada culture. Despite the original identification of a number of sites in the Badari region attributed to this developmental stage, none reinvestigated in a recent survey "yielded ceramics sug-

⁷See Kaiser 1956:96, 1985a:81-87 (according to his cultural sequence, Naqada I developed out of the Tasian culture). See Holmes 1996, who suggests that the sparsity of Amratian (Naqada I) remains in the Badari district may support the theory of regional circumscription and partial contemporaneity (also Holmes & Friedman 1987). In contrast, Kantor claims that the similarities interpreted by Kaiser "as exchanges between contemporary cultures" suggest, rather, a "genetic link" and cites evidence for the possible presence of the Badarian as far south as Hierakonpolis as arguing against the existence of "several regional contemporary cultures" (1965:3-4, see also Kantor 1992:8-9).

⁸See also Brunton 1929:460 and 1937:21 (Mostagedda: Area 1800) for mention of graves designated Amratian, which overlay a Badarian settlement site. NB: Most of the graves in another of Brunton's "Amratian" cemeteries (Matmar 2600/2700) have SD ranges that place them within the Naqada IIab period (Brunton 1948:3/Plates VIII-IX).

gestive of an exclusively [Naqada I] component." Although this apparent sparsity of remains has been interpreted as the absence of a Naqada I occupation of the area (Holmes 1996), the admittedly limited cemetery evidence suggests the issue remains to be clarified. The distribution of cemeteries clearly containing components of this date demonstrates that, at the very least, the geographic range of this developmental stage of the Naqada culture encompassed the length of the Nile valley from the vicinity of Abydos in the north to Hierakonpolis in the south.

Further to the south, the northernmost Nubian A-Group site lay approximately ten kilometers north of the First Cataract at Kubanieh (south). Although the earliest securely datable graves in this cemetery are contemporary with Naqada Ic-IIa, the Nubian occupation of the area may predate this period. It has been proposed that some of the graves without datable Naqada culture material may belong to an initial phase of the first developmental stage of the A-Group, predating the establishment of material culture exchange between the two groups (H.S. Smith 1991:98). Despite the apparent southern territorial border at Hierakonpolis, ¹¹ Naqada cultural influence in the form of ideas and imports was felt as far south as northern Lower Nubia ¹² (see, e.g., H.S. Smith 1991).

Naqada II

The second developmental stage, Naqada II, had a wider geographic distribution. The gap in settlement and cemetery evidence mentioned above for the stretch of Nile valley in Middle Egypt, however, still applies. In addition to the postulated environmental considerations, another proposed possibility suggests the "lack of natural resources for centers of craft production" as a reason for the continuing absence of settlement in this area (Bard & Carneiro 1989:20).

In Lower Egypt, cemetery sites such as Gerzeh, Harageh, and Abusir el-Meleq in the Nile valley

⁹Although a level of the habitation site excavated at Hemamieh was originally attributed to this developmental stage, recent test excavation on the periphery of the settlement also indicates a lack of "clear-cut" stratigraphic layers assignable to this period (Holmes 1996:186).

¹⁰In terms of cemetery evidence excavated by Brunton: at Matmar – cemeteries 2600/2700, 3000/3100, 5100 (Brunton 1948:Plates VIII-X), of the ca. 302 registered and unregistered graves, ca. 18 registered graves were given SD ranges limited to Naqada I (30-38), with the possible addition of another ca. 37 graves, if the cultural "division" between "Amratian" and "Gerzean" is accepted as lying between Kaiser's Stufen IIa and IIb (for the early dates of some of the graves in these cemeteries, see also Wilkinson 1996); at Mostagedda – cemeteries 1600/1700/1800/11700 (including area 200), 300/400/5200, 1200, 10000 (Brunton 1937:Plates XXIX-XXXI), of the ca. 187 registered and unregistered graves, ca. 44 registered graves were designated "Amratian", with the possible addition of another ca. 16 graves for the reasons just mentioned (see also Wilkinson 1996); for the area in the immediate vicinity of Badari – cemeteries 3500, 3600, 3700, 3800, 3900, 4600 (Brunton & Caton-Thompson 1928:Plates XXX-XXXIII), of the ca. 99 registered and unregistered graves (not including loci listed as "hole" in the register), ca. 11 graves fell within the ranges just mentioned; a few additional graves of similar date were noted in cemeteries 100 and 1500-1800 at Qau and Hernamieh. The totals given for graves of this date are rough estimates.

¹¹Kaiser's assumption concerning the cultural unity of the Nile valley, from Assuit to the First Cataract ("einer einheitlichen Kulturzone"), during the later phases of Naqada I (Kaiser 1986:1070) seems to be contradicted by the A-Group presence at Kubanieh.

¹²The graves in Cemetery 17 at Khor Bahan contained such a predominance of Naqada culture material that the site was originally thought to be a Naqada culture colony (ASN I 1910a:316; H.S. Smith 1991:98). However, Naqada culture material of this period has also been found in Early A-Group cemeteries to the south (H.S. Smith 1991).

near the entrance to the Fayum and north into the eastern Delta along the former Pelusiac branch of the river at Beni Amir and Minshat Abu Omar¹³ have been identified with the later phases of this stage of the culture complex (Nagada IIc-d)14 (Petrie 1912; Engelbach 1923; Scharff 1926; Kroeper & Wildung 1994; Abd el-Moneim 1996a; see von der Way 1993:83, Figure 21). In the north-central Delta, the site of Tell Fara'in, ancient Buto, exhibits a marked change in material culture during this period (Nagada IId). Ceramic evidence from a habitation area at this site has been interpreted as indicating an eclipse of the indigenous Lower Egyptian culture complex by the Upper Egyptian Nagada culture¹⁵ (von der Way 1991, 1992:3-4, 1993:16/77-78). The limited excavation of several sites in the eastern Delta has also revealed evidence for a similar alteration in material culture, albeit at a slightly later point in time. At Tell el-Iswid (south), two main phases of what is thought to be a "continuous occupation" exhibit a transition from the earlier Lower Egyptian material culture with affinities to that known from an early level at Buto (Iswid Phase A) to one of a distinctly Upper Egyptian character (Iswid Phase B) dated to Nagada III¹⁶ (van den Brink 1989:58-59/79-80). An uninterrupted occupation, again despite an apparently similar shift in material culture, has also been reported at Tell Ibrahim Awad for this transitional period (van den Brink 1988:77, 1989:78). The stratigraphic evidence at Tell el-Farkha, however, has been interpreted as demonstrating a hiatus in habitation between the occupation layers associated with a Lower Egyptian culture complex similar to that known from the pretransitional phase at Buto and those of the Nagada culture apparently contemporary with Tell el-Iswid Phase B¹⁷ (Chlodnicki 1991;23, 1992;182-183).

The distribution of datable sites indicates a northward expansion of the Upper Egyptian Naqada culture during the second half of Naqada II, at first as far as the entrance to the Fayum and then on into the eastern and north-central Delta. The temporal and geographical progress of the expansion

¹³van den Brink suggests the Pelusiac branch may not have been active during the third millennium BC due to what he considers a "settlement vacuum" along that branch of the river during this period (1993:293-294). He places Beni Amir on the former Tanitic branch contra Baines & Málek who place it on a loop of the Pelusiac branch (see maps 1980:18/31).

¹⁴Kaiser dates the advent of the cemeteries at Gerzeh and Harageh to Naqada IIc, at Minshat Abu Omar to Naqada IId1, and at Abusir el-Meleq to Naqada IId2 (Kaiser 1987a:122). Kroeper & Wildung date the earliest phases of the Minshat Abu Omar cemetery (MAO I-II) to Kaiser's Naqada IIc-d/Petrie's SD "33-78 [sic]" (1994:XIV). Kaiser's assignment of the advent of the Minshat Abu Omar cemetery to Naqada IId1 is based on his reevaluation of an earlier publication of the Kroeper & Wildung dating (see Kroeper & Wildung 1985:92-94). He claims that the scant ceramic material cited for the Naqada IIc date also occurs in Naqada IId1 and prefers the later date based on the bulk of the ceramic evidence (see Kaiser 1987a, particularly 120-122). Hendrickx offers a tentative correlation of Kroeper & Wildung's MAO "groups" with his revision of Kaiser's relative chronology, dating the earliest, MAO Ia, to his Naqada IIC-IID1 and MAO Ib to his Naqada IID1 (see Hendrickx 1996:66, note 25). The advent of the cemetery at Beni Amir has been dated to Naqada IIc based on Upper Egyptian ceramic parallels also present at the Lower Egyptian culture complex sites of Buto – Schicht II and Tell el-Iswid (south) – Phase A (see below), and the Upper Egyptian culture complex site of Minshat Abu Omar – MAO I (Abd el-Moneim 1996b:259).

¹⁵According to von der Way, the lower levels of the "transitional layer" (Schicht IIIa) at Buto contain 95% Lower Egyptian ceramics; the upper levels of this layer contain 100% Upper Egyptian ceramics dating to Naqada IId (1992:9).

¹⁶Although van den Brink claims a "continuous occupation" for the site, elsewhere he states that in one of the small soundings "a thin sand layer, of natural – though possibly of very local – origin, ca. 2 cm. thick, is resting on top of the last cultural layer belonging to the late chalcolithic, thus separating it from the immediately superimposed layers, clearly dating from the Proto/Early Dynastic period" (van den Brink 1992:56).

¹⁷Chlodnicki et al. take for granted the apparently contemporary site abandonment at Tell el-Iswid (south), the evidence for which van den Brink seems to consider insignificant (see preceding note) (Chlodnicki 1991:23/27, 1992:182-183).

into the Delta cannot be accurately tracked, however, until further excavation and publication provide more evidence for this transitional period at the sites mentioned above and those yet to be investigated. Presently, the apparent synchronism between the Lower Egyptian material culture of Buto Schicht II and Iswid Phase A with the Upper Egyptian Naqada culture material evidenced by the contents of the Minshat Abu Omar graves of MAO I-II and the apparent Naqada IIc presence at Beni Amir leaves the pattern of Naqada culture occupation of the Delta in question (see van den Brink 1989:78-79; von der Way 1993:133, Figure 26). Based on the available evidence, however, it would appear that previously unoccupied sites were first established prior to the cultural integration of those that remained occupied by the indigenous population.¹⁸

In Upper Egypt, the geographic distribution of cemeteries containing components of this date extends from Matmar in the north to Hierakonpolis in the south, now clearly encompassing the Badari district. The development during this period of three centers of population can be detected based on the size and/or concentration of cemeteries in the vicinities of Abydos, Naqada, and Hierakonpolis. Elite cemeteries at these three sites attributable to the later phases of this developmental stage also demonstrate an on-going centralization of political power, the earlier emergence of which can be traced back, at least at Hierakonpolis and Abydos, to the late Naqada I period (Wilkinson 1996:7 with references; see also Appendix C).

To the south, Kubanieh remained the northernmost Nubian A-Group site. The A-Group presence apparently persisted at this site into the Naqada IIIa-b period, with graves of the latest date being extremely rare (H.S. Smith 1991:94). At the First Cataract, however, stratigraphic evidence in the area of the Satet temple on the island of Elephantine demonstrates the presence of a Naqada culture settlement as early as the latest phases of this developmental stage of the culture complex (Naqada IId). Ceramic evidence, although slight, suggests that the settlement may have been established as early as Naqada IIa/b (Lindemann 1988:142). This settlement may be regarded as a Naqada culture enclave in what was basically Nubian A-Group territory²⁰ (Seidlmayer 1996:111).

Cemetery Evidence

Whether or not the Naqada culture developed out of the Badarian is moot. The changes in material culture were, in either case, accompanied by a shift in funerary practices. The custom of burying animals

¹⁸This appears to be true at least for Gerzeh and Abusir el-Meleq; questionable evidence has been cited for a Lower Egyptian presence at Harageh and Minshat Abu Omar (for a review of the evidence, see Chapter 3, note 25).

¹⁹Seidlmayer states: "The essential proof that this early settlement is really the ancestor of the later town of Elephantine, not a Nubian village supplanted later by an Egyptian foundation, is provided by the fact that the origin of the temple of Satet is securely tied to this context" (1996:111).

²⁰Kaiser's suggestion that southern Upper Egypt and northern Lower Nubia were at this time occupied by a type of Naqada colonial culture ("eine Art naqadoider Kolonialkulture") (Kaiser 1964:118/120), is in conflict with the evidence for the distinctly Nubian A-Group presence in the area. "Colonial culture" is here understood to imply a Naqada (albeit hybrid) culture presence.

in separate graves within the confines of human cemeteries was no longer observed. The unambiguous animal burials with mortuary associations documented for the two main developmental stages of the Naqada culture consist of entire animals buried in human graves.²¹

The archaeological evidence indicates that the practice was limited primarily to the cemeteries of Upper Egypt. At Minshat Abu Omar, the only extensive cemetery excavated in the Delta in part associated with the Naqada culture prior to the final transitional phase leading to the rise of the First Dynasty, no animal burials were documented in the graves published to date²² (Kroeper & Wildung 1994). The small cemetery at Beni Amir²³ also apparently has yielded no evidence for animal burial (Abd el-Moneim 1996a). Only one instance, that of a dog buried in a human grave, was documented for the cemetery at Harageh, and none were noted at Gerzeh. The grave at Abusir el-Meleq, where a goat skull and several ceramic vessels were the only contents, is unlike other animal burials and probably should not be considered as such (see Appendix A). These five sites constitute the principal cemetery evidence for the late Naqada II northward expansion of the Upper Egyptian culture complex.²⁴

In the cemeteries of Upper Egypt, the animal most often reported is generally and tentatively identified as gazelle. These animals were usually buried at the feet of the humans whose graves they shared. At Matmar eight instances have been documented in graves ranging in date from Naqada I through Naqada IIcd, with one additional instance in a grave dated to Naqada III. Additional individual occurrences have also been reported at Mostagedda and Armant. Only at Naga el-Hai was what may have been a similar burial identified as a goat.²⁵ The burial of dogs in human graves has been documented at Matmar, Abadiyeh, Naga ed Dêr, Mahasna, and Naqada²⁶ (see Appendix B).

Anomalies

Independent animal burials have been reported at predynastic sites in Upper Egypt. In one case the burials are clearly unassociated with mortuary practices, having been documented in the vicinity of the

²¹The animal burials in the elite cemetery at Hierakonpolis Locality 6, which have been dated to the Naqada Ic-IIa period, may have accompanied human interments (see Chapter 7).

²²A total of 420 pre- and early dynastic graves have been excavated; 261 of these have been attributed to the MAO I-II range (MAO I=255, MAO II=6) (Kroeper 1996:81); 114 graves were described in the publication of the cemetery. Of these 114, 105 were attributed to the MAO I-II range (Kroeper & Wildung 1994). An additional 4 MAO I graves were published in a separate article (of the 5 MAO I graves described in the article, 1 had been previously included in the cemetery publication) (Kroeper 1996). 152 Naqada II graves have yet to be published.

²³ As of 1992, 36 graves had been excavated. How many of them predate the Naqada III/early dynastic period is not stated (Abd el-Moneim 1996a).

²⁴In addition to the cemeteries at Minshat Abu Omar and Beni Amir, the Munich East-Delta Expedition has documented six pre- and early dynastic sites in the eastern Delta. The presence of cemeteries of the later "terminal predynastic" (Naqada III) and early dynastic periods are reported or suspected at all of them (Krzyżaniak 1989). For the cemeteries at these sites that have been excavated, the exact number and date of the graves cannot be determined due to lack of full publication (see Bakr 1988, 1994; Mostafa 1988). Some of these sites may possibly date to the Naqada II period (Wildung 1984:269). The only graves excavated (as of 1990) in the pre- and early dynastic levels at Tell Ibrahim Awad (Phases 7-5ab) have been dated to the First and Second Dynastics (Phase 5a-b) (van den Brink 1988:78ff, 1992:50-51).

²⁵See also Abydos, although in this case the remains may not represent an entire animal (see Appendix C).

²⁶Two instances are represented only by the presence of skulls in very disturbed graves.

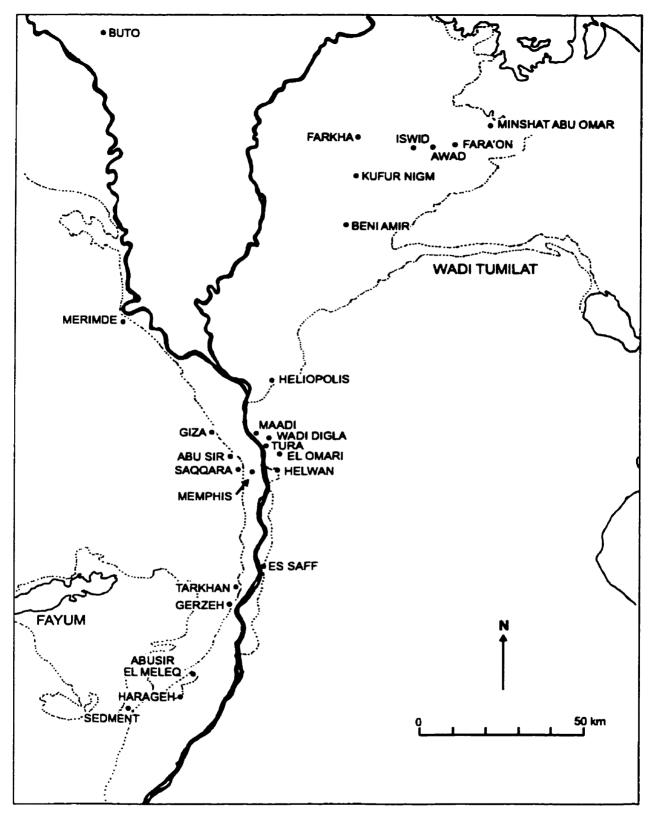
settlement rather than the cemetery. In the other, clarification of the true nature of the burials awaits future excavation.

Adaima

At Adaima, located approximately twenty-five kilometers downriver from Hierakonpolis, an extensive predynastic settlement and associated cemetery have been partially excavated. Ceramic evidence indicates the cemetery was in continuous use from Naqada Ic through Naqada IIIb (Midant-Reynes 1996a:239). For the portion of the settlement excavated to date, however, two principal periods of occupation have been detected. The first has been dated to late Naqada I through mid Naqada II, the second to Naqada III. The separate burials of five dogs and a young pig interred in leather bags or rolled in mats are considered contemporary with the first occupation period. At least two of these burials (dog and pig) had been "dug in virgin soil, apart from the other settlement remains"; the others were buried in settlement debris (Midant-Reynes 1996b:95, 1996c:14, 1993:362/365). Two of the dog burials were specifically dated to the Naqada II period based on the single ceramic vessel each contained (Leclant & Clerc 1996:314; Midant-Reynes, personal communication 1999). An interpretation of the implications of these burials must await their full publication.

Hierakonpolis

The report of an "animal cemetery" at Hierakonpolis Locality 68, where dog burials were reported as associated with an "Early Predynastic component" and cattle burials with a "Protodynastic component" (Hoffman 1982a:60, Hoffman in B. Adams 1987:196), was based on a surface survey. The area remains unexcavated and the presence of the presumed burials has never been verified (R. Friedman, personal communication 1998). Whether Locality 68 was in fact an animal cemetery or a human cemetery that included animal interments obviously cannot be determined without excavation. Under the present circumstances, the site, as perhaps the only Naqada culture cemetery exclusively dedicated to animals, can be considered a potential anomaly in the pattern of animal burial documented elsewhere for this culture complex.



Lower Egypt

Chapter 3

Lower Egypt

NEOLITHIC

Three principal culture complexes have been identified for the neolithic phase of the Lower Egyptian predynastic cultural sequence. Although the relative chronology and cultural relationships between the three remain at points unresolved, a number of cultural affinities have been noted and a general sequence, supported at present by available calibrated radiocarbon dates, has been established. Each is considered a segment of the neolithic continuum out of which the Maadi-Buto culture evolved.

Favum Neolithic A

Fayum Neolithic A,² generally considered the earliest food-producing culture in the Nile valley,³ is primarily known from a number of habitation sites strung out along what would have been at that time the north shore of the lake occupying the Fayum Depression. The sites consist of scattered hearths and

¹The sequence presented below is not universally accepted. Among others, see Eiwanger 1984:16-17, where he proposes Merimde phase I as earlier than Fayum A and the chronological chart in von der Way 1993:133, where the accepted sequence is Merimde II, Merimde II-IV = Omari, Merimde V = Fayum A.

²Kozlowski & Ginter divide the Fayum cultural sequence into three separate, apparently culturally discontinuous, phases. The second and third, designated Neolithic (Early: Fayum A or Fayumian and Late: Moerian, aka. Predynastic), are apparently separated by a chronological gap of at least one hundred years. For the Moerian, botanical and faunal remains at the presently documented sites suggest food-producing played a minor role (Kozlowski & Ginter 1989). Site FS-3 (see below) perhaps can be attributed to this cultural phase (Wenke & Brewer 1992).

The earlier Fayum B culture, now termed Qarunian, is generally considered epipalaeolithic, as it predates the appearance of domestic plants and animals in the area. The gap in occupation between the Qarunian and Fayum Neolithic A has been estimated as up to 1000 years (Wenke 1988). To date, only two human burials have been documented at sites attributed to the Qarunian culture (Wenke 1983: site FS-2 and Henneberg 1989: site E29G1). In the latter case, the Qarunian is designated "Early Neolithic" based on an assumed cultural relationship with what is believed to be a neolithic phase of cultural development in the Western Desert; Wenke et al., however, feel that this cultural relationship remains unclarified (Wenke 1988:37).

³For the present, calibrated radiocarbon dates published by Hassan (1985) support the chronological priority of Fayum A in relation to the settlement at Merimde (contra Eiwanger 1984:16-17), with a suggested time span of ca. 5200 – 4000 BC for Fayum A (Early Fayum Neolithic). Kozlowski & Ginter report a "temporal framework of more than 900 radiocarbon years" for the Fayum A culture (1989:163).

occupation debris with no archaeologically detectable evidence for permanent shelters. Faunal remains indicate a persisting reliance on hunting and fishing supplemented by the keeping of domestic species. The contents of a series of large mat-lined communal granary pits located on high ground adjoining one of the sites (Kom K) provide evidence for plant cultivation, suggesting an at least semisedentary way of life.⁴ No burials, human or animal, were found in conjunction with any of the habitation sites associated with this culture complex (Caton-Thompson & Gardner 1934; Wenke 1988).

"Merimdekultur"

A portion of an exceptionally large occupation area, created in part by settlement drift over a long period of time,⁵ has been excavated at Merimde-Benisalâme, on the southwestern edge of the Delta. The settlement at this site is presently considered that of the earliest fully sedentary neolithic community in Egypt. Recent excavation has identified five phases of occupation, the earliest of which was separated from the subsequent phases by what is believed to have been a possibly lengthy hiatus in habitation. The material culture of Phase I has no presently documented parallels elsewhere in Egypt⁶ (Eiwanger 1984:59), whereas that of the last three phases (III-V) exhibits affinities with the Fayum A culture (Eiwanger 1992:74). The presently available calibrated radiocarbon dates indicate a partial contemporaneity between the two, predating the final phase at Merimde⁷ (Hassan 1985).

Only in the first occupation phase were burials apparently placed in a clearly unoccupied area close to the settlement. In the later phases no designated cemetery was detected; burials appear to have been randomly situated near the occupied area, dug into earlier settlement debris⁸ (Eiwanger 1984:59, 1982:69-70). No animal burials were reported from Merimde.

⁴See Wetterstrom 1993:210 and Wenke & Casini 1989:153 for two opinions on granaries, cultivation, and a sedentary way of life.

⁵Available calibrated radiocarbon dates published by Hassan (1985) indicate a time span of 4800–4400 BC for occupation of the site, but an occupation of as much as 900 years preceding the Naqada I period of Upper Egypt has been suggested elsewhere (Hawass 1988:38). Material contemporary with sites in the Maadi area (see below) and later has also been found at Merimde, but at present there is no stratigraphically demonstrable continuity between the two (probably due to deflation; see Eiwanger 1984:17, note 45).

⁶Some limited material culture continuity exists between Merimde Phases I and II (Eiwanger 1988:53).

⁷See notes 1 and 3 above. Contra Kantor 1992:6, who feels that the "more developed" attributes of the later phase ceramic material at Merimde suggest that Fayum A and Merimde may be considered "successive phases rather than contemporary regional variants" of the Lower Egyptian neolithic sequence. See also Kozlowski & Ginter 1989:176 for a brief discussion of the contemporaneity and cultural relationship between the two.

⁸For the deposition of burials associated with the first occupation phase, see Eiwanger 1984:59, 1982:69-70. See Kemp 1968 for an analysis based on Junker's early excavation reports, where he discusses the possibility of settlement drift and its impact on the interpretation of the location of the burials from the later occupation phases (the earliest phase was unidentified at that time). Kemp's proposal that the burials were placed in "areas outside [the] immediate living-space" (1968:28) is apparently not universally acknowledged. For example, although Eiwanger accepts settlement drift as a partial explanation for the complicated stratigraphy at the site (1992:8; see 1988:12 for discussion of stratigraphic discontinuity of phases), he contrasts the burial practices of the first phase to that of the later phases, stating that the dead (of the later phases) were haphazardly buried within the settlement (1984:59). He does acknowledge, however, that the burials were not obviously associated with any specific structure (Eiwanger 1979:55, note 45). See Debono & Mortensen 1990:75-76 for a comparison of the Merimde and Omari settlement burials and their acceptance of settlement drift at Omari as an explanation for the location of burials in settlement debris at that site. See also Seeher 1992 for a brief review of these burial customs.

el Omari

Omari consists of a scatter of settlement and cemetery sites located in the vicinity of the Wadi Hof southeast of Maadi. The relative chronology of the various occupation areas has not been fully clarified. The various settlements have been interpreted as representing shifts in habitation by the local population possibly due to changing climatic conditions, as well as, in one case (Areas F/Fa), the presence of a different possibly earlier or later group of settlers (Debono & Mortensen 1990:78). The largest settlement (Areas A/B) is thought to represent an extended period of occupation with lateral shifts of the active habitation area. Burials are scattered throughout the settlement. These are thought to have been situated around the habitation area and eventually spread across the site as the occupation shifted. No animal burials were documented at Omari (Debono & Mortensen 1990:75-77).

Although affinities have been noted between the pottery of Omari and that of Merimde Phases II-IV (Debono & Mortensen 1990:40), in its final phases Merimde exhibits a more developed material culture, making it unlikely that Omari was a development of the Merimde tradition. Two options have been offered for the possible cultural and chronological relationship of the two: Omari may be regarded as either "a local development from a culture related to that of Merimde" or "roughly contemporaneous with Merimde II-IV but [having] a different origin and development" (Debono & Mortensen 1990:80-81). Presumably the first option does not rule out the possibility of contemporaneity. In either case, similarities in the ceramic material with that of nearby Maadi suggest Omari as a "direct predecessor" of that culture complex. However, a chronological gap, estimated at "a few centuries", leaves the cultural continuity between the two unresolved (Rizkana & Seeher 1987:64-65).

MAADI-BUTO CULTURE

Geographic Distribution

Archaeological evidence for this distinctly Lower Egyptian culture complex has been documented at sites in the Delta, along the northern Nile valley, and possibly in the Fayum. In contrast to the primarily homogeneous nature of the Naqada culture of Upper Egypt, ¹⁰ the material culture attested at these sites exhibits a more pronounced regional variability (Rizkana & Seeher 1987:58, 1989:80; von der Way 1992:1). Two localities, as the cultural designation attests, are presently considered the type-sites for this culture complex.

At Buto, in the north-central Delta, the lower stratigraphic levels of a habitation area, which predate

⁹In contrast, Debono & Mortensen do not consider Omari an "obvious precursor to the Maadi culture" (1990:81).

¹⁰This is not to deny the regional variations documented for that culture complex, although Hendrickx suggests that "the uniformity of the gravegoods in the Naqada cemeteries of Upper Egypt, over a distance of nearly 400 km, is remarkable" (1996:63). The use of grave goods as a gauge of regional uniformity, however, has been contested. See Hendrickx 1996:61-63 for a discussion of regional variability, including the statement quoted here and Wilkinson 1996:6-7 for a brief review of the various opinions on this topic. See Holmes 1988 for a discussion of the regional variation in lithic industries.

the transition in material culture discussed in the previous chapter, have been identified as the original occupation of an indigenous population (von der Way 1992:1). Similar cultural material has also been documented at two small settlement sites three kilometers to the southwest (Wunderlich 1989). In the eastern Delta, the ceramic material from the early occupation levels at Tell el-Iswid (south) and Tell el-Farkha exhibit an affinity to the pretransitional layer at Buto (Schicht II)¹¹ (van den Brink 1989:59; Chlodnicki 1991:27). On the southern edge of the western Delta, at Merimde-Benisalame, the contents of a small number of graves display strong similarities with the material culture known from sites in the Maadi area. At the time these graves were excavated, no contemporary settlement site was detected (Badawi 1980:75).

On the east bank of the Nile near the apex of the Delta, excavation has revealed portions of three cemeteries and a single settlement site. One cemetery was associated with the settlement at Maadi. The contemporary settlements associated with the cemeteries at Wadi Digla, one kilometer to the south, and Heliopolis, twenty kilometers to the north, remain unlocated ¹² (Rizkana & Seeher 1990; Debono & Mortensen 1988). Across the river, the presence of a cemetery, thought to have been destroyed by Old Kingdom activity in the area, is suspected near the Giza pyramids. There, a number of ceramic vessels, which find close parallels with material known from the Maadi area cemeteries, were discovered during early excavation at the foot of the Great Pyramid.¹³ Several similar vessels were unearthed during late nineteenth century construction activities in the vicinity of the village of Giza. It has been suggested that these may have originated from a contemporary settlement site (Rizkana & Seeher 1987:61; Mortensen 1985). Further evidence in the form of a more extensive corpus of similar ceramic material has recently come to light during construction activities not far to the northwest of the proposed original find-spot of the Giza village material, supporting the supposition of the presence of a settlement in that vicinity (el-Sanussi & Jones 1997). Ceramic evidence from an accidentally discovered and subsequently unexcavated cemetery at Tura and a partially excavated cemetery at es-Saff indicates that this (or a third) variant of the culture complex extended for approximately fifty kilometers to the south along the east bank of the Nile, almost as far as the entrance to the Fayum on the opposite side of the river. 14 No contemporary settlement sites were detected for either of these two cemeteries (Kaiser & Zaugg 1988; Habachi & Kaiser 1985; see also Rizkana & Seeher 1987:60-62).

At Sedment, located on the west bank of the Nile south of the entrance to the Fayum and approximately one hundred kilometers south of Maadi, one large and several smaller clusters of circular pits

¹¹ The pretransitional levels at Tell Ibrahim Awad have yet to be investigated or published (van den Brink 1992:54-55).

¹²Occasional scatters of sherds and additional burials containing contemporary material have been reported during modern construction activities in the areas to the south and southeast of the Wadi Digla cemetery (el-Sanussi & Jones 1997:252), suggesting a possible extension of the cemetery and the location of the settlement site.

¹³ Doubt has been cast on this location as the original find-spot for this material (el-Sanussi & Jones 1997:252-253).

¹⁴According to Rizkana & Seeher, the meager material from es-Saff (along with that from Sedment; see following note) exhibits "differences (despite a general similarity) which have a character of its own", suggesting another regional variant (1989:80).

were documented during the excavation of cemeteries at the site. Although many of the pits were empty, others contained pottery but no skeletal material. These pits have been interpreted as storage caches for unrecognized settlement sites predating the graves in their vicinity. Ceramic parallels have been noted for both Omari and Maadi and a date during the "transitional" phase between the fluorescence of each has been suggested for a Lower Egyptian occupation of the area¹⁵ (Williams 1982). If all the pits were in fact storage caches, no contemporary graves were noted.

Reexcavation of a site (FS-3) near Qasr Qarun in the southwestern Fayum has apparently confirmed limited ceramic parallels originally cited for the Maadi variant of the Lower Egyptian culture complex. ¹⁶ Based on radiocarbon measurements, however, the site has been dated much earlier than those in the Maadi area. ¹⁷ Moreover, in terms of cultural classification, it has been suggested that the site be considered Late Fayum Neolithic (Moerian) rather than Early Predynastic. ¹⁸ Faunal analysis reveals a strong reliance on hunting and fishing. Along with the lack of evidence for permanent shelters, this suggests the site may have been a seasonal encampment rather than a settled agriculturally based habitation (Wenke & Brewer 1992). No associated burials were detected.

Relative Chronology

Datable ceramic parallels with Upper Egypt indicate that the sites in the Maadi area were, for the most part, contemporary with the later phases of Naqada I and the earlier phases of Naqada II. An intersite relative chronology established for the three cemeteries in the area proposes an apparent cessation of use for the Maadi settlement cemetery coinciding with the advent of the cemetery at Heliopolis. The first phase of the cemetery at Wadi Digla was contemporary with the former, the second phase with the latter. ¹⁹ The Lower Egyptian presence at these sites appears to have terminated, at the very latest, during the early Naqada IIc period. The cemeteries at Merimde-Benisalâme and es-Saff also fall within this time frame ²⁰ (Rizkana & Seeher 1987:78, 1989:80-85, 1990:102-103).

¹⁵Rizkana & Seeher suggest the Sedment material may represent another regional variant of the Lower Egyptian culture complex (1987:62-63, 1989:84, note 200). See Kaiser 1985a and 1987b for discussions of Sedment (and what he, in accord with Williams 1982, considers comparable material from Harageh), where he proposes a separate "Middle Egyptian" culture complex occupation of the area, contemporary with "early(?)" Maadi (see also von der Way 1993:79). See also Debono & Mortensen 1990:38 for a brief comparison of the ceramic material at Sedment and Omari.

¹⁶Rizkana & Seeher consider the ceramic evidence inconclusive (1987:61).

¹⁷Wenke & Brewer estimate ca. 400 years earlier (1992:177).

¹⁸See note 2 above. von der Way prefers a classification as "lower Egyptian chalcolithic", in other words, Maadi-Buto culture (1993:12).

¹⁹This relative chronology is based on the excavated (and dated) portions of the Maadi settlement and all three cemeteries. The Maadi settlement and cemetery were only partially excavated (see Rizkana & Seeher: re: cemetery 1990:15, re: settlement 1989:84; further excavation has been undertaken in the settlement, see Caneva 1987, 1989 and Bökönyi 1985). The Heliopolis cemetery was also only partially excavated (see Debono & Mortensen 1988:10). It is thought that a possibly large portion of the western section of the Wadi Digla cemetery was destroyed by modern activity in the area (Rizkana & Seeher 1990:29). Evidence for further burials possibly associated with the Wadi Digla cemetery has been noted during modern construction activities (see note 12 above).

²⁰Although in the text of the article Hassan describes Maadi as a "settlement founded in Late Predynastic (Naqada II-III) times" (1985:105), his chronological chart based on calibrated radiocarbon dates indicates an overlap with the end of

The Lower Egyptian occupation layers at Buto (Schichten I-II), again based on ceramic parallels, have been dated to Naqada IIb-d. The earliest level (Schicht I) is thought to be contemporary with the second phase of the cemetery at Wadi Digla, possibly starting as early as the very end of Wadi Digla Phase I. Unlike the sites in the Maadi area, however, the Lower Egyptian presence at Buto persisted until Naqada IId (Schicht II), toward the end of which ceramic evidence indicates a complete transition to Upper Egyptian material culture (Schicht IIIa). The earliest presently attested occupation layers at Tell el-Iswid (Phase A)²¹ and Tell el-Farkha (Phase I),²² as mentioned above, are considered contemporary with Buto II and come to an end with (or, if abandonment is accepted for both sites, prior to) the replacement of the indigenous material culture by one of purely Upper Egyptian character dated to Naqada III²³ (von der Way 1993:16-18; van den Brink 1989:59; Chlodnicki 1991:27, Table 1, 1992:185, Table 1).

The distribution of datable sites indicates an apparent abandonment of the northern Nile valley by the Lower Egyptian culture complex during the early Naqada IIc period. The northernmost Naqada culture sites for this period were established in the area near the entrance to the Fayum with a few possibly extending into the eastern Delta.²⁴ At present there is no published evidence for a previous indigenous presence at any of these Naqada culture sites.²⁵ In the Delta, where all sites were apparently not abandoned, the indigenous culture appears to have been fully assimilated by the Upper Egyptian

Naqada I/beginning of Naqada II (1985:122, Figure 2). Kaiser had previously concluded, based on artifactual evidence, that these sites were at least in part contemporary with Naqada I continuing into the Naqada II period (Kaiser 1956:99-100); contra, e.g., Trigger, who places it later, at the end of Naqada II (see chronological table 1983:6). See Rizkana & Seeher 1987:20-22 for a brief discussion of previous opinions on the date of Maadi.

According to the intersite relative chronology established for the three cemeteries: Maadi settlement cemetery = Wadi Digla Phase I, Wadi Digla Phase II = Heliopolis cemetery (Rizkana & Seeher 1990:97). Based on the admittedly meager evidence from the graves at Merimde-Benisalâme and es-Saff, Rizkana & Seeher attribute the former to Wadi Digla Phase I and the latter to Wadi Digla Phase II (Rizkana & Seeher 1990:102).

²¹Strata I-VI (van den Brink 1989:59)

 $^{^{22}}$ "Phase Γ " used here is based on Chlodnicki 1991:27, Table 1 and 1992:185, Table 1; contra Chlodnicki 1992:171, where the "earliest" occupation phases are termed "3-4".

²³The latest Lower Egyptian material at Iswid is dated, as at Buto, to Naqada IId (van den Brink 1989:59). The latest Lower Egyptian material at Farkha is dated to Naqada IIc. Chlodnicki, contra van den Brink, assumes a contemporary site abandonment at Iswid and redates the latest Lower Egyptian material at Iswid to Naqada IIc (Chlodnicki 1991:27, Table 1). At Buto, the complete transition to Upper Egyptian material is dated to within the Naqada IId period (see Chapter 2 note 15), in other words, prior to Naqada III, which is the earliest date for the replacement of Lower Egyptian with Upper Egyptian material culture at Iswid and Farkha.

²⁴As mentioned in the previous chapter (see Chapter 2, note 14), the Naqada IIc date for the advent of the cemetery at Minshat Abu Omar has been contested by Kaiser, who redates it to Naqada IId1. Until the Beni Amir ceramic material is fully published and evaluated the Naqada IIc date proposed for the advent of that cemetery also remains in question.

²⁵That is, except possibly for Harageh, where a small number of ceramic vessels (from what were originally reported as graves but have since been alternatively identified as cache-pits) have been compared to material from Maadi. See Rizkana & Seeher 1987:63 for a brief discussion of this material, where they find the parallels less than conclusive. At the cemetery site of Gerzeh (dated Naqada IIc-IId1/2 per Kaiser 1987a:119, note 3, 1990:289), although only 15 km south of es-Saff, no Lower Egyptian material was detected (Seeher 1990:153). At the opposite end of the northern geographic range, at Minshat Abu Omar, despite the change in burial customs observed between the earlier (MAO I-II) and later (MAO III-IV) phases of the cemetery, the material culture as demonstrated by the grave goods is consistently Upper Egyptian. Per Kroeper, "not a single potsherd of Lower Egyptian type" was found (Kroeper 1992:144, 1987:82; see also van den Brink 1989:80); contra Wilkinson, who states: "some of the earliest – and as yet unpublished – graves at Minshat, which were poor in grave goods, apparently contained vessels of the northern/Maadi repertoire" (1996:5 citing a personal communication with Köhler).

Naqada culture by the Naqada III period.²⁶ No detectable transition in either indicative burial customs or grave contents has been noted within any of the Maadi-Buto culture cemeteries excavated to date.

Cemetery Evidence

Other than the cemeteries in the area of Maadi, very few graves have been excavated at sites associated with this culture complex. In the Delta, excavation has primarily revealed occupation layers of habitation areas. Only one contemporary grave has been excavated at Buto (von der Way 1986:196/Plate 29). In the small cemetery at Merimde-Benisalâme only about fifteen presumed graves were detected.²⁷ For the Nile valley south of Maadi, the suspected cemetery at Tura was never investigated and the excavated portion of the cemetery at es-Saff yielded only eleven graves, possibly only ten, as one locus apparently contained no skeletal material (Kaiser & Zaugg 1988; Habachi & Kaiser 1985; see also Rizkana & Seeher 1987:60-62). Whether or not the mortuary practices involving the burial of animals documented at the three Maadi area cemeteries were observed by the local population at these sites cannot be determined due to insufficient evidence.

Table 3.1: Maadi (variant): Independent Animal Burials

Cemetery	Dog	Goat	Human
Maadi	1	_	77
Wadi Digla	1	13	471
Heliopolis	5	6	48

The only recorded instances, consisting of individual independent burials of dogs and goats, ²⁸ occur in the cemeteries at Maadi, Wadi Digla, and Heliopolis. All of the dogs, with the exception of the one at Wadi Digla, were buried without grave goods. ²⁹ The goats, in many cases, were accompanied by quantities of ceramic vessels. Occasionally, traces of the matting or skins in which the animals had been wrapped were preserved. At Wadi Digla, the body of one of the better preserved goats provides evidence for the deliberate slaughter of these animals before burial. Evidence from Heliopolis suggests similar treatment for the dogs. No burials of entire animals within human graves have been reported at

²⁶Again, as mentioned in the previous chapter for the northward expansion of the Naqada culture, an accurate temporal and geographical pattern for the assimilation of the Lower Egyptian culture complex awaits further excavation and publication of the Delta sites.

²⁷Badawi published the contents of the 3 intact graves out of the 5 graves he reported (Badawi 1980). Rizkana & Seeher estimate 15 as the possible total number of graves based on "units" of pottery found in the area (1987:61, note 112, 1990:97, note 94 citing a personal communication with Eiwanger).

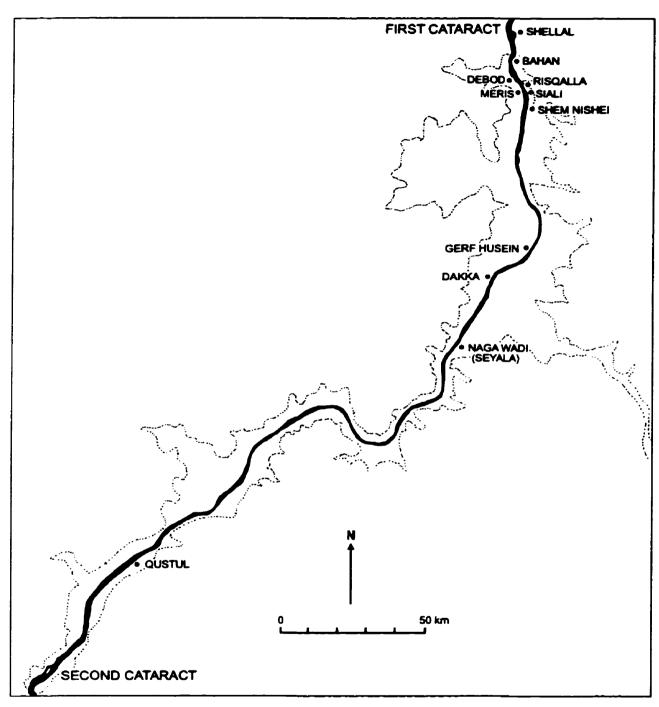
²⁸Technically, a few of these animals remain unidentified and two may be sheep. All were originally reported as gazelles. The ones from Wadi Digla were actually originally "officially" identified as such (Debono 1950:231, 1952:635-637; Moustafa 1953:213; Rizkana & Seeher 1990:93). The ones at Heliopolis, also originally identified as gazelles, are now assumed to be goats based on the revised identification of the animals at Wadi Digla. (see Appendix A)

²⁹The grave goods attributed to the dog burial at Wadi Digla appear to be in doubt (Rizkana & Seeher 1990:60; see also Appendix A).

any of these sites (see Appendix A).

Based on the intersite relative chronology established for these cemeteries, an evolution of mortuary practices involving the independent burial of animals has been proposed. The occurrences increase from the single burial of a dog at Maadi, contemporary with the earlier phase of the cemetery at Wadi Digla to which no animal burials are attributed, to the later coeval burials at Wadi Digla (14 animals) and Heliopolis (11 animals).³⁰ It should be noted, however, that this proposed evolution is based on the limited excavated areas of the cemeteries at Maadi and Heliopolis and may not reflect the original contents of the unexcavated portions of these two cemeteries. Nevertheless, the practice apparently ceased with the abandonment of these cemeteries. No independent animal burials have been documented in the presently documented cemeteries attributable to the Naqada culture in Lower Egypt.

³⁰Coinciding with this proposed pattern of development is the occurrence of parts of butchered animals in human graves. None were documented at Maadi, while three occurrences each have been noted at Wadi Digla (Phase II) and Heliopolis, respectively, (Rizkana & Seeher 1990:93; see also Appendix D).



Lower Nubia

Chapter 4

Lower Nubia

A-GROUP

Cultural Sequence

Three main developmental stages have been proposed for this Lower Nubian culture complex.¹ Each has been dated based on the presence of Naqada culture imports. The first developmental stage, designated Early A-Group, was contemporary with phases Ic through IIa-c/d of the Naqada culture. It has been proposed that an initial phase of this developmental stage predates the influx of Naqada culture material (H.S. Smith 1991; see also SJE 1972:28). The following stage, Classic A-Group, corresponds to the early Naqada III period. The final stage, Terminal A-Group, encompasses the transition from the end of Naqada III on into the early First Dynasty. The first half of the First Dynasty has been suggested as the termination date of the A-Group as an archaeologically identifiable population (SJE 1972:28-32; for qualification of this basic chronological format see Appendix A).

Geographic Distribution

Cemetery sites containing components definitely attributable to the various subphases of the Early A-Group stage were apparently limited to southern Upper Egypt and northern Lower Nubia, extending from Kubanieh, approximately ten kilometers north of the First Cataract, to the region of Dakka-Seyâla in the south, less than halfway between the First and Second Cataracts (SJE 1972:28). The earliest securely datable graves associated with this developmental stage, contemporary with the Naqada Ic-IIa period, have been identified in cemeteries throughout this geographic range.² Components of a number

¹The terminology used here is Nordström's; for its correspondence to Trigger's, see SJE 1972:28-29.

²Although the cemetery at Khor Bahan is often cited as containing the earliest datable A-Group graves (based on Reisner's original opinion ASN I 1910a:316), H.S. Smith's reanalysis of the artifactual evidence from a number of A-Group cemeteries has demonstrated the presence of graves of this date (and possibly earlier) in cemeteries throughout the geographic range of the Early A-Group (1991); see also the same article for a brief argument in support of the possibly more extensive geographic

of these cemeteries have also been attributed to the proposed initial pre-Naqada import phase of the Early A-Group (H.S. Smith 1991).

Despite the developing Naqada culture settlement at Elephantine, the Lower Nubian presence at Kubanieh apparently persisted into the following Classic A-Group stage. Most of the latest securely datable graves at that site were contemporary with the Naqada IIIa period, with only a few dated to Naqada IIIb. Burials as late as this date have also been attested at Shellal, adjacent to the First Cataract (H.S. Smith 1991:94/98). These two cemetery sites were apparently no longer in use during the final phase of the Terminal A-Group stage. To the south, however, sites associated with the second and third developmental stages have been documented throughout Lower Nubia as far as Melik en-Nasir, south of the Second Cataract (SJE 1972:29).

Within the region encompassed by the later A-Group expansion to the south, three small cemeteries are noted for the large size of a number of the graves and the intimated richness of the burials.³ Two lay near Seyâla, the third just north of the Second Cataract at Qustul. In Cemetery 137 at Seyâla, at least one grave containing the remains of rich burial goods can be dated to Naqada IIIa1/IIIa2. The other graves in this cemetery may pre- and/or post-date this burial within a limited time span. At Cemetery 142 (Naga Wadi) just south of Seyâla, although the plundered graves retained little Naqada material, the majority of those for which there are data appear to range in date from Naqada IIIb through the early First Dynasty. Cemetery L at Qustul, notable for the exceptionally large size of a number of the graves, appears to have encompassed a time span contemporary with that of the two apparently successive elite cemeteries in the vicinity of Seyâla (H.S. Smith 1994, 1991:107-108).

Cemetery Evidence

Two sites located in northernmost Lower Nubia provide the majority of evidence for mortuary practices involving the burial of animals for this culture complex. Ten graves containing animals were documented among an isolated cluster of human burials in Cemetery 7 at Shellal. Fifteen similar graves lay scattered among human burials in Cemetery 17 at Khor Bahan, only approximately nine kilometers to the south.

These animal burials contained no datable artifacts and none were obviously associated with any specific human burial. Nevertheless, based on artifactual evidence from the human graves among which these burials were scattered, they may be dated to the first developmental stage of the A-Group, contemporary, for the most part, with the second half of Naqada I and early Naqada II.⁴ At Shellal, one of the animal burials was cut by a human grave, demonstrating, in that case, the animal burial was the earlier of the two. This human burial belongs to the group of graves in that cemetery associated with the proposed

distribution of the Early A-Group to the south.

³For a discussion of other cemeteries with graves of larger than average size see OINE III 1986:14.

⁴See Appendix A: A-Group for an explanation of the basis of this dating.

initial phase of the Early A-Group.⁵ The fact that the animal burial predates this early grave indicates that the custom of burying animals within the confines of human cemeteries was observed from the very start of the A-Group as an archaeologically detectable culture complex.

The majority of animal burials in these two cemeteries were those of dogs. A total of thirty-three dogs were documented as single, double, and multiple burials in twenty-one out of the combined total of twenty-five animal graves from both cemeteries. Evidence, in the form of stomach contents, suggests that most of the twenty-one dogs buried at Bahan did not die natural deaths. At Shellal, one of the dogs was buried with a goat. In both cemeteries, only four animal graves did not contain dogs; two were individual burials of goats and two were individual cattle burials (see Appendix A). Only one other independent dog burial has been noted in the presently documented A-Group cemeteries.⁶ At Risqalla, less than ten kilometers upriver from Bahan, a grave containing the bodies of two dogs lay surrounded by a cluster of Early A-Group human burials at the southern end of Cemetery 30. This double dog burial was contemporary with at least some of the animal burials at Bahan (see Appendix A).

Five sheep/goat burials similar to those attested at Shellal and Bahan were also documented in other A-Group cemeteries. Two individual independent burials have been noted in each of two cemeteries at Shem Nishei (Cemetery 44) and Gerf Husein South (Cemetery 79), and another single burial in Cemetery 41 at Meris⁷ (see Appendix A). Except for the sheep burial in Cemetery 41, which may be contemporary with early burials at Bahan, the others appear to be of a later date and can probably be attributed to a very early phase of the Classic A-Group developmental stage.

Cattle burials have also been documented in other A-Group cemeteries. Two of the four noted in Cemetery 41 at Meris lay among an isolated cluster of human graves originally designated "B-Group". These burials, like the two at Bahan, may be attributed to an early phase of the first developmental stage of the A-Group, based on the suggested revised date of the human graves in their vicinity. The second set of cattle burials lay near another group of human graves of a later date. This set of burials appears to be contemporary with the individual burial of a cow at Kubanieh (south) to which they have been compared (see Appendix A). These cattle burials, like those of the sheep/goats at Shem Nishei and Gerf Husein, can probably be attributed to an early phase of the Classic A-Group.

Cattle and sheep/goat burials have also been documented in two of the three elite Classic/Terminal A-Group cemeteries mentioned above. In Cemetery 142 (Naga Wadi) near Seyâla, the three sheep/goats

⁵See H.S. Smith's reanalysis of the artifactual evidence from the isolated cluster of graves at Shellal under discussion here, where he suggests that they may belong to the initial (pre-Naqada import) phase of the first developmental stage of the A-Group (1991:94/101).

⁶The status of the dog burial (144) in Cemetery 79 at Gerf Husein South is ambiguous (see Appendix A).

⁷One additional burial of an unidentified "young animal" in Cemetery 44 may also be that of a sheep/goat. The other sheep/goat burials documented in cemeteries with components of this period are of questionable date (see Appendix A).

⁸Actually, except for one of the cow burials, which lay a short distance to the north of the patch of human graves, neither the grave containing the other cow nor that of a sheep (mentioned above) appear on the cemetery map. Their spatial relationship as being "among" the human burials is, thus, an assumption.

⁹Here too, only one appears on the cemetery map, but the location of both is described in the text.

and one of the two "ox" burials lay isolated at the southwestern end of the cemetery, with the sheep burials forming a separate cluster at a short distance from that of the ox. Despite the fact that these burials were originally attributed to the "B- and C-Groups", it seems likely that at least those of the sheep/goats were contemporary with the one datable human grave in their immediate vicinity and thus with the other Terminal A-Group burials in this cemetery. The date of the ox burials, however, is more problematic. Although the location of only one is indicated on the cemetery map, both were described as occupying "large pits". The exceptional size of the identifiable grave has led to the suggestion that it was an intrusive burial (H.S. Smith 1994:376), thus calling into question the date of both. As so little information was provided concerning the details of these burials, their contemporaneity with the Terminal A-Group use phase of this cemetery must remain in doubt (see Appendix A).

Only cattle burials were documented in Cemetery L at Qustul. Although eight were reported, only seven graves actually contained animal remains. Based on their distribution they appear to be contemporary with the later graves in this cemetery, ranging in date from the Classic through the Terminal A-Group period (see Appendix A).

Table 4.1: A-Group: 1	Independent :	Animal Burials b	v Cultural Phase
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Cultural Phase	Cemetery	Doga	Sheep/Goat ^a	Cattle	(?)	Human Graves
Early A-Group	Shellal 7(Knoll A)	12	2	_		51
	Bahan 17	21	1	2		61
	Risqalla 30	2	-	_		8
	Meris 41(Patch L)	-	1	2		41
"early Classic"	Kubanieh (south)	-	_	1		?
A-Group	Meris 41 (Patch B)	-	-	2		21
	Shem Nishei 44	_	2	-	1	30
	Gerf Husein 79		2			?
Classic/Terminal	Naga Wadi 142	-	3	2(?)		11+?
A-Group	Qustul L		-	7		25

a) The counts in this table reflect total number of animals not number of graves (see Appendix A).

Most of the cemeteries from which these animal burials have been reported are located north of Dakka, well within the presently documented geographic range of the first developmental stage of the A-Group culture complex. Although the distribution of contemporary cemetery sites associated with the Early A-Group stage is generally believed not to extend much further south, cemeteries associated with the two following stages do. And yet, no animal burials, other than those of cattle and sheep/goats in the two widely separated elite cemeteries, have been documented in the Classic and Terminal A-Group cemeteries to the south. Whether this is an archaeologically demonstrable cultural fact or the result of

¹⁰Naga Wadl: see ceramic evidence in grave 18 (ASN IV 1927:216).

inadequate publication remains in question.¹¹ However, if the suggested chronological and geographical distributions of the animal burials are correct, then it would appear that by the time of the Classic A-Group expansion to the south, funerary practices incorporating the independent burial of animals had altered in terms of the variety of species involved and in the final phases of the culture had become the prerogative of the highest strata of the southern elite.

¹¹It should be noted that in the southern cemeteries excavated and published by the ASN, animal burials associated with the period under discussion here apparently start to be listed as "empty graves". Starting with Cemetery 44 in the region of Dehmit, where three animal burials listed by G. Elliot Smith in ASN I 1910c:167 are listed as "empty" (2 burials) or not described at all (1 burial) in the grave catalog for that cemetery in ASN I 1910a:258, no other animal burials are reported in A-Group cemeteries to the south, except for the two burials listed under the heading "Empty graves" for Cemetery 79 in the Gerf Husein district (ASN II 1912a:151) (see Appendix A: A-Group: Shem Nishei: Cemetery 44 and Gerf Husein South: Cemetery 79) and those of cattle and sheep in the "elite" Cemetery 142 (Naga Wadi) near Seyâla. Whether other animal burials went unreported or simply did not occur remains in question. Emery & Kirwan's (1935) summary publication of the cemeteries surveyed and excavated between Wadi es-Sebua and Adindan (most cemeteries are identified as to cultural affiliation but not described) also leaves the lack of animal burials in doubt. On the other hand, no animal burials were documented in any of the A-Group cemeteries (except for Qustul: Cemetery L) excavated by the University of Chicago's Oriental Institute Nubian Expedition in the region between Abu Simbel and Sudanese border (OINE IV 1989) or at Serra East (OINE X 1993), nor were any reported in the Scandinavian Joint Expedition's thorough publication of the Classic and Terminal A-Group cemeteries in their concession (SJE 1972).

Chapter 5

Independent Animal Burials

CONTEXT

The all-encompassing character of an assumption such as "reverence for a sacred animal" as an explanation for the independent burial of animals in human cemeteries inherently precludes the possibility of differing intent for the burial of each of the species that occur. Once that assumption is questioned, alternative motivations may be given equal consideration. In order to evaluate all the possible interpretations for such burials, the role of each species and the nature of their burials must be viewed within the contexts of the associated communities of the living and the dead.

First, an attempt to reconstruct the faunal component of the subsistence economy of each of the three culture complexes with which such burials were associated should contribute to an understanding of the role of the various species in the economic life of the community. Next, an analysis of the mortuary practices of each of these cultures should reveal the customary methods employed for signifying status differentiation and thus theoretically define the characteristics of postmortem reverential treatment of the prestigious dead. Finally, a review of the available iconographic evidence may perhaps suggest which species, if any, were considered numinous by these preliterate cultures. A synthesis of these separate avenues of investigation should firmly place the documented instances of independent animal burial in their original cultural contexts. Only then may the possible alternative motivations for these burials be adequately assessed.

Species Identification

As the preceding review of the cemetery evidence reveals, the custom of independent animal burial has been documented in cemeteries associated with the Badarian, Maadi (variant), and A-Group culture complexes of the predynastic period. Three genera, Canis, Ovis/Capra, and Bos, have been identified from these burials. The tentative nature of several of the original identifications necessitates the less than species-specific categories.

Of the three culture complexes, the identifications of the Badarian material are the most inconclusive, in that in some cases genus and in others species are left in doubt. In fact, none of the faunal remains from the independent burials were positively identified, including the two submitted for expert examination (see Appendix A). The identifications for the A-Group burials are also unconfirmed if less indefinite. In all cases, the assumption, apparently on the part of the excavators, was that all three attested species were domestic (see Appendix A). In contrast, the faunal material from the Maadi and Wadi Digla cemeteries of the Maadi culture has undergone thorough reexamination, resulting in a conclusive revision of some of the original identifications. What were originally identified as gazelles have now, for the most part, been identified as goats (Boessneck 1989:120). This revised identification has prompted reevaluation of the identification of similar animals, also originally identified as gazelles, buried at Heliopolis (Rizkana & Seeher 1990:93). The original identification of the canids as domestic dogs was reconfirmed for the two burials examined (Boessneck 1989:101-103/120; see Appendix A).

Table 5.1: Independent Animal Burials

	Badarian	Maadi	A-Group	Elite A-Group
Cattle	2	_	7	9(?) ^e
Sheep/Goat	2	19°	8	3
Dog	2(?)a	7	35 ^d	_
(?)	2 ^b	-	1	_

a) One of these may not be an independent animal burial (Mostagedda). b) These 2 animals were tentatively identified as either Bos or goat (Deir Tasa). c) Six of these animals (Heliopolis) originally identified as gazelles, are assumed to be sheep/goats based on the revised identifications of the animals at Wadi Digla. Six "unidentified quadrupeds" (Wadi Digla) were originally identified as gazelles and are now believed to be sheep/goats. d) These 35 dogs occurred as single, double, and multiple burials (including one instance of a dog and goat together) in a total of twenty-two graves (Shellal, Bahan, Risqalla). d) Two of these may be intrusive burials of a later date (Naga Wadi).

These identifications, inconclusive or otherwise, are all that are available. The present location of the Badarian and A-Group faunal material, if it was preserved, is unknown. Allowing for the unavoidable difficulty in distinguishing between sheep and goat and assuming the doubtful identifications were not wild species, the animals documented in independent burials were cattle, sheep/goats, and dogs. The fact that these domesticated forms have been identified at Fayum Neolithic A sites and at Merimde-Benisalâme may support the validity of this assumption (Fayum: Gautier 1987:176, 1976; Wenke 1988:39-40; Merimde: von den Driesch & Boessneck 1985). In varying frequencies, all three

¹Due to similarities in skeletal structure, distinctions cannot be accurately made (particularly among post-cranial bones) between the wild or domesticated forms of canids (dog/jackal) and Bos as well as between closely related domesticated species such as sheep and goat without zoological evaluation. Even after analysis, the distinction is not always possible (particularly in the last case, hence, the category "sheep/goat"). See Reed 1966; also Reed 1960: (dog) 128-129, (sheep and goat) 129-130, (cattle) 141-142. Re: the possible identification of one of the Bos? buried at Badari as a "cow buffalo" (Syncerus?, Homioceras?), see Reed 1960:142 for the possible presence of buffalo in the prehistoric Nile valley; see also S. Payne in Payne 1993:260.

species occur in burials associated with both the Badarian and A-Group culture complexes, only the last two in burials associated with the Maadi variant of the Lower Egyptian culture complex.

Subsistence Economy: Faunal Component

The question now remains: What role did these animals play in the life of their respective communities? Ideally, in order to attempt to answer that question, the evidence for the faunal component of the subsistence economy of the settlements associated with each of the cemeteries in which the burials occurred should be investigated. In reality, that is not possible. Associated settlements were rarely detected for specific cemeteries. Thus a more general review of the evidence for each culture complex as a whole is necessary. The fact that the evidence for two of the three culture complexes derives from sites confined to relatively short stretches of the river suggests that generalizations may be valid for at least the Badarian and Maadi (variant) cultures.² The unequal geographical and chronological distributions of one of the species documented in A-Group animal burials may, however, indicate local variations or a shift in emphasis in faunal exploitation that may not be reflected in a general reconstruction of this culture's subsistence economy.

Accurately identified faunal material from both settlement and cemetery sites is well documented for only the Maadi (variant) culture complex. The majority of Badarian and A-Group faunal material derives from the cemeteries. However, indirect evidence in the form of cultural artifacts either manufactured from animal by-products or indicative of hunting may be used to contribute to a reconstruction of a culture's subsistence economy.

Badarian

The remains of most habitation sites identified as Badarian were scarcely more than thin layers of organic and ashy debris and scatters of pits, some of which were thought to have originally been used for grain storage. In one case, some of the organic material was identified as goat-dung.³ Faunal material was only rarely recovered from the occupation debris, occasionally in conjunction with cooking pots⁴

²Badarian sites: ca. 10 km from Badari to Mostagedda (for the relevant cemetery sites) out of ca. 35 km for the entire Badari district; Maadi (variant) sites: ca. 21 km from Wadi Digla to Heliopolis.

³Mostagedda Area 1800 (a continuation of Area 11700/11800): how this determination was made is not stated (Brunton 1937:21 and illustrated stratigraphic section Plate LXXI-B). Only this case, of the instances of "animal droppings" cited in Krzyżaniak 1977:70 as evidence for the keeping of "herds of goats" in enclosures in or close to the settlements, is organic settlement debris identified as such in the original publication (Brunton 1937:20-21/Plate LXXI-B). For Krzyżaniak's cited instances: Badari (sic, probably Mostagedda) Area 2200-3500, Mostagedda Areas 1600-1180 (sic, probably 11800) see Brunton 1937:15-16/20-21; Areas 11700/11800 and 1800 make up a portion of the last. Organic material identified as "the dung of some small animal" was also reported in what might have been settlement debris in Area 5200 (Cemetery 5200:5206: Brunton & Caton-Thompson 1928:9).

⁴No faunal remains were reported by Caton-Thompson from the Badarian levels of the stratified settlement site at Hemamieh (Brunton & Caton-Thompson 1928:74-76). The only faunal material reported from the settlement site most likely associated with the two cemeteries (5100 and 5300/5400) in which five of the independent burials (2 cattle, 2 sheep/goats, 1 dog) occurred was "two small horn cores" (species unidentified) and "the mandible of a small ruminant (gazelle?)" (Badari

(Brunton 1937:58). Most of this material was simply identified as "animal bone(s)". Other than the animal burials, the bulk of the faunal remains derive from food (meat) offerings in graves. For the most part, these remains were described as those of a "small ruminant" or "immature animal", with "gazelle(?)" or "possibly a very young calf" occasionally offered as tentative species identifications (see Appendix D). Animal hides, some of which were identified as those of either goats or gazelles, also occurred in the graves as garments and wrappings. Although admittedly meager, this evidence was the basis for the assumption that "herds of oxen, sheep, and goats which we may suppose to have been domesticated" were kept⁵ (Brunton & Caton-Thompson 1928:41; see also Reed 1966:191-192, 1960:133/136/142). Fragmentary rough stone walls on the high desert were thought to possibly have been the remains of cattle enclosures (Brunton & Caton-Thompson 1928:40).

Based on the occurrence of flint arrow heads, hunting was assumed to have also played a part in the subsistence economy (Arkell & Ucko 1965:150; see also Brunton & Caton-Thompson 1928:41). Occasional finds of antelope horn, hippopotamus tusks, and crocodile plates (Brunton & Caton-Thompson 1928:34; Brunton 1948:6) may support this conclusion, assuming these animals were originally procured for their meat rather than their extant by-products scavenged.⁶ The numerous "ivory" artifacts in the graves, a portion of which must have been hippopotamus ivory, suggest at least some hunting of this species occurred. However, only the bones tentatively identified as those of gazelles may represent wild species among the faunal remains from graves of this date (see Appendix D). Much of the material derived from food (meat) offerings, but four instances were of entire animals (see Appendix B). These identifications, however, should be treated with extreme caution, especially in light of the revised identifications of animals buried at Wadi Digla.⁷ If the tentative identification as gazelle is correct,

Area 5500: Brunton & Caton-Thompson 1928:5-6) as well as "fragments of animal bones" and a "goat's (?) hom" (Badari Area 5200: Brunton & Caton-Thompson 1928:9).

⁵For the nature of settlement debris: Badari (Brunton & Caton-Thompson 1928:5-6), Mostagedda (Brunton 1937:8-25), Matmar (Brunton 1948:4-7). For "animal bones" in settlement debris: Mostagedda Area 3300 (Brunton 1937:12), Area 100 (Brunton 1937:19; see also 1937:58), Badari Area 5500 (Brunton & Caton-Thompson 1928:6). For meat offerings in graves: Mostagedda (Brunton 1937:30-31/57-58), Matmar (Brunton 1948:11); see also Appendix D. For animal skin garments: Brunton & Caton-Thompson 1928:40, Brunton 1937:47, Brunton 1948:10.

⁶See, e.g., Rizkana & Seeher 1989:70 for the suggestion that the hippopotamus bones found at the Maadi settlement site were probably scavenged.

The fact that the Wadi Digla animals were "officially" identified as gazelles (Moustafa 1953) demonstrates the difficulty in distinguishing sheep/goat bones from "other, similarly-sized Bovidae such as various gazelles and antelopes" (Reed 1960:130). The original identification of the Badarian animals as "gazelles(?)" was never confirmed. In reference to similar burials of the Naqada period, Brunton states: "The term gazelle is used for what was no doubt some kind of small antelope. That they were actually gazelles is most likely; but one has been identified as a duiker" (1948:22). The remains that were identified as a duiker (Cephalophus sylvicultrix), however, were not any of the whole animals designated "gazelle(?)", but those of a food offering (skull) from an unregistered Naqada III period grave in the Matmar 200 series (Brunton 1948:24/29). No zoological identifications were made for any of the entire animals found in the Badarian or Naqada I-III period graves or for most of the faunal material representing food (meat) offerings. See "Identifications" sections in: Brunton & Caton-Thompson 1928: Badarian:38 (only two of the animals in the independent burials are discussed here), Predynastic:62-64; Brunton 1937: Tasian:33, Badarian:58-59, Predynastic:91-92; and Brunton 1948: Badarian:11, Predynastic:23, Protodynastic (Brunton used this term for the early dynastic period, but the graves referenced here can be dated to the Naqada III period):29 (where the skull from a food offering is identified as that of a duiker). Brunton's apparent lack of distinction between gazelles and goats is demonstrated by his statement, in reference to the independent animal burials, that "gazelles and oxen were sometimes

however, then the presence of young animals might suggest some limited form of human management of the species rather than hunting⁸ (see Chapter 6). The presence of shell hooks and an abundance of fish bones as well as the occasional turtle "plate" indicate an exploitation of aquatic resources (Brunton 1937:30/56, 1948:11; Holmes 1996:187-188). Infrequent finds of artifacts identified as throwsticks (although they might have been castanets) and awls made of bird bone suggest fowling was practiced.⁹

Although the limitations imposed by the sparse faunal material are exacerbated by the lack of accurate identification, what evidence there is allows for several alternate interpretations. If the questionably identified independent animal burials are assumed to be domestic species and all other tentative identifications accepted as correct, then there is evidence, albeit slight, for the keeping of herds supplemented by hunting and/or the capturing and rearing or attempted domestication of a wild species (see Chapter 6). In the case of the latter or if the gazelles are assumed to be misidentified sheep/goats, then the evidence for stock-raising is strengthened and the evidence for hunting for the procurement of meat becomes extremely circumstantial. There was thus either a dependence on fully domesticated stock, or on fully and incipiently domesticated stock, or a combination of herding supplemented by hunting. An assumption concerning the role of the dog, as either hunter's or shepherd's companion or possibly both, depends to some extent on which proposed subsistence strategy is accepted as valid.

Maadi (variant)

In-depth analysis of the faunal remains from the settlement at Maadi has revealed the relative frequency and therefore, theoretically, the relative economic importance of the various species documented at the site. Domesticated animals constitute by far the largest portion (approximately eighty-six percent) of the faunal assemblage, with wild species (not including birds and fish) accounting for less than three percent of the total. This suggests the role of hunting was negligible, ¹⁰ while indicating a reliance on domestic livestock and to a substantially lesser degree on fowling and aquatic resources (Boessneck 1989:121, Diagram 12; Boessneck 1988:22, Diagram 2). In addition to fish bones, numerous shell fragments and bones of the soft-shelled turtle and the shells of freshwater molluses provide evidence of the range of exploitation of the latter (Rizkana & Seeher 1989:76; Bökönyi 1985:498).

Six domesticated species, cattle, sheep, goat, pig, ass, and dog, are well attested in the settlement material. Kill patterns demonstrate a mixed exploitation for most, with meat and hides (primary slaughter

ceremonially buried in graves of their own" (1929:465). Previously the animals were tentatively identified as sheep/goats – in one case, after expert examination as "probably a sheep" (Brunton & Caton-Thompson 1928:38; see Appendix A).

⁸Reed suggests that the kill pattern evidenced by the predominance of subadult gazelle bones identified at the settlement site at Toukh may reflect "an unknown type of hunting practice or preference, or perhaps...an early experiment in domestication of gazelles" during the Gerzean (Naqada II) period in Upper Egypt (1966:192).

⁹Throwsticks: Brunton & Caton-Thompson 1928:32/Plate XXIII; Brunton 1937:56/Plate XXV. Bird bone awls: Brunton & Caton-Thompson 1928:33; Brunton 1937:54.

¹⁰Especially in light of the fact that much of that 3% represents remains of animals not originally procured for their meat (Rizkana & Seeher 1989:76).

products), milk/cheese(?) (secondary products)¹¹ and "labor" being provided in various combinations by the first five. Butchery marks on bones indicate that in addition to its usual function as a beast of burden even the ass occasionally was consumed. Because hunting was of no apparent importance, the role of the dog may have been related to animal husbandry. There is no evidence that dogs were eaten. Supplementary faunal evidence, in terms of food (meat) offerings, is limited to six graves in two out of the three cemeteries (see Appendix D). Only one set of bones, the leg of a newborn pig, was positively identified. (Rizkana & Seeher 1989:76, 1990:35; Boessneck 1989:87-125; Bökönyi 1985)

Although the settlement sites associated with two of the three cemeteries in the Maadi area were never located, it may be safe to assume that the structure of the faunal component of the subsistence economy revealed by this analysis is indicative of the Maadi (variant) culture complex as a whole. Each of the two species noted in the independent burials is well attested in the settlement material, from which their distinct roles in the life of the community may be extrapolated. The sheep and goats provided milk, meat, and hides, while the dogs perhaps served the traditional dual function of shepherd's assistant and guardian of the flocks.

A-Group

Only a relatively limited number of A-Group habitation sites have been detected. Many may be archaeologically inaccessible due to silt accumulation (SJE 1972:23/29). Those investigated predominantly date to the later phases of the culture complex. They provided very little faunal material and much of it remained unidentified (e.g., see Meris, Debod, and Dakka, ASN I 1910a:169/215-218; ASN III 1915:9). However, the identified material, although minimal, indicates the presence of cattle, goats and/or sheep (Bietak & Engelmayer 1963:25; see also SJE 1972:19/23-24 and 158 for Site 340). Nevertheless, most of the direct evidence for domesticated species derives from the burials of cattle and sheep/goats in cemeteries attributable to all three developmental stages of the culture complex as well as those of dogs in cemeteries limited to the earliest. Supplementary material in the form of the remains of food (meat) offerings was rare and only infrequently identified, in those instances, generally and tentatively as the bones of young goats (see Appendix D). Indirect evidence for the presence of cattle from the Classic A-Group period on is provided by the use of cattle-dung temper in the ceramics. Although this is not considered definitive evidence of stock-raising during this period (SJE 1972:24), it seems a logical assumption that if dung became "an important raw material for the Nubian potters", a regularly available supply would be necessary.

The cemeteries also provided examples of ad hoc tools of unaltered animal horn and ribs with sharpened ends that were identified respectively as those of gazelle or goat and "ox (?)". However,

¹¹Wool would probably not have been an important secondary product, as the species of sheep documented in Egypt at this time had "hairy" rather than "wooly" coats (see Zeuner 1963:180; but see also Reed 1960:137-138).

most animal horns reported as grave goods were not identified as to species.¹² Remains of sewn leather garments, caps, and bags and body wrappings of animal skins with and without hair occurred frequently, particularly in the earlier graves.¹³ The body wrappings were often reported as "kid-" or "goatskin". However, the identifications offered for most of this material were clearly tentative, even when not stated to be so.¹⁴ None appear to have been confirmed by zoological or scientific analysis.

Although flint arrow and "lance" heads and copper and bone "harpoons" have been documented, ¹⁵ osteological remains of wild species were extremely rare (SJE 1972:24). Thus there is little direct evidence of hunting for the procurement of meat, such as the remains of butchered parts of the usual game animals. ¹⁶ The by-products of large game usually occurred as elements of ornaments or as finished goods, a partial crocodile skull being an example of the infrequent exception. ¹⁷ Ivory, both elephant and hippopotamus tusk, and animal bone were raw materials used for the manufacture of vessels, implements, and ornaments. ¹⁸ Rarely was the source of the "ivory" specified. The evidence cited most often for the local availability of either source is iconographic, in that incised images of elephants occasionally appear on the pottery and a few figurines of hippopotami have been found in graves ¹⁹ (see SJE

¹²See, e.g., Shellal:Cemetery 7 graves 253(also "bone spatula with worn point (the end of a sheep tibia)"), 263(also "horn spatula"); Bahan:Cemetery 17 grave 86; Gerf Husein:Cemetery 79 grave 137 (ASN I 1910a:40/42/126; ASN II 1912a:143); for unidentified horns see, e.g., Bahan graves 68, 78, 84, 88. (ASN I 1910a:123-126)

¹³See, e.g., Shellal (ASN I 1910a:33-42), Bahan (ASN I 1910a:115-137), Meris:Patch L (ASN I 1910a:211-215); all Early A-Group.

¹⁴For the apparently arbitrary nature of the identification of animal skins, see Cemetery 89/500 grave 647, where the leather is described as "fine soft Gazelle leather" (ASN II 1912a:192, Figure 169).

¹⁵See, e.g., Bahan:Cemetery 17 graves 50(flint lance head; although these appear to be similar to an object identified as a knife in Needler 1984:265-266 catalog entry 160), 58(flint lance heads), 78(flint arrow heads) (ASN I 1910a:120-124; ASN I 1910b:Plate 62/a3, b3, b9, b10, b11, b14, b16). Siali:Cemetery 40 grave 14(copper harpoon), Shem Nishei:Cemetery 45 grave 275(bone harpoon) (ASN I 1910a:236/267; ASN I 1910b:Plate 66/b43).

¹⁶The faunal material (including crocodile, gazelle, and wild cattle) reported as A-Group by Perkins (1965) was attributed to the Abkan by Nordström (SJE 1972:15-16/24). The small assortment of fragmentary material reported in SJE 1972:129 derived from 3 chronologically diverse sites only one of which was A-Group. The provenience of the individual pieces identified (wild or domestic ass, gazelle, and canid) was not stated. The gazelle deriving from grave 22 in Cernetery 40 at Siali (ASN I 1910a:237) mentioned by Nordström (SJE 1972:24 citing Hofmann 1967) was only tentatively identified as a gazelle and was an intrusive burial possibly of much later date (see Appendix A). In addition to citing Perkins' report, Hofmann (1967:118) also cites the bones of a gazelle from grave 2 in Cernetery 95. These, however, were also only tentatively identified as such (see ASN III 1915:42).

¹⁷See, e.g., Shellal:Cemetery 7 grave 250(ostrich feather ornamented leather cap); Bahan:Cemetery 17 grave 56("claws of a large carnivore", possibly used ornamentally); Metardul:Cemetery 50 grave 84(large canine teeth pierced for suspension); Gerf Husein:Cemetery 79 grave 87(part of a crocodile skull), 88(pierced carnivore tooth) (ASN I 1910a:40/121/291; ASN II 1912a:137); see also SJE 1972:128, for ostrich feather fans.

¹⁸A sample of instances would include: Vessels: e.g., Bahan:Cemetery 17 graves 9, 68, 83, Meris:Cemetery 41 graves 212, 228, Gerf Husein:Cemetery 79 graves 48, 122, 124; Spoons: e.g., Shellal:Cemetery 7 graves 222, 266, 268, Siali:Cemetery 40 grave 15; Combs, Bangles, and Beads: e.g., Shellal:Cemetery 7 graves 201, 221, 230, 233, 234, 253, Bahan:Cemetery 17 graves 5, 8, 14, 15, 58, 78, 83, 87, Risqalla:Cemetery 30 grave 34, Siali:Cemetery 40 graves 17, 65, Meris:Cemetery 41 graves 105, 238, Gerf Husein:Cemetery 79 graves 35, 37, 65, 130, 135, 168; Needles: e.g., Shellal:Cemetery 7 graves 209, 222, 250, Bahan:Cemetery 17 grave 18. (ASN I 1910a: Shellal 33-42, Bahan 115-137, Risqalla 191-194, Meris 208-215, Siali 234-241; ASN II 1912a: Gerf Husein 127-151)

¹⁹For an incised image of an elephant, see, e.g., Bahan grave 66 (ASN I 1910a:130-131) and one from Faras (Griffiths 1921:10/Plate III); one of these vessels is and both may be of Egyptian manufacture; see Boessneck 1988:28 for similar pictorial evidence cited for the presence of this species in Upper Egypt; see Needler 1984:357 for a "Naqada I-early Naqada II" ceramic elephant figurine from Hierakonpolis and a discussion of instances of slightly later depictions of this species; see also Petrie 1920:12. For hippo figurines, see, e.g., Siali:Cemetery 40 grave 11 (ASN I 1910a:235) and Qustul:Cemetery L grave

1972:24). Proposed favorable climatic conditions, based on petroglyphs depicting "savanna fauna" in the Eastern Desert and in part on geological evidence, have also been offered in support of the argument for the presence of elephants as far north as Upper Egypt as late as the early dynastic period (Butzer 1959: particularly 68-73). Only for the hippopotamus, however, can there be no doubt of its presence, as osteological material documented at contemporary sites far to the north demonstrates the range of its habitat.²⁰ "Tortoise shell" bracelets, molluse shells, the infrequently noted fish bone, and the rare fish hook indicate the exploitation of aquatic resources²¹ (SJE 1972:19/21/24).

In view of the sparsity of well documented faunal remains from habitation sites, a reconstruction of the hunting and herding aspects of the subsistence economy is dependent upon the limited direct and indirect evidence from the cemeteries. For hunting, the evidence is entirely indirect, except possibly for that crocodile skull mentioned above. However, it would appear there was a focus on riverine fauna – fish, shell fish, turtles, and the hunting of hippopotamus, if for its ivory then also for its meat. No judgement can be made as to whether or not the desert fringe was similarly exploited due to the general lack of evidence, considering the small number of unconfirmed identifications for species native to that habitat. As for herding, taking into account both the circumstantial evidence of the pottery and the cattle and sheep/goat burials documented in even the earliest cemeteries, it may be suggested that animal husbandry was practiced throughout the A-Group period. Finally, in an extreme stretch of the meager evidence, the double burial of a dog and a goat at Shellal (see Appendix A) perhaps demonstrates a relationship between these two species that might suggest the primary role of the former in the economic life of the community. The available evidence is insufficient, however, to support an explanation for the absence of dog burials in cemeteries later than the Early A-Group.

Status Differentiation

Based on the premise that "the form and structure which characterizes the mortuary practices of any society are conditioned by the form and complexity of the organizational characteristics of the society itself" (Binford 1971:23), two analytical criteria are generally acknowledged as valid in the use of mortuary data for the reconstruction of social organization — spatial distribution for the identification of "corporate group differentiation" (reflecting, e.g., social affiliation and/or status differentiation; see Goldstein 1981:57) and energy expenditure for "rank grading". The former can be recognized in the patterning of presumably related burials, the latter reflected in, among other factors, the elaboration

L19 (OINE III 1986:314/315, Figure 140b); for a hippo-shaped dish, see Bahan:Cemetery 17 grave 64/locus 40 (ASN I 1910a:129-130).

²⁰As in the use of hippopotamus leg bones as "anvils" at Maadi (Rizkana & Seeher 1989:68-70). The presence of the hippopotamus in the Nile valley in Egypt is of course also documented from much later periods.

²¹Tortoise shell bracelets (assuming these are tortoise shell and not horn): e.g., Shellal graves 237, 254, Bahan graves 32, 48, 63, Meris graves 208, 217 (ASN I 1910a:39/41/135-136/212-213). Bivalve shells: e.g., Bahan graves 66, 68, Meris grave 207 (ASN I 1910a:123/131-132/212); Fish bones at the "Archaic Camp" at Meris (ASN I 1910a:215-218).

of grave construction and the nature of the grave goods (e.g., craftsmanship and exotic origin as well as artifacts in materials not easily obtained or specifically recognizable as "status symbols"²²) (Tainter 1978:124-125/136). Both criteria are relevant to an attempt to understand the phenomenon of independent animal burial within the context of the cemeteries in which it occurred.

Within this framework, the principle that "the forms, which differentiations in mortuary ritual take, vary significantly with the dimensions of the social persona symbolized" (Binford 1971:23) is of primary importance to the present investigation, as it is the basis for the hypothesis that characteristics of reverential treatment may be defined by the customary methods of signifying status employed by each of the three culture complexes with which the animal burials were associated. The application of the second criterion, energy expenditure, in an evaluation of the evidence should theoretically delineate some of these customary methods of symbolizing status. As there is little evidence for variation in or elaboration of grave type except for that observable in the later A-Group cemeteries, the only available evidence for estimating status differentiation in most cases is the nature of the grave goods.

The validity of the isolated use of the quantity and quality of graves goods as an index of rank has been contested, however, as ethnographic evidence reveals that the postmortem equivalent to living status is not always signified in this manner (Tainter 1978:121). For the Badarian and A-Group material, this does not appear to be an issue, since the apparent inequality in the distribution of goods is supported, in a few instances, by the spatial patterning of the graves. The sparsity of grave goods noted in burials of the Maadi (variant) culture, however, may negate the value of this form of evidence for detecting status differentiation. Here the application of the first criterion, spatial distribution, may facilitate an at least partial reconstruction of the social organization of the associated communities.

An application of these two criteria is fruitful in analyzing, however, only those cemeteries that provide a representative sample of a culture's burial practices. Partially excavated cemeteries particularly invalidate the usefulness of both. Neither the spatial patterning of the graves nor the full range of grave types or the distribution of the quantity and quality of grave goods can be adequately assessed. Heavily plundered cemeteries or poor preservation primarily affect an evaluation of the comparative distribution of material wealth (as evidenced by the grave goods), allowing at best tentative conclusions when only remnants of the original grave contents remain. Nevertheless, although most of the relevant cemeteries had been plundered and a small number only partially excavated, the evidence they provide is sufficient for the purposes of the present investigation.

Badarian

The results of an analysis of the distribution of the quantity and quality of grave goods with reference to the gender and age of the deceased and the size, condition, and spatial patterning of two hundred and

²²See, e.g., Wilkinson 1996:75 and Bard 1994:100 for brief arguments in favor of maceheads as status "markers".

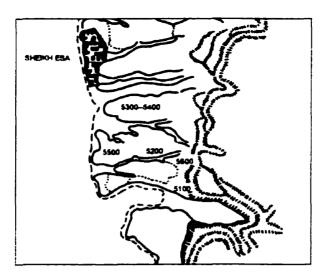


Figure 5.1: Cemeteries in the Immediate Vicinity of Badari (based on Brunton 1927:Plate VII)

sixty-two Badarian graves in seven cemeteries in the immediate vicinity of Badari suggest the existence of a two-tiered social system based on "economically' distinct groups amongst whom social ranking developed as the result of corporate group control over highly valued resources" (Anderson 1992). Two of these seven cemeteries contained a large proportion of the wealthy graves included in the analysis and the five best-documented independent animal burials in the Matmar-Badari region²³ (see Table 5.1 and Appendix A).

These two cemeteries were situated on two of three adjacent desert spurs (see Figure 5.1). Cemetery 5100, located close to the cliffs on the southernmost spur, lay approximately 400 meters south of Cemetery 5300/5400, located two spurs to the north. The original extent of the former was believed possibly to have extended north into Areas 5600 and 5200 where mostly poor or plundered Badarian burials were disturbed by much later reuse of these areas. A settlement site lay on the middle spur, apparently centered in Area 5500 and possibly extending east toward the cliffs into Area 5200 and north onto the tip of the spur occupied by Cemetery 5300/5400 (Brunton & Caton-Thompson 1928:4-6/9/13). Each of the two cemeteries exhibited distinct clusters of burials in terms of the placement of the graves and, in one, an unequal distribution of both the quantity and quality of grave goods and the genders of the deceased.

In Cemetery 5300/5400, the most notable aspect was the division of the cemetery along a north-south axis into two distinct sectors.²⁴ Here the primary distinguishing characteristic was the sharp contrast in

²³Three out of the (possibly) eight independent animal burials in this region cannot be adequately evaluated in the context of the cemeteries in which they occurred, as insufficient information was provided in terms of the original contents and spatial distribution of the 2 at Deir Tasa and the 1 at Mostagedda (see Appendix A).

²⁴The following estimated number of graves per sector is based on the published cemetery map; an additional ca. 17 registered graves do not appear on the map. Although the location of these 17 graves cannot be determined, their placement,

the nature of the burials in each sector. The western consisted of approximately thirty-eight undisturbed graves, the majority of which contained the burials of males ranging in age from "young" to "very old". Only a small number of the burials were of infants or children too young to determine gender and one burial was questionably identified as that of a female. Very few of the graves contained anything more than a single ceramic vessel. Many contained no grave goods at all. The eastern sector also consisted of approximately thirty-eight graves, most of which were heavily plundered burials. Although the bodies in many of these disturbed graves were either fragmentary or missing completely, an adequate number were sufficiently preserved to demonstrate that this portion of the cemetery had contained the burials of males and females of all ages, including at least one infant. The grave goods that remained, both whole and fragmentary, indicate burials originally provided with a wide array of luxury items, including slate palettes, ivory ornaments, implements and vessels, and beads of shell, agate, carnelian, alabaster and glazed steatite. None of these items, except for a few beads, occurred in any of the undisturbed graves in the western sector. The bodies in both sectors were generally wrapped in matting and/or skins (see Brunton & Caton-Thompson 1928:10-13/Plates VI-VII). Only rarely was cloth reported in this context, but its presence in graves in other cemeteries suggests it was not necessarily uncommon, just generally poorly preserved. It was noted, moreover, that cloth was "not confined to the better-class interments" (Brunton & Caton-Thompson 1928:19; Brunton 1937:47; Brunton 1948:10).

In Cemetery 5100, the spatial distribution of the graves formed three clusters, conforming, for the most part, to the natural configuration of the terrain. The majority of burials in all three sectors of this cemetery resembled those of the richer sector of Cemetery 5300/5400 in that they were heavily plundered, with some graves retaining only fragmentary or no human remains and most merely the remnants of the originally rich burial goods. Only a total of four graves, three of which were those of children and all of which contained few or no burial goods, were undisturbed. There was no clearly discernible distinction by sector in terms of wealth or gender. At most, if the possession of ivory ornaments, implements, and vessels is accepted as an index of wealth, then, based on the relatively more frequent presence of the fragmentary remains of such items, the occupants of the graves in the southwestern sector of this cemetery may have been comparatively more wealthy than those of the other two. Body wrapping in all sectors was similar to that in Cemetery 5300/5400 (Brunton & Caton-Thompson 1928:6-9/Plates V-VI).

Animal burials

In Cemetery 5300/5400, four independent animal burials were clustered on the northern edge of the eastern sector of the cemetery, where it abutted the western sector of poorer graves. Two of these burials

wherever that may have been, must have conformed to the basic division of the cemetery, which was originally noted and described by Brunton & Caton-Thompson 1928:10/20). One grave (5404) appearing on the map (in the eastern sector) is not listed in the register or mentioned in the text; it is not included in the count.

were of cattle (5422, 5434) and two were of sheep/goats (5423, 5424). One animal burial, that of a dog (5113), lay in an arc of human graves on the eastern edge of the southeastern sector of Cemetery 5100 (see Appendix E, Figures E.1 and E.2). No grave goods, other than traces of matting and, in one case, cloth with which the animals were covered, were noted in any of the burials (see Appendix A). These wrappings are the lowest common denominator in terms of "grave goods" in any of the burials and the only commonality shared by the animal burials with the human burials in either cemetery. In fact, although the spatial distribution of the animal burials places them in the sphere of the richer burials, their contents do not differentiate them from the poorest.

Maadi (variant)

Any attempt to analyze the spatial patterning and comparative wealth of the burials in two of the three cemeteries in the vicinity of Maadi is hindered by the relatively small portions excavated of the Maadi settlement cemetery and that at Heliopolis (see Rizkana & Seeher 1990:15; Debono & Mortensen 1988:9-10). This situation is compounded at Heliopolis by the disturbed condition of the excavated portion of the cemetery and the lack of information concerning the extent of the sondages made in search of further burials within the area encompassed by the published cemetery map. The number and location of burials that may have been destroyed or remained undetected within that area cannot be estimated. Only at the extensively excavated cemetery at Wadi Digla, which presents a more representative sample of contemporary burial practices, can the distribution of burial goods and the chronological and spatial patterning of the burials be adequately assessed.²⁵

The suggested two-phase chronological development of the cemetery at Wadi Digla reflects uninterrupted use over an extended period of time. To some extent, this development conforms to the natural configuration of the terrain, with the earlier graves centered, for the most part, in the southeastern sector of the cemetery on the higher portion of the spur and the later graves lying to the west and extending to the northeast along the slope. Scatters of graves attributed to the earlier chronological phase do, however, occupy portions of the slope. Despite the fact that more than half the burials in the cemetery have not been attributed to either phase due to the lack of distinctive grave goods or other distinguishing characteristics,²⁶ the possibility of clusters of related graves ("e.g., family burial plots") has been

²⁵Two sections of this cemetery were excavated: the "western group", encompassing the majority of the burials, and the "eastern group", a small group of graves isolated from the main portion of the cemetery by modern road building activities. This group of graves lay adjacent to the northeastern portion of the "western group". (see Appendix E, Figures E.5-E.9)

²⁶The seriation (based on a correspondence analysis) of types of grave goods and other distinguishing characteristics is, for the most part, consistently applied in the attribution to phase of the ca. 165 dated graves. Most often combinations of characteristics appear to have been the determining factors in attribution to phase and conflicts in characteristics quite often the apparent reason for no attribution to phase. However, there are instances where it is not clearly discernible why, for example a) graves with certain characteristics (irregular body orientation – as opposed to right side, head south – and chunks of limestone) were dated (e.g., 149, 158) when another with the same characteristics was not (e.g., 150), b) graves containing both early and late phase "jar types" (e.g., 67, 266, 328) were attributed to Phase I when it would seem more appropriate to date them to Phase II (see Rizkana & Seeher 1990:36/42/43/49/53/66-67, Figures 13, 14). See Rizkana & Seeher 1990:99-100 for see

offered as a tentative explanation for these apparently isolated scatters of early-phase graves (see below) (Rizkana & Seeher 1990:65/69/70, Figure 17). However, the contrast between the apparently random distribution of some burials and the apparently orderly distribution of others in conjunction with the occurrence of graves attributed to the later phase among the main mass of earlier burials demonstrates that the cemetery's development was more complex than a suggestion of family burial plots or topographical expansion implies.

As just mentioned, a chronological distinction among the various types of grave goods has been noted within the cemetery at Wadi Digla. The suggested intersite relative chronology is based, in part, on the occurrence of these grave goods in the two other cemeteries in the vicinity of Maadi. Although the distribution of ceramic grave goods suggests a diachronic development of increasing quantity²⁷ (Rizkana & Seeher 1990:98), a review of the distribution of all grave goods in the three cemeteries reveals no correspondence between quality and quantity as distinguishing factors among the burials whatever their chronological attribution.

Burial goods that might be considered "luxury" items were of limited variety and extremely rare, occurring in only approximately two percent of all the graves.²⁸ The sparsity of luxury goods in the cemeteries can be contrasted with their presence in the Maadi settlement, where the remains of items such as imported pottery (and local imitations) and stone vessels are well-attested. The most frequent grave good was common pottery, similar to the locally produced wares known from the settlement at Maadi, much of which showed clear traces of previous use. Although this suggests the original contents were more important than the vessels themselves, the pottery was all that remained (Rizkana & Seeher 1990:26-27/76/78/89/99). Despite its frequency, however, the majority of human burials provided with pottery contained only a single vessel; substantially fewer contained two, three, or four vessels; only a small number contained five or more, the latter quantities occurring in a combined total of only five percent of all the graves containing pottery.^{29/30}

summary of characteristics considered indicative of each phase. The correlation of attribution to phase and grave number was obtained by a comparison of Rizkana & Seeher 1990:70, Figure 17 (which plots a distribution of dated graves on a cemetery map where the grave numbers are not indicated) and Rizkana & Seeher 1990:Figure 11 (the cemetery map where the graves are numbered).

²⁷The validity of this development must be qualified, somewhat, by the disparity in the excavated extents of the cemeteries compared.

²⁸ca. 11 graves contained comparatively exceptional items, occasionally in conjunction with pottery: Wadl Digla: pierced shell and/or beaded ornaments (graves 75, 257, 300, 430), stone vessel (grave 102), ivory comb (grave 66), rhombic slate palette (grave 259) (Rizkana & Seeher 1990); Heliopolis: pierced shell ornament (grave 65), stone vessels (graves 10, 61), copper ornament(?) and tool(?) (grave 34) (Debono & Mortensen 1988).

²⁹Out of the combined total of ca. 265 graves (in all three cemeteries) containing pottery, 60% (160 graves) contained 1 vessel, 17% (45 graves) contained 2 vessels, 11% (29 graves) contained 3 vessels, 7% (18 graves) contained 4 vessels, 2% (5 graves) contained 5 vessels. The combined total number of graves containing 6 vessels (2), 7 vessels (3), 8 vessels (1), 9 vessels (1), and 10 vessels (1) make up only 3% of all the graves containing pottery.

³⁰Rizkana & Seeher provide a chart (1990:76, Figure 22) listing the "number of graves/number of vessels per grave" for the cemeteries at Wadi Digla (western and eastern groups) and Maadi. A comparison of the numbers cited in the chart and those obtained from a review of the grave catalogs reveals several discrepancies. The format for the following lists is: number of graves(number of vessels per grave). Maadi: Grave Catalog: for the 70 human graves (out of 77 described, including 1

Nevertheless, more than half the human burials contained no pottery. Occasionally these aceramic burials were accompanied by a simple flint tool, mollusc shell, or piece of mineral ore intended as cosmetic pigment. More often they contained no detectable grave goods at all.³¹ On the other hand, a few of these graves contained the most notable of the non-ceramic grave goods. One aceramic burial contained an ornament of pierced Red Sea shells, each of two others a single stone vessel.³² The only other complete stone vessel noted in any of the three cemeteries derived from a grave containing only two ceramic jars.³³

As the example just mentioned demonstrates, for the graves containing pottery, it was not always the ones with the greater number of vessels that also contained the rare exceptional item. A burial containing only one ceramic vessel was accompanied by a necklace consisting of thirty Red Sea shells.³⁴ Two similar burials were each also accompanied by a beaded ornament, while another contained a slate palette.³⁵ Another beaded ornament and the only ivory comb noted derived respectively from two burials each containing only four ceramic vessels.³⁶

Rarely did graves provided with a large number of ceramic vessels contain anything other than the pottery and rarer still were the instances where the additional objects could be considered exceptional. Generally they were no different than those found in graves with little or no pottery — a simple flint

questionable grave) for which there were data concerning the original contents of the burial, 46 contained no ceramic vessels (including graves containing only sherds), 23(1), 1(2); (Rizkana & Seeher 1990:18-22). The numbers listed in the Chart (based on 76 graves, not including the 1 questionable grave) apparently include the 6 graves for which there were no data in the category of graves containing no ceramic vessels and the 2 graves containing bottom sherds (thought to have been used as bowl-like receptacies) in the category of graves containing 1 vessel; the animal burial was not included in the count. Wadi Digia (western group): Grave Catalog: for the 440 human graves (out of 442 described) for which there were data concerning original contents, 232 contained no ceramic vessels (including graves containing only sherds), 122(1), 37(2), 26(3), 16(4), 4(5), 2(6), 1(7) (Rizkana & Seeher 1990:30-59); pottery caches and animal burials are not included in these counts. The numbers listed in the Chart (based on 442 graves) apparently include the 2 graves for which there were no data in the category of graves containing no ceramic vessels but (unlike the Maadi count) do not include bottom sherds counted as vessels. Wadi Digla (eastern group): Grave Catalog: for the 29 human graves, 14 contained no ceramic vessels (including graves containing only sherds), 7(1), 5(2), 1(3), 1(4), none(5, 6, or 7), 1(8) (Rizkana & Seeher 1990:63). There is a discrepancy between the chart and grave catalog for the number of graves containing 1 vessel (6 instead of 7) and 7 vessels (1 instead of none). Heliopolis: Grave Catalog: for the 48 human graves, 30 contained no ceramic vessels (including graves containing only sherds), 8(1), 2(2), 2(3), 1(4), 1(5), none (6), 2(7), none (8), 1(9), 1(10) (Debono & Mortensen 1988:10-22); pottery caches and animal burials are not included in these counts. The total grave counts used in the previous note are the corrected totals (based on the grave catalogs) and do not include graves for which there were no data or count bottom sherds as vessels.

³¹Out of the combined total of 587 human graves (for which there were data), 322 contained no pottery (see preceding note); 250 of these graves are listed in the grave catalogs as containing no grave goods at all (Rizkana & Seeher 1990:18-22/30-63; Debono & Mortensen 1988:10-22).

³²Wadi Digia: grave 430("a string of 16 pierced Red Sea shells (ancilla acuminata)) (Rizkana & Seeher 1990:59); Heliopolis: grave 10(basalt vessel); grave 61(limestone vessel). (Debono & Mortensen 1988:12/19)

³³Wadi Digla: grave 102(2 ceramic vessels, "small jar of light green calcite"). (Rizkana & Seeher 1990:39/89)

³⁴Heliopolis: grave 65(1 vessel, flint nodule ("probably a palette"), small fragment of malachite, necklace of 30 "Ancillaria" shells). (Debono & Mortensen 1988:20)

³⁵Wadi Digla: grave 75(1 vessel, "two rows of nine Red Sea shells (ancilla acuminata)"); grave 300(1 vessel, bracelet of ca. 27 disc-shaped carnelian(?) beads); grave 259(1 vessel, rhombic slate palette) (Rizkana & Seeher 1990:37/51/49). Clearly identifiable palettes were rare; most items thought to have been used as palettes were, e.g., flat flint nodules or, in one case, a rim sherd from a broken basalt vessel (Rizkana & Seeher 1990:89/90-91; Debono & Mortensen 1988:39).

³⁶Wadi Digla: grave 257(4 vessels, 1 aspatharia shell, bracelet(?) of 11 pierced Red Sea shells (ancilla acuminata) and 5 disc-shaped stone beads); grave 66(4 vessels, 1 aspatharia shell, two-sided ivory comb). (Rizkana & Seeher 1990:48-49/36)

tool, molluse shell, or piece of mineral ore. Only one of the ceramically well-provisioned burials, in this case with seven vessels, contained luxury items in addition to the pottery. Several fragments of copper found in this grave were thought to have been the remains of a tool and an ornament.³⁷ This rare and random provisioning of the burials with here a luxury item and there a large number of common ceramic vessels exhibits no archaeologically detectable customary standard for signifying the status of the deceased.

The architecture of the graves, in all cases simple pits, is no more indicative of status than the patchwork pattern of distribution of the burial goods. In fact, in some instances, the grave pit was barely large enough to accommodate the body. Only rarely was anything that might be considered extra effort invested in the construction of the graves. Moreover, the few graves that might be thought to exhibit more elaborate construction did not contain the more "richly endowed" burials. Although some pits were encircled (all but one only partially) with rough chunks of limestone, most of those more fully lined with these stones were unaccompanied by grave goods.³⁸ Apparently, wood was rarely used to line a grave and these were also not among the best-provisioned burials³⁹ (Rizkana & Seeher 1990:22-23/69/71; Debono & Mortensen 1988:38). The pattern of provisioning these burials suggests an inverse relationship between this minimal elaboration of grave construction and the quantity and quality of grave goods.

In addition to the pottery included in the burials, caches of one or more vessels were detected at both Wadi Digla and Heliopolis. At the former, several clusters of caches occurred in the vicinity of animal burials. Many more caches were scattered among the human burials. Although a few of these were relatively isolated, most were closely adjacent to individual graves, occasionally in the narrow space between two. The sequence of deposition for the pottery caches is, however, unclear due to the fact that some of the vessels they contained were apparently not preserved and many of those that were are "jar types" found in graves attributed to both the early and late phases of the cemetery's development (see Rizkana & Seeher 1990:63-64). Thus even if these possibly associated graves were datable (most are not), their contemporaneity would not be assured.

On the other hand, if the pottery caches and the adjacent graves are assumed to be contemporary (although not necessarily simultaneous) and associated, then a comparison of the contents of both reveals a random correspondence between the number of vessels in the caches and the quality and quantity of the

³⁷Heliopolis: grave 34(7 vessels, flat flint nodule ("probably a palette"), fragments of copper ("probably remains of a tool"), other fragments of copper ("perhaps of a bracelet")). (Debono & Mortensen 1988:16)

³⁸Graves lined with stones: e.g., Wadi Digla: grave 49 (completely encircled), graves 55, 59, 68, 69, 150, 402 (partially encircled); except for grave 59, for which there were no data concerning original contents, and grave 55, accompanied by a mollusc shell, these graves contained no grave goods (Rizkana & Seeher 1990:35-36/42/57). A few of the graves with fewer stones had as many as 4 vessels, e.g., graves 41, 63 (Rizkana & Seeher 1990:34/36), but most were unexceptional.

³⁹Wood lined graves: Heliopolis: graves 12(3 vessels), 19(sherds), 26(sherds), 62(1 vessel), 63(sherds, piece of quartzite) (Debono & Mortensen 1988:12-14/19-20); Wadi Digla: grave 29(1 vessel) (Rizkana & Seeher 1990:33). Rizkana & Seeher suggest that the remains thought to have been wood may have been traces of matting and branches (1990:98).

burial goods. Caches of single vessels adjoined graves with no grave goods as well as those containing luxury items or multiple vessels. Caches of multiple vessels also adjoined graves with no grave goods as well as those containing from as few as one to as many as five vessels. A similar comparison between the contents of the caches and instances of elaborated grave construction also reveals no obvious correspondence. Caches of one or more vessels adjoined graves, both provisioned and not, that were partially lined with stones. Despite this lack of correlation in quantity (and quality), at first glance there does appear to be a slightly more frequent conjunction of caches with, what by the standards of this cemetery might be considered, exceptional graves. This slight edge depends, however, on which grave is assumed to be associated with the cache in those instances where there is a choice between two. Nevertheless, this random correspondence generally suggests that the presence of a cache is no more indicative of status than the distribution of grave goods or the elaboration of grave construction (contra Rizkana & Seeher 1990:95).

Although the anthropological evidence is insufficient to reconstruct completely the age and gender demographics of these cemeteries, an irregular distribution of the burials of subadults has been noted in all three. A predominance of such burials was detected in the group of graves situated in the western sector of the excavated portion of the Maadi settlement cemetery. A scatter of similar burials was also noted in the northwestern sector of the excavated portion of the cemetery at Heliopolis. In contrast, subadult burials were apparently more widely distributed throughout most of the more extensively excavated cemetery at Wadi Digla. However, concentrations, less dense than that at Maadi, have been noted in two sections of this cemetery (Rizkana & Seeher 1990:99). Many of these burials were scattered among graves that formed roughly circular clusters around several goat burials. Several others lay among the more linearly aligned graves in the far northeastern sector ("eastern group") of the cemetery. Their presence contributes to the impression that these clusters may have been family burial plots (see below). Although most of the Wadi Digla skeletons originally identified as those of "infants" were not available for accurate aging and the hazards of preservation perhaps contributed to the rarity of the youngest age categories in the cemeteries, the fact that burials of foetuses, neonates, and infants were

⁴⁰Wadi Digla: Square II: pots 1-2(only bottom fragments)/grave 27(no grave goods); pots 5-7/maybe grave 45(5 vessels, mollusc shell); pot 8/grave 139(no grave goods). Square III: pot 1/grave 51(2 vessels, shell necklace); pots 2-4/grave 62(no grave goods, partially lined with stones); pot 5/between grave 63(4 vessels) and grave 65(1 vessel), graves 63 and 65 have both been attributed to Wadi Digla Phase I; pots 6-8/between graves 65(1 vessel) and 73(5 vessels), graves 65 and 73 have both been attributed to Wadi Digla Phase I; pot 9/grave 78(1 vessel); pot 10/between graves 68(no grave goods, partially lined with stones) and 70(2 vessels, mollusc shell, flint tool); pot 11/grave 75(1 vessel, shell ornaments). Square IV: pot 1/grave 85(2 vessels, partially lined with stones). Square V: pots 1-3/between graves 112(1 large sherd) and Animal 4(goat, no grave goods), grave 112 has been attributed to Wadi Digla Phase II. Square VI(III): pots 1-3/between graves 134(1 vessel) and 39(1 vessel), grave 134 has been attributed to Wadi Digla Phase II; Square VII: pot 1/maybe grave 144(no grave goods), grave 144 has been attributed to Wadi Digla Phase I; pots 5-6/between graves 165(4 vessels) and 159(2 vessels, mollusc shell, copper ore) (Rizkana & Seeher 1990). Pot notation on maps appears as, e.g., "P 2-3"; square numbers appear at the lower left-hand corner of each square.

⁴¹See, e.g., Wadi Digin: Square III: pots 6-8/grave 65(1 vessel) or grave 73(5 vessels), pot 10/grave 68(no grave goods, but partially lined with stones) or grave 70(2 vessels, mollusc shell, flint tool); Square VII: pots 5-6/grave 165(4 vessels) or grave 159(2 vessels, mollusc shell, copper ore). (Rizkana & Seeher 1990)

documented in the Maadi settlement suggests that children may have had to attain a specific age before being considered eligible for burial in the cemetery (Debono & Mortensen 1988:40; Rizkana & Seeher 1989:67, 1990:99; see also Beck & Klug in Rizkana & Seeher 1990).

All but two of these settlement burials were unaccompanied by grave goods. Of these two, a young child (0-6 years),⁴² was provided with five ceramic vessels (Rizkana & Seeher 1989:67-68). This well-provisioned burial contrasts with the majority of subadult burials in the Maadi settlement cemetery, where the two furnished with grave goods contained only one vessel each.⁴³ At Wadi Digla, the majority of subadult burials also contained no grave goods. However, one of those that did, contained the only stone vessel documented in the cemetery.⁴⁴ Two similarly exceptional subadult burials were also noted at Heliopolis. One contained a pierced shell ornament, the other a stone vessel.⁴⁵ These three graves suggest that children, once old enough to be interred in the cemetery, were not differentiated from the adult population in terms of burial goods.

The absence of an archaeologically detectable standard for status differentiation among mortuary remains does not necessarily demonstrate the lack of a hierarchical social structure. The possible necessity of attaining a specific age before eligibility for cemetery burial suggests, however, that graded levels of status, if such existed, were not hereditary (see Brown 1981).

Animal burials

Clusters of animal burials were documented in the cemeteries at Wadi Digla and Heliopolis. All five of the dogs buried at Heliopolis lay in two isolated closely aligned groups of two and three graves each. Three of the goat burials lay in a row to their south. At Wadi Digla, four of the goat burials lay in a fairly isolated row toward the western end of the cemetery with another single burial further to the west. Three others lay in close proximity to each other toward the northeastern end (see Appendix E, Figures E.3 and E.5-E.8). Five of the goat burials lay at the centers of what appear to be four closely grouped clusters of human graves (see Figure 5.2).

All of the animal burials at Wadi Digla have been attributed to the cemetery's second chronological phase, primarily based on the similar number of animal burials documented at Heliopolis (Rizkana &

⁴²Among the settlement burials, most of the children included in the category "infans I" (0-6 years) were identified as being less than four months old. The age range for this burial was less specific. (see Beck & Klug in Rizkana & Seeher 1990)

⁴³Maadi settlement cemetery: (subadult burials with grave goods; 2 out of a total of 17): 1 vessel: graves 50(child, 4-7 years) and 56(child, 8-13 years). (Rizkana & Seeher 1990)

⁴⁴Wadi Digla: (subadult burials with grave goods; 13 out of a total of 33 for which there were data concerning original contents): 1 vessel: graves 148(child, age unspecified), 175(6-10 years), 302a(foetus, possibly related to adjacent grave 302 of adult male), 383a("infant", age unspecified), 384("infant", age unspecified), 418("infant", age unspecified), 432("infant", age unspecified); 2 vessels: graves 14(10-15 years), 344(6-10 years), 351(male?, 13-16 years), IV("infant", age unspecified); 3 vessels: grave 424("infant", age unspecified); 2 vessels and calcite jar: grave 102(10-14 years). (Rizkana & Seeher 1990)

⁴⁵Heliopolis: (subadult burials with grave goods; 4 out of a total of 8): 1 vessel: grave 4(female, 13? years); 2 vessels: grave 5(4-5 years); 1 vessel and pierced shell necklace: grave 65(6-8 years); basalt vessel: grave 10(ca. 11 years). (Debono & Mortensen 1988)

Seeher 1990:94). The sequence of deposition of some the Wadi Digla burials, however, is problematic. Any attempt to reconstruct the development of the cemetery, including the chronological relationship between the animal burials and the human graves in their vicinity, is hindered by the large number of undated graves. Within those limitations, however, an analysis of the clusters of human burials that surrounded several of the goat burials suggests developmental processes that may place at least these animal burials in their proper context.

For example, one of the goat burials (Animal 2) lay at the center of a cluster of human burials, some of which comprise one of the apparently isolated scatters of early-phase graves mentioned above. Three of the seven graves forming the inner ring of surrounding human burials have been attributed to Wadi Digla Phase I. Of the eight human burials forming an outer ring partially encircling the first, one has been attributed to the earlier phase and two to the later. To the northwest lay four more graves. The two closest to the outer ring have also been attributed to the earlier phase.⁴⁶ Although the preponderance of dated burials attributed to the early phase lay in the western portion of this cluster, the four undated remaining graves of the inner ring may possibly also be attributable to that phase, based on the presence of certain indicative characteristics.⁴⁷ If the goat burial is accepted as the central and one of the earliest graves in an expanding cluster of gradually accumulating human burials, than at least this animal burial might be attributed to the earlier chronological phase of the cemetery's development (see Figure 5.2).

The structure of the cluster of burials to the south may support this premise. At the center of that cluster, one undated human burial and another goat burial (Animal 1) were partially encircled by an arc of pottery caches, all containing "jar types" apparently attributable to Wadi Digla Phase II.⁴⁸ To the east, south, and southwest, lay two parallel arcs of human graves comprising a total of twelve burials. A partial arc of another four lay to southeast.⁴⁹ The distribution of these graves, four of which are also attributed to the later phase, suggests that the ground to the north may have been occupied by earlier burials, preventing development in that direction. The fact that the outer ring of the northern cluster also breaks off at this point may indicate that the pottery caches and goat burial were already in place

⁴⁶Wadi Digla: Graves in the vicinity of Animal 2: Wadi Digla Phase I: graves 4, 417, 418, 419, 424, 425(this grave may not be Phase I, as it contained a jar type indicative of Phase II); Wadi Digla Phase II: graves 107, 108; Indeterminate date: graves 5, 104, 105, 106, 412, 416, 420, 421, 422(this grave may be Phase I, as it contained a jar type indicative of that phase). (Rizkana & Seeher 1990)

⁴⁷Irregular body orientation (as opposed to right side head south) in graves 105, 416; chunks of stone in graves 5, 106; irregular body orientation and the presence of chunks of limestone were generally considered more indicative of Wadi Digla Phase I (Rizkana & Seeher 1990:69-70/73). Although graves 5 and 106 contained no grave goods, it would appear that the conflict between indicative characteristics (body orientation (right side, head south) and the presence of chunks of stone) was the primary reason for their lack of attribution to phase; other graves also containing no grave goods (e.g., 49, 57, 144, 149, 158) were attributed to Wadi Digla Phase I apparently based solely on their irregular body orientation and the presence of chunks of stone. (Rizkana & Seeher 1990)

⁴⁸Wadi Digla: Caches: Square I, pots 1-6, 8-10; the single vessel (Square I, pot 7) that originally accompanied the goat burial was not preserved and thus remains undated (see Rizkana & Seeher 1990:63/66-67, Figures 13, 14).

⁴⁹Wadi Digla: Graves in the vicinity of Animal 1: Wadi Digla Phase I: grave 16; Wadi Digla Phase II: graves 2, 11, 12, 18?(not numbered on map); Indeterminate date: graves 1, 3, 6, 7(adjacent to goat burial), 8, 9, 10, 13, 14(this grave may be Phase II, as it contained a jar type indicative of that phase), 15, 17, 21. (Rizkana & Seeher 1990)

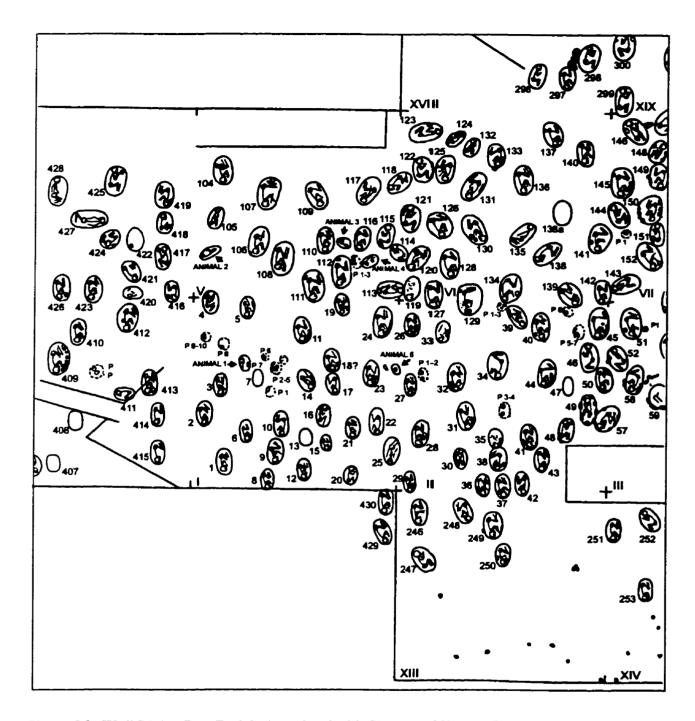


Figure 5.2: Wadi Digla: Goat Burials Associated with Clusters of Human Graves (based on Rizkana & Seeher 1990:Figure 11)

before that cluster could, in its later development, expand further to the south. The one anomalous early grave in the second arc of the southern cluster indicates, however, that its development was not a straightforward outward expansion and that the goat burial was probably not the original core of this cluster (see Figure 5.2).

Immediately to the east of the northern cluster, two other goat burials (Animals 3, 4) were also surrounded by a double ring of human graves. Both animal burials contained no grave goods and the three vessels in a pottery cache lying between one of the goats (Animal 4) and a human burial cannot be dated. Two of the eight graves in the inner ring have been attributed to Wadi Digla Phase II. Five of the eleven graves forming the outer ring have also been dated to that phase. All of these later-phase graves are situated in the southern portion of the cluster. Only one of the graves in the northern portion has been dated, in this case to Wadi Digla Phase I. However, the irregular orientations of a number of the bodies in these undated graves, a characteristic considered more indicative of the earlier phase, suggest that at least some of them may possibly be attributed to that phase. Several undated graves to the northeast that may be associated with this cluster also exhibit characteristics indicative of this phase. Although the goat burials quite clearly lay at the center of this cluster, the chronological development appears to have been from north to south rather than an outward circular expansion. Moreover, there is no reason to believe that the two goat burials were necessarily simultaneous events (see Figure 5.2).

Again, the structure of the cluster of burials to the south may support this suggested chronological development. There another goat burial (Animal 6) lay surrounded by a ring of human burials. The goat burial was accompanied by one vessel and a single vessel lay nearby. A cache of two vessels lay adjacent to one of the human burials. Only the single vessel can, with some certainty, be attributed to Wadi Digla Phase II.⁵² However, the ring of six graves surrounding this goat burial overlaps (and includes two of the graves in) the outer ring of the cluster to the north. Both of the two northern graves encompassed by that overlap as well as two of the other four graves comprising the rest of the ring have been attributed to Wadi Digla Phase II.⁵³ The date of these graves and the apparent overlap of the encircling rings of burials suggests that perhaps here there was a southward shift in the focal point of a family burial plot,

⁵⁰Wadi Digla: Square V, pots 1-3; not described in the published report. (Rizkana & Seeher 1990)

⁵¹Wadi Digla: Graves in the vicinity of Animals 3 and 4: Wadi Digla Phase II: graves 19, 24, 26, 111, 112, 113, 127; Wadi Digla Phase I: grave 121; Indeterminate date (graves with an asterisk [*] have irregular body orientation and may be Phase I): graves 109, 110, 114*, 115*, 116, 117*, 118*, 119, 120, 122*, 123*, 124*, 125*, 126, 128, 131*, 132*, 133; of these possible Phase I graves, 131, 133 also contained chunks of limestone indicative of that phase. Unfortunately, irregular orientation is not limited solely to Wadi Digla Phase I, see, e.g., grave 113 dated to Wadi Digla Phase II (although this attribution is based on only 2 body sherds). However, only a few graves (123, 133) exhibit a possible conflict between body orientation (irregular) and the chronological seriation of the jar types they contained; the majority of these undated graves contained no grave goods. (Rizkana & Seeher 1990)

⁵²Wadi Digla: Single vessel: Square I, pot 11; Cache: Square II, pots 1-2 (only bottom fragments); the vessel in the goat burial was not preserved (see Rizkana & Seeher 1990:60/63/66-67, Figures 13, 14).

⁵³Wadi Digla: Graves in the vicinity of Animal 6: Wadi Digla Phase II: graves 24, 26 (these are the two graves that form part of the outer ring of the cluster to the north), 23, 33; Indeterminate date: graves 27, 32(one of the two vessels in this grave is indicative of Phase I, the other of Phase II). (Rizkana & Seeher 1990)

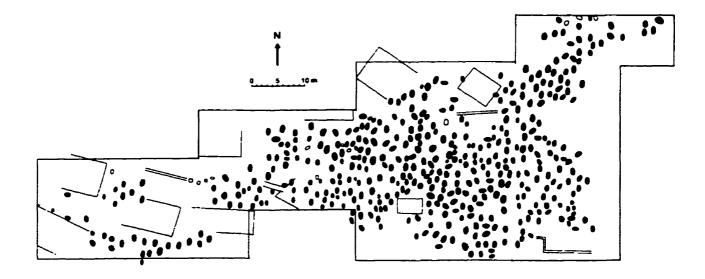


Figure 5.3: Wadi Digla: Grave Distribution

with what would then have been the third goat burial associated with the plot serving as the core of the southern loop (see Figure 5.2).

If these tentative developmental reconstructions have any validity, it may then be feasible to view these clusters as expanding family burial plots within a cemetery for which exclusive claim to certain sectors may not have been the only organizational factor. The goats would not necessarily have to have been among the earliest burials in all the plots with which they were associated. They may simply have served, once in place, as focal points for the gradual accumulation of later related human burials. These clusters, however, are not the only groups of graves exhibiting apparently organized spatial patterning. Several linear, albeit irregular, alignments as well as at least one other circular cluster are visibly detectable 54 (see Figure 5.3 and Appendix E, Figures E.7 and E.8). Unlike the clusters discussed above, none of the most readily discernible of these included associated animal burials.

Whether or not the presumed exclusivity of these family plots in conjunction with the presence of the goat burials can be considered grounds for assuming a relatively higher status for the occupants of the graves in these clusters remains an open question. None of the graves exhibited any significant evidence of elaborated construction. The contents, in the absence of a standard by which to estimate status (see

⁵⁴Wadi Digia: Circular cluster: grave 273 (central burial); graves 267, 268, 270, 272, 274, 277, 278 (inner ring); graves 264, 265, 269, 271, 275, 276, 279, 280, 281, 282 (outer ring). Linear alignments (far southeastern sector): graves 283, 286, 285, 284, 287, 224, 223, 226, 227, 229 (and immediately adjacent somewhat ragged row) graves 288, 289, 225, 231, 230, 232, 233, 238, 239 (south to north); graves 217, 216, 218, 219, 222, 221, 204, 203, 198 (south to north); graves 213a, 211, 209, 208 (and adjacent row) graves 213, 212, 210, 207, 205, 202 (east to west). Linear alignments (in more densely occupied central sector): graves 65, 66, 72, 71, 70, 69, 161, 160, 165 (and immediately adjacent row) graves 256, 64, 63, 62, 67, 68 (south to north); graves 152, 151, 150, 149, 148, 147 (and immediately adjacent row) graves 141, 144, 145, 146 (south to north); graves 304, 303, 302, 302a, 300, 298, 297, 296 (northeast to southwest).

above), contribute little decisive evidence one way or the other. At one extreme, approximately half the fifty-five graves comprising the surrounding rings contained no grave goods whatsoever and none contained anything that might be considered a luxury item. At the other extreme, two were among the ceramically best-provisioned in the cemetery. In fact, these clusters, if considered as a subset of the whole, appear to be slightly poorer ceramically than the rest of the cemetery.

	Graves in			% of graves
	clusters	in clusters	cemetery	in cemetery
Totals	55 ^b	100%	469°	100%
w/out pottery	37	67%	246	52%
w/pottery	18	33%	223	48%
w/l vessel	9	16%	129	28%
w/2 vessels	5	9%	42	9%
w/3 vessels	2	4%	27	6%
w/4 vessels	0	0%	17	4%
w/5 vessels	1	2%	4	_%d
w/6 vessels	0	0%	2	_%ª
w/7 vessels	1	2%	1	_% ^d
w/8 vessels	0	0%	1	_%d

a) Percentages have been rounded. b) This total includes only those graves forming rings around the goat burials; ca. 13 additional outlying graves may have also been associated with these clusters. c) This total includes only those graves for which there were data concerning original contents. d) A combined total of these four categories comprises less than 2%.

Although the group of three goat burials (Animals 7, 8, 9) located toward the northeastern end of the Wadi Digla cemetery lie on the outer edge of the excavated area and the presence or absence of burials to their north remains unknown, no circular clustering similar to that discussed above is detectable among the human graves lying immediately to the south. These graves exhibit a rather linear alignment, as do the goat burials themselves. If these graves represent a truncated portion of a linearly aligned group of human burials, then it is possible that goat burials were also associated with this form of ordering possibly related burials (see Figure 5.4).

Only one dog burial (Animal 5) was documented in the cemetery at Wadi Digla. A scatter of individual vessels and a cache of two loosely surrounded it. Many of these vessels are of a jar type found in both early- and late-phase graves and thus do not contribute one way or the other to the assumption of a Phase II date for this animal burial.⁵⁵ Nor does the distribution of the human graves in this vicinity form an obvious chronologically or spatially structured cluster such as those of the proposed family

⁵⁵Wadi Digla: According to the cemetery map: Square VII, pots 2-3, pot 4, five unnumbered pots, one of which may be the pot thought to have been included in the animal grave; only 5 (including pots 2-3) are described (see Rizkana & Seeher 1990:64/66-67, Figures 13, 14).

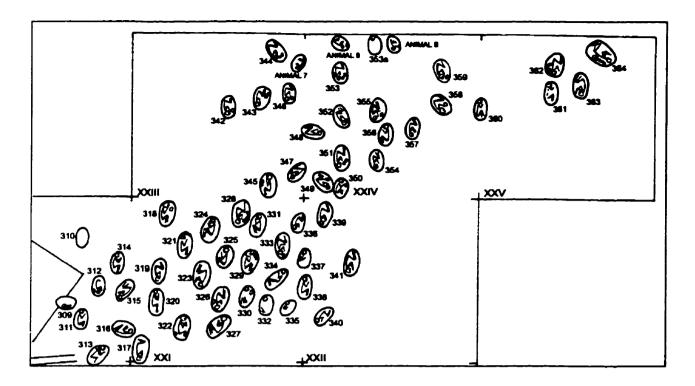


Figure 5.4: Wadi Digla: Goat Burials Associated with Linearly Aligned Human Graves

burial plots. Of the graves that lay closest, two have been dated to the early phase and one to the later, but most are of indeterminate date. Further to the north, west, and south, the majority of graves have been dated to the early phase and many of those that remain undated exhibit characteristics indicative of that phase.⁵⁶ If the late date is valid for both the dog burial and the pottery scattered in its vicinity, the depositional sequence would suggest the later use of a relatively limited vacant patch of ground in a section of the cemetery occupied, for the most part, by earlier graves.⁵⁷ Whatever the date of the dog burial and caches, however, their relationship to the human burials in this area is not readily discernible (see Figure 5.5).

No spatial relationships similar to the apparently structured clusters of human graves associated with animal burials noted at Wadi Digla can be detected at Heliopolis or the Maadi settlement cemetery. At Heliopolis, even those animal burials not isolated in clusters exhibit no observable relationship to

⁵⁷Whether the spaces empty of graves immediately to the north and east were actually vacant or are the result of modern disturbance of these areas was not stated.

⁵⁶Wadi Digla: Closest graves: Wadi Digla Phase I: graves 106, 306; Wadi Digla Phase II: grave 305; Indeterminate date: graves 155, 156, 157, 159, 167, 168. Surrounding area: Wadi Digla Phase I: e.g., graves 147, 148, 149, 154, 169, 307; Indeterminate date (but with characteristics, such as irregular body orientation or presence of stones, indicative of Phase I): e.g., 146(in addition this grave contained a jar type indicative of Phase I), 150, 151, 153, 299, 300, 301, 302, 304. Unfortunately, irregular orientation is not limited solely to Wadi Digla Phase I, see, e.g., grave 305 dated to Wadi Digla Phase II. However, only a few of these graves (153, 300) exhibit conflicts between body orientation (irregular) and the chronological seriation of the jar types they contained; the majority of these undated graves contained no grave goods. (Rizkana & Seeher 1990)

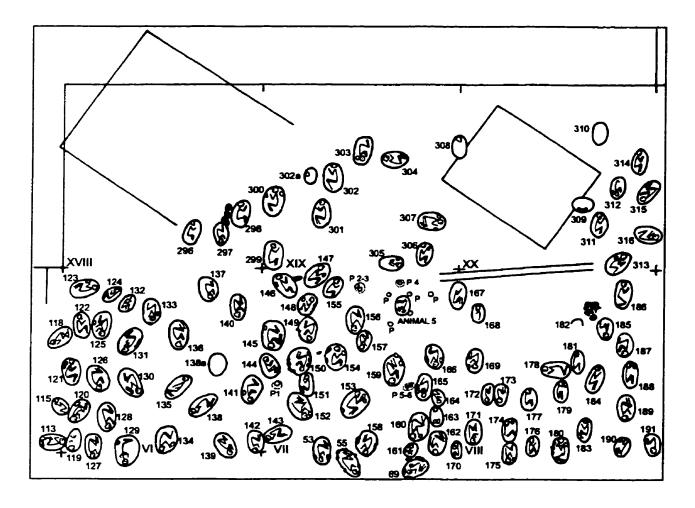


Figure 5.5: Wadi Digla: Vicinity of Dog Burial (based on Rizkana & Seeher 1990:Figure 11)

the few human burials in their vicinity. Due to the difficulties mentioned above, however, the original distribution of burials in this cemetery may not be accurately reflected on the published map. The apparent isolation of most of these animal burials must, therefore, be viewed in this context. Certainly, the disturbed condition of the western portion of the Wadi Digla cemetery seems to have contributed to the apparent isolation of the five animal burials in that sector (see Appendix E, Figures E.3, E.4, and E.5).

Although the differences in spatial patterning just noted may be the results of disturbed conditions compounded by limited and inadequate excavation, a marked inequality in the distribution of grave goods can be detected between the goats buried at Wadi Digla and those at Heliopolis. While seven of the thirteen goats at Wadi Digla were unaccompanied by ceramic vessels and the remaining six had only one vessel apiece, the graves of all six goats at Heliopolis contained pottery ranging from as few as two vessels to as many as eight (see Appendix A). The relative distribution of pottery caches in the two cemeteries does not appear to be relevant to this disparity. Although caches were noted in the vicinity of several of the Wadi Digla goats, most may have been related to the adjacent human burials. Even a portion of the scatter of caches near Animal 1 may have been associated with the one human burial that also lay among them. The only similar cluster of caches located near one of the Heliopolis goats seems more likely related to the adjacent human burial. As most of the Heliopolis goats are relatively isolated. there is no way to determine if there had once been a relationship between the contents of these burials and the quantity of pottery in the human graves that may originally have lain in their vicinity. Unless this unequal distribution can be attributed to the proposed diachronic trend of increasing quantities of ceramic grave goods mentioned above, the significance, if any, of this phenomenon must remain an open question.

The distribution of the goat burials at Wadi Digla, whose original context remained undisturbed, suggests a consistent association with spatially organized clusters of human graves. Although the chronological sequence of deposition of the goat burials cannot be precisely fixed, based on their spatial arrangement they appear not to have been the result of a single funerary event, a specific human burial, but more generally associated with the burials that surrounded them and thus apparently an aspect of locally observed funerary customs. The contents of the human burials in these clusters contribute little to a determination of the salient factor governing their spatial patterning. The concentration of subadult burials in these clusters, however, does appear to support the impression that the occupants of these graves were members of family or lineal descent groups. In the absence of any detectable standard for status differentiation, no judgement can be made concerning the level of status these groups may have held in the life of the community.

A-Group

Compared to the Badarian and Maadi (variant) cultures, the A-Group encompasses a wider geographic and chronological range. The culture's diachronic social and economic development, however, is the principal factor that sets it apart from the other two. The existence of elite cemeteries attributable to the later developmental stages demonstrates a process of increasing social stratification and the centralization of political power in at least two localities in southern Lower Nubia. Hence the cemeteries cannot be considered *en masse* as representative of the culture but must be viewed within the context of the appropriate developmental stage.

Table 5.3: A-Group Cultural Phases at the Relevant Cemeteries

140	Table 3.3. A Group Culturar Hases at the Relevant Cemeteries							
Early A-Group	Early A-Group	Early A-Group	"early Classic"	Classic & Terminal				
Phase 1a	Phase 2 ^a	Phase 3 ^a	A-Group	A-Group				
Kubanieh	Kubanieh	Kubanieh	Kubanieh	Kubanieh				
Shellal 7 (Knoll A)								
Bahan 17	Bahan 17	Bahan 17						
		Risqalla 30						
Meris 41 (Patch L)			Meris 41 (Patch B)					
		←	Shem Nishei 44					
←?	Gerf Husein 79	Gerf Husein 79	Gerf Husein 79	Gerf Husein 79				
				Naga Wadi 142				
			←	Qustul L				
	Naqada Ic-IIa	Naqada IIb-IIc	Naqada IId-IIIa	Naqada IIIa/b-Dynasty I				

^a Phase 1 (H.S. Smith's proposed initial phase of the Early A-Group, predating the influx of Naqada culture material); Phase 2 (Reisner's "Early Predynastic"); Phase 3 (Reisner's "Middle Predynastic") (see H.S. Smith 1991; also Appendix A).

EARLY A-GROUP

The relevant cemeteries are portions of those at Shellal, Bahan, Risqalla, and Meris. Each contained graves attributable to the various chronological subphases of the Early A-Group developmental stage (see Appendix A for dating). All had been disturbed to varying degrees through natural causes and/or human activity.

At Shellal, graves attributable to the initial phase of the Early A-Group lay isolated on the top of a knoll that had been cut by a drainage channel into two low adjacent ridges. Due to heavy denudation of the western slope of the knoll, only faint traces remained of the graves that originally occupied this area of the cemetery (ASN I 1910a:33). Graves on the northern edge and along the western slope (edge of drainage channel) of the eastern ridge also exhibited evidence of erosion.⁵⁸ Areas of vacant ground

⁵⁸Shellal: Denuded graves on the eastern ridge: northern edge: graves 261, 262, 267, 268(empty); western edge: graves

separated several patches of graves on the eastern ridge creating sparse scatters whereas relatively more dense irregular clusters of graves occupied the western ridge (see Appendix E, Figures E.10 and E.11).

Plundering was not thorough, leaving about seventeen of the fifty-one burials essentially intact.⁵⁹ Nine of these lay on the northern portion of the western ridge and all but the southernmost (a superimposed burial) in this area contained few grave goods of note.⁶⁰ The other undisturbed graves were scattered throughout the rest of the cemetery and several of these were provided with a variety of horn and bone implements and ivory, shell and beaded ornaments as well as, in one grave, a leather cap adorned with ostrich feather plumes. Some of the disturbed burials in all but the northern portion of the western ridge, however, retained varying quantities of what might be considered luxury goods, such as stone maceheads, tortoise shell bracelets, ivory ornaments and spoons, and pierced shell and stone bead ornaments as well as, in one grave, an ivory figurine. Pottery was sparse and of local manufacture (see ASN I 1910a:33-42).

At Bahan, graves attributable to the Early A-Group lay along the western portion of a high terrace on the northern edge of the wadi. On the terrace below, only faint traces remained of what was thought to have originally been a cemetery of "considerable" size. The contents of the three graves reported suggest this area was the vestige of the later expansion of the cemetery that lay on the terrace above (ASN I 1910a:114-115/140). The graves on the high terrace are attributable to three chronological phases, all falling within the time frame of the Early A-Group developmental stage (see Appendix A). As at Shellal, areas of vacant ground separated various irregular patches of graves. The extent to which this may be attributed, in this case, to the activities of sebbâkhin, who were responsible for much of the modern disturbance in the southern portion of the cemetery, is not stated (ASN I 1910a:115). Due to the number of graves lacking chronologically distinctive grave goods, no topographical development of the cemetery can be detected, except for a concentration of most of the few graves attributed to the latest subphase toward the eastern end (see Appendix E, Figures E.12 and E.13).

The majority of the sixty-one graves on the high terrace had been plundered. Only three are stated to have remained undisturbed. However, many of the graves, including several from which the bodies

^{255, 256, 265(}empty).

⁵⁹Shellal: Thirteen graves are stated to have been undisturbed: graves 205, 207, 208, 209, 213, 222, 226, 233, 234(superimposed burial), 235, 240, 254, 263; the descriptions of an additional four do not specifically mention disturbed conditions: graves 201, 204, 250, 257. (see ASN I 1910a:33-42)

⁶⁰Shellal: Human burials in northern portion of western ridge (7 definitely undisturbed, 2 possibly undisturbed, 4 disturbed): graves 205(undisturbed old male; sewn leather bag?), 207(denuded but undisturbed female; rough granite? palette, oval speckled stone palette, resin, rubbing stone, shell necklace), 208(undisturbed male; leather penis sheath?), 209(undisturbed female; rubbing stone and pebble, bone and wooden needles), 213(undisturbed female child; ceramic bowl, leather cap?), 234(undisturbed superimposed burial female; stone axe-head, rubbing stones, ivory bracelet, large pierced spiral shell), 235(undisturbed small child; rubbing pebble); 201(intact? child; shell necklace, assorted shells, 1 bone or ivory bead, 1 "beryl" disc bead, small bunch of sewn leather), 204(intact? male; pierced shell ornamented leather cap?, 1 cylindrical bone or shell bead); graves 203(disturbed male; shell beads), 206(disturbed female; none listed), 212(very disturbed, "a few broken bones"; fragments of ostrich egg-shell), (disturbed male; irregular slate palette), 236(very disturbed, "a few bones"; none listed). (ASN I 1910a:33-35/38-39)

were missing completely, still retained great quantities of grave goods.⁶¹ These often consisted of an abundance of fine pottery as well as items such as maceheads, ivory ornaments and vessels, pierced shell and bead ornaments, stone vessels, and slate palettes some of which were zoomorphic in shape. Much of this material was of Egyptian manufacture obtained through trade. Despite the variety, quantity, and quality of these goods, the two gold bow-tips in one rifled grave intimate the original richness of at least some of these burials and the principal objective of the initial plundering. A few presumably unnoticed copper ornaments and implements and a silver beaded necklace were the only other metal objects remaining in these graves (see ASN I 1910a:115-137). Most of the graves retaining the majority of luxury goods lay in several clusters strung out along the length of the northern portion of the cemetery. This situation may not reflect the original distribution of such goods, but may have been due in part to modern disturbance.

At Risqalla, graves attributable to the later phase of the Early A-Group lay clustered on the southern slope of a gravel ridge. A patch of heavily eroded later A-Group graves lay on a mud ridge to their south. Early C-Group reuse of the southern slope of the gravel ridge resulted in superimposed burials in a small number of what may have originally been additional Early A-Group graves and the disturbance of a few others definitely of this date (see Appendix A and Appendix E, Figure E.14).

The degree of disturbance in any of the eight surviving Early A-Group human graves is difficult to determine. Only one is specifically described as unplundered, in spite of the fact that a portion of the burial had been cut away by a later grave. Fragmentary human remains were noted on the edge of another apparently undisturbed grave and a short distance away two adjacent loci contained the debris from unidentified plundered graves (or possibly the same unidentified grave).⁶² However, based on the descriptions, the bodies in most burials were apparently intact and the contents possibly undisturbed. Pottery, both local and imported, comprised the bulk of the grave goods. Only a few of the burials were accompanied by ivory or beaded ornaments. The most notable objects derived from the two piles of debris. One contained a painted ceramic steatopygous female figurine and a shallow ceramic dish with the modeled head of a horned animal at one end, the other a similar dish with horned heads at both ends (see ASN I 1910a:191-194).

At Meris, graves attributable to the initial phase of the Early A-Group lay on a heavily eroded knoll (Patch L: Graves 201-243). Other patches of A-Group graves occupied two separate low alluvial ridges in the vicinity and, together with those on the knoll, may represent the remains of a large cemetery extending into the Classic A-Group period (Patches B, D, L; see ASN I 1910a:208/211; Appendix A). Of the forty-one human graves documented on the knoll, six do not appear on the cemetery map. No

⁶¹Bahan: Disturbed graves retaining quantities of grave goods: e.g., 15, 66; with no bodies: e.g., graves 6, 50, 68, 70, 78, 83, 88. (ASN I 1910a:115-130)

⁶²Risqalla: Fragmentary human remains described as "outside" west end of grave 9. Debris deposits 36(same number as assigned to double dog burial it overlay) and 40; these two deposits contained similar material, most notably the two ceramic bowls with modeled homed animal heads. (ASN I 1910a:191-193)

obvious spatial patterning is visible in the distribution of the graves that do (see Appendix E, Figure E.15).

These graves are described as "greatly denuded and plundered anciently". Based on the disturbed state of the bodies, at least nineteen of them had clearly been thoroughly rifled and another six had definitely been disturbed. The condition of the rest is questionable. However, most contained few or no grave goods and the majority of the infrequently noted finer items, such as ivory vessels and ornaments, derived from several of the disturbed burials. The graves containing these items were fairly evenly scattered throughout most of the cemetery (see ASN I 1910a:211-215).

Grave construction, pits of various shapes and mostly unexceptional sizes, was similar in all four cemeteries. Grave elaboration, when it occurred, consisted of mat lining and the extremely infrequent "wood and twig" burial tray. Evidence for wooden "coffins" was rarer still. Although graves with floors covered with matting, and occasionally also cushioned with chopped straw, occur at both Shellal and Bahan, all unequivocal instances of burial trays and wooden coffins are limited to only some of those graves at Bahan attributable to the "Early Predynastic" phase of the cemetery's development.⁶³ The absence elsewhere of these forms of elaboration may be explained by the fact that graves datable to this chronological subphase of the Early A-Group are lacking at the three other cemeteries. Within the time frame of their occurrence, most of the graves containing burial trays were documented in one cluster of predominantly plundered graves some of which retained a wide variety of luxury goods.⁶⁴ The fact that other plundered graves of this date retaining similar or greater quantities of such goods were not furnished in a like manner in conjunction with the comparatively meager contents of the few intact graves with evidence for such furnishings suggests that the presence of burial trays was not directly related to the wealth of the burial.

Due to the extensive despoliation of these four cemeteries, no definitive analysis of the distribution of the quantity and quality of the grave goods is possible. There is, obviously, no way to estimate the original contents of plundered graves. However, if the evidence from Bahan, where objects made of precious metals appear to have been a primary target, is considered generally applicable, than the presence of other luxury items that apparently were considered not worth the taking may be an acceptable, albeit inexact, index of the original distribution of material wealth. Based on the relative "poverty" of some of the intact burials and the remnants of apparent "wealth" in some of those that were disturbed, the evidence demonstrates a manifest inequality in access to luxury goods. Unfortunately, this comparison

⁶³Bahan: Burials furnished with trays or wooden coffins: graves 5(disturbed? double burial, 2 males; possible evidence for wooden box or burial tray), 6 and associated locus 92(body removed; burial tray), 7(intact superimposed burial, male; bottomless wooden box with lid, matting above and below), 68(body removed; possible evidence for wooden box or burial tray frame), 83(body removed; burial tray filled with "river sand"), 86(intact female; burial tray), 89(disturbed male; burial tray filled with chopped straw); for a summary of the contents of these graves see notes 65, 66, 67, 83 below. (ASN I 1910a:115-127)

⁶⁴Bahan: Cluster with grave furnishings: graves 5, 6, 83, 86; for a summary of the notable contents of these graves, see note 65 below.

presents only the extremes at either end of the scale. Too few definitely intact burials survived to suggest the full intermediate range of differentiation in any of the cemeteries. Nevertheless, the only cemetery that clearly exhibits a spatial distinction between poor graves and relatively richer graves is that at Shellal. In this case, as mentioned above, a small number of intact burials containing few or no grave goods were concentrated in one section of the cemetery. This distinction, if it reflects an original reality, attests to the existence of a stratified social structure as early as the first archaeologically detectable phase of the A-Group culture complex.

At Bahan, many of the plundered graves retaining the greatest quantities and widest variety of quality goods were concentrated primarily in two irregular clusters attributable to the second phase of the cemetery's development and in another loose scatter attributable to the third.⁶⁵ Since the contents of the one intact burial in these clusters was comparatively meager and as a number of randomly scattered plundered graves also retained quantities of quality goods, this apparent concentration may not be significant.⁶⁶ In fact, although a comparison of the contents of plundered graves is little more than an exercise in speculation, based on the remnants they retained, most of the burials in this cemetery appear to have been on the whole comparatively richer than those in the other three cemeteries. This may be due in part to the vagaries of chronology or preservation. Nevertheless, the three definitely intact burials in this cemetery contained substantially fewer fine goods compared to some of the plundered graves of the same date.⁶⁷ These undisturbed graves, all attributed to the second phase of the cemetery's development, demonstrate the continuing existence of the social stratification detectable at Shellal. Although

⁶⁵Bahan: Grave clusters: "Early Predynastic": a) graves 6 and associated locus 92(body removed; wood and twig burial tray; e.g., 6 ceramic and 2 stone vessels, slate palette, macehead, ivory pin), 83(body removed; wood and twig burial tray; 11 stone vessels, ivory vessel and comb), 5(disturbed double burial, 2 males; wood burial tray?; 4 ceramic vessels, macehead, ivory comb); 86(intact female; wood and twig burial tray; e.g., 5 ceramic vessels, lozenge-shaped slate palette, quartz palette, basket); b) graves 88(body removed; twig and mat burial tray? or lining?; e.g., 10 ceramic vessels, 3 maceheads, fringed and clay/resin beaded leather garment), 78(body removed; mat lining; e.g., 9 ceramic vessels, 2 maceheads, 3 ivory combs, 2 baskets with red concentric band patterns, leather garments), 81 and associated locus 80(very disturbed male; 2 ceramic vessels). "Middle Predynastic": graves 66 and associated loci 42, 52, 53(disturbed double burial, 2 females; e.g., 39 ceramic vessels, 1 crescent-shaped and 2 turtle-shaped slate palettes, 9 ivory bracelets, ivory ring, copper knife, several strands of mixed carnelian, garnet, green-glazed and silver beads), 15(disturbed female; e.g., 6 ceramic vessels, double bird-headed slate palette, limestone vessel, 2 ivory bracelets, copper bracelet, gold bow-tips, strands of mixed carnelian, lapis lazuli and green-glazed beads, ceramic cylinder seal), 64 and associated locus 40(very disturbed, fragments of bones; wood and mat burial tray?; e.g., 6 ceramic vessels, one of which was modeled in the shape of a hippopotamus), the contents of locus 41 may also have derived from this grave(4 ceramic vessels, meat offering) (ASN I 1910a:115-133).

⁶⁶Bahan: Scattered plundered graves retaining quantities of quality goods: e.g., graves 50 and associated locus 49(body removed; e.g., 45 ceramic vessels, basalt vessel, turtle- and lozenge-shaped slate palettes, macehead, meat offering), 56(very disturbed male; e.g., variety of flint tools including 4 flint knives, ox-shaped slate palette, 2 tusks with incised patterns, copper needle with bone case, meat offering), 70(body removed; e.g., 2 maceheads, ivory tusk, porphyry marbles, carnelian and greenglazed beads), 82(body removed; lined with matting; e.g., 8 ceramic vessels, meat offering, ivory hairpin), 89(disturbed male; wood and twig burial tray; e.g., 6 ceramic vessels, macehead, fringed leather garment, ivory pendant). (ASN I 1910a:117-121/123-125/127)

⁶⁷Bahan: "Early Predynastic" intact burials: graves 7(superimposed burial, male; wooden box; e.g., 7 ceramic vessels, wooden dish, lozenge-shaped slate palette, 7 baskets), 63(male; e.g., 7 ceramic vessels, fish-shaped slate palette, basket), 86(female; burial tray; e.g., 5 ceramic vessels, lozenge-shaped slate palette, quartz palette, 2 ox-rib implements, basket) (ASN I 1910a:116-117/122/125-126); cf. particularly grave 50(and associate locus 49), and graves 78 and 88; see notes 65, 66 above, for a summary of the contents of these graves.

the few graves securely dated to the third phase of the cemetery's development were all plundered, the contents of two of them suggest they were among the richest in the cemetery.⁶⁸

The disturbed condition of many of the graves in these four cemeteries does not allow for a full reconstruction of their age and gender demographics, as much of the skeletal material was only fragmentary or missing completely. The bodies that remained, however, demonstrate that these cemeteries contained the burials of males and females of all ages including infants. Concentrations of graves containing subadult burials occurred in all four cemeteries. However, the evidence from Shellal and Meris where subadult burials are better represented and where some also occur scattered among the other graves suggests that it is not safe to assume that children were segregated. Moreover, the contents of a few of these graves demonstrate occasional provisioning comparable to that of some adults. As the "precise" ages of the children in these graves cannot be estimated and no settlements associated with these cemeteries were excavated, it is not possible to determine whether or not those of the youngest age categories were buried elsewhere. The provisioning of these burials cannot then be viewed as definitive evidence for the inheritance of privileged status.

Animal burials

All the animal burials in three out of these four cemeteries were originally attributed to the "B-Group" (see Appendix A). The custom of interring animals within the confines of human cemeteries was considered a characteristic of the mortuary practices of this artificially created culture complex (see, e.g., ASN I 1910a:43). In light of the reevaluation of the artifactual evidence from the graves formerly attributed to this cultural phase, these burials can now be placed in their proper chronological context (see H.S. Smith 1966, 1991). Although the animal burials in these four cemeteries contained no datable artifacts and none were obviously associated with any specific human burial, they may be considered contemporary with the graves attributable to the various chronological subphases of the Early A-Group among which they lay scattered.

At Shellal, the animal burials were distributed throughout all but the northern portion of the western ridge of the cemetery (see Appendix E, Figure E.11). On the southern portion of this ridge a group of

⁶⁸Bahan: "Middle Predynastic" plundered burials retaining great quantities of quality goods: graves 15 and 66; see note 65 above, for a summary of the contents of these graves.

⁶⁹Shellal: males (18), females (13), children (10), unidentified or missing (12); these include two double burials. Bahan: males (23), females (10), children (4), unidentified or missing (26); these include two double burials. Risqalla: males (2), females (2), children (3), unidentified (2); these include one double burial. Meris: males (15), females (11), children (8), unidentified or missing (7).

⁷⁰Well-provisioned children's graves: Shellal: grave 254(undisturbed "infant"; e.g., red jasper and shell disc-bead bracelet, pierced shell bracelet(?) and necklace(?), tortoise shell bracelets, wooden hairpin, green stone palette) (ASN I 1910a:40-41). Baham: grave 14(very disturbed "newborn"; e.g., hippopotamus tooth ivory bracelet), grave 87(condition questionable/"infant"; e.g., carnelian and green-glazed bead necklace, 3 ivory bracelets) (ASN I 1910a:134/136). Risquila: grave 9(condition questionable/"male child"; e.g., decorated ware jar) (ASN I 1910:191). Meris: grave 208(probably disturbed/"child"; e.g., tortoise shell bracelet, pierced shell necklace, copper needle), grave 228(condition questionable/"child"; e.g., ivory dish) (ASN I 1910a:212/214).

⁷¹See particularly the relevant sections in ASN I 1910c.

four, comprising two single dog burials (223, 224), a double dog burial (231), and a goat burial (232), lay loosely surrounded by human graves.⁷² Only one of those closely adjacent was intact. The most notable item in this grave was an ivory spoon. However, two of the disturbed burials, from one of which the body was missing completely, each contained the only stone maceheads documented in the cemetery as well as, in the most disturbed, fragments of an ivory bracelet. One of the other graves that partially intruded upon one of the dog burials contained an ivory figurine. Immediately to the north of this patch of graves, two adjacent dog burials (227, 228) were also partially encircled by human graves.⁷³ Again only one was intact and in this case the most notable items were two ivory bracelets. An ivory anklet and a carnelian beaded ornament derived from two of the disturbed burials in this vicinity.

On the eastern ridge the graves were more widely dispersed. A pair of denuded animal burials, comprising a single dog burial (256) and a double burial of a dog and a goat (255), were the southernmost graves on this ridge. The only closely adjacent human grave contained the intact well-provisioned burial of an infant.⁷⁴ It is possible that erosion in this denuded area of the cemetery had eliminated all traces of other human graves that may have similarly encircled these animal burials. However, neither of the other two animal burials (252, 264) on this ridge were surrounded by human graves. Two heavily plundered burials in the vicinity of these animals also retained fragments of quality goods.⁷⁵

To the limited degree that the original contents of the graves in the vicinity of the animal burials in this cemetery can be estimated, many of them appear to have been among the richest. If the absence of animal burials in the northern portion, possibly the poorer section, of the western ridge of the cemetery was not the result of the hazards of preservation, then the spatial distribution also supports the apparent relationship with the better-endowed burials.

At Bahan, since the human burials in the cemetery can be attributed to several chronological subphases of the Early A-Group, there is no reason to believe that all the animal burials were, as they were originally thought to be, contemporary only with those human burials designated "B-Group and Graves of Indeterminable Date". This is especially true, as this was in fact a catch-all category for burials lacking chronologically distinctive grave goods. Although these presumably contemporary human burials

⁷²Shellal: Human burials in the vicinity of animal burials 223, 224, 231, 232: graves 222(intact double burial, male/female; e.g., 1 ceramic vessel, flat stone palette, ivory spoon), 224(disturbed female; cuts animal burial with same grave number; e.g., ivory figurine), 225(very disturbed, body removed?; e.g., pierced shells), 229(disturbed male; e.g., stone macehead), 230(body removed; floor cushioned with chopped straw covered with matting; e.g., oblong and ovoid slate palettes, stone macehead, stone axe-head, basket woven in red and white pattern, fragments of ivory bracelets), 241(disturbed old male; sherds). (ASN I 1910a:36-40)

⁷³Shellal: Human burials in the vicinity of animal burials 227, 228: graves 219(very disturbed male; none listed), 220(body removed; e.g., 3 ceramic vessels, pierced shells, carnelian disc-beads), 221a(very disturbed male; e.g., ivory anklet, pierced shells), 233(intact male; e.g., 2 ivory bracelets, 2 large spiral shells, 2 strand pierced shell necklace). (ASN I 1910a:36/38)

⁷⁴Shellal: Human burial in the vicinity of animal burials 255, 256: grave 254 (intact infant; e.g., green stone palette, red jasper and shell disc-bead bracelet, pierced shell bracelet and necklace, wooden hairpin, 2 tortoise shell bracelets). (ASN I 1910a:40-41)

⁷⁵Shellal: Human burials in the vicinity of animal burials 252, 264: e.g., graves 266(very disturbed/just broken bones; fragments of an ivory spoon), 268(empty; fragments of an ivory spoon). (ASN I 1910a:42)

were originally thought to be the latest in the cemetery, many of them are now considered some of the earliest.⁷⁶ Since at least one of the animal burials had been superimposed on a plundered human burial now known to be, in light of the adjusted chronology, not among the earliest,⁷⁷ it seems unlikely that all the animal burials date to only one phase of the cemetery's development. They may be contemporary with any of the human graves in their vicinity (see Appendix A).

Unlike some of the animal burials at Shellal, none of those at Bahan were encircled by human graves and all were less densely grouped (see Appendix E, Figure E.13). Three animal burials, comprising two single dog burials (4, 54) and that of a young ox (71), lay in the northwestern section of the cemetery. The human burials in this vicinity are very poorly reported.⁷⁸ Only two can be identified with some certainty and both were heavily plundered.⁷⁹ Thus the true nature of the burials in this area cannot be accurately determined.

Three other animal burials lay in the southwestern section of the cemetery. Two, comprising a single dog burial (44) and a multiple dog burial (26), were a short distance apart; the third, the burial of a sheep/goat (23), lay further to the east. Human burials were scattered in the vicinity of all three. All but one of those closest to the two dog burials were heavily plundered. Only two retained grave goods and these were in the context of this cemetery unexceptional. However, four ivory bracelets lay among the debris that covered the multiple dog burial. They presumably derived from a nearby plundered grave and suggest the original richness of at least one of the adjacent burials. Of the graves in the vicinity of the sheep/goat burial, only the one that was definitely disturbed retained any grave goods. Again, the most notable item, a broken macehead, derived from the debris that overlay the animal burial.

Most of the six animal burials in the central section of the cemetery were fairly isolated (8, 33, 67,

⁷⁶In other words, H.S. Smith's proposed initial phase of the Early A-Group, predating the influx of Naqada culture (hence datable) material (1991).

⁷⁷Bahan: Grave number 8 designates both the animal burial and the "Early Predynastic" human burial on which it was superimposed (ASN I 1910a:137).

⁷⁸Bahan: Human burials in the vicinity of animal burials 4, 54, 71: graves 30(very disturbed, a "pile of bones"), 47(cannot possibly be the debris locus of that number associated with grave 46), 60(very disturbed male), 73(not likely that it is the debris locus of that number associated with grave 60), 75(not in grave catalog). Concerning the two that were purportedly debris loci associated with plundered graves: locus 47 is described as immediately south of grave 46 (ASN I 1910a:129), but appears on the map quite a distance to the northwest; locus 73 is described as the debris from grave 60 (ASN I 1910a:122), but also appears on the map quite a distance to the northwest; the loci on the map with these numbers appear to be mislabeled graves. Grave number 75 is stated in the grave catalog as not having been used (ASN I 1910a:133).

⁷⁹Bahan: Identifiable human burials in the vicinity of animal burials 4, 54, 71: graves 30(very disturbed; none), 60 and associated locus 73(very disturbed male; 1 ceramic vessel, lozenge-shaped slate palette); grave 60 was attributed to the "Early Predynastic" phase of the cemetery's development. (ASN I 1910a:122/135)

⁸⁰Bahan: Human burials in the vicinity of animal burials 26, 44: graves 25(very disturbed; none), 28(very disturbed female; none), 29(disturbed male; sherds), 31(probably not a grave/deposit of debris), 43(intact? male; e.g., 6 ceramic vessels, slate palette, shell bracelets), 45(very disturbed; sherds), 74(very disturbed; e.g., lozenge-shaped slate palette, 2 breccia marbles). Graves 43 and 74 were attributed to the "Early Predynastic" phase of the cemetery's development (ASN I 1910a:117/123/134-135); all the others were considered undatable ("B-Group and Graves of Indeterminable Date") due to the lack of chronologically distinctive grave goods.

⁸¹Bahan: Human burials in the vicinity of animal burial 23: graves 21(very disturbed; e.g., shell bracelet), 22(disturbed? male; none), 24(intact? male; none), 93(intact?; none reported in grave catalog); all these were considered undatable due to the lack of chronologically distinctive grave goods. (ASN I 1910a:134/137)

91). Only two lay in the vicinity of human graves. The one burial closely adjacent to that of three dogs (20) was a heavily plundered grave retaining little more than the remnants of a fringed and beaded leather garment. Of the two graves that lay to either side of another dog burial, in this case a double burial (69), only one is reported in the grave catalog. This grave had been plundered but retained a wide variety of goods including a quantity of ceramic vessels, stone and ivory vessels, a macehead, and the remnants of a beaded ornament among an assortment of other items. 83

In the eastern section of the cemetery, three more dog burials, two singles (11, 36) and a double (77), lay among a patch of human graves. Three of the graves most closely adjacent to one of the single dog burials (36) contained the well-provisioned burials of infants. The graves in the vicinity of the other single dog burial (11) had all been heavily plundered, but retained a variety of luxury goods. The grave closest to the double dog burial (77) contained the possibly intact unexceptional burial of a child. The very disturbed grave a short distance to the northeast may not have been contemporary with the animal burials, as it was of a later date than the few datable graves in their immediate vicinity. The second state of the single dog burials, as it was of a later date than the few datable graves in their immediate vicinity.

Based on the spatial distribution of the animal burials, if proximity to datable graves alone is considered relevant, most would appear to be contemporary with the first two subphases of the cemetery's development. However, the one dog burial superimposed on an "Early Predynastic" grave suggests the practice of independent animal burial was observed throughout the entire time period the cemetery was in use. Although the original extent of the contents of many of the graves (at least those that can be identified) that lay in the immediate vicinity of the animal burials cannot be estimated due to their disturbed condition, most of them were not among those plundered graves that retained the greatest quantities and variety of quality goods.

At Risqalla, a double dog burial was surrounded by the cluster of surviving Early A-Group human burials (see Appendix E, Figure E.14). Although a few of these graves contained items that may

⁸²Bahan: Human burial in the vicinity of animal burial 20: grave 94(body removed; fringed and beaded leather garment, stone pendant). (ASN I 1910a:137)

⁸³ Bahan: Human burials in the vicinity of animal burial 69: graves 68(body removed; possible evidence for wooden "coffin" or burial tray frame; e.g., 10 ceramic vessels, alabaster macehead, alabaster vessel, ivory vessel, lozenge-shaped slate palette, 3 copper needles, 2 fish-tail flints, 2 alabaster pendants, haematite marbles), 96(not in grave catalog); grave 68 was attributed to the "Early Predynastic" phase of the cemetery's development. (ASN I 1910a:122-123)

⁸⁴Bahan: Human burials in the vicinity of animal burial 36: graves 13(intact? "new-born infant"; e.g., white stone palette, shell bracelets), 14(disturbed "new-born infant"; e.g., hippopotamus tooth ivory bracelet), 87(intact? "infant"; e.g., carnelian and green-glazed bead necklace, 3 ivory bracelets); all were considered undatable due to the lack of chronologically distinctive grave goods. (ASN I 1910a:133-134/136)

⁸⁵Bahan: Human burials in the vicinity of animal burial 11: graves 12(very disturbed male; e.g., green-glazed beads), 35(very disturbed male; e.g. diorite? macehead), 10(debris deposit from either grave 12 or 9; e.g., wide variety of ceramic vessels, remains of a meat offering), 9(very disturbed male; e.g., ivory dish). The debris deposit (10) was attributed to the "Early Predynastic" based on the pottery; the disturbed graves to either side of it (9, 12), from either of which it may have derived, were considered undatable due to the lack of chronologically distinctive grave goods. Grave 35 was attributed to the "Early Predynastic" phase of the cemetery's development. (ASN I 1910a:117/133)

⁸⁶Bahan: Human burial in the vicinity of animal burial 77: grave 37(intact? young male (13 years); 2 ceramic vessels, dog scapula); this grave was attributed to the "Early Predynastic" phase of the cemetery's development. (ASN I 1910a:117)

⁸⁷Bahan: Human burial of later date northeast of animal burial 77: grave 64(associated locus 40) and possibly associated locus 41; all attributed to the "Middle Predynastic" phase of the cemetery's development. (ASN I 1910a:129)

be considered luxury goods, such as ivory ornaments and imported pottery,⁸⁸ their contents, in terms of quantity and variety, are in no way comparable to those in graves of similar date at Bahan.⁸⁹ As mentioned previously, the most notable objects derived from two adjacent debris loci, one of which overlay the dog burial. These presumably originated from a nearby grave (or graves), which, although apparently the most thoroughly plundered, may possibly have been the richest in this cemetery.

At Meris, the location of two of the three animal burials remains unknown, as their position is not indicated on the published map (see Appendix E, Figure E.15). The only one that does appear lay isolated from the rest of the graves. In conjunction with the plundered condition of the cemetery as a whole, this situation inhibits any attempt to evaluate even the general context of these burials.

The distribution of the animal burials at Shellal suggests a pattern of association with well-provisioned burials that, although less clearly defined, is still detectable at the two other cemeteries where both the immediate and general contexts of these burials can be at least partially evaluated. At Bahan, that pattern of association is qualified by the absence of animal burials in the immediate vicinity of the possibly richest graves in the cemetery. The contents of the animal burials themselves, limited as they are to the occasionally reported mat and/or cloth wrappings and leather collars and leashes (see Appendix A), do not differentiate them from the very poorest of the human burials.

"EARLY CLASSIC" A-GROUP

The relevant cemeteries are that at Shem Nishei and portions of those at Kubanieh, Meris, and Gerf Husein South. The extensive cemeteries at Kubanieh and Gerf Husein were in continuous use over an extended period of time, possibly encompassing almost the full chronological range of the A-Group culture complex (see H.S. Smith 1991). Those at Meris and Shem Nishei represent a more limited time span (see Appendix A). All had suffered varying degrees of depredation, in some cases quite extreme. In fact, the human burials at Meris and Shem Nishei had been so heavily plundered that few graves retained anything more than sherds of their original ceramic contents.

At Kubanieh, most of the approximately six hundred graves were situated in the main part of the cemetery, with small outlying patches to the southwest and a more extensive one to the northeast (see Appendix E, Figure E.18). The graves ranged in date from the Early A-Group developmental stage through the early Terminal. Only approximately one hundred and fifteen can be securely dated. An analysis of their distribution suggests a topographical development from south to north for the main part of the cemetery (H.S. Smith 1991:94/Plan 1).

⁸⁸ Risqalla: Human burials containing notable items in vicinity of animal burial 36: graves 41(upper portion of skeleton, cut by later grave; e.g., wavy-handled jar, shell disc-bead bracelet?), 34(female; e.g., 2 ivory bracelets), 10(female child; e.g., wavy-handled jar), 39(male child; e.g., decorated ware jar), 38(double burial, 2 males; e.g., decorated ware jar, pierced shell bracelet). (ASN I 1910a:191-194)

⁸⁹ That is, "Middle Predynastic"; see note 65 above.

Approximately seventy-five of the datable graves can be attributed to the early Classic A-Group period. The majority of these were concentrated in the central portion of the main part of the cemetery. Pottery of Egyptian manufacture and the remains of ornaments of pierced Red Sea shells and semi-precious stone beads comprised the bulk of the grave goods that remained in these predominantly plundered graves. A small number, however, retained remnants of their richer contents such as ivory bracelets and vessels (see Junker 1919:122-153).

Most of the graves of this date were average sized rectangular pits. A few of these retained evidence of wood or stone-slab roofing. Of the approximately ten graves of relatively exceptional size in this cemetery, only three can be securely dated and only one of these to the Classic A-Group period. It lay, along with several of the other large graves, in one of the outlying groups to the southwest. Four undated graves of similar size were scattered in various parts of the cemetery.⁹⁰

At Meris, as mentioned previously, several patches of graves occupied low ridges in this portion of the cemetery. Those discussed above were the earliest. The graves on the ridge under consideration here (Patch B: Graves 101-123; see Appendix E, Figure E.15) were of a later date, extending chronologically into the early Classic A-Group developmental stage (see Appendix A). Most had been thoroughly plundered. Only four retained remnants of their original contents other than sherds. These consisted, for the most part, of a few complete ceramic vessels and a couple of grinding stones. The most notable items, pierced shell, ivory and blue-glazed beads, derived from an "apparently intrusive" burial in one of the only two graves exhibiting evidence of elaborated construction. In this case, flat stones had been embedded in places in the mud plaster coating the sides of the grave. The other elaborated grave was particularly exceptional in that its extant remains consisted of an above ground stone-built structure. One side was formed by large boulders, the ends and other side of undressed stone. Rough stone slabs formed the roof. All that was left of the burial were the scattered remains of a child and some beads. Both these graves lay toward the western end of the cemetery (see ASN I 1910a:208-210).

At Shem Nishei, graves attributable to a late phase of the Early A-Group, possibly also including a few of the early Classic, lay on a high gravel bank on the southern edge of the wadi (Khor Berastod) (ASN I 1910a:256). The thirty human graves in this cemetery were distributed in several sparse scatters (see Appendix E, Figure E.16). All consisted of simple pits of various shapes. Only one was of comparatively exceptional size. Although this grave had been plundered, it retained the greatest quantity of

 $^{^{90}}$ Kubanieh: 10 graves of exceptional size: 6 were situated in the two outlying groups to the southwest; 1 in the outlying group to the northeast; 1 in the middle and 2 others in the north of the main part of the cemetery. (Naqada IId-IIIa) grave $150(395 \times 80 - 90 \text{cm}; \text{ stone-slab roofing}; \text{ southwest group})$; (Naqada IIIb) graves $107a(380 \times 135 - 100 \text{cm}; \text{ southwest group})$, $114(335 \times 65 - 112 \text{cm}; \text{ southwest group})$; (Undated) graves $79(410 \times 110 - 200 \text{cm}; \text{ stone-slab roofing}; \text{ southwest group})$, $141(305 \times 67 - 120 \text{cm}; \text{ southwest group})$, $145(350 \times 63 - 56 \text{cm}; \text{ southwest group})$, $147(300 \times 200 - 60 \text{cm}; \text{ northern area of main cemetery})$, $194/18.0.1(270 \times 120 - 38 \text{cm}; \text{ northern area of main cemetery})$, $205(440 \times 180 - 80 \text{cm}; \text{ central area of main cemetery})$, $25.n.1(310 \times 140 - 107 \text{cm}; \text{ northeast})$. (Junker 1919:125-129/133/153; dates based on H.S. Smith 1991)

⁹¹Meris: grave 105(disturbed double burial, 2 females; e.g., 4 ceramic vessels, several cowrie shell, ivory and blue-glazed beads). (ASN I 1910a:209)

⁹² Meris: grave 103 ("bones of a person about the age of puberty"; beads). (ASN I 1910a:208)

grave goods.⁹³ Whether or not this reflects the original relative distribution cannot be determined due to the plundered condition of the rest of the cemetery.⁹⁴ Many of the graves were completely empty and of those that retained remnants of their original contents none contained anything of note. Other than several rough stone palettes, local and a few pieces of imported pottery were all that remained of the grave goods (see ASN I 1910a:256-258).

At Gerf Husein, approximately two hundred graves ranging in date from the Early A-Group developmental stage through the early Terminal occupied a strip of land between the desert dunes on the west and an expanse of sand on the east (see Appendix E, Figure E.17). Almost half were empty.⁹⁵ An analysis of the distribution of the approximately seventy securely datable graves suggests a topographical development from north to south expanding from the desert edge toward the river, with the latest graves strung out along the eastern edge of the cemetery. Some of the undatable graves that lay scattered throughout the length of the cemetery may have been earlier than the earliest datable graves (H.S. Smith 1991:102/Plans 3 and 4). This distribution creates a mix of chronologically diverse burials in portions of the cemetery.

Of these seventy datable graves, approximately twenty-six can be attributed to the late Early A-Group and about twenty-five to the early Classic based on the imported pottery they contained. The majority lay scattered along the western side of the cemetery, with most of the earlier graves to the north and the later to the south. While all but a few of the Classic A-Group graves had definitely been plundered, several retained, in addition to imported pottery, a variety of quality goods such as zoomorphic slate palettes, copper implements, ivory and "mother-of-pearl" bracelets, and an assortment of semi-precious stone beads. In contrast, quantities of imported and local pottery comprised the bulk of the grave goods in the late Early A-Group graves, many of which may have been intact. 97

Construction for the majority of graves of this date in this cemetery consisted primarily of simple oval or rectangular pits of unexceptional size. However, a number of them exhibited a variation on this

 $^{^{93}}$ Shem Nishel: Largest grave: grave 15(rectangular, $180 \times 170 - 125$ cm; 5 ceramic vessels, slate palette, rubbing pebble). Other graves in associated scatter: graves 13(broken pottery), 14(diorite? palette), 16(1 ceramic vessel), 19(empty), 20(3 ceramic vessels, shell, fragments of malachite), 21(body laid on matting, covered with linen and leather; fragments of malachite). (ASN I 1910a:257-258)

⁹⁴This grave is comparable in size to some of the richer, but not the richest graves at Bahan (1 of which (50) was a bit larger and 2 of which (15, 66) were smaller); cf. Bahan graves 88(rectangular, 195 × 120 – 110cm) and 89(rectangular, 210 × 140 – 100cm); another heavily plundered grave retaining few grave goods at Bahan was also of similar size: grave 61(irregular shape, 195 × 140 – 110cm) (ASN I 1910a:122). The Shem Nishei grave may be contemporary with the latest graves at Bahan, as the imported pottery it contained can be attributed to the Naqada IIb-c period (H.S. Smith, personal communication 1998). It would then be contemporary with the 2 smaller but much richer graves (15, 66) just mentioned. (see notes 65, 66 above for a summary of the contents of these graves)

⁹⁵Gerf Husein: Eighty-six graves are listed as empty (ASN II 1912a:151); another 38 had definitely been disturbed.

⁹⁶Gerf Husein: (Naqada IIb-IIc): 3, 11, 15, 33, 97, 136, 138, 141, 142, 143, 147, 148, 150, 160, 161, 165, 166, 167, 168, 169, 171, 172, 173, 178, 193, 202; (Naqada IId-IIIa): 31, 34, 40, 41, 42, 44A, 44B, 45, 57, 66, 67, 68, 70, 73, 81, 84, 90, 93, 98, 117, 187, 188, 189, 130, 135 (see H.S. Smith 1991:Plan 3); several of these contained superimposed burials (ASN II 1912a:127-151).

⁹⁷The condition of the burials was not definitely stated. The assumption that they may have been intact is based on the brief descriptions of the bodies.

theme being dug in what was termed a "beehive section", in other words, narrower at the mouth. One of these, as well as three of the simple pits, retained evidence of their original rough stone roofing slabs. Except for two rather large circular beehive graves attributed to the Classic A-Group period, the burial in one of which may have been intrusive in an earlier grave, all the other exceptionally large graves were rectangular and of Terminal A-Group date⁹⁹ (see ASN II 1912a:127-151, dating based on H.S. Smith 1991).

In these heavily plundered cemeteries, the grave goods contribute little to a determination of the original distribution of material wealth. All four cemeteries, however, had architecturally notable graves. Differentiation was generally a matter of either relative magnitude or elaborated construction, rarely a combination of both. In fact, excluding those graves of questionable date, ¹⁰⁰ only the mud-plastered stone-studded grave at Meris and the one large stone-roofed grave at Kubanieh combined the two. ¹⁰¹ All of the other stone- or wood-roofed graves were of unremarkable size, ¹⁰² and the one relatively large grave at Shem Nishei was unelaborated. ¹⁰³

Understandably, on the assumption that size and/or elaboration reflect privileged status, there were only a relatively small number of such graves in each of the four cemeteries; one at Shem Nishei, possibly two at Meris, at least five at Kubanieh, and possibly six at Gerf Husein. Only at Kubanieh, if the undated and later large graves are also taken into account, is there a clearly detectable concentration of architecturally notable graves, in this case, in the outlying southwestern sector of the cemetery.

The one large stone-roofed grave securely dated to the early Classic A-Group period at Kubanieh compares favorably to those of slightly later date in Cemetery 137 at Seyâla, where the presence of prestige artifacts in conjunction with the size of several of the graves contributes to the interpretation of this cemetery as the exclusive burial place of the local elite¹⁰⁵ (ASN IV 1927:205-206; H.S. Smith

⁹⁸Gerf Husein: Graves with roofing slabs: (Naqada IIb-IIc) grave 148; (Naqada IId-IIIa) graves 31, 73(beehive section); (Naqada II, a more precise range cannot be specified) grave 52. (ASN II 1912a:129/133/136/145; dates based on H.S. Smith 1991)

⁹⁹Gerf Huseln: Large circular beehive: graves 135(225 × 200 – 130cm; possible reuse of earlier grave), 188("large empty double beehive grave, mud-plastered inside", no dimensions provided; date based on sherds). (ASN II 1912a:141/150; dates based on H.S. Smith 1991)

¹⁰⁰Merls: stone-built grave (103); Gerf Huseln: large circular beehive grave (135) and similar "large" double beehive grave for which no dimensions were provided (188).

¹⁰¹Meris: grave 105(irregular circular, diameter 200cm, 60-35cm deep, mud-plastered stone-studded walls); Kubanieh: grave 150(rectangular, 395 × 80 – 90cm, stone-slab roofing). (ASN I 1910a:209; Junker 1919:129)

 $^{^{102}}$ Gerf Husein: (Naqada IIb-IIc) grave 148(110 × 80 – 90cm); (Naqada IId-IIIa) graves 31(140 × 70 – 60cm), 73(155 × 90 – 100cm); (Undated) grave 52(125 × 80 – 105cm); Kubanieh: (Naqada IId-IIIa) graves 27(195 × 85 – 80cm, wood-roofed), 69(no dimensions, wood-roofed), 85(130 × 50 – 63cm), 225(200 × 50 – 125cm). (ASN II 1912a:129-130/133/136/145; Junker 1919:122/124/125/129/135)

 $^{^{103}}$ Shem Nishei: grave 15(rectangular, 180 × 170 – 125cm). (ASN I 1910a:257)

¹⁰⁴Shem Nishel: grave 15(large rectangular pit); Meris: graves 103(stone-built), 105(large circular mud-plastered stone-studded pit); Kubanleh: graves 27 and 69 (both average-sized wood-roofed pits), 85 and 225 (both average-sized stone-roofed pits), 150(large rectangular stone-roofed); Gerf Husein: graves 135(large circular beehive), 188(large double beehive, mud-plastered), 31, 52, 73, 148 (all average-sized stone-roofed pits); some of these are of questionable date and at Kubanieh other similar undated graves may also be of Classic A-Group date; see notes 90, 99, 101, 102 above, for dimensions and dates.

 $^{^{105}}$ Seyâla: graves 1(285 × 150 – 170cm, stone-slab roofing), 2(240 × 90 – 150cm, stone-slab roofing), 5(280 × 150 –

1994). In contrast, the exceptionally-sized graves in both these cemeteries are dwarfed by those of the same date in the elite cemetery at Qustul. Thus the large and/or occasionally elaborated graves at Kubanieh, Meris, Shem Nishei, and Gerf Husein perhaps demonstrate a lesser local manifestation of the quite dramatic differentiation in social stratification evidenced in the exclusively elite cemeteries to the south, most particularly at Qustul.

Animal burials

Most of the animal burials in these cemeteries were poorly reported. Those at Shem Nishei and Gerf Husein were listed among the empty graves. No details were provided concerning their condition, particularly whether the animals were original or superimposed burials. As, presumably, there were no grave goods, the latter possibility may be unlikely. It may therefore be safe to assume that they were contemporary with the other graves in their vicinity and not intrusive burials of a later date. Similarly, despite the fact that it was originally suggested that the spatial isolation of those at Meris possibly set them apart chronologically from the rest of the graves in this portion of the cemetery, the presence of analogous burials elsewhere supports the assumption of their contemporaneity. It would seem, however, that the animal burial at Kubanieh is the only one of the lot that is the least questionably of this date.

At Kubanieh, the only animal burial (20.m.1), that of a decapitated bull, lay in the north-central section of the main part of the cemetery (see Appendix E, Figure E.18). Seven of the thirteen graves in its immediate vicinity can be securely dated, all of these to the early Classic A-Group period. The others contained no chronologically distinctive grave goods. Most were plundered; three were empty; only two plundered graves and another possibly in the same condition retained, in addition to quantities of pottery, anything of note. One of the seven, however, was a stone-roofed grave. 107

At Meris, as above, the location of one of the two cow burials remains unknown due to its absence on the published cemetery map (see Appendix E, Figure E.15). Both, however, were described as isolated from the rest of the graves and presumably in the same vicinity (see Appendix A). The only grave near the one animal burial (102) that does appear on the map was the exceptional stone-built grave described above. Although it contained little more than scattered bones, its elaborate construction

¹⁸⁵cm); according to Firth all the graves had originally been roofed with stone-slabs (ASN IV 1927:204); these graves range in date from Naqada IIIa1-IIIa2. (ASN IV 1927:207-210; dates based on H.S. Smith 1994)

 $^{^{106}}$ Qustul Cemetery L: (Naqada IId-IIIa) grave L29(trench 945 \times 100 - 73(?)cm, side chamber 455 \times 227cm); (Naqada IIIa1) graves L24(trench 1080 \times 150 - 35-70cm (denuded), side chamber 560 \times 300cm), L23(trench 925 \times 200 - 150cm, side chamber 480 \times 330 - 220cm). (OINE III 1986:344/357/377; dates based on H.S. Smith 1994)

¹⁰⁷ Kubanleh: Human burials in the vicinity of animal burial 20.m.1: (Naqada IId-IIIa) graves 20.m.85(not 185 as on map; plundered stone-roofed; 1 broken ceramic vessel), 20.m.126(condition questionable, possibly intact; 3 ceramic vessels, palette, green-glazed beads), 20.m.132(plundered; e.g., 2 ceramic vessels, palette), 20.m.134(plundered; 6 ceramic vessels, 2 ivory bracelets), 20.m.158(condition questionable, possibly plundered; e.g., 7 ceramic vessels, palette, assortment of beads), 20.n.129(not 120 as on map; plundered; e.g., 4 ceramic vessels, assortment of beads), 20.n.168(plundered; sherds, broken palette), 19.m.118(plundered; 4 ceramic vessels); (Undated) graves 20.m.119(plundered; sherds), 20.m.123(plundered; sherds, rubbing stone), 20.m.124(plundered; 1 ceramic vessel), 20.m.125(empty), 20.m.130(empty), 20.m.131(empty). (Junker 1919:125/127-128/130)

alone distinguishes it from most of the other graves in this cemetery. However, its contemporaneity has been questioned (ASN I 1910a:208) and its contents contribute nothing to a determination of date. Its proximity to the animal burials cannot, then, be accepted as evidence for an association with the more notable graves in this cemetery.

At Shem Nishei, the graves in the vicinity of the three animal burials (23, 30, 34) had been, like the rest of the cemetery, heavily plundered. Two of the three closest were empty, the third contained only a few bones and a rough schist palette.¹⁰⁸ Few of the other six graves in this sparse scatter were in better condition. Only two retained grave goods consisting, in these instances, of a few ceramic vessels.¹⁰⁹ This scatter was not the one associated with the one relatively large grave in the cemetery (see Appendix E, Figure E.16).

At Gerf Husein, two individual burials of sheep (37, 121) lay a short distance apart in the central section toward the eastern side of the cemetery (see Appendix E, Figure E.17). Only four of the ten human burials scattered in their immediate vicinity can be dated based on the imported pottery they contained. These burials are chronologically diverse, ranging from the late Early A-Group to the early Terminal A-Group, with two of the four attributable to the intermediate period. The local ceramics in two of the other burials suggest a date corresponding with the earlier graves. Thus half the graves in this vicinity are attributable to the late Early A-Group through the early Classic A-Group periods. The rest contained no chronologically distinctive goods. Accordingly, and based on the pattern of occurrence of similar animal burials in other cemeteries, the animal burials in this cemetery probably predate the one late grave in their vicinity.

Two difficulties inhibit an evaluation of the context of these animal burials. On the one hand, although one of the graves in this vicinity was stone-roofed, it was, like the other similarly constructed graves in this cemetery, of unexceptional size. Moreover, most of the graves had been heavily plundered and only one retained anything of note. The three that may possibly have been intact contained few or no grave goods. On the other, there is no way to determine with which of these chronologically diverse graves the animal burials were immediately contemporary (i.e., late Early or early Classic A-Group).

¹⁰⁸Shem Nishel: Human burials in the vicinity of animal burials 23, 30, 34: graves 29(empty), 31(empty), 32(a few bones; rough schist palette). (ASN I 1910a:258)

¹⁰⁹Shem Nishel: Other human burials in scatter associated with animal burials 23, 30, 34: graves 10(scattered bones of an infant; none), 11(a few bones; 1 ceramic vessel), 12(disturbed skeleton; none), 22(child; 2 ceramic vessels), 24(child, "possibly a secondary interment"; none), 33(not in grave catalog); 9(not a grave). (ASN I 1910a:256-258)

¹¹⁰Gerf Huseln: Datable human burials in the vicinity of animal burials 37, 121: graves 33(Naqada IIb-IIc), 31 and 34 (Naqada IId-IIIa), 29(Naqada IIIb); graves with local pottery 37, 120. (see H.S. Smith 1991)

¹¹¹Gerf Huseln: Human burials in the vicinity of animal burials 32, 121: (late Early A-Group) grave 33(intact? male; 1 ceramic vessel); (late Early A-Group? based on Nubian pottery): graves 37(very disturbed child; e.g., 1 ceramic vessel, rectangular slate palette, ivory bracelet, and an assortment of shell and semi-precious stone beads), 120(intact?; 2 ceramic vessels, broken rectangular palette); (early Classic A-Group) graves 31(body removed; stone-slab roofing; broken ceramic vessels, fragments of shell bracelet, pierced shells), 34(very disturbed male; 1 ceramic vessel, rubbing pebble); (undated) 30(intact? infant; none), 129(empty), 131(empty), 213(empty). (ASN II 1912a:129-131/140/151)

The distribution of the animal burials in these cemeteries does not present a clear pattern of association with architecturally notable graves. At Shem Nishei, the animal burials were not part of the scatter among which the one large grave lay. At Meris and Gerf Husein, the contemporaneity of the nearby elaborated graves is uncertain. Moreover, the one at Gerf Husein was unexceptional except for its stone-roofing. Similarly, at Kubanieh, although one of the nearby graves was stone-roofed, it was not one of those definitely or possibly contemporary graves of exceptional size, most of which were concentrated in the southwestern sector of the cemetery. Thus based on the evidence at Kubanieh, Shem Nishei, and Gerf Husein, the animal burials appear to have had no obvious connection to the most exceptional graves and thus presumably to the highest stratum of, what might be termed, the "local elite" of this period in these three cemeteries.

Information concerning the size and structure of the animals' graves is limited. For those at Gerf Husein, no description was provided (ASN I 1910a:151). For those at Shem Nishei, only the shape, but not the size, was listed for two, while the third was not described at all (ASN I 1910a:258). At Kubanieh, the grave was an average-sized rectangular pit (Junker 1919:151). At Meris, however, the construction of the only one described (101) was unusual. The grave was of irregular shape, dug into the gravel beside an overhanging ledge of rock. The ends and east side had been "outlined" with stones (ASN I 1910a:208). This method of construction was similar to that of two of the animal graves associated with the earlier burials (on a separate knoll: Patch L) in this portion of the cemetery (see above Early A-Group and Appendix A). One of these had also incorporated a ledge of overhanging rock (242), while the other (241) had been dug in a cleft between two boulders, either end being filled with smaller stones (ASN I 1910a:215). In all cases, natural rock formations appear to have been used as a basic element of the structure. The exceptional stone-built grave mentioned above was similarly constructed. Whether this similarity confirms the contemporaneity of that grave or calls into question the date of all these animal burials remains an open question. The latter possibility is compounded by the fact that none of these unusually constructed animal graves appear on either of the two cemetery maps. However, if the former possibility is accepted, then at least one of the animal burials associated with the later graves in this portion of the cemetery shared more than propinquity with architecturally notable graves. 112 If so, in this case alone do animal burials in northern Lower Nubia show similarities to those in the later elite cemeteries to the south.

¹¹² Meris: Patch B (early Classic A-Group) animal graves 101 and 102: 101 (partially stone-built) does not appear on the map and is only assumed here, based on the vague description of location, to be in the vicinity of animal burial 102 (construction method not described), which does appear on the map at the western end of the cemetery not too distant from grave 103 (stone-built grave with human burial); Patch L (late Early A-Group) animal graves 241, 242: neither of these graves appear on the cemetery map; the other animal burial (201/irregular shaped pit) appears on the map quite isolated from the other graves on this knoll.

CLASSIC/TERMINAL ELITE CEMETERIES

All but one of the cemeteries discussed above lay within a fifty-kilometer stretch of the valley, from Kubanieh ten kilometers north of the First Cataract to Shem Nishei approximately forty kilometers to its south. The cemetery at Gerf Husein was situated another fifty kilometers upriver. Beyond this point, the only animal burials reported in any of the numerous Classic and Terminal A-Group cemeteries that lay along the length of the valley south to the Second Cataract were those in the two widely separated elite cemeteries at Naga Wadi and Qustul. That at Naga Wadi was the second of two successive elite cemeteries in the immediate vicinity of Seyâla that together spanned both the Classic and Terminal A-Group stages (Cemeteries 137, 142), while the cemetery at Qustul was in continuous use during the same period of time (H.S Smith 1994).

At Naga Wadi (Cemetery 142), some of the A-Group graves had been disturbed by later reuse and most rifled thoroughly just prior to excavation. The difficulties presented by this situation are compounded by the summary report which left most of the approximately forty-six graves in this cemetery undescribed (ASN IV 1927:213-217). Those few for which there were data can be attributed to the Terminal A-Group period, ranging in date from Naqada IIIb through the early First Dynasty (H.S. Smith 1994). Although the graves retained no prestige objects similar to those found at the other elite cemetery near Seyâla (Cemetery 137), the size of a few of them is larger than the largest at that cemetery and comparable to some of the small "royal and quasi-royal" tombs of the same date at Qustul. 113

The only animal burials that can with some certainty be considered contemporary with the Terminal A-Group elite graves are the isolated cluster of three sheep/goats at the southwestern end of the cemetery. The date of the two ox burials is highly questionable. As the only one of these that appears on the map occupied one of the two largest graves in the cemetery, 114 it has been suggested that it may have been intrusive (H.S. Smith 1994:376). It is possible, therefore, that this burial might be of a later date, perhaps contemporary with the C-Group reuse of some of the other graves in this cemetery. This may also be true for the other unidentified ox burial, as it is also described as occupying a "large pit", which may be any one of the unnumbered undescribed large graves appearing on the cemetery map (see Appendix A and Appendix E, Figure E.19). Although it might be argued that these cattle burials represent funerary practices similar to those observed by the Qustul elite, the fact that none of the cattle buried in Cemetery L occupied such comparatively extravagant graves appears to weigh against such an interpretation. 115

¹¹³Seyâla: Cemetery 137 (Naqada IIIa1-IIIa2): tombs $1(285 \times 150 \text{cm})$, $2(240 \times 90 \text{cm})$, $5(280 \times 150 \text{cm})$; Cemetery 142 (Naqada IIIb – early Dynasty I): tombs $1(335 \times 135 \text{cm})$, $7(550 \times 130 \text{cm})$, and side chamber), and if the tomb in which one of the possibly later intrusive ox burials is included, $15(500 \times 250 \text{cm})$; Qustul (Naqada IIIb – early Dynasty I): L1(330 × 100 cm, and side chamber), L8(400 × 100 cm, and side chamber), L9(405 × 130 cm, and side chamber), L15(550 × 130 cm). (ASN IV 1927:207/208/210/214; OINE III 1986:16, Table 5; dates based on H.S. Smith 1994)

 $^{^{114}}$ Naga Wadi: grave $15(500 \times 250$ cm)

¹¹⁵ Although a few of the animal graves at Qustul are larger than some of the largest graves at Kubanieh, within the context of the cemetery (where most of the tombs are on a far grander scale than any in other A-Group cemetery) they were comparatively

At Qustul, graves ranging in date from the early Classic A-Group through the Terminal were distributed in a large arc, starting with the earliest in the north and extending south-southwest to an area of more densely grouped later graves (dates based on H.S. Smith 1994). Although all had been heavily plundered, the presence of prestige artifacts exhibiting Egyptian royal iconography in conjunction with the extraordinary size of some of the tombs demonstrates that this was the burial place of a powerful elite.¹¹⁶

None of the cattle burials lay in the vicinity of the earlier tombs to the north, thus all may be contemporary with the later phases of the cemetery. Only one lay in close proximity to and possibly associated with a human grave, in this case, one of the largest tombs in the cemetery. Unlike any other animal burial attributed to this culture complex, it contained two large storage jars (see Appendix A). Although a number of these animal burials have been termed subsidiary, their status as such remains a matter of opinion. No artifactual evidence links them to any specific human grave. Only their spatial relationship can be interpreted for or against the possibility, in which case only the one burial, already an anomaly because of the ceramic vessels it contained, might be considered recognizable as such (see Appendix E, Figure E.20).

There can be little doubt concerning the status of the occupants of the larger tombs in the two cemeteries in the vicinity of Seyâla and those at Qustul. Each of the cemeteries as a whole is considered the exclusive burial place of the local elite including their immediate families and/or retainers (ASN IV 1927:204; H.S. Smith 1994). The apparent absence of animal burials in contemporary cemeteries within their probable spheres of influence suggests a change in the pattern of association detected in most of the earlier A-Group cemeteries to the north where such burials were not generally associated with the most exceptional or wealthiest graves.

Iconographic Evidence

Decorated pottery, zoomorphic vessels and sculpted or carved artifacts are among the available evidence that perhaps can provide a clue to which animals may have been considered numinous by preliterate cultures such as those under consideration. Although such a connotation cannot be applied to all images of animals produced in these media, a review of the animals represented will minimally provide a list of species that were possibly of some importance to those who chose to depict them. In this light, it

small. **Kubanieh**: e.g., graves 145 and 114; see note 90 above for dimensions of these graves. **Quatul**: graves L3(200 \times 100 -90cm), L6(300 \times 130 - 160cm), L7(200 \times 90 - 25cm; empty), L20(218 \times 70 - 80cm), L25(250 \times 60 - 55cm), L26(230 \times 60 - 110cm), L27(300 \times 90-75bottom - 105cm), L33(220 \times 60 - 110cm) (OINE III 1986:224/233/236/333/376/377/386).

 $^{^{116}}$ Qustul: e.g., L11(715 × 170cm, and side chamber), L19(740 × 150cm, and side chamber), L23(925 × 200cm, and side chamber), L24(1080 × 150cm, and side chamber), L29(945 × 100cm, and side chamber). (OINE III 1986:269/313/344/357/377)

¹¹⁷Petrogylphs have been excluded because they are difficult to date and thus cannot be definitely attributed to any of the three culture complexes under consideration.

is interesting to note that very few representations of animals are documented among the extant artifacts of the three culture complexes with which independent animal burials were associated.

Badarian

For the Badarian culture, the evidence for animal imagery is limited to a few zoomorphic "amulets" and ivory spoon handles, a single ivory vessel, and a couple of fragmentary ceramic figurines, all but the last deriving from graves. Only a few of these objects could be definitely identified as to the species depicted, primarily the ivory vessel in the shape of a hippopotamus. The others were tentatively identified as hippopotamus and antelope (gazelle or ibex). These artifacts further affirm the Badarian familiarity with these animals, to which the presence of their horns and tusks in the form of raw materials or finished products and their tentatively identified osteological remains (of at least one of the species) already attests.

What these representations imply concerning the possible significance of these animals can be, however, only conjectural. The frequent depiction of hippopotami on painted pottery of the Naqada I period as well as the numerous small sculpted artifacts termed "tags" in this form of the same date, has elicited the suggestion that the animal, hunted for its ivory and notorious for its "marauding habits", was "certainly respected and perhaps even worshipped" (B. Adams 1988:53). Even if the latter suggestion is possibly valid for the hippopotamus, it does not seem justified for the antelope. Yet there are Badarian amulets depicting both.

Although amulets are by definition apotropaic devices, warding off evil is not necessarily their only function. Two of the various proposed categories of amulets may be applicable to the Badarian material — amulets of protection/aversion and amulets of assimilation (see Andrews 1994). The purpose of the former is obvious and most appropriate for the hippopotamus from which anyone occupied with their daily labor on or beside the river would need protection. The purpose of the latter is based on the concept of sympathetic magic, whereby the wearer is endowed with an admired attribute of the animal depicted. In the case of the antelope, its "fleetness of foot" has been suggested as the desirable characteristic, particularly apt for anyone involved in the hunting of such creatures (Andrews 1994:8-9/36/60). Thus there can be little doubt that these animals were "respected", and in at least one case justifiably feared, but beyond that there is no evidence for the Badarian culture that they were considered anything more than what they were — commonly encountered wildlife and prey.

¹¹⁸ Amulets: two carved in bone tentatively identified as the heads of antelope (gazelle or ibex) (Badari grave 5409) and "hippopotamus (?)" (Badari grave 5740) (Brunton & Caton-Thompson 1928:12/16/27/Plate XXIV), one carved in green jasper representing the forepart of a hippopotamus (Mostagedda grave 1208) (Brunton 1937:38/51/Plate XXXIX); Ivory spoon handles with animal form terminals: only the "ibex or gazelle" were considered recognizable (e.g., Badari graves 5130, 5745, Mostagedda grave 1218) (Brunton & Caton-Thompson 1928:31/Plate XXII; Brunton 1937:53-54/Plate XXIV); Ivory vessel: in the form of a hippopotamus (Mostagedda grave 3522) (Brunton 1937:42/53/Plate XXIV); Ceramic Figurines of quadrupeds (fragmentary) from settlement debris: only one was tentatively identified, in this case, as the hindquarters of a hippopotamus (Brunton & Caton-Thompson 1928:34).

Maadi (variant)

In contrast to the proliferation of Naqada culture animal imagery in contemporary Upper Egypt, there is little evidence of similar naturalistic representations among the extant artifacts of the Maadi (variant) culture complex. Due to the paucity of burial goods in the graves, the only documented images of animals derive from the occupation debris of the settlement site at Maadi. The three-dimensional examples consist of several fragmentary bird-shaped vessels and what may have been ceramic figurines of quadrupeds. As the original form of several of the figurine fragments cannot be determined, only those that are obviously heads can be definitely attributed to animals. It has been suggested that these heads may have originally adorned ornamented ceramic vessels rather than been parts of complete figures. Nevertheless, whether from complete figures or not, the sketchy modeling does not allow for species identification. Although one head was originally considered one of the earliest depictions of the camel in Egypt, cows, donkeys, or dogs are the more recent suggestions for the animals that may have been intended (Rizkana & Seeher 1987:47/Plate 64, 1989:11-12/Plate 1).

A few images of unidentifiable quadrupeds as well as those tentatively identified as birds also appear as incised potmarks or painted on pottery. Only one potmark, a schematic representation of a crocodile, is recognizable¹¹⁹ (Rizkana & Seeher 1987:45/50-51/Plates 44/79). Despite an early suggestion that the crocodile marked vessel "was probably used for cult purposes" (Menghin 1932), there is no reason to believe that these images were anything more than purely decorative.¹²⁰

A-Group

Due to the presence of Egyptian imports in graves of all but the initial phase of the first developmental stage of the A-Group culture, it is not always possible to distinguish which animal representations are of Nubian origin. However, all of the zoomorphic slate palettes and most likely all of the zoomorphic amulets no doubt originated in Egypt, and therefore the animals depicted cannot necessarily be assumed to have been symbolically significant to the indigenous culture. Moreover, even if the local population were allowed to make a selection from among an assortment of proffered trade goods, the possibility of a purely aesthetic motivation for the choices made cannot be discounted.¹²¹ This immediately reduces

¹¹⁹See S. Payne in Payne 1993:260-261 for a brief discussion on the difficulties involved in the identification of animals depicted on predynastic objects.

¹²⁰Animal motif potmarks are not classed among those of geometric form or pattern that are generally considered, e.g., symbols denoting the potter or owner or indicating contents or source.

¹²¹ For a sample of zoomorphic slate palettes and amulets, see, e.g., Slate Palettes: Bahan:Cemetery 17 graves 49/50(turtle-shaped), 56(ox-shaped), 63(fish-shaped), Gerf Husein:Cemetery 79 grave 117(hippopotamus-shaped); Amulets: Shellal:Cemetery 7 graves 311(black slate scorpion), 321(translucent green stone scorpion), Bahan:Cemetery 17 grave 3(dark green translucent serpentine? lion), Siali:Cemetery 40 graves 33(copper dog), 70(green-glazed fox? head), 73(copper scorpion), Metardul:Cemetery 50 grave 75(green-glazed scorpions), Gedekol:Cemetery 76 grave 139(ivory hawk), Gerf Husein:Cemetery 79 graves 35(transparent "gypsum" frog and hawk), 76(dark green serpentine? bull's head), 117(green serpentine bull's head), Koshtamna:Cemetery 89/500 grave 871(ivory bull's head), Debeira Site 292 grave 1(rock crystal lioness head), Ashkeit Site 323 graves 17(alabaster/calcite falcon), 42(chalcedony frog). (ASN I 1910a: Shellal 22/24, Bahan

the field of animal imagery directly pertaining to the A-Group culture to the infrequently documented examples of zoomorphic vessels, figurines, and potmarks.

As it is seldom reported whether the potmarks were incised before or after firing, the origin of those on imported pottery cannot always be determined. Even among those incised after firing, the images may already have been scratched on the vessels before they left Egypt. Nevertheless, whether of Egyptian or Nubian origin, the repertoire of images comprises a mix of wild and domesticated species including unidentified horned animals (in a few cases tentatively identified as elands and gazelles), cattle, dogs, elephants, and birds. Rare instances of incised images have also been documented on a slate palette and ostrich eggshells. The animals depicted are similar to those appearing as potmarks. As suggested above, these images were probably purely decorative.

Zoomorphic vessels and figurines were extremely rare. Among them, those depicting hippopotami or birds appear to have been considered the most readily recognizable.¹²⁴ One artifact, "a small shaped piece of sandstone", was tentatively identified as representing a dog (SJE 1972:128). No identifications were offered, however, for the animals represented on vessels ornamented with horned heads.¹²⁵ At best most of these figurines and vessels perhaps can be viewed as representations of familiar wildlife of the river and the desert.

Two other artifacts, both from the elite cemeteries near Seyâla, provide further evidence of only limited value for indigenous animal imagery. The embossed sheet gold mace-handle sheath ornamented with figures of various wild species was undoubtedly an Egyptian import¹²⁶ (see H.S. Smith 1994). Although the symbolic significance of similar ornamentation on artifacts known from Egypt has been discussed at length (e.g., Cialowicz 1992 including sources cited), there is no reason to believe that

^{118/120/122/140,} Siali 238/240/241, Metardul 287; ASN II 1912a: Gedekol 118, Gerf Husein 130/136/139/140, Koshtamna 196; SJE 1972: Debeira 152, Ashkeit 175/179)

¹²² See, e.g., Bahan: Cemetery 17 graves 6(no identification, no illustration), 15(no identification, illustrated as a horned animal), 66(elephant), Siali: Cemetery 40 grave 3(eland?), Gedekol: Cemetery 76 grave 64(no identification, illustrated as a horned animal), Gerf Husein: Cemetery 78 pottery cache 10(elephant?), Gerf Husein: Cemetery 79 grave 147("animal entering snare, drinking from a canal, or entering an enclosure"), Koshtamna: Cemetery 89/500 graves 647(ostrich) 760(elephant), Dakka: Cemetery 99 grave 72(ostrich), Dakka: Cemetery 102 grave 160(gazelles), Faras no #(elephant) (ASN I 1910a: Bahan 116/128, Figure 82/130-131, Figure 86, Siali 234/328, Figure 299; ASN II 1912a: Gedekol 112, Figure 65, Gerf Husein 7, Figure 1/145, Figure 129, Koshtamna 192, Figure 170/194; ASN III 1915: Dakka 50/66, Figure 39; Griffiths 1921:10/Plate III); see also SJE 1972:77/Plate 26 and Junker 1919:80-82, Figure 44 for potmarks from Kubanieh depicting a dog, elephant, antelope ("Steinbock"), and ostrich; images tentatively identified as scorpions also occur, see Bahan grave/locus 50/49 (ASN I 1910a:119, Figure 72).

¹²³See, e.g., Dakka:Cemetery 102 graves 52(slate palette with incised figures of gazelles), 96(ostrich eggshell with incised images of a bird and man?), 102(ostrich eggshell with incised image of gazelles). (ASN III 1915:56, Figure 28/60/61/Plate 11d,e)

¹²⁴ Hippopotami: Most were not illustrated; see, e.g., Bahan:Cemetery 17 grave/locus 64/40(smooth coarse brown ware pottery dish), Siali:Cemetery 40 grave 11(broken hard pink ware figurine painted with brown stripes), Qustul:Cemetery L grave L19(broken ceramic figurine); Birds: Dakka:Cemetery 99 graves 18/19(2 bird-shaped vessels of soft R-P-B-M ware). (ASN I 1910a: Bahan 130, Siali 235; ASN III 1915: Dakka 48/Plate 27e3; OINE III 1986:315, Figure 140b)

¹²⁵See Risqalla:Cemetery 30 loci 36(shallow brown ware dish with horned animal head at one end), 40(shallow oval brown ware dish with horned animal heads at both ends). (ASN I 1910a:192-193)

¹²⁶Presumably, the damaged image of an "ox" may represent either a wild or domesticated form of *Bos*; see Seyāla:Cemetery 137 grave 1 (ASN IV 1927:207).

beyond an awareness of the mace itself as a prestigious possession the imagery on its handle held any special or specific meaning for its owner. The other item, an ivory comb surmounted by two animals interpreted as a pair of giraffes, was purely ornamental. It may have been an import or a local imitation of similar contemporary Egyptian prototypes.¹²⁷

This necessarily brief review of the limited extant material suggests that despite the lack of conclusive evidence for hunting as a significant aspect of the subsistence strategies of the Badarian and A-Group culture complexes, the wild fauna of the river and desert, particularly the hippopotamus and various species that may be generically termed antelope, had some importance for these cultures. The evidence is, however, obviously too slight to support an extended interpretation of the significance of these animals. In terms of the focus of the present study, it seem highly significant that whatever the intensity of intent behind the choice of these species for representation, none were among those interred in the cemeteries.

Appropriately, for the Maadi culture, where the faunal evidence clearly indicates the negligible role of hunting in the subsistence economy, all the tentatively suggested identifications are of domestic species except for the one anomalous crocodile potmark. Of all the suggested species for the modeled heads, dogs, albeit perhaps the least likely identification, are the only ones that occur as independent animal burials in the cemeteries of this culture. Nevertheless, the evidence of three basically unidentifiable figurine heads is obviously insufficient to support an assumption of special significance for this species.

¹²⁷ See Naga Wadi:Cemetery 142 grave 6 (ASN IV 1927:216).

Chapter 6

Animals in Human Graves

CONTEXT

Unlike the animals in the independent burials, those buried in human graves have generally been considered another form of grave goods. The excavator of most of the reported occurrences, prompted possibly by depictions on later tomb walls, suggested that the animals were pets (see Appendix B; and, e.g., Boessneck 1988:Figures 87, 89), presumably sent into the afterlife with their masters and mistresses by those members of the community responsible for burial of the deceased. No intent seems to have been assumed for this act of sacrifice, other than the generally accepted motivation for any other funerary offering of the time — to meet the expected needs of the afterlife. In the case of this proposed scenerio, the continued companionship of a beloved animal would apparently have been the expected need.

Although the assumed motivation concerning meeting the needs of the afterlife may be correct, the proposed relationship between the deceased and the animals that accompanied them may seem, at first glance, an inappropriate anachronism. Ethnographic evidence gathered in an attempt to support the theoretical link between pet-keeping and the origins of domestication¹ reveals, however, the wide range of hunter-gatherers and incipient agriculturalists who keep pets in the generally accepted sense of the term² (Serpell 1989). This suggests that the excavator's original assumption may not be so lightly dismissed. On the other hand, if viewed in the context of their roles in the economic life of the community, an alternative relationship between these animals and the individuals with whom they were

¹The theory of pet-keeping as an explanation of the *origins* of domestication (in theory, animals kept as pets that "managed to breed, despite the rigours" of captivity were, when the need arose, the ones that eventually were domesticated; Serpell 1989:18) is not generally accepted (Serpell 1989:10; see also J. Clutton-Brock "Preface" *The Walking Larder* 1989:xxi); as an aspect of the *process*, however, it has its supporters (see Zeuner 1963:39; but see also Reed 1960:124).

²Serpell cites the Oxford English Dictionary definition of the term as: "Any animal that is domesticated or tamed and kept as a favourite, or treated with indulgence and fondness." He suggests that "the word tends to be used more loosely as a blanket description for animals that are kept for no obvious practical or economic purpose – i.e. pets, as opposed to livestock or working animals" (1989:10-11).

buried may be revealed. Once again the evidence for the faunal component of the relevant subsistence economies must be investigated. As demonstrated by the preceding review of the cemetery evidence, funerary customs incorporating the burial of entire animals in human graves have been documented for the Badarian and Naqada cultures.

Species Identification

As mentioned previously, most of the Badarian faunal material never underwent in-depth analysis. In all four clearly documented cases of burial within human graves, the animals were tentatively identified as gazelles. The questionable nature of these identifications has already been noted and several alternative subsistence strategies offered based on the limited available evidence (see Chapter 5).

The absence of analysis also applies to the Naqada culture material. None of the burial identifications, presumably made by the excavators, were verified. All the canids that accompanied human burials were assumed to be domestic dogs. Nine of the ten tentative gazelle identifications were made by the same excavator who identified the animals in the four Badarian burials (see Appendix B). If the possibility of a mistaken original identification by this one excavator is acknowledged, then all of the Badarian and the majority of the applicable Naqada burial material relating to gazelles is immediately called into question. In addition, it is not possible to weigh the merits of the other unverified gazelle identification, as the basis for the identification is not stated.³ The resulting ambiguity makes an investigation of the structure of the faunal component of the Naqada culture subsistence economy superfluous, unless the importance of both the sheep/goat and gazelle can be demonstrated and offered as alternatives.

Table 6.1: Animals in Human Graves

	Badarian	Naqada I-II	Naqada III/Dynasty I
Gazelle(?)	40	10 ^d	2
Goat		1	_
Dog	(?)b	6e	_
Cat(?)	15	-	_

a) Two additional burials are suggested by Brunton based on fragmentary evidence from plundered graves (Matmar, Mostagedda). b) The dog burial at Mostagedda Cemetery 2200/3500 may not have been an independent burial (see Appendix A). c) A tentatively identified cat was reported in 1 of the graves containing a gazelle (Mostagedda). d) Three additional burials are suggested by Brunton based on fragmentary evidence from plundered graves (Matmar), an additional burial, possibly containing a gazelle and dog (Ballas) is also not included in this count. e) One of these burials contained 2 dogs (counted as 1 burial) (Mahasna). Two instances are represented only by the presence of skulls in disturbed graves (Abadiyeh, Naqada). The questionable gazelle and dog burial (Ballas) is not included in this count.

³At least Brunton gives his (albeit questionable) reason for making the assumption in favor of gazelles (see Chapter 5, note 7). At Armant, the bones identified as those of gazelles from the entire animal associated with burial "A" in grave 1529 and the butchered parts (meat offerings) in three other graves are not discussed in the "Report on the Animal Remains" in the cemetery publication (Mond & Myers 1937:254-258). Additional tentative gazelle identifications come from a questionable Naqada I(?) period instance at Ballas (possibly dog and gazelle) and an early First Dynasty grave at Abydos (see Appendix B).

Subsistence Economy: Faunal component

"Gazelles"

As eight of the ten Naqada culture burials containing tentatively identified gazelles originate in cemeteries in the vicinity of Matmar, seven from one cemetery, generalizations concerning the faunal component of the subsistence economy of the Naqada culture as a whole may not be immediately applicable to this geographically limited area. Considering the apparent relative rarity of the practice overall, the concentration of so many burials in one cemetery suggests a local phenomenon of some sort, no matter what the actual species of animal.⁴ In fact, all four Badarian and nine of the Naqada culture burials containing tentatively identified gazelles are located in four cemeteries situated on a less than ten-kilometer stretch of low desert in the northern portion of the Badari district. The continuity evidenced by this phenomenon between the Badarian and Naqada culture occupations of this limited area emphasizes the apparently local character of the practice and perhaps reflects some consistent form of animal exploitation over a period of generations. One other clearly documented case, in a grave dated to the Naqada III period, also derives from another cemetery in this vicinity.

Table 6.2: Animals in Human Graves: Matmar-Mostagedda Area

Cemetery	Gazelle(?)	Dog	Cat(?)	Culture
Mostagedda 300/400	3		1	Badarian
Matmar 3000/3100	1			Badarian
Matmar 3000/3100	14	1		Naqada
Matmar 2600/2700	7 ^b			Naqada
Mostagedda 1800	1			Naqada
Matmar 900/1000	l°			Naqada III

a) Brunton suggested the possibility of an additional two similar burials, based on fragmentary remains, in this cemetery (Brunton 1948:22). b) Brunton suggested the possibility of one additional similar burial (or an independent burial), based on disturbed remains in this cemetery (Brunton 1948:12/22). c) Brunton suggested the possibility of one additional similar burial, based on fragmentary remains, in this cemetery (Brunton 1948:25/28).

One important caveat should be noted. As all of these instances derive from the excavations of one archaeologist, the possibility that the apparently local character of this phenomenon is an artifact of publication must remain a consideration. The fact that many other unknown cases of this practice may have existed among the thousands of excavated graves attributed to the Naqada culture, the contents of which were never individually reported in the relevant cemetery publications, must qualify any evaluation of

⁴The practice was relatively rare even in the cemeteries in the vicinity of the highest concentration of documented instances. Compare the number of graves: Matmar: 130 Badarian, 302 Naqada I-II, 107 Naqada III; Mostagedda: 375 Badarian, 188 Naqada I-II, 33 Naqada III; Badari: 260 Badarian, 99 Naqada I-II, 32 Naqada III (see Appendix D for the breakdown by cemetery for these grave counts and Appendix B for the grave counts for the specific cemeteries listed in Table 6.3).

the validity of this premise.⁵

If the animals were in fact gazelles, the presence of young animals, as mentioned previously, may indicate a possible early attempt at domestication of this species in line with the suggested interpretation of the kill patterns evidenced by the predominance of subadult bones among the gazelle remains identified from the settlement site at Toukh⁶ (Reed 1966:192). On the other hand, such an interpretation of a predominance of subadult gazelles in a faunal assemblage has been contested, primarily based on the social structure of the herd. During certain seasons gazelle herds break up into independent groups of females and young, young males, adult males, and territorial males. This would necessarily bias a sample produced by hunting depending on the segment of the herd encountered (Banks 1984:210). However, if the incipient domestication interpretation is accepted as valid, then these animals can be considered another form of livestock. Their role in the life of the associated communities would have been similar to that of the sheep or goat.

For the Naqada culture settlement sites in the Badari district, the evidence for the role of these animals in the local subsistence economy is only slightly less sparse than that for the Badarian. The lack of confirmed identifications for the faunal material still applies. The majority of the evidence for sites in the vicinity of Mostagedda derives from one find-spot. It consists of a collection of fourteen pairs of horns identified as belonging to rams, goats(?), gazelles(?) (both large and small), and a bull or cow. The variation in "gazelle" horn size may also support the suggestion of some form of human management of this species. Additional random finds of animal bones in other habitation areas in this vicinity were tentatively identified as those of oxen. Gazelle horns and ox bones were also reported at habita-

⁵Brunton's publications, from which these cases are drawn, provide a relatively more thorough description of a greater number of the graves excavated than cemetery publications such as those of Petrie. One example among others that might be mentioned: In Petrie's publication of Cemetery B at Abadiyeh, he reports the cemetery contained "up to 570" graves, but describes only 26 (one of which contained evidence for the possible presence of a dog) and provides no grave register (Petrie 1901a). Whether or not animals were present in any of the many undescribed burials in this cemetery, or any other cemetery in which the majority of burials were not individually reported (e.g., Naqada, Ballas), must remain in question. On the other hand, as possible support of the local character of this phenomenon, only one case of a human grave containing a gazelle was noted in the cemetery at Armant (Cemetery 1400-1500: ca. 176 graves), where the individual graves were more fully reported (Mond & Myers 1937). None were noted in the cemetery at Naga ed Dêr (Cemetery N7000: ca. 635 graves), where the burials were also fully reported (Lythgoe 1965) (see Appendix B). None were documented in the unpublished cemeteries at el-Ahaiwah (ca. 1000 graves) and Mesaeed (ca. 700 graves), although the remains of butchered animals (bones and skulls) tentatively identified as those of goats (and in one case a calf) were reported from several graves at el-Ahaiwah (for the absence of entire animals in human graves at Mesaeed, Ehrlich n.d.; for the presence of meat offerings in graves at el-Ahaiwah, Greene n.d.).

⁶Six of the animals in these graves are specifically described as "small". Badarian culture: Matmar 3000/3100 (Brunton 1948:8), Mostagedda 300/400 (Brunton 1937:57); Naqada culture: Matmar 2600/2700 (Brunton 1937:14), Mostagedda 1800 (Brunton 1937:71).

⁷Reed also suggests an "unknown type of hunting practice or preference" as an alternate explanation for the structure of the faunal assemblage at Toukh (1966:192). See Banks 1984:210 with references, for a discussion of the pitfalls in using age-distribution patterns in faunal assemblages as evidence for domestication.

⁸Mostagedda: Area 400A (Group 406): "two pairs of curly horns (ram), two pairs of small horns (goat?), six pairs of long, straight, twisted horns (gazelle?), three pairs of the same but smaller, and one pair of wide-spreading horns (bull or cow)" (Brunton 1937:80). The only burials accompanied by gazelles(?) in this vicinity date to the Badarian period (see Appendix B: Badarian Culture: Badari: Cemetery 300/400).

⁹Mostagedda: Area 10100: "small ox(?)-horn" (Brunton 1937:77); Area 400F: "jaw of an ox(?)" (Brunton 1937:81).

tion sites in the vicinity of Badari.¹⁰ At Hemanieh, a "hut circle" contained a layer of organic matter identified as dessicated sheep or goat dung and the recovered faunal remains were reported as those of "sheep or goat, pig and ox" (Brunton & Caton-Thompson 1928:77/82-84). Although this evidence tentatively attests to the presence of gazelles along with various domestic species, it is insufficient for a reconstruction of the structure of the faunal component of the local subsistence economy.

In contrast, the faunal material recovered from the predynastic settlement site most likely associated with the cemetery at Armant, from which the only other clearly documented case of a "gazelle" in a predynastic human grave outside the Matmar-Mostagedda area derives, has undergone in-depth analysis. Due to the fragmentary condition of most of the remains, only approximately sixty-five percent of the mammalian bones were identifiable. Within those limitations, the most numerous were those of sheep/goat¹¹ followed by cattle, suggesting the economic importance of those species. Although the identified evidence for the gazelle is much less abundant, it appears to have been the only wild mammalian species of any importance in the local subsistence economy (Boessneck & von den Driesch in Ginter & Kozlowski 1994:183-189).

One further, albeit questionable, instance of an animal tentatively identified as a gazelle buried in a human grave (accompanied possibly by a dog) was reported from a predynastic cemetery at Ballas (see Appendix B). Preliminary analysis of the faunal remains from Naqada culture settlement sites in the vicinity of el Khatara, located between Ballas and Naqada south of Toukh, revealed a predominance of domesticated sheep, with cattle, pig, and possibly goat less well represented. The remains of "numerous" gazelles were also reported (Hays 1976:552, 1984:68).

In conjunction with the evidence from nearby Toukh, the gazelle remains at el Khatara as well as those from upriver at Armant suggest the possibility that this species may have played at least a minor role in the subsistence economy of some Upper Egyptian Naqada culture communities.¹² Whether as a hunted or incipiently domesticated species cannot be determined. That the Egyptians of the dynastic period attempted the domestication of gazelles as well as other species of antelope is illustrated by the occurrence of these animals depicted in captivity or, more to the point, being herded in scenes carved and painted on the walls of later tombs (see Zeuner 1963:55-56/429-430; Clark 1971:55-57/61, Figure 7 = Boessneck 1988:Figure 49 and, e.g., Figures 38, 39, 46, 47, 51). This evidence, then, perhaps may be used to support the unconfirmed identifications of gazelles from the cemeteries at Ballas and Armant

¹⁰Badari: Area 3200: "two pairs of gazelle horns, young and adult (*Gazella dorcus*)"; Area 3300: "ox-skull, horn, and leg-bones" (Brunton & Caton-Thompson 1928:47).

¹¹The relative frequency reveals a 4:1 ratio of goats to sheep (Boessneck & von den Driesch in Ginter & Kozlowski 1994:186, Table 1). The suggested frequencies appear to be based on a straight count of identifiable bones. Such counts are not necessarily the most reliable way to determine relative frequency. However, a predominance of goats over sheep is attested by the analyzed faunal remains from one locality in the vicinity of Hierakonpolis (McArdle 1992:53, McArdle in Hoffman 1982a:116).

¹²But apparently not all: only two identifiable gazelle bones were reported from the two Hierakonpolis localities (11, 29) from which the analyzed faunal remains were published (McArdle 1992:55, McArdle in Hoffman 1982a:117).

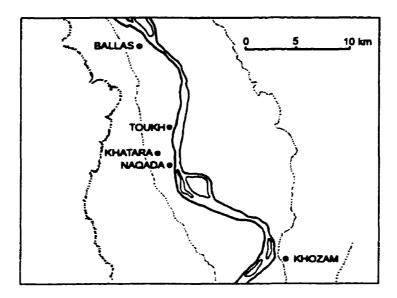


Figure 6.1: Naqada Region

and by extension possibly those in the Matmar-Mostagedda area.

It does not, however, explain why the latter communities (if the practice was a local phenomenon) apparently placed such an emphasis on this species (if the tentative identifications are correct) for this form of funerary offering. That question cannot be answered based on the available data. However, in terms of the documented instances, the fact that at least one grave originally contained joints of meat in addition to an entire animal (Matmar grave 2714: Brunton 1948:14; see Appendix D) seems to demonstrate that these animals, whatever the species, were considered more than just food offerings. Beyond that supposition lies speculation. With that in mind, a suggestion or two might be made.

If the animals in these graves were gazelles, then perhaps they were "pets" — not in the generally accepted sense of the term, but rather as tamed juveniles of a wild species either captured and reared as an additional source of meat or undergoing a deliberate attempt at domestication (see Clark 1971:55-57/60-63; Zeuner 1963:55-56). Their presence then may indicate that the individuals with whom they were buried were intimately involved in that process, in which case they might be interpreted as "markers" of a very specific social persona. On the other hand, there remains a well-founded possibility that these animals were misidentified sheep/goats, a firmly established domesticated species. ¹³ If so, this suggested interpretation would not apply. In that case, a standard generic interpretation might be offered. They might be viewed as representatives of the "flock", symbolic of the "wealth" of the deceased as well as possibly a source of sustainable sustenance in the afterlife. However, the contents of only

¹³In terms of the lack of accurate identifications (see Chapter 5, note 7). In this context, it should also be noted that most of the faunal remains representing food (meat) offerings reported from the published predynastic graves at el-Amrah were definitely identified as goat, not gazelle (see Appendix D).

a very small number of the disturbed graves containing such animals are indicative of above average wealth, and most of the intact burials might be considered unexceptional (see Appendix B). In fact, a comparison of the possibly contemporary burials in Matmar Cemetery 2600/2700 (see Appendix E, Figure E.21) suggests that those containing gazelles/goats were not all among the best-provisioned.¹⁴ Thus the suggestion that these animals might have been a reflection of the wealth of the deceased is not strongly supported by the evidence of the grave goods, and the significance of these burials must remain an open question.

Dogs

Dogs can be active working partners and yet be treated as pets. The iconographic evidence from the historic period demonstrates they were considered both. From the Old Kingdom through the late period, dogs were individually named and characterized as leisure companions (Janssen 1958; Fischer 1961, 1978, 1980; also, e.g., Boessneck 1988:Figures 87, 90, 92, 94). However, the dog is most often represented as involved in the hunt. From undatable petroglyphs, through images on predynastic pottery, to early dynastic objects and tomb paintings of the Pharaonic period, dogs are portrayed accompanying armed hunters or engaged in the pursuit of game. For all but the earliest material, this activity was obviously not a matter of subsistence but a leisure pastime of the elite. In contrast, dogs are only very rarely shown occupied with the mundane labor of the country estate. In fact, several Old Kingdom "farmyard" birth scenes emphasize their predatory nature and depict the impending dire results of a dog's too eager interest (see, e.g., Boessneck 1988:Figures 114, 127). Nevertheless, that they were employed in herding activities is attested by a New Kingdom tomb painting where several dogs are depicted as the companions of shepherds and small herds of cattle and goats (Davies 1948:21/Plate XV). One Middle Kingdom dog's name that translates as "He is a Herdsman" (mniw pw) (Janssen 1958:181, #37) perhaps supplements the scant iconographic evidence for this occupation.

¹⁴Compare the intact graves with gazelles/goats 2665(intact child; 3 ceramic vessels), 2666(intact male; 3 small flint knives, 1 fish-tail knife, 4 ceramic vessels), 2714(intact male; 5 ceramic vessels, meat offering), all falling with an SD range of 36-45 (see Appendix B) with graves without animals 2660(intact female; 2 ivory tags, slate palette, basket, cowry and Natica shells, at least 4 ceramic vessels; SD 38-41), 2717(very disturbed female and child; bone comb, 14 ceramic vessels – "including no less than five of the C or 'cross-line' class"; SD 38) (Brunton 1948:13/14/Plate VIII/IX). The only grave in this cemetery with an animal that might contain comparable "wealth" is 2646(disturbed female and infant; "wicker hamper"?; 2 ivory amulets, child's ivory bracelet, Nerita shell, at least 4 ceramic vessels – including 1 bowl with sculpted hippopotami and a crocodile on the rim) (see Appendix B).

¹⁵See, e.g., Winkler 1938:26/Plate XXIII-3 for a dog actively involved in an ostrich hunt; Winkler 1939:17-18/Plate XIII-1 for 2 dogs, a hunter, a "Barbary" sheep, and a giraffe; Boessneck 1988:83/Figures 3, 20, 21 for a hunter with 4 leashed dogs on a Naqada I period painted bowl, dogs hunting gazelles on a First Dynasty game piece, and a Middle Kingdom desert hunt scene; Clark 1971:58, Figure 5 for Middle Kingdom desert hunt scenes; Hendrickx 1992 for a discussion of hunting scenes on predynastic pottery.

¹⁶A far from exhaustive, but much more than superficial search through dynastic tomb paintings/reliefs turned up only this one example from the Nineteenth Dynasty Theban tomb of "Khons" (Davies 1948:Plate XV). See also, e.g., undated petroglyphs, from the region of the Second Cataract, depicting a herd of cattle and several human figures, three of which are accompanied by relatively small animals interpreted as dogs (Otto & Buschendorf-Otto 1993:49-50, Figure 42b).

For the predynastic period, however, their principal occupations can only be indirectly inferred. Although the full extent of the contribution made by hunting to the subsistence economies of the Badarian and Naqada cultures cannot be estimated based on the limited available faunal material, the sparse evidence of the images on pottery attributable to the latter culture suggests that dogs played their part, however marginal the activity may have been. On the other hand, when well-documented faunal evidence demonstrates that hunting was a negligible aspect of the subsistence strategy, such as in the case of the Maadi (variant) culture (see Chapter 5), the dog's role in animal husbandry can be assumed with some certainty. Whatever their role in the economic life of the community, however, there is no reason to believe that even during the predynastic period they were not also treated as pets. Thus dogs were no doubt considered prized possessions for both their contribution to the economy and their companionship.

The occurrence of dogs in human graves during the predynastic period may reflect both this personal relationship between the deceased and the individual dog as well as the animal's economic value. Although none of these plundered graves provide evidence of the occupants' occupation, the remaining contents of the majority may be considered suggestive of the deceased's privileged status (see Appendix B). If the exceptionally large quantities of pottery (Matmar, Naga ed Dêr), stone staff- and maceheads (Mahasna, Abadiyeh), ivory vessel, and copper harpoon head (Mahasna) are accepted as such, 17 then perhaps these dogs were the favored pets and valued companions "in the chase" of those members of the community for whom hunting had become primarily a recreational activity. This may explain the rarity of such burials.

Table 6.3: Dogs in Human Graves

Graves	Date	
1(?)	Badarian	
1	Naqada IId1	
1	Naqada IId1	
1	Naqada IId?	
16	Naqada Ic-IIa	
1°	Naqada (?)	
1°	Naqada I	
	1(?) ^d 1 1 1 1 1 ^b 1 ^c	

a) This may have been an independent burial (see Appendix A). b) This grave contained 2 dogs. c) Only the skulls were documented in these two very disturbed graves.

¹⁷The Mahasna grave was listed among Wilkinson's "high status burials" (1996:79); NB: he cites an ivory macehead from this grave but the only ivory object mentioned in the original publication was a vessel (see Appendix B).

Chapter 7

Elite Cemeteries

Throughout the various developmental stages of the Naqada culture, animals had primarily been buried within human graves. An instance of the continued occurrence of this custom has been documented in a grave dated to the early First Dynasty (see Appendix B). In the elite and ultimately royal cemeteries of an increasingly socially stratified Upper Egypt, however, a distinction can be observed in two aspects of this practice. Although dogs still occur in an elite context, except in one instance, new and, in some cases, exotic species take the place of the livestock attested elsewhere. In addition, along with the elaboration of tomb construction, subsidiary burials began to appear. Animals buried separately were, in most cases, obviously associated with specific tombs¹ — apparently the high-status version of the former practice. This phenomenon also persisted on an elite level into the period of the First Dynasty, as the cemeteries containing the tombs of the "upper-class" in the vicinity of the newly established royal capital at Memphis attest.

NAQADA CULTURE

Elite Cemeteries

Three ancient Upper Egyptian population centers — Hierakonpolis, Naqada, and Abydos — are the sites of elite cemeteries that predate the rise of the First Dynasty and the earliest burials in the royal necropolis at Abydos. Clearly documented cases of animal burial occur in two.² In the case of the

¹In the instances where the principal tomb is not immediately evident, it is more often a question of incomplete publication inhibiting identification than the probability that the animal burials were not associated with specific tombs.

²Although cemeteries of the Naqada III through early dynastic periods, containing apparently high-status burials, are known from eastern Delta sites, no animal burials, subsidiary or otherwise, have been reported from any of them – that is except for an apparent food offering consisting of the decapitated carcass of a cow in the side chamber of an elite grave at Minshat Abu Omar (see note 4 below). This may be due to the lack of full publication of the presently excavated cemeteries. For Delta cemeteries containing components of this date see Krzyżaniak 1989; for specific cemeteries see: Ezbet el-Tell/Kufur Nigm: Bakr 1988, 1994; Tell Fara'on/Imet: Mostafa 1988, Mustafa 1988; Minshat Abu Omar: Kroeper & Wildung 1985, 1994, Kroeper 1992, 1996; Tell Ibrahim Awad: van den Brink 1988, 1992; Beni Amir: Abd el-Hagg Ragab 1992, Abd el-Moneim

massive multiple dog burial at Naqada Cemetery T the subsidiary status and date within the period of the cemetery's use must remain a matter of speculation due to the lack of full publication.

In contrast, one cemetery at Hierakonpolis, Locality 6, provides the highest concentration of and earliest evidence for exotic animals associated with elite burials. Three instances, a multiple dog burial (Tomb 5), a multiple baboon burial (Tomb 12), and a possible joint burial of a young elephant and several dogs (Tomb 14), have been dated to the earlier use phase of the cemetery (Naqada Ic-IIab). Although the immediate vicinity of the last two burials has not been fully excavated, consonant with their early date there appear to be no surface indications of larger tombs to which they might have been subsidiary. (B. Adams, personal communication 1998). The extremely disturbed condition of these burials inhibits full reconstruction of their original contents. Thus it is difficult to determine whether or not these animals originally accompanied human interments; but human remains were found in conjunction with those of the Tomb 14 elephant and dogs and may have originally been a component of that burial. Confirmation of the original configuration as joint interments awaits future excavation that will hopefully reveal less disturbed burials. The multiple cattle burials assumed to be subsidiary to Tomb 2, tentatively dated to Naqada III, may be the latest animal burials in the cemetery and appear to be the last of this species documented as anything other than food offerings.⁴

FIRST DYNASTY

Royal Necropolis

Unlike the elite cemetery at Hierakonpolis, where the funerary sacrifice of exotic animals, even minimally interpreted as ostentatious display, proclaimed the status of the individuals with whom they were presumably buried, other than the questionable instance of a goat(?) in a human grave, no trace of similar animal burials has been reported from the elite cemetery at Abydos (Cemetery U) that adjoins and predates the burials of rulers who immediately preceded the advent of the First Dynasty (Cemetery B).

¹⁹⁹⁶a. Separate cemeteries that might be considered exclusively (or primarily) elite have not yet been detected.

³A planned magnetometer survey of this cemetery should clarify this matter (R. Friedman, personal communication 1998).

⁴At Minshat Abu Omar, in one of the undisturbed side chambers of what has been designated an "elite" grave (1450) of early dynastic date, "the remains of a sacrificial ox (without head)" was found under a layer of ceramic vessels (Kroeper 1992:130). Although not fully described, the phrase "without head" seems to imply the remains consisted of an entire carcass (see also Kroeper 1988:17). This appears to be a food offering and not an animal burial. A similar situation was recorded at Naga ed Dêr. In the side chamber of a grave (1605) of Second Dynasty date, the skeleton of an entire "calf(?)" was found lying under a large cylindrical alabaster jar (Reisner 1908:55). Further evidence in the form of large sections of articulated bones of cattle documented in the burial and side chambers of First Dynasty mastabas at Saqqara may support the supposition that these remains represent food offerings (although in one case described as a "skeleton", in the sketch plan of the burial chamber the remains do not appear to be an entire carcass; see Emery 1949:98-99; also Emery 1954). The carcass of a "sacrificed ox" was found in the undisturbed burial chamber of the Fourth Dynasty mastaba of "Khnmw-ba-f" at Giza (S. Hassan 1944:10).

⁵For the questionable goat burial in Cemetery U, see Appendix C; this was not one of the obviously elite graves in this cemetery. For reports of recent excavation in Cemetery U, see Kaiser & Dreyer 1982:225-226; Dreyer 1990:54-62, 1992, 1993:24-55, 1996:13-30. For the results of earlier excavation, see Peet 1914. For reports of recent excavation in Cemetery B (tombs other than those associated with the funerary complex of Aha), see Kaiser & Dreyer 1982:220-225; Dreyer 1990:67-71,

The earliest instance for which there is evidence is associated with a royal tomb. Seven lions, their remains found scattered in the debris of previous excavations, may have originally been interred in a double-chambered grave at the east end of the triple row of subsidiary chambers associated with the funerary complex of Aha, first king of the First Dynasty. These lions, apparently raised in captivity, suggest the existence of a royal menagerie. They went to their grave along with members of the royal entourage who were buried in at least some of the adjacent subsidiary chambers. These lions are the last of the truly exotic animals presently documented in this context.

Evidence for the subsidiary burial of dogs in the First Dynasty royal necropolis exists in the form of four inscribed stelae. The tomb(s) with which they were originally associated remain(s) unknown, as the precise location of their discovery was never reported. Based on stylistic grounds all four stelae have been dated to the reign of Den, fourth king of the First Dynasty. If this attribution is correct, the dogs were probably buried along with members of the royal entourage whose plundered remains were found in association with the series of subsidiary chambers that surround the tomb of this king. A single bone of a dog provides scant evidence for the possibility of a similar burial associated with the tomb of Oa'a. last king of the First Dynasty. Only one intact dog burial associated with a royal funerary complex has been reported at Abydos. In this case, the burial was found in situ in one of a row of subsidiary graves associated with the valley mortuary installation attributed to king Diet, third king of the First Dynasty. Whether the dog was the sole occupant or accompanied one of the royal entourage believed to have been buried in these graves was not indicated in the published report (see Appendix C). No similar animal burials were documented in the subsidiary graves associated with the other First Dynasty funerary enclosures in this vicinity (see Petrie 1925; and Cemetery S: Peet 1914:30-35), nor were any reported from graves thought to be subsidiary to a cultic installation attributed primarily to the reign of king Den at Saqqara (see Macramallah 1940; Kaiser 1985b).

Elite Tombs

Subsidiary animal burials associated with high-status tombs have been reported from a number of cemeteries in the vicinity of the ancient capital city of Memphis. The majority of documented cases come from the extensive early dynastic cemetery at Helwan. The incomplete publication of this cemetery provides, however, only the barest details of the reported burials, leaving the specifics of some and the identity and date of the principal tombs with which most were associated unknown. Other cases have been noted in association with large First Dynasty tombs at Tarkhan, Saqqara, and Abusir. Most of these burials were more fully reported. Only these last tombs have been closely dated; that at Tarkhan to the reign of Djet, those at Saqqara and Abusir to the reign of Den. It is with these elite burials that the first

^{1996:48-49.}

⁶For the possible original location of these burials, see Dreyer 1993:59.

instances of two animals not previously documented in this context occur. Donkeys and various species of bird now appear for the first time in subsidiary burials.⁷

Donkeys, buried in groups of three, occur at three different sites. Three instances of multiple burial have been reported at Helwan alone; two others at Abusir and Tarkhan. Only three of the five principal tombs with which these burials were originally associated can be definitely identified. Two of the triple donkey burials lay within the passages formed by enclosure walls surrounding large mastabas at Helwan (no N^o) and Tarkhan (2050); one lay to the south of a tomb lacking an enclosure wall at Abusir (IV). In addition to the donkeys, further subsidiary burials, both human and animal were associated with the Helwan and Tarkhan mastabas (see Appendix C).

The separate burial of a bird, identified as a "duck", was associated with the Tarkhan mastaba. Although water fowl appear as food offerings in the subsidiary chambers associated with First Dynasty royal tombs at Abydos (see Appendix C), the fact that this animal was buried in a coffin of its own leaves little doubt concerning the status of the burial. The species of animal in the additional subsidiary burials associated with the Helwan mastaba were not identified in the published report.

One of the two Helwan multiple donkey burials for which the principal tomb is not immediately evident may, along with another set of animal burials, have been associated with one large mastaba (680.H5) in that cemetery (see Appendix C, Figure C.1). In this case, the burials lay outside the suspected principal tomb's enclosure wall. The donkeys lay to the east; to the west, two small adjacent graves contained the remains of a dog and a bird (possibly a hawk), each buried in a coffin of its own. A similar conjunction of these last two animals also occurs at Saqqara, although in that case not even a tentative identification is offered for the species of bird. There, three birds, each wrapped in cloth and placed in individual coffins, were buried in a row along with seven dogs interred in a similar manner under the mudbrick pavement that surrounded the mastaba of Hemaka (3035). A single human burial sans coffin accompanied them. The combination of human and animal subsidiary burials associated with this tomb and those at Helwan and Tarkhan mimic, on a smaller scale, those of the royal funerary complexes of the early First Dynasty kings buried at Abydos (see Appendix C).

One other subsidiary animal burial is presently documented associated with an elite tomb of this period. At Saqqara, a single dog was buried near the entrance in the enclosure wall of a First Dynasty mastaba (3507) attributed to Queen Her-neith. It was the only subsidiary burial associated with that tomb. A parallel to this burial can be found in the dog burials associated with a late Sixth Dynasty mastaba (V) at Balat, where one of the dogs was apparently also interred near the entrance in the enclosure wall (see Appendix C).

⁷For the possibility of the subsidiary burial of geese in the funerary complex of Aha, see Appendix C: Dynasty I: Abydos.

ICONOGRAPHY

Artifacts of the Naqada culture provide a rich array of animal imagery represented in a wide variety of media. Wild and domesticated species appear painted or modeled on decorated pottery and carved on ivory combs, spoons, and knife handles as well as in the form of zoomorphic amulets and "tags", cosmetic palettes, and vessels, or as chipped flint, ivory, ceramic, or stone figurines and by the time of the First Dynasty occasionally as sculpture of considerable size. While not all of these images can be considered expressions of religiously symbolic motifs, at least some clearly appear to have been related to cultic activities, most particularly the apparently ex voto figurines recovered in excavations of temple sites at Elephantine, Hierakonpolis, and Abydos (see Needler 1984:335/355ff). It is, however, the carved ivories depicting animal files and the ceremonial relief-carved palettes attributed primarily to the end of the predynastic period and the rise of the First Dynasty that have received the most attention in terms of suggested interpretations for the symbolic significance of the animals represented (see, e.g., Needler 1984:328-331; Cialowicz 1992; Baines 1993; and sources cited in all of these). Many of the interpretations offered in these analyses range far afield from the present investigation; however, some are relevant to the species that occur in association with elite and royal burials.

Although royal and divine symbology were closely intertwined, two animals, lions and bulls, are acknowledged symbols of the prowess of the king. This suggests that the lions that accompanied Aha to his grave may have been symbolic expressions of this aspect of the royal persona rather than merely exotic members of a royal menagerie (see, e.g., Baines 1993; also Needler 1984:352). On the other hand, the assumption of a similar symbolic connotation for the earlier multiple cattle burial presumably associated with one of the Locality 6 elite graves at Hierakonpolis is not so readily applied. This is in part due to the unknown nature of the presently unexcavated adjacent suspected cattle burials. More important, however, the standardized form of bull's head amulets, some dated as early as Naqada I (see Petrie 1920:11; also Needler 1984:317-318), the relief-carved bovine heads such as that appearing on the "Hathor" palette attributed to the late Naqada II period (see Petrie 1953:11/Plate B), and the multimedia bull's heads sculpted in rows on "benches" associated with several First Dynasty mastabas at Saqqara (see Emery 1954, 1958) demonstrate the scope of symbolic import for cattle beyond that of late predynastic/early dynastic "royal" iconography. Thus an interpretation of the meaning of this burial might better be sought within the wider religious as well as secular significance of this species.

Like the Apis bull cult, evidence for which has been traced back to the early dynastic period (Otto 1964:11ff), the worship of a deity in the form of a baboon (hd wr), later assimilated by the god Thoth, may also have had similarly early roots (Vandier d'Abbadie 1964:148 with references). Baboon figurines occurring in temple deposits, presumably originally votive offerings possibly dedicated to a spe-

⁸Illustrated examples can be found in most published reports of pre- and early dynastic sites, but see, e.g., Schweinfurth 1903, Capart 1905, Petrie 1920, Needler 1984, Payne 1993 among others for more comprehensive discussions of such artifacts.

cific deity, and an early First Dynasty cylinder seal depicting a baboon hieratically posed in conjunction with an image of the king (Petrie 1920:10; Needler 1984:357-358; Vandier d'Abbadie 1964:147-148, Figure 1) may provide supporting evidence for the early existence of this cult. In contrast, the elephant was never associated with a specific deity or cult. Yet its formalized "serpent-treading" posture repeatedly portrayed on several late predynastic carved ivory artifacts ornamented with animal files suggests a traditional symbolic motif, the original meaning of which cannot be retrospectively amplified by reference to iconographic or textual evidence from the historic period (see, e.g., Churcher in Needler 1984:152-168). Nevertheless, an interpretation of the burials of baboons and an elephant at Hierakon-polis Locality 6 within these symbolic contexts may not be viable in light of the possibly mixed, human and animal, nature of the burials.

Although a cultic interpretation has been offered for the multiple donkey burial at Abusir (Eissa in Boessneck 1992), the motivation for this and similar burials associated with "upper-class" tombs in other cemeteries in the vicinity of Memphis may have been more mundane. Artifactual evidence from the settlement site at Maadi suggests that as early as the Lower Egyptian culture's occupation of this region the Memphite area was the western terminus for an overland trade route with southwest Asia (Rizkana & Seeher 1989:78-80). An archaeological survey of the north Sinai has demonstrated that this route was still in active use during the early dynastic period (Oren 1989). Thus one possible explanation for the concentration of such burials in cemeteries in this vicinity may be the tomb owners' involvement in overland trade via donkey caravans.

As the presence of dogs in human graves may have been an aspect of the privileged status of the deceased (see Chapter 6), it is not surprising to find dog burials in elite cemeteries such as those at Naqada and Hierakonpolis or associated with the royal funerary complexes at Abydos. Although at the higher levels of elite society the personal relationship with these dogs may not have been as close as that suggested for the burials discussed in the previous chapter (particularly in the instances where multiple burials suggest hunting packs), the animals' employment in nonessential sport hunting was probably the same (see, e.g., Boessneck 1988:23; Baines 1993:64-65). A similarly secular explanation, although obviously far more tenuous due to the lack of species identification, may also be applicable to the adjacent dog and bird burials noted at Helwan and Saqqara. If the three unidentified birds associated with the tomb of Hemaka were the same species as the tentatively identified falcon ("hawk") at Helwan, then perhaps the conjunction of these two species, both employed in recreational hunting activities, may be indicative of the tomb owners' frequent participation in this leisure pastime of the elite.⁹

The single dog burial associated with the Saqqara mastaba attributed to Queen Her-neith seems best viewed within the context of another common employment of this species. Whether this specific animal was, during its life, primarily a watchdog or a pet obviously cannot be determined, not that

⁹There is slight evidence for the practice of falconry in ancient Egypt (Houlihan 1986:48 with references).

one role precludes the other. However, the former role is suggested by its burial near the entrance in the mastaba's enclosure wall. Unlike the royally ordered burial of a dog for services rendered as "watchdog" of the king, attested by an inscription on a reused limestone block recovered during excavation of the cemetery west of the Great Pyramid at Giza (Reisner 1936), this burial was not necessarily an honor bestowed on the dog but rather a "magical" or symbolic means of providing protection for the burial of the queen.

Although certain species had already acquired religiously and politically symbolic significance by the time of the rise of the First Dynasty, interpretations suggested for the motivation for most of the animal burials associated with elite and royal tombs might better be sought within the framework of the more prosaic roles of particularly the domesticated species that occur in this context. Only the burials of exotic animals more readily lend themselves to interpretations as expression of religious or political symbolism. The lion burials associated with the funerary complex of Aha at Abydos are the most notable example. Due in part to the lack of comparable contemporary occurrences, the burials of exotic animals in the elite cemetery at Hierakonpolis are the most difficult to interpret. In fact, they cannot be adequately explained based on the presently available evidence. Perhaps when the cemetery is more fully excavated, a reconstruction of the original context of these burials will be possible. At present, the mixed nature of these burials seems to argue against a religiously symbolic interpretation.

Chapter 8

Conclusions

This study has been an attempt to marshal all the available contextual evidence for the animal burials of the predynastic period, with the intention of providing a cultural framework within which interpretations for such burials may be adequately evaluated. The results of the present investigation can now be reviewed as they pertain to the questions originally proposed.

Who: Culture Complexes and Continuity

A review of the published archaeological evidence for the two principal categories of animal burial reveals that the distribution of each conforms to the generally accepted geographically circumscribed territories of the contemporary, but culturally diverse, culture complexes of the predynastic period. The phenomenon of independent animal burial has been documented in the cemeteries of the Maadi (variant) culture of Lower Egypt and the A-Group culture of Lower Nubia. Animals buried in human graves have been documented primarily in those cemeteries of the Naqada culture located in Upper Egypt. Only the cemeteries of the earlier Badarian culture provide unequivocal evidence for both categories of animal burial.

If the Badarian is accepted as a cul-de-sac in the cultural sequence of Upper Egypt, there is, then, no direct continuity between the predynastic cultures that observed funerary customs incorporating the practice of independent animal burial and the dynastic culture of Egypt. The issue is, however, moot. The presently available evidence indicates that the phenomenon of independent animal burial vanished from the cemeteries of the Nile valley north of the Second Cataract with the demise of the Badarian, Maadi (variant), and A-Group as discrete archaeologically detectable cultures. In contrast, mortuary practices involving the burial of animals in or directly associated with specific human graves can be tracked from the cemeteries of the Badarian culture, through those of the Naqada culture, into the elite cemeteries of the First Dynasty and beyond. This uninterrupted continuity coincides with the generally acknowledged cultural development leading to the dynastic culture of the historic period (e.g., Kantor

1944:135-136; Bard 1994:26/114; contra, e.g., Köhler 1995; Williams 1987). If anywhere, then, it would be among these cultures and this form of burial that the origins of cult practices involving the interment of animals might be sought.

What: Species and Symbolic Significance

The widely inconsistent quality of the published information concerning the identification of the animals that occur in the independent burials necessitates, in a few instances, only a tentative designation as domesticated forms of Bos, Ovis/Capra, and Canis. Nevertheless, whether as wild or domesticated forms, these are the "three" genera that occur in this type of burial. Only two out of the three predynastic culture complexes with which such burials were associated provide sufficient iconographic evidence that, if stretched, might be suggestive of the symbolic significance of particular species. In the case of both cultures, however, the animals depicted were wild fauna, none of which were among those species interred in the cemeteries. There is, thus, no iconographic evidence that, even if maximally interpreted, suggests the attribution of numinous qualities to the species that occur in the independent animal burials.

Although the animals buried in or associated with human graves have generally been considered another form of grave goods, some of the species that occur in these burials had acquired religiously and politically symbolic significance by the time of the rise of the First Dynasty. Nevertheless, credible interpretations for the motivations for many of these burials may also be framed within the context of the more prosaic roles of particularly the domesticated species that occur. Only the burials of exotic animals associated with the graves of the elite more readily lend themselves to interpretations as expressions of this religious or political symbolism. At present, however, only one early First Dynasty example, the lions associated with the funerary complex of Aha at Abydos, derives from a context that would make such an interpretation tenable. Until the primary source of the other exotic animal burials, Locality 6 at Hierakonpolis, is more fully excavated, their original context cannot be reconstructed. This hinders the formulation of viable interpretations of their significance.

Where and How: Distribution and Status Differentiation

There is no conclusive evidence for the existence of cemeteries dedicated exclusively to the burial of sacred animals. Except for the anomalous settlement burials at Adaima, all the documented animal burials were situated within the confines of human cemeteries. In this context, an intrasite comparison of the animal and human burials demonstrates that, in those cemeteries where the human burials exhibit fully developed standards for postmortem status display, none of the independent animal burials were comparable to those reflecting the privileged status of the prestigious human dead. In fact, although the spatial distribution of most of the animal burials placed them in the sphere of the relatively richer burials in the Badarian and A-Group cemeteries in which they occurred, their contents did not differentiate them

from the poorest. Only in the cemeteries of the Maadi (variant) culture, where there is no detectable customary standard for signifying the status of the deceased, were some of the goat burials accompanied by "grave goods". However, the distribution of these burials at Wadi Digla suggests they were associated with spatially organized clusters of apparently related human burials that may have been the exclusive burial plots of particular segments of the community. This pattern of association suggests that although the goat burials do not appear to have been the product of a single funerary event, a specific human burial, they were nevertheless directly related to the burials that surrounded them and thus apparently an aspect of locally observed funerary customs. The presence of the goods accompanying these burials must then be considered in this context.

Why

As this brief review of the results of the present investigation reveals, there appears to be no unequivocal evidence in support of an interpretation of the independent animal burials as concrete manifestations of a contemporary attitude of reverence for the animals that occur, either individually or as representatives of their species. In conjunction with the geographically circumscribed and apparently culture-specific distribution of the phenomenon of independent animal burial, this lack of evidence for reverence for the relevant species suggests that the burials should be viewed within the context of the traditional burial customs of each of the three culture complexes with which they were associated.

Maadi (variant)

Two species, goats and dogs, occur in the independent animal burials documented in the cemeteries of the Maadi (variant) culture. That the animals were deliberately slaughtered before burial is attested by examples of the better preserved remains of both species. Although these animals may therefore be generally viewed as "funerary sacrifices", the motivation for the burials was most likely species-specific and, at least in the case of the dogs, possibly a reflection of the role this species played in the economic life of the community.

As mentioned above, the spatial distribution of the goat burials at Wadi Digla, whose original context remained undisturbed, suggests an association with what appear to have been exclusive burial plots. In light of the fact that the proposed chronological development of these plots suggests that the goat burials were not necessarily the earliest graves in these clusters, they do not appear to have been "foundation deposits" dedicating the initial use of that section of the cemetery. However, they may represent later sacrifices honoring in general the occupants of these related graves, in a sense a post-interment communal provisioning for the dead. The occurrence of pottery caches also tends to suggest post-interment funerary rites (see Rizkana & Seeher 1990:94-95; Boessneck 1989:123). The presence of ceramic vessels in some of the goat burials may have been a consolidation of these two forms of funerary offerings.

This may explain the unequal distribution of such vessels in the goat burials at Wadi Digla. The marked disparity between the quantities of ceramic vessels accompanying the goats at Wadi Digla and those at Heliopolis may reflect local variations in the practice of consolidating such offerings as well as a possible diachronic trend of increasing post-interment offerings concurrent with the similar trend of increasing quantities of ceramic grave goods noted in the human burials themselves.

It has been proposed that the dogs were buried as symbolic guardians of the cemeteries (Debono & Mortensen 1988:47). For the dog, the role of guardian in this context may have been an extension of the part it had come to play in animal husbandry as protector of the flock. Thus, although the burials may be considered, in a sense, a funerary sacrifice, they appear to have been a magical or symbolic means of meeting a specific need of this life, not the presumed needs of the afterlife. The significance, if any, of the lack of uniformity noted in the orientation of the dog burials is not immediately evident. If the proposed interpretation is correct, however, they may have been faced in the direction deemed most in need of a vigilant sentinel at the time of their interment.

This role of guardian of the dead was enbodied by deities such as Khentimentiu during the early dynastic period and later by Anubis, both of whose animal manifestations were jackals. Attribution of this role to the jackal would be a form of propitiation, since jackals were no doubt one of the foremost predators on cemeteries (Baines 1993:68). Even if this role reversal from predator to protector for the jackal were to be viewed as a substitution of the traditional protector (domesticated dog) by the propitiated predator (jackal) instead of a self-contained psychological process, there is no evidence for cultural continuity between dynastic culture, which honored the jackal in this way, and the Lower Egyptian Maadi culture complex, whose traditional burial customs at the very least were "eclipsed" by those of the Upper Egyptian Naqada culture (see Bard 1994:26/114). In this light, it is difficult to see these dog burials as either the underlying origin of the later funerary beliefs or as the concrete manifestation and, therefore, evidence for the early existence of such beliefs.

Badarian

Three species, cattle, sheep/goats, and dogs, occur in the independent animal burials documented in the cemeteries of the Badarian culture. Only one cemetery provides well-documented evidence for the burial of the first two. In this case, the burials were apparently associated with the richer graves in the eastern section of the cemetery. Despite the relatively small number of human graves in this section of the cemetery, their dispersed distribution suggests they were not all related burials. The concentration of the animal burials in one limited area then may suggest an association with only those graves in their immediate vicinity. Whether these animal burials can be considered foundation deposits or the results of post-interment funerary rites is, however, a matter of conjecture, as the sequence of their deposition in relation to the human burials cannot be determined.

Again, only one cemetery provides well-documented evidence for the independent burial of a dog.

Even if the other questionable case was also an independent burial, the two alone are insufficient to support an extended interpretation of the significance of these burials. Nevertheless, they may have served a purpose similar to that proposed for the dog burials in the cemeteries of the Maadi culture.

A-Group

Three species, cattle, sheep/goats, and dogs, occur in the independent animal burials documented in the cemeteries of the A-Group culture. However, the burials of dogs outnumber by far the burial of domestic livestock in the earlier cemeteries and then unaccountably no longer occurred in the later cemeteries. Finally, in the last phases of the culture, the burials of sheep/goats and cattle were restricted to the cemeteries of the elite.

Although the evidence of the double burial of a dog and a goat at Shellal may perhaps, if stretched, demonstrate a relationship between these two species that might suggest the primary role of the former in the economic life of the community, the occasional multiple burials might, on the other hand, be considered suggestive of hunting packs. The lack of evidence for the principal emphasis of the subsistence economy is, however, only one of the major obstacles to an interpretation of these burials.

If the dogs are assumed to have been associated with herding activities then an interpretation similar to that offered for the dog burials in the cemeteries of the Maadi culture might be valid. However, despite the fact that the double burial just mentioned may reinforce an assumption of an economic role for the dog suitable to such an interpretation, the presence of the goat in this burial seems inexplicable in the context of an interpretation of dogs as guardians of the cemeteries. This burial, at least, appears to emphasize the dog's mundane role as guardian of the flock rather than its symbolic role as guardian of the dead. Similarly, if some of these burials were those of hunting dogs, there is no apparent extended symbolic analogy for this role appropriate to a funerary context. Many of these burials therefore do not readily lend themselves to generalized symbolic interpretations in the context of the cemetery as a whole. This places them in the realm of the secular rather than the symbolic.

In either case, whether as hunting or herding dogs, the evidence for social stratification in these cemeteries does not allow for an assumption that they were the communal property of the community of the living and thus the communal property of the community of the dead. If not communal property then whose dogs were they? Although clusters of possibly related burials are detectable at both Shellal and Bahan and in some cases dog burials were spatially associated with these clusters, the relationship between the animal and human burials is not immediately evident due in part to the lack of clearly organized patterning of the graves in these clusters. Nevertheless, the possibility exists that in some instances these dogs were the personal possessions of one (or maybe more) of the occupants of these adjacent graves. In this case, some of the dog burials may have been subsidiary burials. The apparent association of many of these burials with some of the better-endowed human burials may support this suggestion. In the end, however, there is no consistent pattern of association that would allow for an

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all-encompassing interpretation of the dog burials in these cemeteries.

The distribution of burials containing domestic livestock in the Early and "early Classic" A-Group cemeteries exhibit no clearly detectable pattern of association with the more exceptional or wealthier graves. The significance of these burials cannot be determined based on the available evidence. The isolation of the cluster of sheep/goat burials in the elite cemetery at Naga Wadi (Seyâla) also presents an obstacle to interpretation. It does not seem likely that these burials were associated, in the sense of post-interment offerings, with the one rather humble contemporary human grave in their immediate vicinity, when no similar offerings were detected for the obviously elite burials in this cemetery. In the absence of supporting evidence for retainer sacrifice in the elite cemeteries of Nubia similar to that practiced by the early dynastic elite of Egypt, it also seems unlikely that this patch of graves was an expression of the personal wealth — in this case symbolic of a flock accompanied by its shepherd — of one of the local elite, as were, for example, the burials of birds and dogs accompanied by their attendant associated with the First Dynasty tomb of Hemaka at Saqqara.

Only one of the cattle burials in the elite cemetery at Qustul appears to have been directly associated with a specific human tomb. This burial resembles the similarly decapitated carcass of a cow deposited as a food offering in a side chamber of an elite grave at Minshat Abu Omar (see Chapter 7, note 4). Whether the Qustul burial was simultaneous with the burial in the adjacent tomb or a post-interment funerary offering cannot be determined. The distribution of the other cattle burials in this cemetery, however, suggests the occurrence of post-interment funerary rites honoring, in these cases, the prestigious dead in general.

Despite the fact that the majority of predynastic independent animal burials have been documented in the cemeteries of the A-Group culture complex and in most cases the reasons for these burials are not immediately evident, no interpretation suggesting a reverence for these animals has ever been offered as motivation for these burials. This seems to demonstrate the influence retroactive amplification, by reference to Egyptian religion of the historic period, has had on the interpretation of similar burials in the cemeteries north of the First Cataract.

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Appendix A

Independent Animal Burials

Among the animal burials listed below, some are of uncertain date, others are not clearly independent burials. Where the information provided is considered insufficient to include the example in this category of animal burial, the grave number is marked with an asterisk (*).

BADARIAN CULTURE

Upper Egypt

Badarian Culture: Independent Animal Burials

Cemetery	Dog	Sheep/Goat	Cattle	(?)
Mostagedda 2200/3500	1(?)4	_	_	
Deir Tasa	_	_	_	2
Badari 5100	1	_	_	
Badari 5300/5400	-	2	2	

a) This may not have been an independent burial.

Mostagedda

Area 2200/3500 was the site of a Badarian settlement as well as cemetery. Brunton suggests the "history of the site" was as follows: The central area of the cemetery was the site of the original settlement, surrounded by an irregular circle of "grain pits". Burials were situated to the north and northwest, up to the foot of the cliffs. Others lay near the pits to the southwest with a few on the east. These "may date to a time when the settlement was shrinking" or may be contemporaneous with the full extent of the settlement, as they were predominantly the burials of children. The clusters of burials that were situated within the circle of pits "may have been made when the site was abandoned, and the settlement had moved half-way down the spur" (1937:15-16).

Brunton does not state clearly whether the following was an independent animal burial or the remains of a plundered human burial. The animal burial is described along with the remains of another burial(?) as coming from "graves without bodies" (1937:41). Thus, it is possible that this was not originally an independent animal burial, in which case the only independent animal burials documented for the Badarian culture would be those at Badari and Deir Tasa. This burial does not appear on the cemetery map (Brunton 1937:Plate IV).

Tasian/Badarian Burials: Mostagedda: Cemetery 2200/3500

Human graves	ca. 85 ⁴
Animal graves	1(?)

a) 2 Tasian, 83 Badarian

• 3500(?):1 dog(?), "the skeleton of an animal probably a dog"; lying on right side, head south; matting (Brunton 1937:41)

Deir Tasa

Two apparently disturbed² animal burials were documented in a cemetery attributed to the Badarian culture. The animal graves differed from those of the humans in that most of the latter were circular or oval (only rarely rectangular), whereas the former were rectangular.³ Both animals were tentatively identified as either *Bos* or goat ("de bovins ou de chèvres"). Neither burial is specifically indicated on the sketch plan of the cemetery. No further information was provided (Gabra 1930:148-149).

Badarian Burials: Deir Tasa
Human graves | ca. 45
Animal graves | 2

Badari

Cemetery 5100 lay ca. 400 meters south of Cemetery 5300/5400. A settlement site, apparently centered in Area 5500 (possibly extending north onto the tip of spur 5300), lay between them. The full extent of the cemetery may have originally been larger than the portion excavated (Brunton & Caton-Thompson 1928:4-6).

Brunton states: "The burials of Cemetery 5100 seem to have been of the more important people, judging from the scanty remains" (Brunton & Caton-Thompson 1928:6). This evaluation is confirmed by Anderson's analysis of the distribution of burial goods among Badarian burials in the vicinity of Badari (Anderson's "Badari South"; 1992). The dog(?) burial lay at the center of an arc of human graves at the eastern edge of the cemetery (Brunton & Caton-Thompson 1928:Plate IV).

Badarian Burials: Badari: Cemetery 5100

Human graves	ca. 54
Animal graves	1

• 5113: dog(?), "small carnivorous animal (jackal or dog ?)"; lying head south; covered with matting (Brunton & Caton-Thompson 1928:7)

Cemetery 5300/5400 was one of the largest Badarian cemeteries documented in the vicinity of Badari. Brunton states: "the Badarian burials, though seldom plundered, were unhappily very poor in character. Hardly any grave contained more than two pots, if indeed that. The better graves, generally robbed, were situated on higher ground half-way up the spur"; and "the whole of the western or lowest part

An unregistered grave in the 3500 series.

²The bones are described as scattered.

³Rectangular graves of Badarian date are not common but do occur, see Brunton & Caton-Thompson 1928:18; Brunton 1937:43; Brunton 1948:9.

contains no female graves whatever, with the exception of [one], where the sex was rather doubtful" (Brunton & Caton-Thompson 1928:10/20). This evaluation is confirmed by Anderson's analysis, which demonstrated that the "luxury goods" were confined to burials in the eastern portion of the cemetery (Andersons's "Badari North"; 1992:62). The Bos and sheep/goat burials were clustered on the northern edge of the cemetery, where the area containing the wealthier burials abuts the poorer section.

Badarian Burials: Badari: Cemetery 5300/5400

Human graves	ca. 93
Animal graves	4

- 5422: Bos, "large bovine animal"; lying on left side, head south; covered with matting (Brunton & Caton-Thompson 1928:12)
- 5423: "sheep or goat?" (identified as "probably a sheep"); orientation unspecified ("much disturbed"); matting and traces of cloth (Brunton & Caton-Thompson 1928:12/19/38)
- 5424: sheep or goat(?), "similar bones to those in 5423"; orientation unspecified (Brunton & Caton-Thompson 1928:12)
- 5434: Bos, "animal burial like 5422" (identified as an ox or "possibly cow-buffalo"); orientation unspecified (Brunton & Caton-Thompson 1928:12/38; see also Reed 1960:142)

NAQADA CULTURE

Lower Egypt: West Bank

Abusir el-Meleg

This cemetery has been dated to Naqada IId2 through Naqada IIIb (Kaiser 1987a:119, note 3 and 1990:289). Dates for individual graves were not offered (Scharff 1926).

• *1078: The skull of a goat and several ceramic vessels were the only contents noted in this allegedly undisturbed grave (Scharff 1926:14). The skull lay upright, facing inward at one end of the grave and four ceramic vessels lay opposite, at the other. The central space was empty (Scharff 1926:Plate 66). The position of the skull appears to indicate it was not attached to an entire animal when deposited in the grave. A skull alone would not be unusual for this cemetery. Skulls, or parts of skulls, occasionally in conjunction with other bones of butchered animals, were found in more than thirty graves in this cemetery. Most were Bos ("Rinder", "Kalb", "Stier"); some remained unidentified. Three, graves, besides 1078, contained goat ("Ziegen") skulls among the grave goods. (see Appendix D)

Upper Egypt

Matmar

• *2600(ii): At an unregistered locus in the 2600 series, the "bones of a gazelle(?) [were found] just below the surface" (Brunton 1948:12). It was suggested that the remains may have been from

⁴The burial had been disturbed. The skull was missing. The spine lay along the east side of the grave.

⁵The burial had been disturbed. The skull was missing. Only the spine remained in position.

⁶More than fifty graves (out of a total of ca. 815) contained parts of butchered animals. Of these, thirty-three had at least one skull or part of a skull (Schaff 1926:108-164; see also Appendix D).

a "solitary" burial or from a plundered grave (Brunton 1948:22). Due to the fact that no other unquestionable independent animal burial attributable to the Naqada culture has been reported from the Upper Egyptian cemetery sites reviewed here, the latter seems more likely. (see Appendix B)

Naga el-Hai

• *NEH 76: The bodies of two goats were reported as the only contents of this "hole in the ground". As another grave (NEH 61) contained the intrusive modern burial of a cow, it seems likely that the goats were of the same date (Freed n.d.).

MAADI-BUTO CULTURE

Lower Egypt: East Bank

Maadi (variant): Independent Animal Burials

Cemetery	Dog	Sheep/Goat
Heliopolis	5	64
Maadi	1	_
Wadi Digla	1	134

a) All of these were originally identified as gazelles. Not all of them have undergone reexamination and some of those reexamined remain unidentified. Nevertheless, they are now all believed to be sheep/goats.

Heliopolis

The cemetery was not fully excavated. A sounding made to the west of the excavated area indicates the cemetery extended in that direction. Later excavation revealed more burials, but these remain unpublished (Rizkana & Seeher 1990:97, note 95). Due to the fact that the excavated portion of this cemetery had been disturbed by modern construction activities and the extent of the sondages made in search of further burials within the area encompassed by the published map cannot be determined (see Debono & Mortensen 1988:10, note 18), the number and location of burials that may have been destroyed or remained undetected within that area cannot be estimated. However, the entire extent of the cemetery has been estimated at ca. 200 graves (Debono & Mortensen 1988:10/40-41).

In the final publication of the earlier excavations, some confusion was expressed concerning the total number of animal interments at this site. Debono originally reported a total of eleven animals (6 "gazelles", 5 dogs) (1950:234-236, 1952:634-638). In a brief abstract, however, Rizkana reported only three (species unspecified) (1957:393). This abstract appears to represent, at least in part, a report of the later unpublished excavations (see Debono & Mortensen 1988:40). If so, these three animal burials would bring the total to fourteen. However, as no details were provided, these possibly additional burials are not included here. Only 11 animal burials are indicated on the cemetery map (Debono & Mortensen 1988:Plan 1). One additional grave contained only fragments of animal bones and may also have originally been an animal burial.

The orientation of the dog burials varied considerably. "Their heads were turned to the south, west, north-west, or north-east, they may look east, north or west or lie on the right or left side, often rolled together as if they were asleep" (Debono & Mortensen 1988:40). Evidence suggests that at least one of the dogs (I 40) was deliberately killed. "The legs had perhaps been tied together and the head was separated from the body" (Debono & Mortensen 1988:46-47). No "grave goods" were reported for any of the dog burials. The five dog burials lay in an arc on the northern edge of the eastern end of the excavated portion of the cemetery (Debono & Mortensen 1988:Plan I).

All of the goats were originally reported as gazelles (Debono 1950, 1952). They are now thought to be goats.⁷ All of the goats were accompanied by what have been termed "offerings". These accompaniments consisted of ceramic vessels. Three of the goat burials lay side-by-side toward the eastern end of the excavated portion of the cemetery; the other three were scattered among the human graves (Debono & Mortensen 1988:Plan I).

Maadi (variant): Heliopolis

Human graves	ca. 48
Cache-pits	8
Animal graves	11(?)

- I 15: goat; lying contracted on right side, head south, face east; "offerings" (2 vessels) (Debono & Mortensen 1988:13/39)
- I 24: goat; lying contracted on right side, head south, face east; "offerings" (8 vessels) (Debono & Mortensen 1988:14/39)
- *I 31: "animal bones in the filling" (Debono & Mortensen 1988:16). As no other contents were noted, this may have been an animal burial.
- I 36: goat; lying contracted on right side, head south, face east; matting; "offerings" (4 vessels) (Debono & Mortensen 1988:16/39/Plate 10-2)
- I 37: goat; lying contracted on right side, head south, face east; matting or skin(?); "offerings" (6 vessels) (Debono & Mortensen 1988:17/39/Plate 10-4)
- I 38: dog; lying rolled together on right side, head south, face east; no "offerings" (Debono & Mortensen 1988:17/39)
- I 39: dog; lying rolled together on left side, head west, face north; no "offerings" (Debono & Mortensen 1988:17/39/Plate 12·18)
- I 40: dog; lying contracted on right side, head northwest, face west; matting(?), no "offerings" (Debono & Mortensen 1988:17/39/Plate 12·3)
- I 41: dog; orientation unspecified (disturbed); no "offerings" (Debono & Mortensen 1988:17/39)
- I 42: dog; lying rolled together on left side, head northeast, face east; no "offerings" (Debono & Mortensen 1988:17/39)
- I 67: goat; lying on its belly, limbs folded under body, head south, face east; matting or skin(?); "offerings" (2 vessels) (Debono & Mortensen 1988:20-21/39)
- I 71: goat; lying contracted on right side, head south, face east; matting or skin(?); "offerings" (3 vessels) (Debono & Mortensen 1988:21/39/Plate 15-3)

⁷See Debono & Mortensen 1988:13, note 22. See also Wadi Digla below for animals originally reported and officially identified as gazelles that after reexamination have been identified as goats.

⁸The grave number in the photograph is wrong; see Debono & Mortensen 1988:17, note 25.

Maadi

The cemetery was not fully excavated. Its original extent is unknown. Six burials were excavated ca. 70 meters northwest of the western end of the principal area excavated, and later excavations (which remain unpublished) revealed "several dozens" more ca. 300 meters to the east. This suggests the original extent of the cemetery was substantially larger than the portion published. It has been estimated that ca. 80% of the cemetery remained unexcavated (Rizkana & Seeher 1990:15-16, Figure 2; Klug & Beck 1985:100). The dog lay buried at the western end of the main excavated portion of the cemetery, to the north of a cluster of human graves (Rizkana & Seeher 1990:17, Figure 3).

Maadi (variant): Maadi

Human graves	ca. 77
Cache-pits	-
Animal graves	1

• no No: dog; lying on right side, head east; no "offerings" (Rizkana & Seeher 1990:27; see also Boessneck 1989:103; Moustafa 1955)

Wadi Digla

A large portion of this cemetery is thought to have been destroyed by modern activity in the area prior to excavation, particularly to the west and north of the principal area excavated. To the east a modern road separated the two excavated portions of the cemetery ("western group" and "eastern group"), probably eradicating the graves that originally lay between (Rizkana & Seeher 1990:29-30, Figure 10).

The osteological material from the animal burials was resubmitted for zoological determination many years after excavation. At that time, the material from only ten burials was available for identification. Moreover, confusion of some of the specimens while in storage is suspected. Of the fourteen animals: three are not included in the identification list (animals 8, 9, 11); the identification of one (animal 6) as an "adult domesticated ass" is considered suspect, the presumed misidentification being attributed to confusion of specimens while in storage,9 the assumption being that the original animal remains from this grave had been misplaced or lost (e.g., see animal 10); two were unidentifiable (animals 1, 2); one was identified as a dog (animal 5); five were identified as young goats (animals 4, 7, 10, 12, 14), two as young sheep/goats (animals 3, 13). Among the goats, animal 10 was identified as two "kids". The identification as more than one animal has also been questioned and attributed to confusion of specimens while in storage (one of these may have originally been animal 6) (Boessneck 1989:120-121; Rizkana & Seeher 1990:59-60). The more recent identifications supersede the original identification of thirteen of the fourteen animals as gazelles10 (Moustafa 1953; Rizkana & Seeher 1990:93). An original tentative identification of one animal as a pig (Amer & Rizkana 1953:99) was not confirmed. The remains of one of the better preserved goats provides evidence that it had been killed "by making an incision in the neck between the second and third cervical vertebrae" (Moustafa 1953:213).

None of the animal burials were located in the "eastern group". The dog burial lay surrounded by human graves in the northern section of the central portion of the "western group". Of the other animals: four (animals 11, 12, 13, 14) lay in a row toward the western end of the cemetery; one (animal 10) lay

⁹The remains of domesticated ass have been identified in the faunal assemblage from the excavations of the settlement site (Rizkana & Seeher 1989:90-92).

¹⁰Due to the fact that thirteen of the animals were originally thought to be the same type of quadruped (i.e., gazelle), the six unidentified animals are here also assumed to be sheep/goats. See Debono & Mortensen 1988:42 where the same assumption is made.

in line with these four, but further to the west; five (animals 1, 2, 3, 4, 6) lay scattered among human graves in the western section of the central portion of the cemetery; three (animals 7, 8, 9) lay in a row on the northern edge of the eastern section of the cemetery (Rizkana & Seeher 1990:Figure 11). All the animal burials have been attributed to the cemetery's later chronological phase (Wadi Digla Phase II) contemporary with the Naqada II(a?)-b period (Rizkana & Seeher 1990:94).

Unlike the goat burials at Heliopolis, not all the sheep/goats buried here were accompanied by "offerings". For those that were, these "offerings", as at Heliopolis, consisted of ceramic vessels. Only one burial (animal 9) contained additional material consisting of a carnelian bead and the remains of an object thought perhaps to have been a copper ornament (Rizkana & Seeher 1990:60/94). Additionally, unlike the dogs at Heliopolis and Maadi, the dog buried here may have been accompanied by a ceramic vessel.

Maadi (variant): Wadi Digla: Phases I & II

Human graves	ca. 471
Cache-pits	30
Animal graves	14

- WD Animal 1: unidentified quadruped; lying on left side, head south; "offerings" (1 vessel) (Rizkana & Seeher 1990:59)
- WD Animal 2: unidentified quadruped; lying on right side, head northeast; no "offerings" (Rizkana & Seeher 1990:59)
- WD Animal 3: lamb or kid; lying on right side, head southeast; no "offerings" (Rizkana & Seeher 1990:60)
- WD Animal 4: kid; lying on right side, head southwest; no "offerings" (Rizkana & Seeher 1990:60/Plate XXIV)
- WD Animal 5: adult dog; lying on left side, head south; "offerings(?)" (Rizkana & Seeher 1990:60/Plate XXV)
- WD Animal 6: unidentified quadruped; lying on right side, head southeast; "offerings" (1 vessel) (Rizkana & Seeher 1990:60/Plate XXV)
- WD Animal 7: kid (3-6 months old); lying on left side, head south; "offerings" (1 vessel) (Rizkana & Seeher 1990:60/Plate XXV)
- WD Animal 8: unidentified quadruped; lying on left side, head south; no "offerings" (Rizkana & Seeher 1990:60)
- WD Animal 9: unidentified quadruped; lying on right side, head south; "offerings" (1 vessel, disc-shaped carnelian bead, copper ornament?) (Rizkana & Seeher 1990:60/Plate XXV)
- WD Animal 10: kid; lying on right side, head south; "offerings" (1 vessel) (Rizkana & Seeher 1990:60)

¹¹There appears to be some confusion concerning the presence of an offering in this grave. "According to the ... sketch plan one vessel lay near (above) the head; on the photograph some sherds are visible; in the 'tomb record' no vessel is mentioned; no vessel or sherds could be traced in the [storage] magazine" (Rizkana & Seeher 1990:60).

- WD Animal 11: unidentified quadruped; lying on right side, head south; "offerings" (1 vessel) (Rizkana & Seeher 1990:60/Plate XXV)
- WD Animal 12: kid; lying on right side, head south; no "offerings" (Rizkana & Seeher 1990:60)
- WD Animal 13: kid or lamb; lying on right side, head south; no "offerings" (Rizkana & Seeher 1990:60/Plate XXV)
- WD Animal 14: kid; lying on right side, head east; no "offerings" (Rizkana & Seeher 1990:60/ Plate XXV)

A-GROUP

Southern Upper Egypt & Lower Nubia

A-Group: Independent Animal Burials

Cemetery	Dog	Sheep/Goat	Cattle	(?)
Kubanieh	 -	_	1	
Shellal 7A	12"	2 ^u	-	
Bahan 17A	214	1	2	
Risqalla 30	24	-	-	
Meris 41L & 41B	_	16	46	
Shem Nishei 44	_	2 ^c		1°
Gerf Husein 79	_	2 ^d	-	
Naga Wadi 142	_	3	2(?)e	
Qustul L	_	-	75	

a) These 35 dogs occurred as single, double, and multiple burials (including one instance at Shellal of a dog and goat together) in a total of twenty-two graves. b) The sheep/goat burial and 2 of the cattle burials do not appear on the published cemetery maps. Their spatial relationship to the human graves in the two separate sections of this cemetery in which they were found cannot be determined, leaving their chronological relationship also in question. Nevertheless, as they are less questionable than others noted below, they have been included in this category. c) The 2 sheep/goat burials were listed as empty graves and the unidentified animal burial was not mentioned at all in the grave catalog (ASN I 1910a). Animal burials were attributed to these graves in the Report on the Human Remains (ASN I 1910c). d) These 2 sheep/goat burials were listed under the heading "empty graves". e) One or both of these may be later intrusive burials. f) One additional empty grave is thought originally to have contained another cattle burial.

The terminology of Reisner's proposed cultural sequence of "Early Predynastic," "Middle Predynastic," "Late Predynastic," "A-Group," (aka. "Late Predynastic-Early Dynastic") and "B-Group" (aka. "Archaic" or "Old Kingdom Nubian") is used below where the excavators' classification of burials is referenced. However, all these categories (with the exception of some of the material originally designated "B-Group" that apparently belongs to the C-Group) have now been reconsidered and reorganized as phases of the culture complex designated "A-Group." The three developmental stages of the A-Group culture complex have been dated:

¹²These three subdivisions of the Predynastic period "correspond roughly" to Petrie's Amratian, Gerzean, and Semainean (H.S. Smith 1966:73).

¹³Reisner's hypothesis concerning "Nubian retardation", that "Egyptian" material found in Nubian graves should be dated later than its occurrence in Egypt (see ASN I 1910a:320), is not considered valid here. For the terminology of Reisner's cultural

Nordström	SJE 1972:28-29	Williams	OINE III 1986:13, Table 3
Early	Naqada Ic-IIa-d	Early	Naqada Ib-IIa-c
Classic	Naqada III	Middle	Naqada IId1-IIIa1
Terminal	late Naqada III/early Dynasty I	Late	Naqada IIIa1-b"

a) Williams' third developmental stage terminates with the Naqada III period based on his proposed "Late A-Group" origin for the First Dynasty.

Although Nordström's terminology is used here, ¹⁴ in order to accommodate several of the following cemeteries where the dating of the graves overlaps the chronological division between "Early" and "Classic" A-Group (corresponding more closely to Williams' "Middle" A-Group), an artificial category termed "early Classic" has been created (and used in the body of the text) for their classification. This category is an attempt to compensate for the difficulties that attend the imposition of a chronological structure developed for one culture (Naqada) on another (A-Group) as well as the dilemma of division between Kaiser's Naqada IId2 and IIIa1 addressed by Hendrickx's adjustments to Kaiser's original subdivisions (see Naqada Culture Appendix B).

Most of the animal burials contained no datable artifacts. In fact, other than the occasional piece of leather assumed to be a collar or leash, no objects were documented in any of the burials¹⁵ with only one exception — the ceramic vessels in one of the cattle burials in Cemetery L at Qustul. Nevertheless, based on H.S. Smith's reanalyses (1966, 1991, 1994) of the artifactual evidence from the human graves among which many of these animal burials were scattered, an attempt has been made, where the evidence allows, to indicate the contemporary phase(s) of the Naqada culture to which the burials might be assigned.

In a discussion of the animal burials in Cemetery 17 at Khor Bahan, Reisner states: "The animal burials, both here and at Cemetery 7 [Shellal], are made as separate or multiple burials not visibly connected with any one human grave" (ASN I 1910a:139). The lack of obvious association to specific human graves also appears to be true for all but the ambiguous cattle burials at Qustul Cemetery L.

el-Kubanieh - Süd

This cemetery lies ca. 10 km north of the First Cataract on the west bank of the river. A total of ca. 600 A-Group graves were excavated (Junker 1919). Those that are datable based on the ceramics they contained range from Naqada Ic through Naqada IIIb, with those of the latter date being extremely rare. According to H.S. Smith's reanalysis of the distribution of datable graves in this cemetery, the following burial lay in an area occupied by graves dating to the Naqada IId-IIIa ("early Classic" A-Group) period (1991:94). The animal burial was presumably contemporary with these graves. Only ca. 75 graves can be securely dated to this period (see H.S. Smith 1991:Plan 1). It is not possible to estimate the total number that actually were of this date.

• 20.m.1: bull ("Stier"), skull missing (Junker 1919:41/151)

sequence see ASN I 1910a:5. See H.S. Smith 1966 for a persuasive argument against the existence of Reisner's "B-Group" as a cultural entity and 1991 where he suggests, contra his earlier opinion, that some of the "B-Group" material may be culturally cohesive and representative of the earliest phase of the first developmental stage of the A-Group culture complex.

¹⁴See OINE III 1986:19, Table 1 for a comparison of terminology, although there Williams designates a separate "Khor Bahan" phase predating Nordström's "Early A-Group" stage contra Nordström (see SJE 1972:28).

¹⁵Although Reisner made this observation in the first volume of the ASN (ASN I 1910a:139), it is also apparently true, with one exception, for burials other than the ones he was aware of at the time.

¹⁶According to H.S. Smith, within the area of quadrants 23-19/j-q burials of Naqada IId-IIIa predominate, "and from m onwards exclusively" (1991:94).

Shellal: Cemetery 7A

Shellal lies adjacent to the head of the First Cataract on the east bank of the river. The animal burials lay scattered among an isolated cluster of human graves, N^{os} 201-268¹⁷ (see ASN I 1910b:Plan X:7A.), which were originally identified as "Early B-Group" (ASN I 1910a:33ff). Based on a reevaluation of the artifactual evidence, H.S. Smith suggests that most of the human graves in this cluster can be attributed to the earliest phase of the Early A-Group. Smith states: "this group of graves have a character consistent with the earliest graves at Bahan and Kubanieh, and on what evidence exists, should be dated to the Naqada I, possibly in some instances even earlier (e.g., Naqada Ib?) than the earliest dated Bahan graves" (1991:101). No graves of a later date (i.e., post A-Group) are reported from this area. One dog burial (224) was cut by a later human grave.

Early A-Group Burials: Shellal: 7A (Graves 201-268)

Human graves	ca. 51
Animal graves	10

- 223: dog: lying on left side, head 5° north of west; skull missing (ASN I 1910a:37)
- 224: dog; lying on left side, head 38° west of north; no wrappings; no accompaniments; skull missing due to disturbance by later grave (ASN I 1910a:37, Figure 22; ASN I 1910b:Plate 6b)
- 227: dog; lying on right side, head 15° south of west; no wrappings; no accompaniments; undisturbed (ASN I 1910a:37)
- 228: dog; lying on right side, head 30° north of west; no wrappings; no accompaniments; grave denuded (ASN I 1910a:37)
- 231: 2 dogs; lying on left sides, heads 10° north of west; no wrappings; a piece of three-strand twisted thong, "perhaps a leash"; disturbed (ASN I 1910a:38)
- 232: goat; ¹⁹ lying on left side, head 30° west of south; no wrappings; no accompaniments (ASN I 1910a:38; ASN I 1910b:Plate 7a)
- 252: 3 dogs; lying on left sides, heads 8° north of east; no wrappings; no accompaniments ("B and C are contemporaneous burials, put in on A; but A may also be contemporaneous") (ASN I 1910a:40)
- 255: A. goat; lying on left side, head due west; B. dog; lying on right side between legs of goat, head due west (burials simultaneous); grave denuded (ASN I 1910a:41; ASN I 1910b:Plate 7c)
- 256: dog; bones disordered; disturbed (ASN I 1910a:41)
- 264: dog; lying on left side, head 20° west of north; no accompaniments (ASN I 1910a:42)

¹⁷In ASN I 1910a:33, this patch of graves is designated "201-261", but the grave numbers on the map as well as in the grave catalog run up to and include 268.

¹⁸See Khor Bahan: Cemetery 17 below for the date of the Bahan graves.

¹⁹G. Elliot Smith lists a dog for this grave (ASN I 1910c:76). This is just one of a number of discrepancies between the contents Elliot Smith attributes to specific graves and that described by Reisner. The assumption here for this grave is that Reisner's description in ASN I 1910a is correct and Elliot Smith's in ASN I 1910c is not.

Khor Ambukol: Cemetery 14

This cemetery lies on the east bank of the river south of Shellal and just north of Cemetery 17 at Khor Bahan. The following burial was listed among graves originally designated "B-Group" (ASN I 1910a:142ff). According to H.S. Smith, "it cannot be shown that these burials belonged to a single cultural group. If they did so, it must have been to the Predynastic" (1966:87).

• *43: goat or sheep; disturbed (ASN I 1910a:144). Due to the fact that this grave does not appear on the cemetery map (see ASN I 1910b:Plan XII), its spatial relationship to the other graves in the cemetery cannot be determined. Its date, although possibly predynastic, remains in question.

Khor Bahan: Cemetery 17A

This cemetery is located ca. 9 km south of Shellal. It is here accepted that this cemetery contains the burials of an indigenous population, not those of an Naqada culture colony (see H.S. Smith 1991:98 and SJE 1972:28). The mortuary practices involving the independent burial of animals appear to support this conclusion.

The animal burials were listed separately in the grave catalog, but, in accord with Reisner's hypothesis that animal burials were an aspect of "B-Group" mortuary practices, were considered contemporary with the ca. 30 human burials listed under the heading "B-Group and Graves of Indeterminable Date" (ASN I 1910a:133ff). All the graves designated as such, as well as the animal burials, lay scattered among burials identified as "Early" and "Middle Predynastic" (see ASN I 1910b:Plan XIV:17A). Based on a reevaluation of the artifactual evidence, H.S. Smith suggests that the human burials designated B-Group "do not differ essentially from the 'Early and Middle Predynastic' graves, except in so far as they do not include dateable Naqada material." The datable graves in this cemetery have been attributed to the Naqada Ic-IIb periods. Smith suggests many of the burials originally designated "B-Group" and of "Indeterminable Date" may predate these (1991:98). Apparently no graves of a later date (i.e., post-Early A-Group) were found in this cemetery. Concerning the animal burials, H.S. Smith states: "there is little reason for assigning these animal burials to any group other than the Predynastic, though of course they cannot strictly be dated" (1966:88).

Concerning the dog burials, G. Elliot Smith notes "that considerable quantities of gnawed fragments of bone were found under the ribs in almost everyone of these dogs. As we have never seen this in any other case amongst the considerable series of dogs of later dates found in other cemeteries, the natural inference is that these archaic dogs in Cemetery 17 did not die natural deaths, but were sacrificed (killed when their stomachs were full)" (ASN I 1910c:116-117).

Early A-Group Burials: Bahan: 17A

Human graves	ca. 61
Animal graves	15

• 4:21 dog; contracted on right side, head 25° east of north; covered with matting over very fine linen; leather collar with attached leash around neck (ASN I 1910a:137)

²⁰Actually, all Reisner would commit to was that the animal burials were "probably not previous to the B-Group" (ASN I 1910a:139).

²¹G. Elliot Smith lists fragments of a human skeleton for this grave (ASN I 1910c:117). None are listed by Reisner (ASN I 1910a:137). If, in fact, these fragments were present, perhaps this dog was also buried in the debris of an earlier grave. See grave 8 for such a case.

- 8:²² dog; orientation unspecified; wrapped in matting; leather thong ("leash?"); superimposed burial (ASN I 1910a:137)
- 11: dog; contracted, axis of body 30° east of north; skull missing (ASN I 1910a:138)
- 20: 3 dogs; orientation unspecified (ASN I 1910a:138)
- 23: goat or sheep; lying on left side, orientation unspecified (ASN I 1910a:138)
- ◆ 26: 5 dogs; orientation unspecified; grave denuded (ASN I 1910a:138; ASN I 1910b:Plate 28a)
- 33: young ox; lying on left side, head 20° west of south; no accompaniments (ASN I 1910a:138)
- 36: dog;²³ lying on right side, head north(?) (ASN I 1910a:138)
- 44: dog; lying on right side, head 25° west of north; no accompaniments (ASN I 1910a:138)
- 54: dog(?); lying on left side, orientation unspecified; no accompaniments (ASN I 1910a:138)
- 67: 2 dogs; heads 50° west of north; covered with matting; leather collars and leashes on necks (ASN I 1910a:138)
- 69: 2 dogs; lying on right sides, heads 15° north of east; no accompaniments (ASN I 1910a:138)
- 71: young ox; lying on right side, head southwest; no accompaniments (ASN I 1910a:138)
- 77: 2 dogs; lying on right sides, heads south (skulls missing); no accompaniments (ASN I 1910a:139)
- 91: dog; lying on left side, head 25° north of east (ASN I 1910a:139)

Risqalla (Wadi Qamar): Cemetery 30

This burial was listed among graves designated "Predynastic" (ASN I 1910a:191ff) and lay surrounded by a cluster of human graves of that and later date at the southern end of the cemetery (see ASN I 1910b:Plan XX). The Decorated Ware in a few of these graves suggest a Naqada II(c-d?) date. Based on an analysis of the artifactual evidence, H.S. Smith suggests that the majority of the "Predynastic" graves can be dated to Naqada IIb-c. The artifacts in the debris overlaying grave 36 (the double dog burial) also fall within this time frame (H.S. Smith, personal communication 1998). If this debris represents the plundered remains of an unrecognized overlying grave, then its presence confirms an early date for the dog burial. If it was the displaced remains of a plundered adjacent grave (as the excavator suggested), then its utility for dating the dog burial depends on how soon after interment the original source of the debris was plundered, which, of course, is unknown. H.S. Smith suggests, however, that several graves designated "Early C-Group" in this section of the cemetery may represent later intrusive burials in what may have originally been A-Group graves (personal communication 1998; see ASN I 1910a:194-195). This suggests a possible time frame for the disturbance of the source of the debris

²²This dog was buried in the debris of a grave designated "Early Predynastic".

²³G. Elliot Smith lists two dogs for this grave (ASN I 1910c:118). This is one of a number of discrepancies between the contents Smith attributes to specific graves and that described by Reisner. The assumption here for this grave is that Reisner's description in ASN I 1910a is correct and Elliot Smith's in ASN I 1910c is not.

²⁴This is a rare instance in the ASN publications where an animal burial was listed among predynastic burials. Most of the animal burials under discussion here were either attributed to the "B-Group" and/or listed separately.

²⁵See grave 9 and 38 for pottery painted with images of boats (ASN I 1910a:191/193).

overlaying grave 36 (see ASN I 1910a:190-191). Thus despite the presence of a few graves designated "C-Group" in its vicinity, an Early A-Group date for this animal burial is accepted here. The three graves originally designated "Early Dynastic" (attributable to a later A-Group developmental stage) do not appear on the cemetery map (located on a ridge to the south).

Early A-Group Burials: Risgalla: 30

Human graves	ca. 8
Animal graves	1

• 36: 2 dogs; lying on left sides (one between the legs of the other), heads east; leather collar or leash (ASN I 1910a:192; ASN I 1910b:Plate 40f)

Meris: Cemetery 41

Animal burials 101 and 102 were in an area where the graves were originally identified as of the "Early Dynastic type". However, they "were apart at a little distance, and did not seem to belong to the main patch of graves" (ASN I 1910a:208; see ASN I 1910b:Plan XXV:41B). The implication was that the spatial isolation of these burials might indicate they were not contemporary with the other graves in the area. Junker suggested, however, that the single cow burial at Kubanieh-Süd was evidence for attributing these two burials to the A-Group (Junker 1919:41). H.S. Smith suggests that a number of the datable graves in this plundered section of the cemetery may be attributable to Naqada IIIa extending the range of this portion of the cemetery into the early Classic A-Group period (personal communication 1998). Except for the one exceptional stone-built grave (103), the date of which is questionable, no graves of a later date (i.e., post A-Group) were reported in this vicinity. Grave 101 does not appear on the cemetery map (ASN I 1910b:Plan XXV:41B).

"early Classic" A-Group Burials: Meris: 41/100 (Graves 101-123)

Human graves	ca. 21
Animal graves	2

- 101: cow(?); lying on right side, head northwest (ASN I 1910a:208)
- 102: cow(?), "similar animal burial to N° 101" (ASN I 1910a:208)

Animal burials in the 200 series were originally listed under the heading "B-Group" (ASN I 1910a:211ff). According to H.S. Smith, most of the human graves in this series (201-243) "were of Predynastic date" (1966:92) and suggests that they are comparable to the "B-Group" graves of Cemetery 7 at Shellal, which he dates to the earliest phase of the first developmental stage of the A-Group (see above) (1991:101). No graves of a later date were reported in this vicinity. Grave 201 lay quite a distance from the main patch of graves, more isolated from the 200-series graves than 102 was from those of the 100-series. The other two animal burials, graves 241 and 242, do not appear on the cemetery map (see ASN I 1910b:Plan XXV:41L).

Early A-Group Burials: Meris: 41/200 (Graves 201-243)

Human graves	ca. 41
Animal graves	3

■ 201: ox or cow (identified as cow; ASN I 1910c:155); head 15° east of north (ASN I 1910a:211)

- *210: Grave 210 was an apparently disturbed human burial. "At south side of grave outside lay
 part of the upper half of a sheep's skeleton, head east" (ASN I 1910a:212). The nature of this
 burial is not clearly stated. The information provided is insufficient to determine whether the
 bones represent the remains of an entire animal or parts of a butchered animal (food offering), or,
 for that matter, if the sheep was contemporary with the graves in its vicinity.
- 241: cow(?); lying on right side, head 10° south of west (ASN I 1910a:215)
- 242: ram(?) (identified as ram; ASN I 1910c:156); lying on right side, head west (ASN I 1910a:215)

Shem Nishei: Cemetery 44

The graves in Cemetery 44 were originally dated to the "later Predynastic" period. H.S. Smith suggests that the meager remaining ceramic evidence indicates a late Early A-Group, possibly early Classic, date for the graves in this cemetery (personal communication 1998). No graves of a later date (i.e., post A-Group) were reported from this area. The following animal burials lay in an arc at the edge of a scatter of human graves in the southwestern section of the cemetery (see ASN I 1910b:Plan XXVIII). Two (23, 30) were listed as "empty"; one (34) was not listed at all (ASN I 1910a:256-258). G. Elliot Smith, however, attributes animal burials to these graves (ASN I 1910c:167). In this case, G. Elliot Smith's attribution is accepted. 27

"early Classic" A-Group Burials: Shem Nishei: 44

Human graves	ca. 30
Animal graves	3

• 23: sheep or goat (ASN I 1910c: 167)

• 30: sheep or goat (ASN I 1910c: 167)

• 34: young animal (ASN I 1910c: 167).

Gerf Husein South: Cemetery 79

Two animal burials (32, 121) were listed under the heading "Empty graves" (ASN II 1912a:151). They lay among human burials originally attributed to the "Early Dynastic" period (see ASN II 1912b:Plan XIV). Based on an analysis of the distribution of datable graves in this cemetery, H.S. Smith suggests the cemetery expanded from the desert edge towards the river, starting with datable graves attributable to the Early A-Group (as early as Naqada Ic) and continuing in use into the early Terminal A-Group period (Naqada IIIb) (1991:102). Except for grave 144 (with possibly associated dog burial), which was originally considered "Late Predynastic" (see ASN II 1912b:Plan XIV) and appears to be of Early A-Group date, the following animal burials can probably be dated to the beginning of the Classic A-Group developmental stage. Due to the fact that many of the graves in this cemetery cannot be dated, it is not possible to estimate the total number that were actually contemporary with the animal burials.

²⁶Cemetery 44 is described as belonging to the "same archaeological group" as Cemetery 43 (ASN I 1910a:256), which was originally dated almost entirely to the "later Predynastic period" (ASN I 1910a:246). At least two graves (67, 68) in Cemetery 43 contained Decorated Ware of late Naqada II date (ASN I 1910a:251).

²⁷"In this case" as opposed to the various discrepancies previously mentioned between Reisner and G. Elliot Smith, primarily due to the similar situation of "empty" graves containing animals in Cemetery 79 (see below).

- 32: sheep (ASN II 1912a:151)
- *87: The crocodile skull fragment in this plundered grave (ASN II 1912a:137) is here considered an "artifact", rather than evidence for the original presence of a crocodile in the grave.
- 121: sheep (ASN II 1912a:151)
- *144: dog, "a small recess or later burial at the foot of the grave and 35cm above the floor, contained a dog's bones" (ASN II 1912a:144). Although there is no clear evidence for the practice of burying animals within human graves for this culture complex,²⁸ due to the fact that this animal may have accompanied the human burial, it is here not considered an independent burial.

Koshtamna: Cemetery 89/500

• *576: The original human burial "had been destroyed to make room for a later burial of a goat" (ASN II 1912a:190). Although all the graves in this cemetery were originally attributed to the "Early Dynastic" period, the date of the goat burial remains in question.

Classic/Terminal A-Group Elite Cemeteries

Naga Wadi: Cemetery 142

Based on the large size of a few of the graves in this cemetery, it is thought to have been the burial place of a local elite. Most of the human burials were originally attributed to the "Early Dynastic" period (ASN IV 1927:213). Although these plundered graves retained little datable Naqada material, the majority can be attributed to the Terminal A-Group (Naqada IIIb through Early Dynasty I), based on the Nubian ceramics they contained. The graves of this date are contemporary with the later graves in Cemetery L at Qustul. It has been suggested, however, that a component of this cemetery may be attributable to the Early A-Group (H.S. Smith 1994, 1991:107-108).

An isolated group of 6 graves at the far southwestern end of the cemetery were attributed (according to the cemetery map) to the B- and C-Groups: "Old Kingdom Nubian – Middle Kingdom Nubian" periods (ASN IV 1927:Plan XII). The evidence for this dating of these graves is not stated. Two human burials (3, 11) in the main portion of the cemetery were identified as C-Group burials in reused earlier graves (ASN IV 1927:215-216), possibly suggesting the motivation for the later date assigned to the isolated group of graves. However, the date may be based on the fact that most were animal burials, which were originally thought to be characteristic of B-Group mortuary practices. Only two human burials lay in this vicinity. One (18) is listed in the grave catalog among the "Early Dynastic" graves (ASN IV 1927:216), the other is an unnumbered undescribed apparently extended burial (ASN IV 1927:Plan XII). No information is provided for most of the graves in this cemetery. The number of human graves listed in the Table below is only a portion of the total number of graves appearing on the cemetery map.

Concerning the animal burials, Firth states: "Graves 14 and 15 were two large pits containing bones of oxen. Graves 16, 17, 18³⁰ [sic] oval pits³¹ containing sheep³² burials" (ASN IV 1927:217). Grave 14

²⁸A disturbed human burial in this cemetery also contained fragmentary evidence for the presence of an animal; the bones of a dog as well as those of an additional human were noted in the debris filling grave 52 (ASN II 1912a:133).

²⁹This is based on the body position indicated within the grave outline on the cemetery map.

³⁰Grave 18 is listed in the grave catalog as that of a human burial (ASN IV 1927:216) and on the cemetery map the body position for a human burial is indicated within the outline of the grave (ASN IV 1927:Plan XII).

³¹On the cemetery map the outline of the graves are drawn as rectangles (ASN IV 1927:Plan XII).

³²On the cemetery map the notation indicates "sheep or goat burials" (ASN IV 1927:Plan XII).

(ox burial) is not indicated on the cemetery map. The other 4 animal burials lay isolated at ca. 10-15m distance from the southwestern end of the main scatter of human graves, with the sheep burials clustered a short distance from the ox burial. Based on the exceptional size of grave 15 (it is one of the two largest graves indicated on the map), H.S. Smith suggests that the grave may have originally been that of one of the most important members of the elite and that the cattle burial may have been a later intrusive burial (1994:376).

Terminal A-Group Burials: Naga Wadi: 142

Human graves	ca. 11
Animal graves	5(?)

- 14: ox (ASN IV 1927:217); the date of this burial is questionable
- 15: ox (ASN IV 1927:217); the date of this burial is questionable (see H.S. Smith 1994:372/376)
- 16: sheep or goat (ASN IV 1927:217)
- 17: sheep or goat (ASN IV 1927:217)
- 17a:33 sheep or goat (ASN IV 1927:217)

Qustul: Cemetery L

Based on the exceptional size of a number of the tombs and the wealth of the burial goods, this cemetery is believed to have been the burial place of a local elite.³⁴ Despite Williams' emphasis on Qustul Cemetery L predating the Naqada III "elite" cemeteries at Hierakonpolis Locality 6 and Abydos Cemetery B (OINE IV 1989:138), which would place it at least in part in Nordström's second developmental stage, "Classic A-Group", he places it in his third developmental stage, "Late A-Group" (see OINE III 1986:13, Table 3 & text below, see also OINE III 1986:163-165). W. Adams suggests the ceramic evidence (particularly the "eggshell ware") indicates a Terminal A-Group date, contemporary with the early First Dynasty (1985:188). B. Adams suggests the ceramic evidence indicates the cemetery was contemporary with the "protodynastic" tombs at Hierakonpolis Locality 6 (Naqada IIIa2-IIIb) (1995:54). H.S. Smith suggests that the evidence of the ceramics and stone vessel types indicates a time span for the cemetery from Naqada IId/IIIa through the early First Dynasty (1994:375); i.e, "early Classic" through the final phase of Terminal A-Group.

Burial L6 lay near the northwest corner of a large tomb (L23). The Supplementary Notes, referring to one cluster of three presumed cattle burials (L3, L7/empty, L27), state: "The entire group was apparently associated with L2 and L5"³⁵ (OINE III 1986:377). Referring to the other cluster of three cattle burials (L20, L25, L26), they state: "Three bovine burials were located directly west of L1, but not convincingly related to any one royal tomb" (OINE III 1986:333). For burial L33, the Supplementary Notes state: "This bovine burial was not located near enough to any major tomb to be assigned to any particular phase of the cemetery" (OINE III 1986:386), emphasizing that the burial was not obviously

³³In the text this grave is noted as grave 18 (ASN IV:217); on the cemetery map the notation reads: "16-17a Sheep or goat burials" (ASN IV 1927:Plan XII).

³⁴Williams' proposal that Cemetery L was the burial place of local Nubian royalty who eventually unified Egypt and founded the First Dynasty is not generally accepted (see, e.g., W. Adams 1985).

³⁵L2 and L5 were two large tombs (of approximately equal size) which lay to the north of this cluster of animal burials. Although here they are being treated as one of the sets of "paired tombs" (Williams' suggests several sets of large tombs were immediately contemporary) elsewhere they are listed as "single tombs" (see OINE III 1986:166)

associated with any specific tomb. These last four burials constitute half the suspected cattle burials in this cemetery, 36 thus calling into question the subsidiary status of any of them.

Williams states: "Most cattle buried in Cemetery L had the heads removed; animals were buried in other cemeteries often intact" (OINE III 1986:16). However, only three of the Cemetery L burials are mentioned as apparently retaining their original condition. One (L27) is not described; another (L6) is described as having been decapitated; the third (L20), although listed in the Finds Register as missing its skull, is documented in the Supplementary Notes as having originally retained it. No indication was given for the presence or absence of skulls for any of the other 4 (not including the empty grave) burials, but of these four, one consisted of only two bones. Thus, Williams' statement concerning the missing heads appears unsubstantiated by the published evidence.

In only one instance were objects found in the graves definitely deposited with the original burial (L6 - two storage jars). The stone mortars and pestles in L3 were considered intrusive materials attributed to one of the large plundered tombs in its vicinity. The only other objects were shell hooks and studs and a few beads (in: L3, L6, L7, L33), which may or may not have been part of the original deposits.

Classic/Terminal A-Group Burials: Qustul: L

Human graves	ca. 25
Animal graves	74

- a) One additional empty grave was presumed to have originally been a cattle burial. It is not included in this count.
- L3: Bos, "2 long bones ... probably originally a cattle-sacrifice burial" (OINE III 1986:224)
- L6: Bos; "front northward" (skull missing). Objects: 2 storage jars, 38 one at either end of grave (OINE III 1986:233-236)
- *L7: empty, but presumed to have originally contained an animal burial (OINE III 1986:236).
- L20: Bos, "folded into grave, westward without skull" (OINE III 1986:333)
- L25: Bos⁴⁰ (OINE III 1986:376)
- L26: Bos (OINE III 1986:376)
- L27: Bos⁴¹ (OINE III 1986:377)
- L33: Bos; "east-west orientation is unusual" (OINE III 1986:386).

³⁶Technically, these four burials constitute more than half of the attested cattle burials in the cemetery, since of the eight burials reported, one was empty and only assumed to have originally contained an animal.

³⁷Of all the other cattle burials attested in A-Group cemeteries (1 at Kubanieh, 2 at Bahan, 4 at Meris, 2 at Naga Wadi), only the one at Kubanieh is specified as missing its head (see above).

³⁸These have been identified by B. Adams as *Protodynastic Corpus* 63 (1995:54).

³⁹The comment in the Supplementary Notes for this burial that "the notes indicate that the skull was present but not retained" appears to contradict the statement in the Finds Register "without skull" (OINE III 1986:333).

⁴⁰The Finds Register for this burial, as well as the following (L26) specify a "sample" of bones was retained; no indication is given of the original extent or condition of the burials; see also Supplementary Notes for L20 for reference to both these burials (OINE III 1986:333).

⁴¹The Supplementary Notes for this burial state: "This bovine sacrifice burial was the only one of the cluster (see L3 and L7) to contain a coherent burial" (OINE III 1986:377). Unfortunately, no description of this burial was provided.

Post A-Group Animal Burials in Cemeteries with A-Group Components

Debod: Cemeteries 23 & 22

In Cemetery 23 section C, a cluster of 18 graves⁴² containing animal burials lay to the east of and apart from Cemetery 23 section A, which was a group of human burials designated "B-Group and C-Group" (ASN I 1910a:159ff; see ASN I 1910b:Plan XVI for location). Sixteen of these animal burials were listed as sheep ("sheep": 87, 88, 89, 94, 103; or "sheep?": 78, 84⁴³; "ram": 79, 92, 95, 96, 100, 44 105; "ewe": 93, 102, 104), one as a dog (90), and one as an ichneumon (98) (burials presented in tabular format; ASN I 1910a:168). In reference to the human burials in Cemetery 23 section A, H.S. Smith states: "Though most of the fifty-nine graves on this knoll were undoubtedly C-Group, there are a few which may have belonged to the Predynastic or A-Group" (1966:90). One animal burial, that of a sheep (70), lay among the human graves at the north end of this section of the cemetery. To the north of this knoll, was a cluster of 11 New Kingdom human burials (Cemetery 23 section B). Scattered among them were 4 graves containing animal burials – 1 goat (57), 2 sheep (62, 47 67), and an apparent double burial of a sheep and dog⁴⁸ (58) (ASN I 1910a:166-167).

To the south of Cemetery 23, ca. 50 sheep and two cow burials lay scattered in Cemetery 22. Most were located in the eastern section of the cemetery. Reisner states: "Cemetery 22 contains three distinct sets of graves – C-group graves on the west, animal graves on the east, and Byzantine graves on the south ... most of these animals are sheep, both young and old, rams and ewes ... In No. 124, a sheep had been buried in a plundered C-group burial and was in this case, at least, later than the C-group burial. The sheep burials were all, I think, later than the C-group cemetery ... The main question in regard to the cemetery concerned the empty circular pits – especially those in the animal cemetery. These were probably plundered graves of a period anterior to the C-group. Nos. 32 and 38 contained scattered sheep bones, probably from superimposed sheep burials ... it seems as if the eastern slope were first occupied by a B-group (or earlier) cemetery which gradually grew towards the west during the C-group period. The western slope was then occupied by a later (Ptolemaic?) cemetery of sacred (?) sheep" (ASN I 1910a:180-181).

Both cemeteries lay on the west bank of the river to the south of the temple at Debod. Although there is some slight evidence for A-Group presence in both cemeteries in the vicinity of the animal burials, if Reisner's reasoning is correct for Cemetery 22, the animal burials in Cemetery 23 were also probably of the same date (Ptolemaic) — especially since Cemetery 23 is closer to the temple than Cemetery 22. Other sheep burials were documented in the vicinity of Debod temple. Across the river on the east bank two out of a small cluster of three graves (designated Cemetery 21) also contained sheep (ASN I 1910a:187), probably of the same date.

⁴²Two additional graves (91, 99) included in the list have no animal contents identified.

⁴³Grave 84 was listed as containing a multiple burial of 3 "sheep?".

⁴⁴The list contains the grave number 100 (ASN I 1910a:168); on the cemetery map there is no grave 100, but there is a grave numbered 101.

⁴⁵In the introductory text for this cemetery, a cow is mentioned among the animal burials (ASN I 1910a:156), but no cow is included in the list (ASN I 1910a:168).

⁴⁶This burial is identified as that of a dog by G. Elliot Smith (ASN I 1910c:128); another example of the discrepancies mentioned above between Reisner and G. Elliot Smith.

⁴⁷Reisner lists a "ram" (ASN I 1910a:167); G. Elliot Smith lists a "young goat" (ASN I 1910c:128).

⁴⁸The bones and skulls were found in the debris of this plundered grave (ASN I 1910a:166).

⁴⁹He must mean "eastern", since most of the animal burials were in the eastern section of the cemetery.

Siali: Cemetery 40

The graves in Cemetery 40 were originally dated to the "Early Dynastic" period (ASN I 1910a:232-233). Two graves contained intrusive burials, that of a ram (8) and a "gazelle(?)" (22) (ASN I 1910a:235/237). Three other graves (62, 63, 64) contained sheep burials. Firth states: "Two Ptolemaic-Roman mud-cut caves [also] contained sheep burials. It is clear that these sheep burials are all later than the Predynastic, and probable that they are of the Ptolemaic period or later" (ASN I 1910a:241). No date was suggested for the intrusive "gazelle(?)" burial.

Appendix B

Animals in Human Graves

Cemetery	Gazelle(?)	Goat	Dog	Cat(?)	Culture
Matmar 3000/3100	1				Badarian
Mostagedda 300/400	3			1	Badarian
Harageh G		T	1		Naqada
Matmar 2600/2700	7				Nagada
Matmar 3000/3100	1		1		Naqada
Mostagedda 1800	1				Naqada
Naga ed Dêr N7000			1	:	Naqada
Mahasna H			1		Naqada
Abadiyeh B			1		Naqada
Naga el-Hai		1			Naqada
Naqada "Great New Race"			1		Naqada
Armant 1400-1500	1				Naqada
Matmar 900/1000	1				Naqada III
Abydos M graves	1				Dynasty 1

Among the burials listed below, some of the animals were not identified, some of the remains were not clearly stated to have been those of entire animals, and for others the remains were too fragmentary to determine their original extent. Where the information provided is considered insufficient to include the example in this category of animal burial, the grave number is marked with a asterisk (*). In the following Tables, graves with animals are a subset of the total number of human graves.

BADARIAN CULTURE

Upper Egypt

Matmar

Brunton describes adjoining areas 3000 and 3100 as both containing Badarian and predynastic graves, "the former to the east and south, the latter to the north and west" (Brunton 1948:3). Although no cemetery map was provided for either area, they are here treated as one extended cemetery; Brunton apparently considered them as such. Concerning the Badarian burials, Brunton states: "These graves were found somewhat scattered in ground which had been re-used in Predynastic and later times, and probably represent only a part of the original Badarian cemetery which had extended northward from the edge of the spur" (Brunton 1948:8). See Naqada Culture section below, for totals of predynastic graves. An associated settlement site was located to the west in Area 3200 (Brunton 1948:7/Plate I).

Matmar: Cemetery 3000/3100¹

Human graves	ca. 14	Badarian
Graves with Animals	1	Badarian

• 3100(iii): Human: adult, gender unspecified. Animal: small gazelle(?); at feet (Brunton 1948:8/11)

• *2007: Brunton states: "In 2007 (plundered) were the leg bones of a small ruminant; and in Cemetery 3100 one robbed grave still contained the bones of a similar animal at the foot end. Probably both were the remains of pets (gazelles?) rather than food" (1948:11). For this grave, the evidence is insufficient to determine whether the bones represent the remains of an original burial of an entire animal or parts of a butchered animal (food offering). The Cemetery 3100 grave mentioned here is assumed to be the unregistered grave listed above.

Mostagedda

Cemetery 300/400 (including Area 400A/5200⁴ and Area 400B) (Brunton 1937:22/Plate III) lay on two adjoining spurs immediately behind the modern village of Mostagedda. The cemetery contained graves attributed to the Tasian, Badarian, and Naqada cultures. A Badarian settlement site (Area 400E) was located at the western end of the second spur to the north (Brunton 1937:23/Plate I).

Mostagedda: Cemetery 300/400⁵

Human graves	ca. 108 ^a	Tasian/Badarian
Graves with Animals	3	Badarian

a) 21 Tasian, 87 Badarian

- 302: Human: adult male. Animal: small gazelle(?); close to legs (Brunton 1937:34/57/Plate VII)
 - Grave: condition: intact; dimensions: 110 × 145 65 (cm). Contents: matting under body, chaff "pillow" under head; wrappings: fringed(?) cloth and skins; other: 1 ceramic vessel
- 330: Human: male. Animal: small gazelle(?) and cat(?):6 at feet (Brunton 1937:34/57/Plate VII)
 - Grave: condition: disturbed; dimensions: $105 \times 85 90$ (cm). Contents: matting; wrappings: skins, cloth; other: "apparently an artisan's odds and ends": rough flint, 5 calcite

¹Four 3000-series and six 3100-series graves (total 10) are listed in the "Badarian Graves and Town Groups" register (Brunton 1948:Plate III). Three of the 3000-series and five of the 3100-series registered graves are described in the text. An additional four 3000/3100-series (presumably generically numbered either 3000 or 3100) unregistered graves are also mentioned in the text (Brunton 1948:8-9).

²An unregistered grave in the 3100 series.

³Brunton assumed that entire animals buried in human graves were pets. See below, Naqada Culture: Matmar, where he makes the same assumption concerning fragmentary animal remains and Naqada III/Dynasty I: Matmar, where he comes to the opposite conclusion. A third grave containing animal bones is mentioned but its number and/or unregistered series is not specified (Brunton 1948:11).

⁴Area 5200, immediately behind Mostagedda, was apparently equivalent to Area 400A (see Brunton 1937:79).

⁵For a breakdown of registered and unregistered Tasian and Badarian graves listed in the register and/or described in the text, see Appendix E.

⁶As cats are not generally thought to have been domesticated at this time, this may represent a case of a individual tamed specimen of a wild species.

crystals, small alabaster cylinder bead (only partially pierced), 2 lumps red ochre, half a Spatha shell, a bone point, 2 pieces of heavy boneshaft (one pierced), 2 pieces of horn (one pierced)

- 494: Human: young female. Animal: small gazelle(?); at knees (Brunton 1937:36/57/Plate VIII)
 - Grave: condition: intact; dimensions: 75 × 100 60 (cm). Contents: no signs of matting; wrappings: cloth and skins; ornaments: strings of beads and Ancillaria, Nerita shells at neck, ankles, and wrists; other: pottery female figurine, leather bag (empty), flints; ca. 2 ceramic vessels

• *549: Human: child. Animal: "bones at the north end may have been food or the remains of a gazelle" (Brunton 1937:36/57). The evidence is insufficient to determine whether the bones represent the remains of an original burial of an entire animal or parts of a butchered animal (food offering).

NAQADA CULTURE

Petrie's three predynastic cultures, Amratian, Gerzean, and Semainean, are now considered developmental stages of the "Naqada Culture", and generally designated Naqada I, II, and III, based on Kaiser's revised relative chronology (Petrie 1953:2; Kaiser 1956:109, 1957).

	Petric		Kaiser	Petric
Amratian	SD 30-37	Naqada I	Stufen la-b-c	SD 30-38
Gerzean	SD 38-60	Naqada II	Stufen IIa-b	SD 38-40/45
			Stufen IIc-d	SD 40/45-63
Semainean	SD 61-78	Naqada III	Stufe III	SD 63-80

Various adjustments to Kaiser's original principal divisions have been proposed. Kemp suggests, based on his seriation of the graves at el-Amrah and Mahasna, that the "boundary" between Amratian (Naqada I) and Gerzean (Naqada II) apparently lies between Petrie's SD 47-48 (1982:10); Hendrickx, based on his review of the defining ceramic characteristics of Stufen I and II, would place it between Kaiser's Stufen IIa and IIb or possibly between Stufen IIb and IIc (1996:39); and Hassan, based on multi-dimensional scaling of sherds from settlement sites in the vicinity of Naqada, places it between Kaiser's Stufen IIab and IIcd (1988:138). Further adjustments to Kaiser's original subdivisions have also been proposed. Hendrickx suggests that Stufen IIa and Ib should be considered a single "entity" (1996:41); and that the material used to define Stufe IIIa1 is not sufficiently distinct from that of Stufe IId2 to be considered a separate group (1996:42/59). The most marked divergence between Hendrickx's suggested restructuring of Kaiser's subdivisions lies within the Naqada III period (Kaiser 1990; Hendrickx 1996:62, Table 7 and Conclusions:63-64):

⁷As Hassan has observed: "These groups are not temporal units, except in the relative sense; they are primarily ceramic assemblage zones, and boundaries between them are most probably time transgressive" (1988:138).

Kaiser	Hendrickx
IId2-IIIa1	IID2
_	ШАІ
IIIa2	ША2
IIIb1-IIIc1	ШВ
IIIc2	IIIC1
ШсЗ	IIIC2
	IIID

The advent of the First Dynasty coincides with Hendrickx's Naqada IIIC1, which covers the reigns of Narmer/Aha/Djer (Hendrickx 1996:64); according to Petrie's original chronological structure the advent of the First Dynasty coincided with SD 79 (Petrie 1920:4).

Lower Egypt: West Bank

Harageh

Two small predynastic cemeteries (G and H), ca. 1.5 km apart, were excavated at Harageh. Both can be dated within the Naqada IIc-dl period (Engelbach 1923:7; see Kaiser 1987a:119, note 3 and :122, 1990:289), with the graves in Cemetery G dated to Naqada IIdl (Kaiser 1957:74). According to Engelbach, Cemetery G contained ca. 30 graves (1923:6); only 20 are listed in the tomb register and 20 appear on the cemetery map (Engelbach 1923:Plates V/LV).

Harageh: Cemetery G⁸

Human graves	ca. 30	Naqada IId1
Graves with Animals	1(?)4	

a) There is no way to determine whether or not any of the 10 unregistered graves contained animals.

- 410G: Human: gender unspecified. Animal: dog. Date: SD 55-57 (Engelbach 1923:Plate LV). Although no human remains are indicated for this disturbed grave, the assumption here, based on the notational format for other graves in the tomb register, is that this was a human interment accompanied by a dog and not an independent burial of a dog.
 - Grave: condition: disturbed; dimensions: 40 × 95 45 (in). Contents: matting; other: ca. 4 ceramic vessels

Upper Egypt

Matmar

Although Brunton terms Cemetery 2600/2700 Amratian (1948:3), based on the SD ranges offered in the grave register (1948:Plates VIII-IX), the majority of the 122 registered graves ranged in date from late Naqada I through late Naqada II.

⁸One (416) of the 20 graves listed in the tomb register (Engelbach 1923:Plate LV) does not appear on the cemetery map (Engelbach 1923:Plate V); one (421) of the 20 graves appearing on the cemetery map is not listed in the tomb register.

Matmar: Cemetery 2600/27009

Human graves	ca. 205	Naqada Ic(?)-IIcd
Graves with Animals	7	

- 2622: Human: male. Animal: gazelle(?); at feet. Date: SD 43-46 (Brunton: 1948:12/22/Plate VIII)
 - Grave: condition disturbed: dimensions: 110 × 130 120 (cm). Contents: matting; ornaments: 2 ivory combs; other: ivory tag, Conus, Ancillaria, Nerita shells, at least 3 ceramic vessels
- 2646: Human: female & infant. Animal: gazelle(?); at feet. Date: SD 36-38 (Brunton 1948:13/22/ Plate VIII)
 - Grave: condition: disturbed; dimensions: 100 × 155 130 (cm). Contents: matting and thick sticks above and below bodies; ornaments: 2 ivory amulets (antelope-headed and plain tags), child's ivory bangle bracelet; other: Nerita shell, at least 4 ceramic vessels (including 1 bowl with sculpted hippopotami and a crocodile on rim)
- 2654: Human: female. Animal: gazelle(?); at feet. Date: SD 36-54 (Brunton 1948:13/22/ Plate VIII)
 - Grave: condition: disturbed; dimensions: 107 × 128 40 (cm). Contents: matting; ornaments: beads; other: at least 2 ceramic vessels
- 2665: Human: child (ca. 11 years old). Animal: gazelle(?); at knees. Date: SD 37-44 (Brunton 1948:13/22/Plate VIII)
 - Grave: condition: intact; dimensions: $100 \times 130 100$ (cm). Contents: matting; wrappings: cloth; other: 3 ceramic vessels
- 2666: Human: young male. Animal: gazelle(?); at feet. Date: SD 36¹⁰ (Brunton 1948:13/22/ Plate VIII)
 - Grave: condition: intact; dimensions: $85 \times 130 110$ (cm). Contents: matting; wrappings: cloth; other: 3 small flint knives, fish-tail knife, at least 6 ceramic vessels
- 2714: Human: male. Animal: tiny gazelle(?); at feet. Date: SD 38-45¹¹ (Brunton 1948:14/22/ Plate IX)
 - Grave: condition: intact; dimensions: $120 \times 140 130$ (cm). Contents: matting; other. 5 ceramic vessels, food (bread? and meat) offering
- 2723: Human: female. Animal: gazelle(?); at feet. Date: SD 37-48 (Brunton 1948:14/22/Plate IX)

⁹Ninety-seven 2600-series and twenty-six 2700-series graves are listed in the "Predynastic Graves" register (including one 2700-series grave that may not be Naqada culture). Forty-four of the 2600-series and twelve of the 2700-series (not counting the grave that may not be Naqada culture) registered graves and an additional 83 unregistered graves are mentioned in the text (Brunton 1948:12-14/Plates VIII-IX). For the purposes of this Table, the grave that may not be Naqada culture is not included in this count.

¹⁰Date according to Kaiser 1957:74 - Naqada IIb.

¹¹Date according to Kaiser 1957:74 - Naqada IIa.

- Grave: condition: disturbed; dimensions: $66 \times 96 112$ (cm). Contents: matting; wrappings: cloth(?); other: circular basket, at least 1 ceramic vessel
- *2600(ii): At an unregistered locus in the 2600 series, the "bones of a gazelle(?) [were found] just below the surface". It was suggested that the remains may have been from a "solitary" burial or from a plundered grave (Brunton 1948:22). Although the latter seems more likely, the information provided for these disturbed remains is insufficient to make a determination one way or the other.

Brunton describes adjoining areas 3000 and 3100 as both containing Badarian and predynastic graves, "the former to the east and south, the latter to the north and west" (Brunton 1948:3). Although no cemetery map was provided for either area, they are here treated as one extended cemetery; Brunton apparently considered them as such. See Badarian Culture section above, for totals of Badarian graves. According to Wilkinson's seriation (of 55 graves), the predynastic graves in this cemetery ranged in date from Naqada Ib through Naqada IIIb¹² (1996:47-49).

Matmar: Cemetery 3000/3100¹³

Human graves	ca. 74	Naqada Ib-IIIb
Graves with Animals	2	

- 3111: Human: multiple burial female & child, also possibly adult male. Animal: gazelle(?); at feet. Date: Naqada Ib-IIa¹⁴ (Brunton 1948:15/22/Plate X)
 - Grave: condition: very disturbed; dimensions: $180 \times 225 100$ (cm). Contents: roofing sticks; other: at least 4 ceramic vessels
- 3128: Human: male. Animal: dog; in its own wooden coffin; at feet. Date: Naqada IId1¹⁵ (Brunton 1948:16/17/Plate X)
 - Grave: condition: partly disturbed; dimensions: 200 × 290 190? (cm). Contents: wicker coffin(?); wrapping: mat; other: ca. 40 ceramic vessels, meat offering
- *3123 & *3130: Brunton suggests that several cases of fragmentary remains may represent the original burial of an entire animal; he states: "Bones of animals, but not complete skeletons, when they are found at the foot end of plundered graves, also probably indicate the presence of pets" [16] (1948:22). 3123: Human: female. Animal: "The legs of a young gazelle (?) were in the north-west corner" of the grave. Date: Naqada Ib-IIa [17] (Brunton 1948:16/Plate X). 3130: Human: female(?). Animal: "Leg bones of a young animal." Date: Naqada IIc(-IId1) [18] (Brunton 1948:16/Plate X). The evidence is insufficient to determine whether the bones represent the remains of an original burial of an entire animal or parts of a butchered animal (food offering).

¹²Number of graves per phase: (Matmar 1) Naqada Ib-Ic-IIa-22, (Matmar 2a) Naqada IIb(-IIc)-9, (Matmar 2b) Naqada IIc (-IId1)-7, (Matmar 2c) Naqada IId1-7, (Matmar 2d) Naqada IId2/IIIa1-9, (Matmar 3) Naqada IIIa2-IIIb-1 (Wilkinson 1996:47-49)

¹³Forty-five 3000-series and twenty-nine 3100-series graves (total 74) are listed in the grave register (Brunton 1948:Plates IX-X). Twenty-two of the 3000-series and seventeen of the 3100-series registered graves are described in the text. An additional unspecified number of 3100-series unregistered graves are also mentioned in the text (Brunton 1948:14-16).

¹⁴Date obtained from Wilkinson 1996:47-49 (Matmar 1). Date according to Brunton 1948:Plate X - SD 37-45.

¹⁵Date obtained from Wilkinson 1996:47-49 (Matmar 2c). Date according to Brunton 1948:Plate X – SD 52. Date according to Kaiser 1957:74 – Naqada IIc.

¹⁶Brunton assumed that entire animals buried in human graves were pets. Here he assumes that the fragmentary remains indicate the presence of an entire animal rather that a meat (food) offering.

¹⁷Date obtained from Wilkinson 1996:47-49 (Matmar 1). Date according to Brunton 1948:Plate X – SD 38-43.

¹⁸Date obtained from Wilkinson 1996:47-49 (Matmar 2b). Dates according to Brunton 1948:Plate X - SD 52-53.

• *5114: Brunton also suggests that the fragmentary remains in this disturbed grave may be interpreted as representing the original burial of an entire animal (1948:16/22). Human: female. Animal: "The head of a small ruminant was found with the pottery." Date: Naqada IIc(-IId1)¹⁹ (Brunton 1948:16/Plate X). The evidence is insufficient to determine whether the bones represent the remains of an original burial of an entire animal or parts of a butchered animal (food offering).

Mostagedda

Cemetery 1800 was part of a "great burial-ground" (Brunton 1937:93) that stretched from the southeastern tip of the spur near Area 200 north through Areas 11700/11800, 1800 and 1700 to Area 1600 close to the cliffs (see regional map: Brunton 1937:Plate II and Area 100 description: Brunton 1937:18-19/76). No cemetery map was provided for any of these areas. Settlement remains and scattered burials indicate a previous Badarian occupation of these areas (Brunton 1937:18-21). Brunton designates most 1800series graves "Amratian", without offering SD ranges (1937:Plates XXX-XXXI). Only eight 1800-series graves were included in Wilkinson's seriation²⁰ (1996:49-50).

Mostagedda: Cemetery 1800²¹

Human graves	ca. 68	Naqada Ib-IIIb
Graves with Animals	1	

- 1808: Human: male(?). Animal: very small gazelle; at feet. Date: "Amratian" (Naqada I).²² (Brunton 1937:71/90/Plate XXX)
 - Grave: condition: disturbed; dimensions: $90 \times 90 140$ (cm). Contents: matting; other: painted ceramic model disk macehead, Natica shells

*223: In the grave register under the heading "Other Objects", grave 223 is listed as containing an "animal" (Brunton 1937:Plate XXIX). This notation seems to imply that an entire animal is intended. However, for grave 1808, which is described in the text as containing the "skeleton of a very small gazelle," the grave register simply notes "bones" (Brunton 1937:Plate XXX). Elsewhere in the text, the bones in grave 223 are attributed to a food offering (Brunton 1937:90). Thus, grave register notation cannot be trusted for identification of status (entire animal or butchered parts) of animal offerings in graves.

¹⁹Date obtained from Wilkinson 1996:47-49 (Matmar 2b). Date according to Brunton 1948:Plate X - SD 53-60.

²⁰Number of graves per phase: (Mostagedda 1) Naqada Ib-Ic-IIa-5, (Mostagedda 2) Naqada IIb-IIc-IId1-IId2-1, (Mostagedda 3) Naqada IIIa2-IIIb-2 (Wilkinson 1996:49-50)

²¹ Fifty-five 1800-series graves are listed in the "Predynastic Graves and Town Groups" register (Brunton 1937:Plates XXX-XXXI). Forty-one of the 1800-series registered graves and an additional ten 1800-series (presumably generically numbered 1800) unregistered graves are mentioned in the text (Brunton 1937:71-73). In addition to these 1800-series graves, information is provided for graves in other sections of this large cemetery (Areas 200, 1600, 1700, 11700). A total of 126 registered graves are listed in the "Predynastic Graves and Town Groups" register and an additional 4 unregistered graves are mentioned in the text. Of the 126 registered graves, ca. 16 were given SD ranges placing them in the Naqada III period (Brunton 1937:69-71/74-75/Plates XXIX-XXXI). An additional 13 registered graves (including 3 in the 1800-series) are listed in the "Protodynastic Graves" register. Although Brunton attributes these graves to the period of the First Dynasty, their SD ranges place them in Naqada III (Brunton 1937:93-94/Plate XXXI). Two of these three 1800-series graves were included in Wilkinson's seriation and dated to the Naqada IIIa2-IIIb period (1996:49-50). For the purposes of this Table, these three 1800-series graves have been included in the total count of graves.

²²This grave was not included in Wilkinson's seriation (1996:49-50).

Qau

• *110: In the grave register under the heading "Other Objects", grave 110 is listed as containing a "small animal"; although the grave is listed as intact, no mention is made of this animal in the brief description in the text (Brunton & Caton-Thompson 1928:49/Plate XXX). As noted above (Mostagedda: grave 223), register notation alone is insufficient grounds for assuming this grave contained an entire animal. Human: adult male. Animal: (?), "small animal." Date: SD 36-51

Naga ed Dêr

A total of ca. 635 graves were excavated in Cemetery N7000 at Naga ed Dêr. No dates were offered for individual graves (Lythgoe 1965). According to Hendrickx, the graves in the cemetery ranged in date from Naqada Ia/b through Naqada IId (1996:51/52, with reference to R. Friedman's unpublished MA thesis).

Naga ed Dêr: Cemetery N7000

Human graves	ca. 635	Naqada Ia/b-IId
Graves with Animals	1	

- N7418: Human: gender unspecified. Animal: dog; outside north end of wooden "box" that surrounded the human interment. Date: Naqada IId²³ (Lythgoe 1965:252-254)
 - Grave: condition: very disturbed; dimensions: 230 × 185 120 (cm). Contents: wooden "box"; other: ca. 30 ceramic vessels (including zoomorphic bird-shaped pot), possibly 2 ivory spearheads
- *N7296: *Human*: multiple burial. *Animal*: (?), "some small animal, skull missing, length of vertebral column about 12 cm." Date: Naqada IIb²⁵ (Lythgoe 1965:172-174).
- *N7597: Human: male. Animal: (?), "bones of a small animal perhaps a rabbit(?)." Date: SD (?) (Lythgoe 1965:392-393).

Mahasna

Ayrton & Loat estimate the original extent of the cemetery as ca. 600 graves, of which approximately one-half were excavated. Of the ca. 300 graves excavated, only 135 (including 27 heavily plundered graves) are described in the text;²⁶ no cemetery map or grave register was provided (Aryton & Loat 1911:10-25). According to the excavators, the cemetery contained graves of "the whole pre-dynastic period to the simplest form of the brick-lined tombs of the early Ist Dynasty"; no graves of a later date were detected (Ayrton & Loat 1911:2). According to Wilkinson's seriation (of 96 graves), the graves in this cemetery ranged in date from Naqada Ia-c through Naqada IIIb²⁷ (1996:51). Based on Hendrickx's suggested equivalences between Kaiser's Stufen and Kemp's seriation groups, the earliest graves date to Naqada Ib (Hendrickx 1996:49; Kemp 1982).

²³SD 57-73; date based on Friedman n.d.

²⁴The bones of this unidentified animal are now at the Hearst Museum (formerly Lowie Museum of Anthropology), University of California at Berkeley (Podzorski 1990:12).

²⁵SD 34-56; date based on Friedman n.d.

²⁶106 are listed in the Graves Classification table (Ayrton & Loat 1911:9).

²⁷Number of graves per phase: (Mahasna 1a) Naqada Ia-Ib-Ic-18, (Mahasna 1b) Naqada Ic-IIa-19, (Mahasna 2a) Naqada IIb-9, (Mahasna 2b) Naqada IIc-IId1-IId2-25, (Mahasna 3a) Naqada IIIa2-17, (Mahasna 3b) Naqada IIIb-8 (Wilkinson 1996:51-52)

Mahasna: Cemetery H

Human graves	ca. 300	Naqada Ib-IIIb
Graves with Animals	1(?)4	

a) There is no way to determine whether or not any of the undescribed graves contained animals.

- H23: Human: male. Animal: 2 dogs; "on their backs wrapped in a mat." Date: Naqada Ic-IIa²⁸ (Avrton & Loat 1911:7/21)
 - Grave: condition: disturbed; dimensions: large oblong, 84 × 63 43 (in). Contents: remains of wooden boards (2 inches thick) on bottom and on side of grave; matting; other: diorite staff head, stone macehead, 2 stone "picks" (all with wooden handles), copper harpoon head, ceramic macehead, 1 ivory vessel (see Ayrton & Loat 1911:Plate XX), imitation (clay) garlic bunches, at least 4 ceramic vessels
- *H4: Human: female. Animal: goat(?). The remains of the "skull and skeleton of a goat(?)" lay between two ceramic vessels at the south (head) end of the grave. Another bone identified as that of a "small animal (goat?)" also lay on a bowl in front of the face of the deceased. Date: Naqada IIIa2²⁹ (Ayrton & Loat 1911:21). It is not clearly stated whether the remains represent an original burial of an entire animal or parts of a butchered animal. The latter may be more likely. Several graves in this cemetery contained goat skulls (e.g., H134a, H122) and one (H107) contained "the remains of goats" also deposited between the ceramic vessels (Ayrton & Loat 1911:19/20/22). (see Appendix D: Mahasna)

Abadiyeh

Five predynastic cemeteries (B, C, H, R, U) were excavated between Abadiyeh and Hu. Cemetery B was described as "one of the largest". Petrie states that the cemetery "went up to 570 graves"; only 26 graves are described in the text; no cemetery map or grave register was provided (Petrie 1901a:32-34). Sequence Dates, ranging from Naqada I through Naqada III, were provided for a total of 153 graves (Petrie 1920:Plate LII).

Abadiyeh: Cemetery B

Human graves	ca. 570	Naqada I-III
Graves with Animals	1(?)4	

a) There is no way to determine whether or not any of the undescribed graves contained animals.

- B119: Human: gender unspecified. Animal: dog. Date: SD (?)³⁰ (Petrie 1901a:33). Although only the skull was reported, due to the disturbed condition of the grave, this skull may represent the original burial of an entire animal.
 - Grave: condition: very disturbed; dimensions: (?). Contents: other: macehead, clay male figurine, clay models of a chisel and a hoe (see Petrie 1901a:Plate VI), ox bone

²⁸Date obtained from Wilkinson 1996:51-52 (Mahasna 1b). Date according to Petrie 1920:Plate LII – SD 36-43. According to Kemp's seriation, grave H23 falls within his Mahasna Group I, which, according to Hendrickx, is equivalent to Kaiser's Stufen Ib-c (Kemp 1982:13; Hendrickx 1996:49).

²⁹Date obtained from Wilkinson 1996:51-52 (Mahasna 3a). Date according to Petrie 1920:Plate LII - SD 70(?).

³⁰SD dates were offered for many of the graves; none was offered for this grave.

Naga el-Hai

A total of ca. 1500 graves were excavated. It is suspected that the cemetery extended into the area now occupied by the modern village. The number of graves in this unexcavated area cannot be estimated. The investigated graves ranged in date from early Naqada I through the early dynastic period, with the majority attributable to the later phases (Freed 1974). Although this burial was designated a "goat burial" on the tomb card, its position (per sketch and photograph) at one end of the mostly empty grave suggests it accompanied a human interment.

Naga el-Hai

Human graves	ca. 1500	Naqada I-early Dynastic
Graves with Animals	1	

- NEH. 2079: Human: (?). Animal: goat. Date: Naqada IIc-d2 (Freed n.d.)
 - Grave: condition: disturbed?; dimensions: (?). Contents: other: 5 ceramic vessels, broken slate palette

Ballas

- *394: Human: gender unspecified. Animal: dog and gazelle(?). Date: Naqada I(?)³¹ (Petrie & Quibell 1896:13/16-17). The remains are reported as only "some bones of a dog were in the filling of the tomb" (1896:13) and at the feet of the deceased, "the bones of an animal probably a gazelle" (1896:16). The information provided is insufficient to determine whether the bones represent: in the case of the gazelle, the remains of an original burial of an entire animal or parts of a butchered animal (food offering); in the case of the dog, a component of the original burial or intrusive material.
 - Grave: condition: disturbed?; dimensions: small. Contents: other: 2 painted ceramic female figurines, unbaked clay model boat, shell, 4 ceramic vessels (including an incised and painted pot with stand)

Nagada

Petric's "Great New Race" cemetery at Naqada is one of the largest predynastic cemeteries recorded with ca. 2000 burials excavated.³² In the cemetery publication, only 94 graves were described in the "Notable Graves" section; an additional 18 graves were described and planned; and an additional 20 graves not previously described were mentioned in a discussion of body treatment; no grave register was provided (Petrie & Quibell 1896:18-33/Plates LXXXII-LXXXIII). Baumgartel's 1970 supplement, which attempts to reconstruct the original contents of ca. 1200 of the graves in this cemetery, did not include information on faunal remains for any of the graves listed in the supplement. According to

³¹See Petrie & Quibell 1896:Plate XXVIII-26 for a White Cross Line bowl from this grave.

³²Baumgartel estimates "more than 1900" graves in this cemetery with 1202 graves listed in the main section of her published supplement. A separate list includes an additional 136 graves (possibly from this cemetery) of which 23 grave numbers duplicate those listed in the main section (1970). In Petrie's notebooks, the grave numbers for this cemetery range from 1 – 1953 (Payne 1987:181) and Payne states that only ca. 1000 graves were indicated on the map (1992:185). According to Bard, 2043 graves are indicated on the cemetery map (including 38 from an area "slightly south") with only half of the total number of excavated graves numbered on the published map (1994:80). The cemetery at Naqada is no longer the only known predynastic cemetery of its size. Excavation of a cemetery of estimated similar proportions and date has commenced at Locality 43 (HK43) at Hierakonpolis (Friedman 1996).

Bard's seriation, the graves in this cemetery ranged in date from Naqada I-III, with approximately half of the 905 seriated graves dated to the Naqada II period³³ (1994:48, Table 3/119-123). The earliest datable graves in Payne's analysis are attributed to Naqada Ic (1992:186).

Naqada: "Great New Race Cemetery"

Human g	raves	ca. 2000	Naqada Ic-III
Graves w	ith Animals	1(?)4	

a) There is no way to determine whether or not any of the undescribed graves contained animals.

- 286: Human: gender unspecified. Animal: dog. Date: SD 36³⁴ (Petrie & Quibell 1896:26). Although only the skull was reported, due to the disturbed condition of the grave, this skull may represent the original burial of an entire animal.
 - Grave: condition: disturbed; dimensions: 90 × 50 50 (in). Contents: ³⁵ ornaments: comb; other: ca. 3 ceramic vessels

Armant

According to Mond & Myers there were no graves (other than a few Coptic burials) later than the predynastic period in Cemetery 1400-1500 at Armant (1937:9). According to Wilkinson's seriation (of 95 graves), the graves in this cemetery ranged in date from Naqada I through Naqada IIIa2³⁶ (1996:53-54). The earliest phases of Naqada I were not represented at Armant (Hendrickx 1996:39); the earliest datable graves in Bard's seriation (of 151 graves) are attributed to Naqada Ic³⁷ (1994:54:Table 5/119). Predynastic settlement sites designated MA 21/83 and MA 21a/83 are in close proximity to and considered contemporary with (at least the earlier use phases of) this cemetery (Ginter & Kozlowski 1994:99).

Armant: Cemetery 1400-1500³⁸

Human graves	ca. 176	Naqada Ic-IIIa2
Graves with Animals	1	

- 1529A: Human: multiple burial/child.³⁹ Animal: gazelle; at feet. Date: unspecified/possibly Naqada Ic⁴⁰ (Mond & Myers 1937:14/Tomb Register 29)
 - Grave: condition: disturbed; dimensions: 130 × 130 80 (cm). Contents: wrappings: mat

³³Number of graves per phase: Naqada I-107, Naqada I-II-116, Naqada II-452, Naqada II-III-125, Naqada III-105 (Bard 1994:48, Table 3)

³⁴Date obtained from Petrie 1920:Plate LL.

³⁵ This grave was not included in Baumgartel's 1970 supplement.

³⁶Number of graves per phase: (Armant 1) Naqada I-IIa-15, (Armant 2a) Naqada IIb-IIc-43, (Armant 2b) Naqada (IIc-) IId1-IId2-IIIa1-31, (Armant 3) Naqada IIIa2-6 (Wilkinson 1996:53-54)

³⁷Number of graves per phase: Naqada Ic-28, Naqada IIa-28, Naqada IIb-28, Naqada IId1-13, Naqada IId2-12, Naqada IIIa1-4, Naqada IIIa2-8 (Bard 1994:54:Table 5)

³⁸Eighty-seven 1400-series and eighty-two 1500-series graves are listed in the Tomb Register (26-31); thirty-nine of the 1400-series and fifty-three of the 1500-series registered graves (total 92) are mentioned in the "Notes on Individual Tombs" section (Mond & Myers 1937:12-16); eighty-four of the 1400-series and eighty of the 1500-series registered graves appear on the cemetery map (total 164); an additional six 1400-series and one 1500-series numbered unregistered graves also appear on the cemetery map (total 7); these are perhaps the empty graves mentioned by Mond & Myers (1937:9) that were not recorded; three of the 1400-series and two of the 1500-series registered graves (total 5) do not appear on the cemetery map (Mond & Myers 1937:Plate IV); graves 1211 and 1212, reported as excavated in this cemetery (Mond & Myers 1937:6), also do not appear on the cemetery map.

³⁹According to the excavators, the gazelle was associated with the child's body (Mond & Myers 1937:14).

⁴⁰Many of the graves in the tomb register were given Sequence Dates; this one was not; Bard also lists it as undated

NAQADA III/DYNASTY I

Upper Egypt

Matmar

Although Brunton terms the graves in Cemetery 900/1000 "Protodynastic", 41 he states that the cemetery was "wholly contemporary with the early part of the First Dynasty" (Brunton 1948:23). SD ranges offered for the registered graves place them within the Naqada III period (Brunton 1948:Plate XX). No cemetery map was provided.

In his summary of the protodynastic period at Matmar, Brunton states: "unspecified bones of a small ruminant were found in five graves (900, 1015, 42 1052, 1056, 1059), and it is not certain whether these were pet animals or merely the offering of head and legs; probably the latter. In four graves the bones were at the feet (220, 228, 900, 1059), and at the knees in one (1028). In [1052] there may have been the burial of a complete animal" (Brunton 1948:28). Here Brunton appears to be deviating from his previous opinion that bones at the foot end of plundered graves probably represented the original burial of an entire animal. The conditions of the graves (220, 228, 1028, 1059) ranged from intact (220) to very disturbed (228, 1059), thus the original extent of at least one of the animals in these burials was simply not recorded during excavation. Whether or not the unregistered grave (900) mentioned above is the same as that listed below cannot be determined. However, the faunal remains in an unregistered 900-series grave of a woman are described as "a gazelle (?) at her feet" (Brunton 1948:25).

Matmar: Cemetery 900/1000⁴³

Human graves	ca. 41	Naqada III
Graves with Animals	1	

- 900(?):44 Human: female. Animal: gazelle(?); at feet. Date: Naqada III(?) (Brunton 1948:25)
- *1052: Human: male. Animal: small ruminant. Date: SD 78 (Brunton 1948:25/Plate XX). Although the remains of this animal are listed in the tomb register simply as "bones", Brunton suggests that they may represent the burial of an entire animal (1948:28). The evidence is insufficient to determine whether the bones represent the remains of an original burial of an entire animal or parts of a butchered animal (food offering).

^(1994:119) and Wilkinson did not include it in his seriation (1996:54). However, this grave lay in the area of the cemetery occupied by the earliest datable graves (see maps in Kaiser 1956:107; Bard 1994:52; Wilkinson 1996:55). Although both Bard and Wilkinson claim the cemetery developed from south to north (Bard 1988:42; Wilkinson 1996:53), Hendrickx states that the latest graves were in the southern part of the cemetery (1996:41). This discrepancy seems to originate in the reversed direction of the compass point in Bard's and Wilkinson's maps compared to the original map published in Mond & Myers (1937:Plate IV).

⁴¹Elsewhere he defines his use of the term "Protodynastic" as referring to the period of time between the "end of the Predynastic Period and the beginning of the Fourth Dynasty" (Brunton 1927:10).

⁴²This locus is described as a hole containing the "partial remains of a gazelle (?)", not a grave (Brunton 1948:25).

⁴³Eight 900-series and twenty-eight 1000-series graves are listed in the "Protodynastic Graves" register (Brunton 1948:Plate XX). Five of the 900-series and eleven of the 1000-series registered graves are described in the text. An additional five 900-series (presumably generically numbered 900) unregistered graves are also mentioned (Brunton 1948:25).

⁴⁴An unregistered grave in the 900 series.

Abydos

Graves identified with the letter "M" were situated in predynastic settlement debris near the Osiris temple enclosure wall, which they predate. This portion of the settlement was abandoned at the time the graves were dug (Petrie 1902:14). All were dated to the early First Dynasty (Petrie 1902:19-22).

Abydos: M Graves⁴⁵

Human graves	13	Dynasty 1
Graves with Animals	1	

- ◆ M18: Human: gender unspecified. Animal: gazelle; in southwest corner (head end) of grave.

 Date: Dynasty 1 reign of Djet (Petrie 1902:16/21/Plate XLVIII)
 - Grave: condition: plundered; dimensions: (?). Contents: other: ca. 25 ceramic and 2(?) stone vessels

⁴⁵The contents of 11 graves are described in the text in Petrie 1902:15-18; these 11 are also planned (Petrie 1902:Plates XLVIII-XLIX); 1 additional grave is mentioned in the section where the dates of the graves are discussed (Petrie 1902:19-22); this grave (M 1) was published in Petrie 1901b:36-37; 1 additional grave is mentioned but not described in Petrie 1903:7. Map indicating location of graves in Petrie 1903:Plate XLIX.

Appendix C

Elite Cemeteries

Due to the incomplete publication (Helwan & Naqada Cemetery T) or the heavily plundered condition and as yet incomplete excavation (Hierakonpolis Locality 6) of a number of these cemeteries, the original deposition of some of the burials (Hierakonpolis) remains unclarified and the principal tombs with which others (Helwan, Naqada) may have been associated remain unidentified. Among the animal burials listed below, some are of uncertain date and others are not clearly the remains of entire animals; where the information provided is considered insufficient to include the example in this category of animal burial, the grave number is marked with an asterisk (*).

PREDYNASTIC

Hierakonpolis: Locality 6

Only a small portion of this heavily plundered elite cemetery has been excavated. At present components dated to Naqada Ic-IIab and III have been identified. An intermediate late Naqada II component is suspected but as yet unverified (B. Adams 1998). The cemetery is estimated to contain ca. 200 graves (B. Adams 1996:2).

At the time that he wrote, Hoffman described all of the known animal burials as "part of an extensive animal quarter" presumably associated with the tentatively dated "Protodynastic" Tomb 2. In addition, he cited evidence in the form of surface finds suggesting the presence of elephant, hippopotamus, and crocodile burials in the area (Hoffman 1982b:15). Recent excavation has confirmed the presence of at least one such burial. None of the animal burials, except possibly Tomb 7, appear to be contemporary with Tomb 2.

- Tomb 7 is one of what are assumed to be a series of similar cattle burials lying to the south of Tomb 2; the others remain unexcavated (Hoffman 1982a:56). Based on Nubian parallels (Qustul Cemetery L), this burial is presumed to be contemporary with and subsidiary to Tomb 2, which is tentatively dated to the "Protodynastic Period" (Naqada III). The animal burial contained no datable artifacts (B. Adams 1995:53-54; Hoffman 1982a:55-56).
 - Tomb 7: 3 or 4 Bos, "abundant Bos bones comprising a large (probably male) adult, a smaller (probably female) adult, a juvenile and possibly another, smaller individual, all buried intact

¹Included in this general statement was mention of a "tomb" containing a sheep/goat; no detailed information was provided (Hoffman 1982b:15). This burial may actually be Tomb 3, which appears to have been a human grave containing animal remains.

- (i.e. not defleshed)"; "Several of the ribs were encased in a dark organic substance and the excavator ... suggested that the animal's abdominal cavity had been packed in a[n] early attempt at mummification"; evidence of matting (B. Adams 1996:6; Hoffman 1982a:56-58)
- Tomb 5 is located north-northwest of Tomb 2, in a portion of the cemetery where the burials have been dated to late Amratian/early Gerzean (Naqada Ic-IIa) (B. Adams 1996:5-6). It lies to the west of Tomb 3 (human burial) adjacent to a small pit (Tomb 4) containing an apparently secondary human burial (for Tomb 4 see Hoffman 1982a:53-54).
 - Tomb 5: 5 or 6 dogs, "No complete skulls were found in the grave, but several had been discovered in the backdirt pile from Tomb 2. The teeth indicate the presence of at least five or six individuals and there were also scraps of linen in the grave" (B. Adams 1996:6; Hoffman 1982a:54)
- Tomb 12 lies ca. 45m to the east-northeast of Tomb 2, and does not appear to be associated with it either topographically or temporally. Although Tomb 12 was originally thought to be contemporary with Tomb 2 (Hoffman 1982b:15), it is now believed based on ceramic evidence to predate it (Naqada I-II) (B. Adams 1996:6-7). The grave may have originally also contained a human burial (B. Adams, personal communication 1998).
 - Tomb 12: 4(?) baboons. Hoffman states that the grave contained the remains of 6 baboons (Hoffman 1982b:15). Adams states that the grave "contained the bodies of four baboons, including two skulls. Two baboon skulls had been found in the backdirt on the east side of Tomb 2" (B. Adams 1996:6). The baboon skulls found in the vicinity of Tomb 2 have yet to be identified as belonging to the remains from Tomb 12 (B. Adams, personal communication 1998).
- Recent excavation in the central portion of the cemetery has revealed the plundered remains from two adjacent graves which appear to have originally contained the burials of at least two human males (adolescent and young adult), ca. 7 dogs, and a young elephant. Due to the disturbed condition of the find, reconstruction of the original deposition must remain in part speculative. Based on the in situ find of its jaw, however, the elephant appears to have originally been interred in Tomb 14. At least one of the human males and some of the dogs may have also come from this grave. Some of the dog remains appear to have originated in the adjacent Tomb 13. Another, as yet unexcavated grave in the vicinity may have also been the source of some of these remains. The ceramic evidence indicates a Naqada Ic date. (B. Adams 1998, personal communication 1998).
 - Tomb 13: dogs
 - Tomb 14: juvenile savanna elephant (Loxondonta africana) and? dogs
- *Tomb 3 was a human burial, which also contained animal remains. The evidence is insufficient to determine whether the bones represent the remains of an original burial of an entire animal or parts of a butchered animal (food offering).
 - Tomb 3: *Human*: possible multiple burial; 1 individual possibly male. *Animal*: goat(?), "a few semi-articulated bones (probably goat)" (Hoffman 1982a:50-52). *Date*: SD 38-40/Naqada Ic-IIa (B. Adams 1996:5).

Nagada: Cemetery T

This cemetery is thought to contain the burials of a local elite.² Based on the tombs for which there are data, the cemetery appears to have been in use from early Naqada II through Naqada III, with the majority of burials dated to the Naqada II period³ (Bard 1994:48: Table 3). 69 graves are indicated on the cemetery map.⁴

Petrie mentions, only in passing, a "pit", which contained the remains of ca. 20 dogs (Petrie & Quibell 1896:26). Its location is not indicated on the cemetery map (Petrie & Quibell 1896:Plate LXXXVI). Without further information, it is impossible to determine either the date of this burial⁵ or whether or not its spatial relationship suggests subsidiary status.

Abydos: Cemetery U

Cemetery U is a large predynastic cemetery, lying to the north of and adjacent to the "royal" tombs that immediately predate the advent of the First Dynasty. Its original extent is estimated at ca. 400 graves, ranging in date from Naqada I through Naqada IIIb (Dreyer 1996:14). During the Naqada IId period, it gradually developed into an "elite burial ground" (Dreyer 1992:295).

- *U16: Human: gender unspecified. Animal: goat(?), "bones of some animal, probably a goat"; at feet. Date: SD 35-36⁶ (Peet 1914:16). It is not clearly stated whether the bones represent the remains of an original burial of an entire animal or parts of a butchered animal.
 - Grave: condition: (?); dimensions: oval pit. Contents: matting; other: 5 ceramic vessels

DYNASTY I

Abydos: Royal Necropolis

Umm el-Qaab

● Evidence for this burial was recovered in the scattered debris of previous excavations in Cemetery B near a double-chambered grave at the east end of a triple row of subsidiary chambers (B16), which are considered part of a funerary complex attributed to king Aha of the First Dynasty. The triple row of chambers contained, in part, subsidiary human burials (Dreyer 1990:67; see also Klug in Dreyer 1990:81-86).

²Various opinions have been offered for the status of the individuals buried there; see Bard 1994:77 for a summary; see also Davis 1983; Kaiser & Dreyer 1982:243-244; Kemp 1973.

³Davis states that the cemetery "was used throughout the Gerzean (Naqada II) period ... and well into the early First Dynasty" (1983:21). Bard suggests that the cemetery was abandoned at the start of the First Dynasty (1994:108).

⁴33 graves are numbered on the map; 13 graves are described in Petrie & Quibell 1896; 48 graves are included in Baumgartel's 1970 supplement.

⁵Baumgartel (1960:128) suggests that the burial itself cannot be more precisely dated than the mass dog burial at Hemamieh, which has been allowed a time span from the "Middle Predynastic" to the Old Kingdom. That burial (206: Area E), which was found in an area of Old Kingdom burials which overlay a predynastic settlement, consisted of the remains of approximately 15 dogs "distributed over an area of about four feet square" (Brunton & Caton-Thompson 1928:94/Plate LXIII). The evidence on which Baumgartel bases the comparison between these two burials is the presence of tombs she mistakenly assumes to be of a later date in Cemetery T (Baumgartel 1960:128).

⁶Date obtained from Petrie 1920:Plate LII.

- primarily in the area of B16 12b/c: remains of at least 7 lions (most young, one adult), whose bones indicate they were raised, if not born, in captivity (Boessneck & von den Driesch in Dreyer 1990:86-87; see also Boessneck 1988:32)
- The remains of two species of geese were found near the northwestern end of the triple row of subsidiary chambers belonging to Aha's funerary complex (B16 in the vicinity of 2a/4a). Boessneck and von den Driesch state: "Wenn man sich die Ausnahmestellung der Nilgans unter den Gänsen im alten Ägypten vergegenwärtigt, sind die Gänseknochen nicht einfach als Reste von Speiseopfern auszulegen" (in Dreyer 1990:88). As the original deposition of these geese is unknown, their status as funerary offerings (food or otherwise) can only be speculative. Bos bones (skulls and legs), which may be considered food offerings, found in the same area (western end), are, however, suggestive of the original intent? (see Boessneck & von den Driesch in Dreyer 1990:87-88; see also Boessneck 1988:33).
- Evidence for the possible separate burial of dogs in subsidiary graves in the royal necropolis exists in the form of stelae. Amélineau's excavation recovered four inscribed with the names of dogs.⁸ That excavation was inadequately recorded and published, leaving the location of their discovery unreported. Petrie attributes two of them to the reign of Merneith (Petrie 1900:27). Murray attributes a dog burial to Udimu (Den), presumably based on one of these stelae (Murray 1956:92). Kaplony, based on stylistic grounds, attributes all four stelae to the reign of Den⁹ (Kaplony 1963:375). Fischer, however, attributes them to what he terms the "protodynastic" portion of the royal necropolis (Cemetery B)¹⁰ (Fischer 1980:78/80 note 32). The royal tomb or tombs with which these stelae were originally associated remains in question.
- A single bone of a dog was identified among the scattered faunal remains presumably originating
 in some of the subsidiary chambers surrounding the tomb of Qa'a, last king of the First Dynasty
 (see von den Driesch & Peters in Dreyer 1996:77).

"Talbezirke"

• The following burial was found in situ in one of the ca. 154¹¹ subsidiary burials associated with the valley mortuary installation attributed to king Djet of the First Dynasty. It is not clearly indicated whether this animal accompanied a human interment or was the sole occupant of the grave.

- 433: dog (Petrie 1925:Plate XXI)

⁷The bones of Nile and Grey geese were found among the scattered remains of food offerings (including cattle bones) presumably originating in the subsidiary chambers surrounding the tomb of Qa'a (von den Driesch & Peters in Dreyer 1996:77). The birds buried in coffins of their own at Tarkhan, Saqqara, and Helwan suggest that at least those particular individuals were not considered food offerings.

⁸See Amélineau 1899:Plate XXXVI and page 241:Figures 53 & 54 for the same two stelae in photographic and line drawn form; the same two are published in Quibell 1905:290 (N° 14603) and :292 (N° 14608); see Amélineau 1899:Plate XXXVI (lower left) for a photograph of a third stela; Petrie published these three in line drawings (1900:Plate XXXII-10-11-12); a fourth stela is included in Fischer's supplement to Janssen's list of dogs' names (Fischer 1961:153) citing Amélineau 1899:Plate XXXVII "bottom, second from left" (this photograph is completely unreadable in the available publication).

⁹For the possible original location of these burials, see Dreyer 1993:59.

¹⁰A portion of Cemetery B is actually Dynasty I, if Aha is accepted as the first king of that dynasty.

¹¹The number of graves is taken from the Tomb Register (Petrie 1925:Plate XXI).

Abydos: cemetery near Seti Temple

Despite the fact that no datable artifact was associated with a plundered burial of "dozens" of dogs, the remains of which "were found scattered inside and outside an underground brick chamber", this mass burial was assumed to be of First Dynasty date based on its location (among similar tombs of that date) and the nature of the construction materials of the "underground" chamber (similar to the more firmly dated tombs nearby) (Habachi 1939). However, there is no reason to believe, as the excavator did, that this mass burial was contemporary with the presumably First Dynasty chamber, since the presence of several human burials of "Graeco-Roman" date in this vicinity demonstrates late period activity in this area. Moreover, the fact that many of the dog "mummies", deriving from a Roman period catacomb elsewhere on the site, were only "loosely wrapped in plain white cloth" (Peet 1914:100-101) rather than more elaborately mummified suggests that the lack of evidence for mummification among the dogs from this mass burial in the First Dynasty cemetery does not support the assumption of an early date for their interment.

Elite Tombs

Helwan

A total of 10,258 graves was excavated in this cemetery (Saad 1969:5), very few of which were published. The graves for which there are data range in date from the reign of "king" Ka, predecessor to Narmer (Naqada III/Dynasty 0), uninterrupted throughout the First and Second Dynasties. A few individual graves can be dated to the Third and Fourth Dynasties and later (Wilkinson 1996:337-338).

Although the assumption here is that the animal burials in this crowded cemetery were subsidiary to human tombs, in most cases the relationships are not obvious. Saad apparently believed the burials were associated with specific tombs (Saad 1969:80), but he did not, in individual cases, indicate to which tomb(s) the burial(s) might have been subsidiary. Due to the lack of complete publication, no information is provided for most of the principal tombs to which these animal burials may have been subsidiary or for the chronological sequence of the graves that occasionally lay between the animal burials and the larger tombs in their vicinity.

• The tomb, or tombs, to which the following burials were subsidiary are not immediately evident. The animal graves lay in pairs, east (719.H5 donkeys, 720.H5 camel) and west (667.H5 dog, 668.H5 bird)¹² of tomb 680.H5, beyond the area that its apparently large superstructure would have occupied when extant.¹³ This is the largest tomb in their immediate vicinity. The axes of the animal graves, however, do not coincide exactly (according to the cemetery map) with that of tomb 680.H5 and thus may indicate that they were subsidiary to other tombs. Graves 719.H5 (donkeys) and 720.H5 (camel) appear to parallel the axis of tomb 721.H5, a much smaller triple-chambered tomb to their east. The axis of grave 667.H5 (dog) appears to parallel that of tomb 666.H5, a small tomb to its southwest. Grave 668.H5 (bird) was an oval pit adjacent to the northeast corner of 667.H5 (dog) (Cemetery map: Saad 1951:Plate II).

¹²In a brief description of the results of the 1946/47 excavation season (the fifth season), mention is made of small pits containing dog burials found next to graves: "Häufig befindet sich neben dem Grab eine kleine Grube, in der ein Hund bestattet war"; mention is also made of bird burials: "Teilweise wurden auch Vogelknochen in den Gruben gefunden" (Schweitzer 1948:121). The date of the work discussed and the juxtaposition of these two statements seems to imply a description of these two burials. The use of the word "frequently", however, seems to contradict that assumption.

¹³The complete extent of its original ground plan is not indicated on the cemetery map. Nor is information offered concerning the chronological sequence of other tombs (e.g., 663.H5, 664.H5, 677.H5, 678.H5), which appear to occupy the same area of ground as the mastaba.

In only two cases is a date offered for the animal burials (668.H5 bird, 720.H5 camel). No information is provided for any of the three tombs to which the burials may have possibly been subsidiary (680.H5, 14 721.H5, 666.H5).

- 667.H5: dog; lying contracted, head south, face west; buried in a wooden coffin (Saad 1951a:37/Plate XLVI-a)
- 668.H5: bird (identified as "probably a hawk"; Saad 1969:Plate 65); buried in a small wooden coffin. Date: Dynasty I (Saad 1951a:37/Plate XLVI·b·c)
- 719.H5: donkeys, remains of "more than one" (Saad 1951a:37-38)
- *720.H5: camel, 16 "animal neck bones and some ribs." Date: Dynasty I (Saad 1951a:38). It is not likely that the proposed dating of this burial is accurate (see Boessneck 1988:34). Moreover, since the grave is identified as intact, but the remains are very fragmentary, 17 this animal is not considered a subsidiary burial.
- The tomb to which the following burial was subsidiary is also not immediately evident. Its axis appears to parallel that of tomb 612.H3 (not described in the text), a triple-chambered tomb which lies a short distance to the southwest. Tomb 612.H3 is comparable in size to tomb 721.H5, to which the above mentioned donkey burial may have alternately been subsidiary. No larger tomb lies in its immediate vicinity. The space between them, however, is sufficiently large, as well as occupied by a number of other undescribed burials, to make their relationship less than obvious.
 - 615.H3: 3 donkeys¹⁸ (Saad 1947:167/Plate LXXIV; Cemetery map: Saad 1951:Plate I)
- Another multiple burial of donkeys has also been reported for this cemetery. In a brief discussion
 of the results of the tenth excavation season, a large tomb surrounded by a mudbrick enclosure
 wall is described. A trench containing the burial of three donkeys was found in the eastern section
 of the passage created by the surrounding wall (Leclant 1953:95-96, see also Saad 1969:80/Plate
 120). In this case, the principal tomb to which this burial was subsidiary can be identified (an
 identification number was not provided for the principal tomb).
 - 53.H10:19 3 donkeys

¹⁴The boat grave presumed to be subsidiary to 680.H5 is discussed and compared to the ones at Saqqara dated to the "Archaic" period (Saad 1951a:41-42). Based on architectural characteristics, this tomb has been dated to the second half of the First Dynasty (Wilkinson 1996:352).

¹⁵Since the grave is described as a "trench" (Saad 1951a:37), it may be safe to assume that the donkeys were buried in a row as elsewhere (see Abusir and Tarkhan below).

¹⁶These bones are stated to have been definitely identified as those of a camel. Saad cites a ceramic head from Maadi, excavated by Amer and identified by Junker as that of a camel, and cord made of camel wool, discovered by Caton-Thompson in the Fayum (see G. Caton-Thompson, "The Camel in Dynastic Egypt", Man (34) 1934:21), as evidence for the presence of camels at this early date (Saad 1951a:38; see particularly note 2 for other examples of early "camel sculpture"). See also H.S. Smith 1969:310 and Zeuner 1963:350-351 for a brief mention of similar evidence. Boessneck considers the date of this burial "dubious" (Boessneck 1988:34).

¹⁷In other words, do not represent an entire animal; see Saad 1951a:Plate XLVIII for fragmentary nature of remains.

¹⁸Plate LXXIV shows a skeleton in a trench-like cut, but the description of the position of the bodies states: "The two upper donkeys were found disturbed. The third one which was luckily buried deep at the bottom was found intact" (Saad 1947:167). These donkeys may not have been buried in a row as others found elsewhere.

¹⁹Although the grave number for this burial was not specified in the brief discussion mentioned above, the assumption here is that the grave referred to is the multiple donkey burial mentioned by Saad in the "popular" publication of his work at Helwan (1969:80). In Saad's statement: "... animals were often buried near their owners' tombs. Donkeys were sometimes buried in special tombs (Plate 120). In tomb 53 H.3 [sic] we found the skeleton[s] of three large donkeys", the grave is probably misidentified. The referenced Plate (120) is a photograph of a donkey skeleton in grave 53.H10. This grave number is clearly

Additional subsidiary burials were mentioned as associated with the same tomb, to which the above multiple donkey burial was subsidiary. They were described as those of domestics and pet animals ("celles de domestiques et d'animaux familiers") (Leclant 1953:96). No further information was provided.

- It is stated that some of the tombs to the south of N° 40 contained the burial of dogs and that the graves were dug in a similar manner to those intended for humans. Only one intact burial was identified and described. That animal was buried in a rectangular gravel-cut grave (Saad 1947:166-167). It lay in a crowded area of the cemetery quite a distance from tomb 40 neither near to nor parallel with any larger tomb.²⁰ Its spatial relationship to the other undescribed dog burials in the area also cannot, obviously, be determined. The mention of dog burials associated with specific graves (see note 12), cannot be safely applied to these burials. These dog burials may be the only ones documented in this cemetery that are actually independent animal burials. However, because of their ambiguous status, they have been included in this category.
 - 421.H3:²¹ dog; lying contracted on left side, head north. Objects: 2 cylindrical ceramic jars (Saad 1947:167/Plate LXXIII; Cemetery map: Saad 1951:Plate I)

No clearly documented instance of an animal buried in a human grave was reported for any of the published graves in this cemetery.

- The "skeleton" of a tortoise was reported from grave 264.H2. In the (admittedly poor) photograph of the grave, however, only the shell is discernible (Saad 1947:108:Figure 9). On Plate XLVII, again only the shell (no bones) appears in the photograph. This tortoise shell should perhaps be considered an "artifact" and not an animal.²²
- Mention was made of a dog buried in a human tomb, but no further information was provided²³ (Saad 1969:80)

According to Moustafa 1964:259: "During the First Dynasty ... the pig Sus scross was found buried in large numbers in cemeteries of its own; it was worshipped as the 'God of Evil' in the settlements around Helwan." No source for the evidence on which this statement was based is offered. It is not even clear whether or not the reference to the proposed religious beliefs of the Helwan communities is directly related to the location of the pig cemeteries. On the assumption it was, no published information could be found that substantiated the existence of such cemeteries in the Helwan area. This, like the unsubstantiated pre- and protodynastic animal cemeteries in the vicinity of Hierakonpolis (see Chapter 2), can only be considered a potential anomaly in the pattern of animal burial documented elsewhere for this period.

visible in the photograph and the caption identifies the grave number as such. The designation H10 identifies the grave as being found during the tenth excavation season.

²⁰This is based on the cemetery map.

²¹In the "popular" publication of Saad's excavations at Helwan, a photograph of this burial is used to illustrate the statement: "Pets were sometimes buried in their masters' tombs. In one tomb we found a dog wrapped in a cloth and placed in a coffin. The dog was even provided with food for its life in the other world" (Saad 1969:80). The caption for the Plate reads: "Skeleton of a dog and funerary objects in a coffin in situ in tomb 421 H.3" (Saad 1969:Plate 121). This must be a misuse of the photograph, as the statement differs from the description of the grave in the original publication of the excavation (unless the original description is wrong). Moreover, there is no evidence for the presence of a coffin in the photograph. The implication of this mix-up is, however, that somewhere in this extensive cemetery at least one instance of an animal being buried within a human grave remains lost in the unpublished excavation records.

²²Elsewhere Saad describes this as the "shell" of a tortoise (1951b:153).

²³See note 21 above.

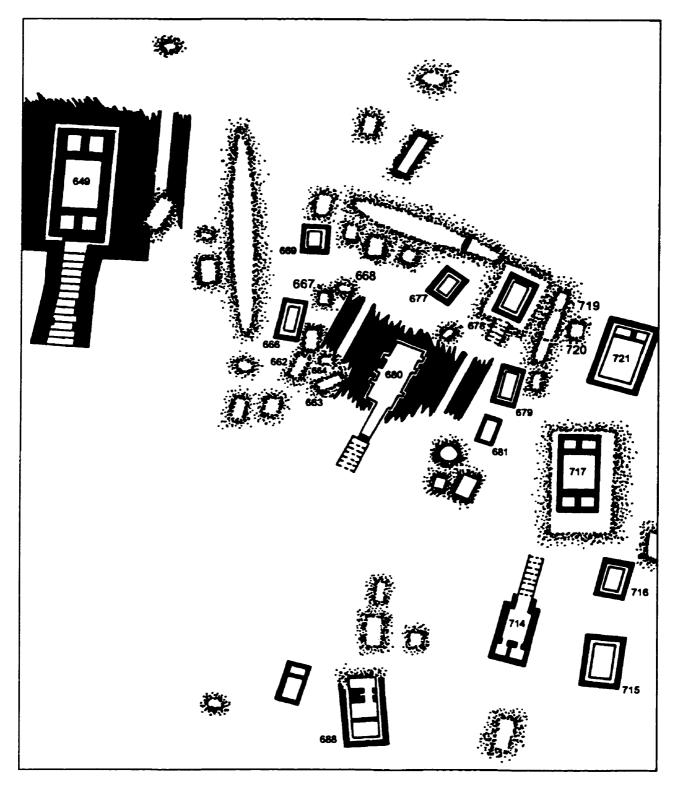


Figure C.1: Helwan: Animal Burials

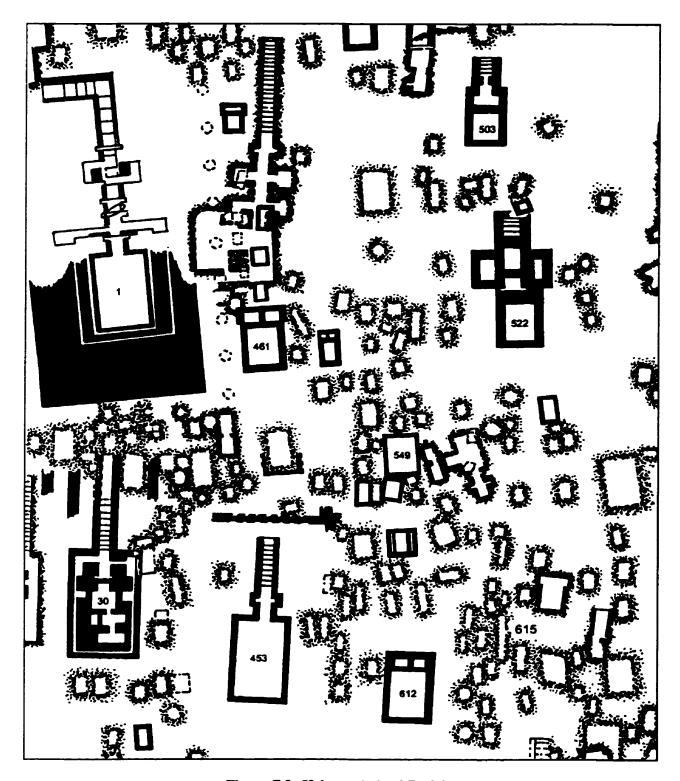


Figure C.2: Helwan: Animal Burials

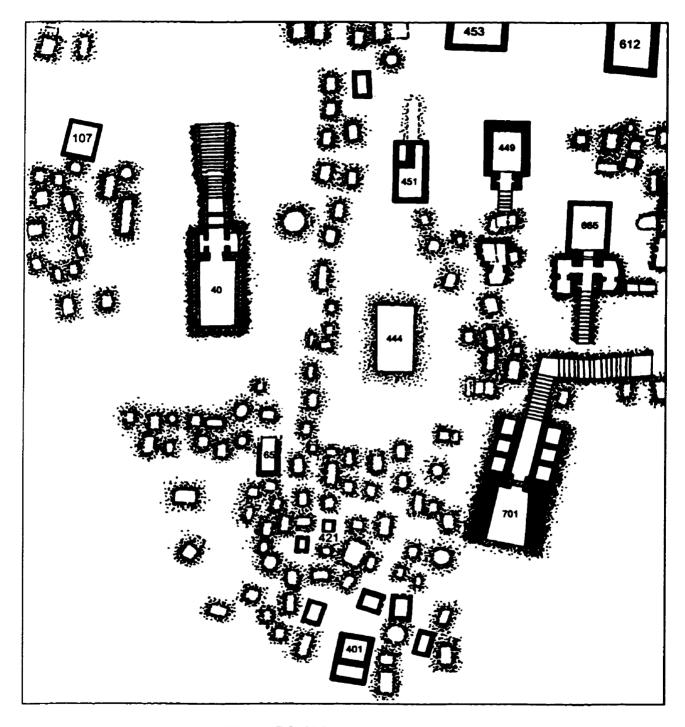


Figure C.3: Helwan: Animal Burials

Saqqara

- This burial was subsidiary to Mastaba 3507, which has been identified as the tomb of queen Her-Neith, thought to be the consort of king Djer of the First Dynasty. The mastaba is dated to the reign of king Udimu (Den) (Emery 1958:71). The animal was buried in a shallow rectangular grave located near the gateway in the enclosure wall. No other subsidiary burials (animal or human) were associated with this tomb (Emery 1958:78).
 - no N^o : dog; head south; wrapped in palm-fiber matting (Emery 1958:78)
- Subsidiary animal burials are thought to have been associated with Mastaba 3035 (Anon. 1939:79), which has been identified as the tomb of Hemaka, an official during the reign of king Den of the First Dynasty (Emery & Saad 1938). The burials are described as lying in a row to the east of the mastaba, underlying a double layer of mudbrick pavement that surrounded it. Three adjacent burials contained birds; seven contained the bodies of dogs; one contained the body of a human wrapped in cloth but buried, unlike the animals, without a coffin (Anon. 1939:79).
 - three burials, no Nos: birds (species unspecified); each wrapped in cloth and placed in its own coffin (one of which had an ebony and ivory inlaid lid). Objects: each burial was accompanied by one small ceramic vessel. (Anon. 1939:79)
 - seven burials, no Nos: dogs; each wrapped in cloth and placed in its own coffin. Objects: each burial was accompanied by one small ceramic vessel. (Anon. 1939:79)

Tarkhan

- These subsidiary burials were located within the narrow passage between Mastaba 2050 and its enclosure wall. The donkey burial was in the south passageway; the duck burial in the east. In addition to the animal burials, two subsidiary human burials (2051, 2053) were also associated with this tomb (Petrie 1914:6/Plates XVIII & XIX). The mastaba has been tentatively dated to the reign of king Djet of the First Dynasty (Wilkinson 1996:352).
 - 2052: 3 donkeys; "buried with their back[s] up, and their legs doubled up beneath them," facing east. (Petrie 1914:6/Plate XIX)
 - 2054: duck; "the coffin was of the full size for human burial", "in [its] N.W. corner lay the bones of a duck." Objects: two jars. (Petrie 1914:6)

Abusir (north)

- This burial was located to the south of and is considered subsidiary to Mastaba IV, which has been dated to the reign of king Udimu (Den) of the First Dynasty. In order to explain the upright stance of the bodies, it has been suggested that the animals were led into the grave pit alive, the pit partially filled with sand, and the animals either struck on the head (some skull damage may support this) or strangled; no evidence for their necks being slit was detected (Boessneck 1992)
 - 3 donkeys (male); buried standing upright in a row, facing east.

OLD KINGDOM

Balat: Dakhla Oasis

- These two burials were associated with Mastaba V at Balat attributed to Medou-Nefer, a "governor" of the oasis at the end of the Sixth Dynasty. Tomb 1 was a pit with "plastered" sides and bottom situated under the east forecourt wall. Tomb 6 was located nearby, in the vicinity of the entrance in the enclosure wall.
 - Tomb T1: dog; lying right side, head north, facing west; beaded collar near head; possible reinhumation (Valloggia 1986:64-65/170; see also Chaix & Olive in Valloggia 1986:201-204)
 - Tomb T6: dog; lying on right side facing west; buried in a lidless box of unbaked clay; beaded collar at neck (Valloggia 1986:65/170; see also Chaix & Olive in Valloggia 1986:204-205)

Appendix D

Food Offerings

BADARIAN CULTURE

Matmar

A total of ca. 130¹ Badarian graves were reported from the various cemeteries in the vicinity of Matmar (Brunton 1948:7-9/Plate III). Animal bones were reported in 3 graves. Only one (2007) was listed in the graves register. Brunton suggests the fragmentary remains found in this plundered grave may represent an original burial of an entire animal (1948:11). One (3100(iii)) of the other two graves contained an entire animal (see Appendix B). No information was provided for the third grave.

Matmar: Badarian

Grave				
Number	Human	Offering	Species	Brunton 1948
*2007		leg bones	small ruminant	7/11/Plate III

Mostagedda

A total of ca. 375² Tasian and Badarian graves were reported from the various cemeteries in the vicinity of Mostagedda (Brunton 1937:5-7/33-43/Plates VII-X). In his summaries of the Tasian and Badarian cultures, Brunton reports that animal bones were found in a total of 9 graves (1937:30-31/57). One additional unregistered grave also contained the remains of a food (meat) offering. 5 of the following graves (426, 451, 2838, 2841, 3002) were attributed to the Tasian culture. In all 5 cases, Brunton describes these bones as being "of an immature animal, possibly a very young calf" (Brunton 1937:30-31). The other graves (300(iii), 549, 592, 3202, 3531) were attributed to the Badarian culture. No species identification was offered for these remains except where noted. Brunton suggests the fragmentary remains in grave 549 may represent an original burial of an entire animal (1937:57).

¹In this and all following grave counts, there is no guarantee that some graves have not occasionally been overlooked, particularly superimposed graves listed under single identification numbers. For this and all following notes, the format for the breakdown of graves counts by cemetery is: (cemetery series number)ca. total number of graves including registered and unregistered. (200)2, (2000)41, (2500)69, (3000/3100)14, (5300)2, (6000)2.

²(200)16, (300/400/5200)108, (500)29, (800)2, (1000)1, (1200)55, (1600)5, (1900)1, (2000)19, (2200/3500)85 not including the questionable independent animal burial, (2600)1, (2700)11, (2800)12, (2900)1, (3000)6, (3200)9, (3300)2, (3400)4, (3600)1, (3700)1, (10000)4, (11700)2.

Grave Number	Human	Offering	Species	Brunton 1937
300(iii)	female(?)	skull	gazellc(?)	34
426	child	2 ribs	calf(?)	5/30-31/Plate VII
451	female	bones	calf(?)	6/30-31/Plate VII
*549	child	bones	gazelle(?)	36/57/Plate VIII
592	male	vertebrae & toe bones	(?)	37/57/Plate VIII
2838	adult male	leg & "blade-bone"	calf(?)	6/30-31/Plate VII
2841	male	5 ribs & "blade-bone"	calf(?)	6-7/30-31/Plate VII
3002	male(?)	ribs	calf(?)	7/30-31/Plate VII
3202	female	ribs	(?)	41/57/Plate X
3531	child	ribs	very young animal	42/57/Plate X

Mostagedda: Badarian

Badari

A total of ca. 260³ Badarian graves were reported from the various cemeteries in the immediate vicinity of Badari (Brunton & Caton-Thompson 1928:6-18/Plates V-VIII). Brunton suggests the bones in grave 5371 may not have been part of the burial goods (Brunton & Caton-Thompson 1928:10).

Badari: Badarian

Grave Number	Human	Offering	Species	Brunton & Caton-Thompson 1928
5148		bones	large ruminant	8/Plate V
*5371	child	rib, knuckle bone, leg & scrap of jaw	calf(?)	10/Plate VI

NAQADA CULTURE: I – III

Upper Egypt

Matmar

A total of ca. 302⁴ Naqada I-II period graves were reported from the various cemeteries in the vicinity of Matmar (Brunton 1948:12-16/Plates VIII-X). Brunton suggests that several cases of fragmentary remains may represent the original burial of an entire animal (3123, 3130, 5114). He states: "Bones of animals, but not complete skeletons, when they are found at the foot end of plundered graves, also probably indicate the presence of pets" (1948:22). This was based on the fact that most of the "gazelles(?)" found in human graves, were at the feet of the deceased. Concerning the bones in grave 2681, Brunton states: "not being near the feet at the north end of the grave these may have been a meat-offering and not the remains of a pet animal" (1948:14).

³(4800)3, (5100)54 not including 1 animal burial, (5200)9, (5300/5400)93 not including 4 animal burials, (5700/5800)95, (6000)6.

⁴(2600/2700)205, (3000/3100)73+an unspecified number of unregistered graves, (5100)24. Based on Wilkinson's seriation, 9 of the 3000/3100-series and 4 of the 5100-series graves were placed in the Naqada IId2-IIIa range; those graves are included in this count; one 3000-series and two 5100-series graves can be dated to the Naqada III period; those 3 graves are not included in this count (see Wilkinson 1996:47-49).

Matmar: Naqada I-II

Grave Number	Human	Offering	Species	Date	Brunton 1948
2681	male(?)	bones	gazelie(?)	SD 37-38	14/22/Plate IX
2713	male	leg	gazelle or kid	SD 36-51	14/22/Plate IX
2714ª	male	leg bones	small animal	SD 38-45 ^a	14/22/Plate IX
3073	old male	bones &	tiny fish(?) &		
		tarsal bone	small ruminant	(?)	15/Plate IX
*3123	female	legs	gazelle(?)	SD 38-43	16/22/Plate X
31286	male	foreleg & shoulder	bull or cow	SD 52 ^b	16/22/Plate X
*3130	female(?)	leg bones	young animal	SD 52-53	16/22/Plate X
3131	(?) ^c	leg bones	young animal	SD 38-46	16/22/Plate X
5107	male(?)	skull & foreleg	small ruminant	SD 36-56	16/22/Plate X
*5114	female	skull	small ruminant	SD 53-60 ^d	16/22/Plate X

a) This grave also contained a "gazelle(?)" at the feet of the body (see Appendix B). Date according to Kaiser 1957:74 – Naqada IIa. b) This grave also contained a dog buried in a wooden box (see Appendix B). Date according to Kaiser 1957:74 – Naqada IIc; date according to Wilkinson 1996:47-49 – Naqada IId1 (Matmar 2c). c) No gender identified in tomb register; text states "no bones left;" summary commentary misidentifies gender as male (Brunton 1948:16/22/Plate X). d) Date according to Wilkinson 1996:47-48 – Naqada IIc(-IId1) (Matmar 3).

A total of ca. 107⁵ Naqada III period graves were reported from the various cemeteries in the vicinity of Matmar (Brunton 1948:23-26/Plate XX). In his summary of the protodynastic period, Brunton states: "The head and forelegs of a young gazelle or duiker seem to have been a usual offering." He suggests the fragmentary remains in grave 1052 may represent an original burial of an entire animal (1948:28).

Matmar: Naqada III

Grave Number	Human	Offering	Species	Date	Brunton 1948
200(?) ^a	female	skull & leg	duiker	(?)	24/29
210		leg bone	lamb(?)	SD 77-78 ^b	24/Plate XX
213	male	skull	calf	SD 78-79 ^b	24/Plate XX
218	female	skull & leg	small ruminant	SD 78 ^b	24/Plate XX
220	female	skull & legs	duiker(?)	SD 78 ^b	24/Plate XX
222	male(?)	skull & legs	small animal	SD 78-79 ^b	24/Plate XX
228	female	skull & leg	small ruminant	SD 78-81 ^b	24/Plate XX
231		jaws	small ruminant	SD 79-80 ^b	24/Plate XX
235	female	jaw	small ruminant	SD 77-80 ^b	25/Piate XX
236	female	skull & leg	small animal	SD 78-80 ^b	25/Plate XX

a) An unregistered grave in the 200 series. b) Date according to Wilkinson 1996:47-48 - Naqada IIIa2-IIIb (Matmar 3).

⁵(200)37 including 10 graves listed in the "Predynastic Graves" register (Brunton 1948:Plate VIII) 7 of which were included in Wilkinson's seriation and dated to the Naqada IIIa2-IIIb period (1996:47-49), (900/1000)41, (2000)25, (5200)1, plus (3000/3100)1 and (5100)2 listed in the "Predynastic Graves" register and dated in Wilkinson's seriation to Naqada IIIa2-IIIb (Brunton 1948:Plate X; Wilkinson 1996:47-49).

Matmar: Naqada III

Grave Number	Human	Offering	Species	Date	Brunton 1948
1028	female(?)	skull & foreleg	young ruminant	SD 81	25/Plate XX
*1052	male	bones	small ruminant	SD 78	25/Piate XX
1054	female	jaw	small ruminant	SD 78-79	25/Plate XX
1056		bones	small ruminant	SD 77-78	25/Plate XX
1059	female	bones	small ruminant	SD 77	25/Plate XX

Mostagedda

A total of ca. 188⁶ Naqada I-II period graves were reported from the various cemeteries in the vicinity of Mostagedda (Brunton 1937:69-75/Plates XXIX-XXXI). Concerning the animal offerings in the following graves, Brunton states: "These, derived no doubt from meat offerings, were invariably of small and young ruminants, generally a fore-leg or fore-quarter; the position of them was to the west, that is, in front of the body near the knees or arms. In one grave (1838 Amratian) a leg-bone lay immediately over the face" (Brunton 1937:90).

Mostagedda: Naqada I-II

Grave Number	Human	Offering	Species	Date	Brunton 1937
223		bones"	gazelle(?)	SD 49-53	69/90/Plate XXIX
1609	male(?)	forelegs	gazelle(?)	SD 49-35	70/90/Plate XXIX
1683	male(?)	bones	young ruminant	SD 31-46	70/90/Plate XXX
1698	male	bones	(?)	SD 37-44 ^b	90/Plate XXX
1800(i)c	young female(?)	forequarter	gazelle(?)	(?)	71/90
1838		leg	kid(?)d	Amratian	71/Plate XXX
1880	female	rib & vertebrae	small animal	Amratian	73/Plate XXXI

^{d)} In the tomb register, the animal remains in grave 223 are listed as "animal" in contrast to the usual designation of "bones" (Brunton 1937:Plate XXIX). This notation seems to imply that an entire animal is intended. Elsewhere in the text, however, these bones are attributed to a food offering (Brunton 1937:90). ^{b)} Date according to Wilkinson 1996:49-50 – Naqada Ib-IIa (Mostagedda 1). ^{c)} An unregistered grave in the 1800 series. ^{d)} "The leg of a kid or some other very small animal."

⁶(Areas 200/1600/1700/1800/11700 inclusive)176 not including the 12 graves dated to the Naqada IIIa2-IIIb period (based on Wilkinson's seriation 1996:49-50) or the 6 graves (not included in Wilkinson's seriation) dated after SD 63 listed in the "Predynastic Graves and Town Groups" register or the 13 graves of similar date listed in the "Protodynastic Graves" register, (300/400/5200)6, (1200)3, (10000)2.

A total of ca. 33⁷ Naqada III period graves were reported from the various cemeteries in the vicinity of Mostagedda (Brunton 1937:93-94/Plate XXXI).

Mostagedda: Naqada III

Grave Number	Human	Offering	Species	Date	Brunton 1937
219	male(?)	forelegs & jaw & bones	calf &	SD 77-80	69/Plate XXIX
1651	male(?)	bones	sheep(?)	SD 77-79°	93/Plate XXXI

a) The forelegs are presumed to be those of a calf; for the jaw and other bones the species was not identified. b) Date according to Wilkinson 1996:49-50 - Nagada IIIa2-IIIb (Mostagedda 3).

Badari

A total of ca. 998 Naqada I-II period graves were reported from the various cemeteries in the immediate vicinity of Badari (Brunton & Caton-Thompson 1928:50-52/Plates XXX-XXXIII).

Badari: Naqada I-II

Grave					Brunton &
Number	Human	Offering	Species	Date	Caton-Thompson 1928
3740	multiple burial	leg & bones	calf(?)	SD 38-44	51/Plate XXXII
3823		leg bones	ox(?)	SD 35-37	51/Plate XXXIII
3931	male	bones	ox	SD 56-73	Plate XXXIII

A total of ca. 329 Naqada III period graves were reported from the various cemeteries in the immediate vicinity of Badari (Brunton & Caton-Thompson 1928:Plate XXXII; Brunton 1927:10/14/Plate XI).

Badari: Naqada III

Grave Number	Human	Offering	Species	Date	Brunton & Caton-Thompson 1928
3701	child	skull & bones	small ruminant	SD 70-78 ^a	50/Plate XXXII
3742		skull	gazelle(?)	SD 74-77	Plate XXXII
					Brunton 1927
6001		skull	gazelle	SD 78-80	14/Plate XI

a) Date according to Kaiser 1957:74 - Naqada IIIa2.

⁷(200/1600/1700/1800/11700)31 including 12 graves dated to the Naqada IIIa2-IIIb period (based on Wilkinson's seriation 1996:49-50) and an additional 6 graves (not included in Wilkinson's seriation) dated after SD 63 listed in the "Predynastic Graves and Town Groups" register (Brunton 1937:Plates XXIX-XXXI), (900)1, (1000)1.

⁸(3500)1, (3600)2, (3700)28, (3800)30, (3900)21, (4600)17. None of these counts include loci designated "hole" or graves dated after SD 63.

⁹(3700)15, (4600)2 – these 3700-series and 4600-series graves are listed in the "Predynastic Graves and Town Groups" register (Brunton & Caton-Thompson 1928:Plates XXXII-XXXIII), (5500)2, (6000)13.

Naga ed Dêr

A total of ca. 635 graves were reported from Cemetery N7000 at Naga ed Dêr (Lythgoe 1965:1-416). Graves in this cemetery ranged in date from Naqada Ia/b through Naqada IId (Hendrickx 1996:51 with reference to R. Friedman's unpublished M.A. thesis). Concerning the meat offerings listed below, in a number of cases, the designation "small animal" was qualified with the suggestion "gazelle(?)" or "goat(?)". In those cases, the assumed species is listed and the designation "small animal" has been omitted for the sake of space. Graves (N7097, N7172, N7525) containing horns (or parts of horns) of cattle are not included in this list (see Lythgoe 1965:53-54/100/339).

Naga (ed Dêr:	Cemetery	N7000
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Grave Number	Human	Offering	Species	Date	Lythgoe 1965
N7113	adult (?)	4 leg bones	ox	Naqada IIc	63
N7235	multiple burial	shoulder blade	young sheep(?)	Naqada IIc	132-135
N7454a	male ^b	vertebrae & leg bones & shoulder blade ^c	small animal	Naqada IIc	278
N7461	double burial	leg bone	young sheep or goat	Naqada IIc	286-288
N7481	adult female	shoulder blade & leg bone	gazelle or goat	(?)	301
N7484	young female	ribs & leg bones	small lamb/goat	Naqada IIb	302
N7497	adult female	leg bone	small animal	Naqada IIb	314-316
N7519	multiple burial	3 ribs & shoulder blade ^d	ox & "smaller" animal	Naqada IId	329-330
N7521	double burial	lower jaw & bones	goat(?)	Naqada IId	333
N7539	-	bones	(?)	Naqada III	353-359
N7583	adult male	skull w/horns	goat	(?)	381

a) All dates based on Friedman n.d. b) Grave N7454 contained a multiple burial; the food offering was associated with "Burial A". c) The shoulder blade of a "young animal" was found in the filling of this grave. d) The 3 ribs are identified as those of an ox; the shoulder blade as belonging to a "smaller animal" (presumably smaller than an ox). The ribs were found among the pottery, the shoulder blade in the filling of the grave.

Mahasna

A total of ca. 300 graves were excavated in Cemetery H at Mahasna; only 135 (including 27 heavily plundered graves) are described in the text; no grave register was provided (Ayrton & Loat 1911). Graves in this cemetery ranged in date from Naqada Ib through Naqada IIIb (Wilkinson 1996:51-53; Hendrickx 1996:49). In grave H4, the remains of the "skull and skeleton of a goat(?)" lay between two ceramic vessels at the south (head) end of the grave. Another bone identified as that of a "small animal (goat?)" also lay on a bowl in front of the face of the deceased. Although it is not clearly stated whether the remains represent an original burial of an entire animal or parts of a butchered animal, the latter seems more likely. Goat skulls and "remains of goats" in several of the other graves in this cemetery were also deposited between the ceramic vessels. Although Wilkinson suggests the goat skulls "may have held some special, perhaps magical, significance" (1996:79), they appear to be no different than similar meat offerings in graves of this and earlier periods documented in other cemeteries.

Mahasna:	Cemetery	Η
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Grave Number	Human	Offering	Species	Date	Ayrton & Loat 1911
H29	double burial	bones	ox	Naqada Ia-Ic	11
H42	male	ribs, collar bone, & complete foreleg	goat or antelope	Naqada Ia-Ic	13
H107		"remains"	"goats"	Naqada IIc-IId2	22
*H4	female	skull & skeleton	goat(?)	Naqada IIIa2	21
H120		skull	goat	Naqada IIIa2	23-24
H122		skuli	goat	Naqada IIIa2	20
H134a		skull	goat	Naqada IIIb	19

a) All dates obtained from Wilkinson 1996:51-52; dates according to Petrie 1920:Plate LII: H29-SD34(?), H42-SD35-36, H107-SD48-53, H4-SD70(?), H120-SD77, H122-SD77-88, H134a-SD78.

el-Amrah

A total of ca. 223 graves were excavated and recorded in Cemetery a at el-Amrah, with the original extent of the cemetery estimated at ca. 600 graves; a total of ca. 400 graves were excavated in Cemetery b, with the original extent of the cemetery estimated at ca. 500 graves (Randall-MacIver & Mace 1902:50-51); only 55 graves from Cemetery a and 98 graves from Cemetery b were described in the text; no grave register was provided (Randall-MacIver & Mace 1902:16-39). According to the excavators, the dates of the graves in these cemeteries covered the entire range of the predynastic period, with those in Cemetery b extending into the First Dynasty (Randall-MacIver & Mace 1902:50-51). The 70 Cemetery b graves included in Kemp's seriation ranged in date from Naqada I through Naqada IIIb, according to Hendrickx's suggested equivalencies (Kemp 1982; Hendrickx 1996:48). It is stated, in reference to the bones of a "small animal" from grave a23, that "similar bones, which frequently occur in these tombs, were identified by an anatomist as being those of a goat, not of a gazelle; the horned head of the same animal is often found" (Randall-MacIver & Mace 1902:36).

el-Amrah: Cemetery a

Grave Number	Human	Offering	Species	Date"	Randall-MacIver & Mace 1902
a 3	female(?)	skull	small animal	SD 44-64	22
a 6		skull ^b	goat(?)	SD 43	22
a 23	male	leg bones	small animal	SD 32	16/36
a 56	male	bones	small animal	SD 43	17
a 67	female(?)	jaw bone	small animal	before SD 41	16
a 88	female	bones	small animal	SD 36-39	16
a 96	male	leg bone	small animal	SD 60	19
a 124	female	bones	small animal	SD 40-51	22
a 139	female	bones	small animal	SD 46	18

a) Dates obtained from Petrie 1920:Plate LI; a67 not dated by Petrie (date according to Randall-MacIver & Mace); dates according to Kaiser 1957:73: a3-IId1, a6-IIc, a96-IIc, a139-IIc. b) "Head of a small animal (probably goat), which was cut away at the back so as to resemble the bucrania at Hou but was not painted."

Grave					Randall-MacIver
Number	Human	Offering	Species	Date	& Mace 1902
b 17	double burial	jaw bone	goat or gazelle	SD 57	20
b 62	female	horned skull	small animal	Naqada IIc-IId2	20/37
b 65	double burial	2 skulls &	horned animal &		
		foreleg	goat or gazelle	Naqada IIc-IId2	21
b 87	female	skull	horned animal	Naqada IIc-IId2	21
b 107	male	skull & bones	small animal	SD 52-56	19-20
b 131	male	jaw	small animal	Naqada IIc-IId2	27
b 136	multiple burial	skull	small animal	SD 31	16-17
b 139	male	bones	animal larger		
			than a goat	SD 44	20
b 189		horned skull	small animal	Naqada IIc-IId2	21
b 232	male	bones	small animal	Naqada IIc-IId2	21
b 233	child(?)	skull	goat(?)	Naqada IIc-IId2	24
b 235	male	bones	ox & small		
			horned animal	Naqada IIc-IId2	21
b 33	male	bones	small animal	Naqada IIIb	26
b 50	female	bones	small bird	Naqada IIIb	28-29
b 70	male	bones	small animal	Naqada IIIb	30
b 91		bones	cow	Naqada IIIb	39

el-Amrah: Cemetery b

Abadiyeh

A total of ca. 570 graves were excavated in Cemetery B at Abadiyeh; only 26 graves are described in the text; no grave register was provided (Petrie 1901a). Graves in this cemetery ranged in date from Naqada I through Naqada III (see Petrie 1920:Plate LII).

Grave Number	Human	Offering	Species	Date	Petrie 1901a
B119"		bone	ox	(?)	33
B234		skull w/horns	bull	SD 66	34

a) This grave also contained the skull of a dog (see Appendix B).

Naqada

Petrie's "Great New Race" cemetery at Naqada contained ca. 2000 graves of which only 132 were (in some cases only partially) described in the text; no grave register was provided (Petrie & Quibell 1896). Baumgartel's 1970 supplement, which attempts to reconstruct the original contents of ca. 1200 of the graves in this cemetery, did not report faunal remains for any of the graves listed in the supplement, including the faunal remains known from the original publication in the graves listed below. According to Bard, the graves in this cemetery ranged in date from Naqada I through Naqada III (1994:119-123).

a) Sequence Dates obtained from Petrie 1920:Plate LI; Naqada (Stufen) dates according to Hendrickx's (1996:48) equivalencies for Kemp's (1982) seriation groups. Petrie's (1920:Plate LI) and/or Kaiser's (1957:73) dates: b17-IId2, b62-SD58/IId1, b65-SD55-61, b87-SD50-52/IId1, b107-IIc, b139-IIb, b189-SD57/IId2, b232-SD58(?)/IIc, b233-IId1, b235-SD58-67/IId1, b91-SD78-80.

Grave Number	Human	Offering	Species	Date	Petrie & Quibell 1896
17		skull	gazelie	SD 74 ^b	23/Plate LXXXII
39		bones	sheep	SD 56 ^c	20/Plate LXXXI
206		leg bones	calf	SD 34 ^c	25
222		bones	gazelle	(?) ^d	25
369		leg	ox	SD 55-74 ^d	26
836		bones	gazelle	SD 63 ^d	23/Plate LXXXIII
1037	male	skull	gazelle	SD 60-70 ^d	27

Naqada: "Great New Race" Cemetery

Cemetery T was an elite cemetery in the vicinity of Naqada. Of the 69 graves indicated on the cemetery map, only 33 are numbered (2 graves with the same grave number) and only 12 graves (3 of which are not indicated on the map) are described in the text; no grave register was provided (Petrie & Quibell 1896). No faunal remains were reported for the 38 graves from this cemetery listed in Baumgartel's 1970 supplement, including the faunal remains known from the original publication in the graves listed below. Based on the tombs for which there are data, the cemetery appears to have been in use from early Naqada II through Naqada III, with the majority of burials dated to the Naqada II period (see Bard 1994:48:Table 3; and Davis 1983).

Grave Petrie & Number Human Offering **Species** Date Quibell 1896 TIO forequarter & skull **SD 52** 24 OX <u>T11</u> blade bone SD 40-58 24 ox T14 bones^b SD 43-61° 20/Plate LXXXII ox T36 male skull gazelle **SD 72** 24 T52 skull SD after 52^d 24 ox

Nagada: Cemetery T

a) All dates obtained from Petrie 1920:Plate LI, unless otherwise noted. b) The ox and human bones were laid side by side in a row. c) According to Davis, no later than SD 48 (1983:19). d) Petrie offered no date; date obtained from Davis 1983:21.

Armant

A total of ca. 176 predynastic graves were reported from Cemetery 1400-1500 at Armant (Mond & Myers 1937). Graves in this cemetery ranged in date from Naqada Ic through Naqada IIIa2 (see Bard 1994:119; Wilkinson 1996:53-54; Hendrickx 1996:41-42). The bones of a "jerboa" in grave 1451 and the remains of "small mammals" in graves 1536 and 1537 may have been instrusive (Mond & Myers 1937:12). These graves are not included in the following list. An additional ca. 23 predynastic graves were reported from Cemetery 1300 (Mond & Myers 1937:Tomb Register 26).

a) All dates obtained from Petrie 1920:Plate LI, unless otherwise noted. b) Date according to Bard 1994:122 - Naqada III. c) Date according to Bard 1994:120 - Naqada III. d) Not dated by Bard (1994:122).

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Grave Number	Human	Offering	Species	Date	Mond & Myers 1937
1370	child	bones	lamb	SD 46	12/Tomb Register 26
1420		bones	(?)	SD 38-47 ⁴	13/Tomb Register 27
1466	male	skull	gazelle	SD 38-48 ^b	13/Tomb Register 28
1518	male	bones	gazelle	SD 75-77°	14/Tomb Register 29
1583	female	skull & bones*	gazelle & goat	SD 65-77 ^d	Tomb Register 31

a) Date according to Wilkinson 1996:53-54 – Naqada IIIa (Armant 1); date according to Bard 1994:119 – Naqada IIa-b.
b) Date according to Wilkinson 1996:53-54 – Naqada IIb-IIc (Armant 2a); date according to Bard 1994:119 – Naqada IIIa-b.
c) Date according to Wilkinson 1996:53-54 – Naqada IIIa2 (Armant 3); date according to Bard 1994:119 – Naqada IIIa.
d) Date according to Wilkinson 1996:53-54 – Naqada IIIa2 (Armant 3); date according to Bard 1994:119 – Naqada IIIa.
e) The skull is identified as that of a gazelle; the other bones as that of a goat.

Lower Egypt

Gerzeh

A total of ca. 288 graves were excavated at Gerzeh, with 249 graves found to be intact and 39 plundered or of New Kingdom date (Petrie 1912:5). No grave catalog or register was provided, however, 161 graves from this cemetery are listed in an abridged register in Petrie 1920:Plate LIII. The predynastic graves in this cemetery date to the second half of the Naqada II period (Naqada IIc-IId1/2)(see Kaiser 1987a:119, note 3 and :122, 1990:289). Animal remains, described as "bones of some large animal, presumably an ox, but possibly a deer", were found in 8 graves; "the ribs were always found in pairs". Analysis of the contents of various ceramic vessels, identified the material as probably meat; no information was provided for the graves from which these vessels originated (Petrie 1912:7). According to the register in Petrie 1920, "Bones in Pots" occurred in 7 graves, only one of which was identified as containing faunal remains in Petrie 1912; the presence of faunal remains, other than those just mentioned, are not indicated in the abridged register, even for graves stated to have contained them in Petrie 1912:7.

Gerzeh

Grave Number	Human	Offering	Species	Date	Petrie 1912
10		ribs	ox or deer	SD 52-63	7
16		shoulder blade	ox or deer	SD 58-63	7
20		ribs	ox or deer	SD 58	7/23
33		ribs	ox or deer	SD 57-64	7
109		ribs	ox or deer	SD 52-66	7
110a		ribs	ox or deer	SD 50-64	7
116		fragments	ox or deer	(?)	7
209		shoulder blade	ox or deer	SD 47	7

a) All dates obtained from Petrie 1920:Plate LIII.

Abusir el-Meleq

A total of ca. 815 graves were reported from the cemetery at Abusir el-Meleq (Scharff 1926). Graves in this cemetery ranged in date from Naqada IId2 through Naqada IIIb (Kaiser 1987a:119, note 3 and :122, 1990:289); no dates were provided for individual graves. The skull of a goat and several ceramic vessels were the only contents noted in the allegedly undisturbed grave 1078. As no human remains were reported for this grave it is not included in this list (see Appendix A).

Abusir el-Meleq

Grave				Scharff
Number	Human	Offering	Species	1926
2d1	male	ribs	cow	108-109
2f10		skuli	calf(?)	108-109
2k8	male	skull (upper half)	(?)	108-109
10e2ª		skull	cow	112-113
14c7		leg	cow	116-117
15a6		leg	cow	118-119
19f3	male	ribs & leg	cow	122-123
21a6		skull	(?)	122-123
22k10		skull	steer	124-125
25d7		skull & leg	calf	126-127
25d3	-	4 skulls	small ruminant	126-127
26d3		skull	small ruminant	126-127
29ь2		bones	(?)	128-129
31e2		leg	calf	130-131
31h1		пibs	cow	130-131
36d9		bones	(?)	132-133
37b1		skull	cow	134-135
37c4		skull	calf	134-135
38g4		leg	calf	136-137
45c6		skull	calf	140-141
52a3		skull	cow	142-143
52h8 ⁴	male	skull	cow	142-143
55k3		skull	steer	144-145
56a1b		bone	cow	144-145
56c7		skuli & leg	calf & cow	144-145
56e4		bones	(?)	146-147
57c6	male	leg	cow	146-147
58c4 ^c		bones	calf	146-147
59a1		skull	calf	146-147
60d9		skull	calf	148-149
61g5		leg	cow	148-149

a) Date according to Kaiser 1957:74 - Naqada IIIa1. b) Date according to Kaiser 1957:74 - Naqada IIIa2. c) Date according to Kaiser 1957:74 - Naqada IIIb.

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Grave				Scharff
Number	Human	Offering	Species	1926
1015		leg	cow	150-151
1019	female	skull & leg	calf	150-151
1036		bones	cow	152-153
1037		"remains"	cow	152-153
1050		leg	cow	154-155
1058		skull	cow	154-155
1059		skull	cow	154-155
1067		skull	steer	156-157
1068		skull & pelvis	cow	156-157
1070		skuli	cow	156-157
1072		skull	cow	156-157
1092		small skull	steer	158-159
1094 ^b		skull	goat	158-159
1097		skull	cow	158-159
1098		skull	cow	158-159
1100		skull	cow	158-159
1112		leg	cow	160-161
1116		skull	calf	160-161
1128		skull	goat	162-163
1139		skull	goat	162-163
1144		skull & leg	calf	162-163

a) "Reste e. Opferrindes in Lehmklumpen gebacken." b) Date according to Kaiser 1957:74 - Naqada IIIa2.

EARLY DYNASTIC

Abydos

Graves identified with the letter "M" were situated in predynastic settlement debris near the Osiris temple enclosure wall, which they predate. This portion of the settlement was abandoned at the time the graves were dug. A total of 13 tombs were excavated (Petrie 1902:15-22, 1901b:36-37, 1903:7).

Abydos: M Graves

Grave Number	Human	Offering	Species	Date	Petrie 1902
M13		2 skulls & bones	calf & "bird"	Dynasty 1	18/21/Plate XLIX
M14		skull	gazelle	Dynasty 1	16/21
M16		3 skulls, leg & other bones	goat or gazelle	Dynasty 1	17/21/Plate XLIX
M19		"knee" bone & shoulder blade	ox	Dynasty 1	17/21/Plate XLVIII

Minshat Abu Omar

A total of ca. 420 pre- and early dynastic graves were excavated in the cemetery at Minshat Abu Omar. The graves have been divided into 4 main groups based on burial customs and grave goods: ¹⁰ MAO I=255 and MAO II=6 (Naqada IIc-d), MAO III=86 (Naqada IIIa-c1/SD 78-80), MAO IV=73 (Naqada IIIc2-c3/SD 80-82) (Kroeper & Wildung 1994:XIV; Kroeper 1992, 1996:81). The following graves have been designated "Early Dynastic" and represent some of the richest graves in the cemetery (Kroeper 1992:139-140). No faunal remains were reported in any of the 114 graves (MAO I-III) included in the first volume of the cemetery publication (Kroeper & Wildung 1994).

Minshat Abu Omar

Grave Number	Human	Offering	Species	Date	Kroeper 1992
1450	female (18-20)	skeleton w/out heada	ox	Early Dynastic	130/141
1590		bones	cattle	Early Dynastic	132/141
2000	adult male	bones	calf	Early Dynastic	131/141
2897		bones	pig & cattle	Early Dynastic	139/141
2899	male (40-50)	bones	(?)	Early Dynastic	138/141

a) "the remains of a sacrifical ox (without head)"

Naga ed Dêr

A total ca. 112 graves of First and Second Dynasty date were reported from cemeteries 1500(/1600) and 3000 at Naga ed Dêr (Reisner 1908:139-142).

Naga ed Dêr

Grave Number	Human	Offering	Species	Date	Reisner 1908
N1572	1	bones	calf(?)	Dynasty 2	54/140
N1582		bones	kid(?)	Dynasty 1	16/140
N1605		skeleton ^a	calf(?)	Dynasty 2	55/140/Plate 35b
N3016		leg, backbone, & bones	kid(?)	Dynasty 1?b	70/142
N3022	old female	bones	kid(?)	Dynasty 2	78-79/142
N3053		ribs, leg, & backbone	kid(?)	Dynasty 2	80-81/142

a) This is an entire animal. b) Date according to Petric 1913:Plate LXVII - SD 81.

¹⁰Hendrickx's suggested dating of these groups (and their subdivisions), based on his relative chronology, differs from that proposed by Kroeper & Wildung (see Hendrickx 1996:66, note 25).

MAADI-BUTO CULTURE

Heliopolis

A total of ca. 48 human graves were reported from the excavated portion of this cemetery. They are considered contemporary with the second phase of the cemetery at Wadi Digla, ca. Naqada II(a?)-b.

Heliopolis

Grave Number	Human	Offering	Species	Debono & Mortensen 1988
35	female	bones	small animal	16
48	male(?)	bones	(?)	18
56	young female(?)	sternum	(?)	18

Wadi Digla

A combined total of ca. 471 human graves were reported from the excavated portions of this cemetery. The following graves have been attributed to Wadi Digla Phase II, contemporary with the excavated portion of the cemetery at Heliopolis (Rizkana & Seeher 1990:93), ca. Naqada II(a?)-b.

Wadi Digla

Grave Number	Human	Offering	Species	Rizkana & Seeher 1990
WD2		4 bones	(?)	30
WD40	male?	bones	(?)	34
WD53	male	leg bones"	newborn pig	35

a) These bones have been identified as a humerus, ulna, and metacarpus.

A-GROUP

Shellal

No food (meat) offerings were reported from any of the graves in the section of Cemetery 7 at Shellal among which the animal burials were scattered (Graves 201-268). A total of ca. 66 later A-Group graves (Graves 101-108, 149, and 301-361) were also reported in other sections of this cemetery (ASN I 1910a: 19ff). These graves can be dated to Naqada IId-IIIb — "early Classic"-early Terminal A-Group (H.S. Smith 1991:98). Only one contained a food offering.

Shellal: Cemetery 7

Grave	I			
Number	Human	Offering	Species	ASN I 1910a
107	(?) adult	fragments	goat	21

Khor Bahan

A total of ca. 61 Early A-Group graves¹¹ were reported from Cemetery 17 at Khor Bahan. Species identification was rarely offered for the faunal remains of food offerings; generally they were termed "bones of a sacrificed animal".

Khor Bahan: Cemetery 17

Grave Number	Human	Offering	Species	ASN I 1910a
84		bones	(?)	137
10%		bones	(?)	117
416		bones	(?)	129
49/50		bones	kid(?)	117-120
56	young adult male	leg-bones	(?)	120-121
57		bones	kid(?)	121
76		bones	(?)	133
82		bones	(?)	124-125

a) Grave 8 contained the burial of a dog superimposed upon an earlier disturbed human burial that had been accompanied by a meat offering. b) These are deposits of debris from unidentified plundered graves.

¹¹ Not including animal burials.

Appendix E

Cemetery Maps

INDEPENDENT ANIMAL BURIALS

In the following Tables, an attempt has been made to account for all graves appearing on the published cemetery maps. Maps are provided here for only those cemeteries where the independent animal burial(s) appear(s) on the published map.

Badarian Culture

The one animal burial in this cemetery is at best only possibly an independent burial. As the grave does not appear on the published cemetery map, no map for the cemetery is provided here. This analysis is included solely as an explanation for the grave totals listed in Appendix A.

Mostagedda: Cemetery 2200/3500

Mostagedda	total]		on	Designated
2200/3500	Number	Register	Text	Мар	Culture/Date
graves & loci	2	24	24	2	Tasian
	89	63 ^b	70°	794	Badarian
	20	7°	17°	90	Fifth Dynasty
	17	no	17 ^f	(?)	Sixth Dynasty
	(?) s			148	(?)
human graves	85 ^h			74h	Tasian/Badarian
animal graves	1(?)	no	1(?)	no	Badarian

a) Two 3500-series graves were identified as Tasian (Brunton 1937:7, Plate VII). b) Twenty-eight 2200-series and thirty-five 3500-series locus numbers (total 63) are listed in the "Badarian Graves and Town Groups" register (Brunton 1937:Plates IX-X). c) Twenty of the 2200-series and twenty-four of the 3500-series registered Badarian loci (total 44) are described in the text; an additional fifteen 2200-series unregistered loci (including 2 numbered graves) and eleven 3500-series unregistered loci (including 1 numbered grave and 1 animal grave) are also described in the text (Brunton 1937:40-43). d) Twenty-seven of the 2200-series, all thirty-five of the 3500-series registered Badarian loci (total registered: 62) and the two 2200-series and the one 3500-series numbered unregistered Badarian graves (total unregistered: 3) appear on the cemetery map (Brunton 1937:Plate IV). It may be safe to assume that the 7 oval generically numbered 2200-series graves appearing on the map are 7 (out of the 13) unregistered (presumably generically numbered 2200) Badarian graves mentioned in the text; a riskier assumption is that the 6 rectangular graves numbered in this way are the other 6 unregistered (presumably generically numbered 2200) Badarian graves mentioned in the text. For the purposes of this Table, these graves are considered as such (total 13). One 2200-series

locus number is illegible on the map; it is here assumed to be the one 2200-series registered Badarian grave that cannot be located on the map. Ten 3500-series generically numbered (numbered 3500) unregistered graves (including the animal burial) do not appear on the map (Brunton 1937:Plate IV). Four 2200-series and three 3500-series graves (total 7) are listed in the "Fifth Dynasty Tombs" register (Brunton 1937:Plate XLV). Four of these (three 2200-series, one 3500-series) are described in the text; an additional thirteen 2200/3500-series unregistered (including at least 2 numbered graves) Fifth Dynasty graves are also mentioned in the text (Brunton 1937:97). The 2 numbered unregistered graves and the 7 registered graves appear on the cemetery map. (Brunton 1937:98-99). (Brunton 1937:97). (Brunton 1937:98-99). (Brunton 1937:97). (Brunton 1937:97).

Badari: Cemetery 5100

Badari 5100	total Number	Register	Text	on Map	Designated Culture
graves & loci	61	614	50	614	Badarian
human graves	54 ^b			54	Badarian
animal graves	1	1	1	1	Badarian

a) Sixty-one 5100-series Badarian locus numbers (including 1 animal grave) are listed in the "Badarian Graves and Town Groups" register (Brunton & Caton-Thompson 1928:Plates V-VI); all of them also appear on the cemetery map (Brunton & Caton-Thompson 1928:Plate IV). b) Six of the 61 loci were probably not graves.

Badari: Cemetery 5300/5400

Badari 5300/5400	total Number	Register	Text	on Map	Designated Culture
graves & loci	109 1	109 ^a no	82 ^b no	82 ^c 1 ^d	Badarian (?)
human graves	93°			76 ^f	Badarian
animal graves	4	4	4	4	Badarian

a) Fifty-four 5300-series and fifty-five 5400-series locus numbers (total 109: including 4 animal graves) are listed in the "Badarian Graves and Town Groups" register (Brunton & Caton-Thompson 1928:Plates VI-VII). One 5400-series non-Badarian (possibly Pan Grave) locus number listed in the Badarian register (see also Brunton & Caton-Thompson 1928:13) does not appear on the cemetery map and is not included in this count. b) Of the 109 Badarian loci listed in the register, forty-eight 5300-series and thirty-four 5400-series loci (including the 4 animal graves: total 82) are described in the text (Brunton & Caton-Thompson 1928:10-13). c) Of the 109 Badarian loci listed in the register, forty-five 5300-series and thirty-seven 5400-series Badarian loci (total 82) appear on the cemetery map (Brunton & Caton-Thompson 1928:Plate IV). Nine 5300-series and eighteen 5400-series registered loci (total 27) do not appear on the cemetery map. d) One numbered locus (5404) appearing on the cemetery map is not listed in the register or mentioned in the text. e) Twelve of the 109 Badarian loci were probably not graves.

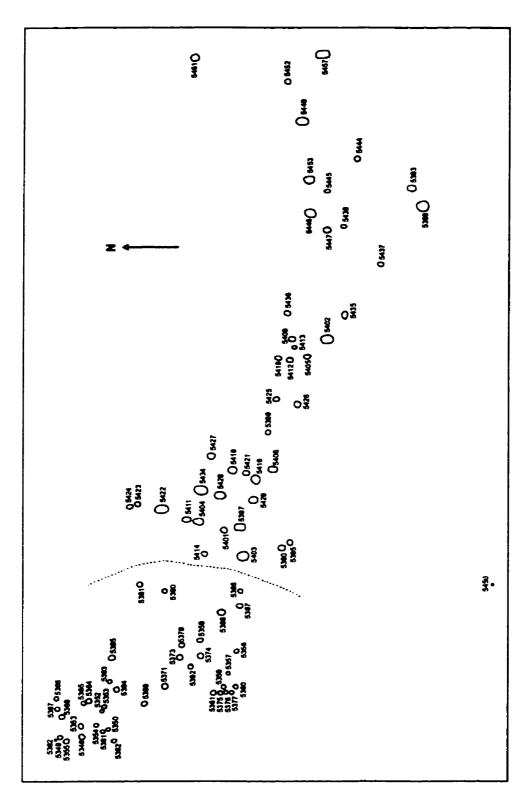


Figure E.2: Badari: Cemetery 5300/5400

Maadi-Buto Culture

Heliopolis

Cemetery Heliopolis	total Number	Grave Catalog	on Map	Designated Culture
human graves	48	48	45	Maadi (variant)
animal graves	11+1(?)	11+1(?)	11+1(?)	Maadi (variant)
cache-pits	86	8	8	Maadi (variant)
Totals	68	68°	65 ^d	

a) One disturbed grave contained only fragments of animal bones and may also have originally been an animal burial.
b) 7 of the 68 loci are stated to have been cache-pits not burials. One shallow locus (I 51), in addition to the designate 7, also only contained "the lower part of a pot" (Debono & Mortensen 1988:18). c) Debono & Mortensen state that 63 "graves" were excavated; 45 human, 11 animal, 7 pottery-groups (1988:38). 68 loci are described in the grave catalog (Debono & Mortensen 1988:10-22). Additional burials were excavated by the Fuad I Desert Institute, but remain unpublished (Rizkana & Seeher 1990:97, note 93). d) 65 loci appear on the cemetery map (Debono & Mortensen 1988:Plan 1).

Maadi

Cemetery	total	Grave	on	Designated
Maadi	Number	Catalog	Мар	Culture
human graves	77	77	70	Maadi (variant)
animal graves	1	1	1	Maadi (variant)
cache-pits	_	_	_	
Totals	78	78 ⁴	716	

a) Rizkana & Seeher state that a total of 76 graves (plus the 1 animal grave: total 77) were excavated (1990:15), but 78 graves (including the 1 animal burial) are described in the grave catalog. b) The original location of 7 graves is unknown (Rizkana & Seeher 1990:18-22, maps 16-17:Figures 2 & 3).

Wadi Digla

Cemetery	total	Grave	on	Designated
Wadi Digla	Number	Catalog	Мар	Culture
human graves	471	4714	468	Maadi (variant)
animal graves	14	14	14	Maadi (variant)
cache-pits	30	(?)6	305	Maadi (variant)
Totals	515		512°	

a) Rizkana & Seeher state that a total of 471 graves (plus the 14 animal graves: total 485) were excavated (1990:29). 485 graves are described in the text (Rizkana & Seeher 1990:30-63). b) The cache-pits as units are not described in the text; the individual vessels found in them are (see Rizkana & Seeher 1990:63-64); 30 appear on the cemetery map (Rizkana & Seeher 1990:Figures 11 & 12). c) Graves 167a and 167b were located outside the excavation area. There was no documentation for grave 197a, it was located somewhere east of grave 197 (Rizkana & Seeher 1990:44/45).

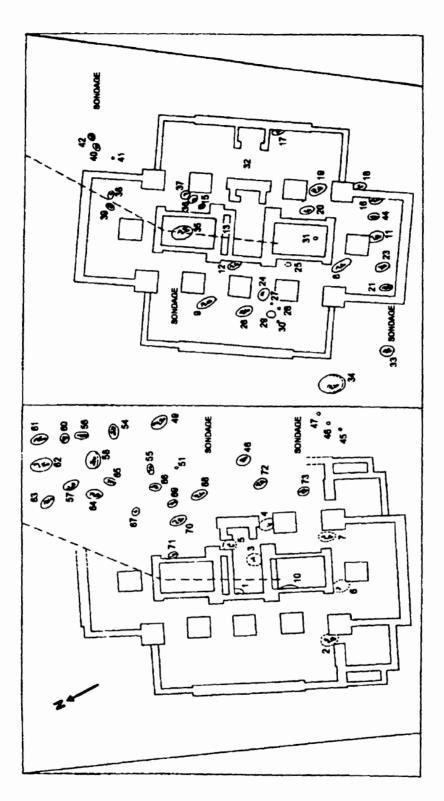


Figure E.3: Heliopolis Cemetery

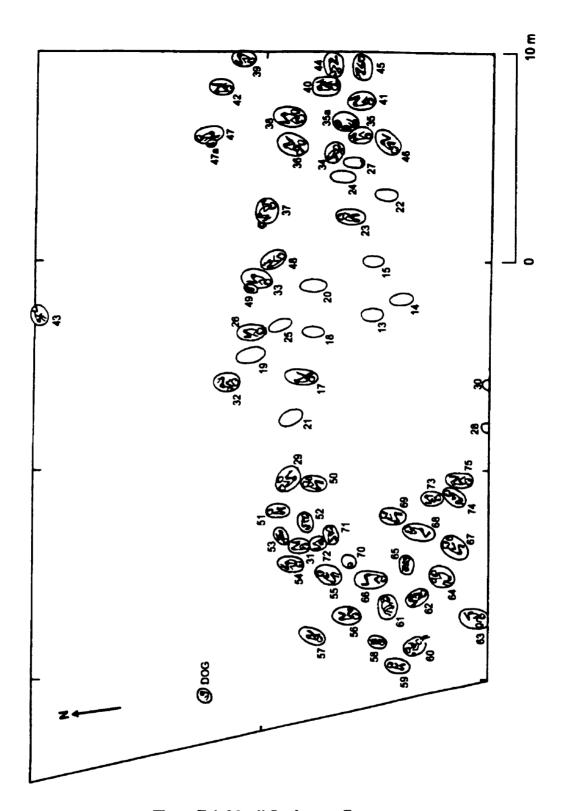


Figure E.4: Maadi Settlement Cemetery

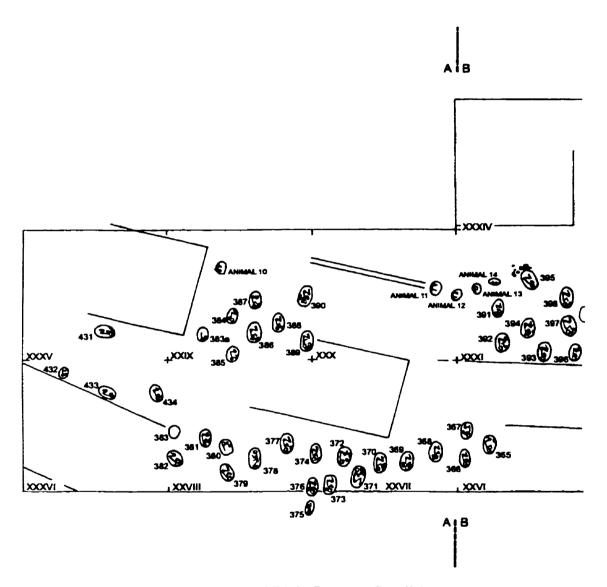


Figure E.5: Wadi Digla Cemetery Detail 1

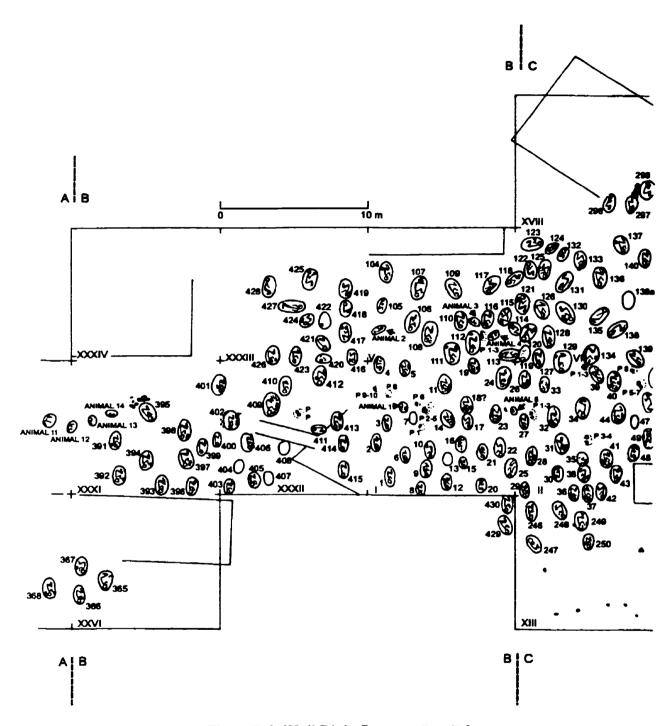


Figure E.6: Wadi Digla Cemetery Detail 2

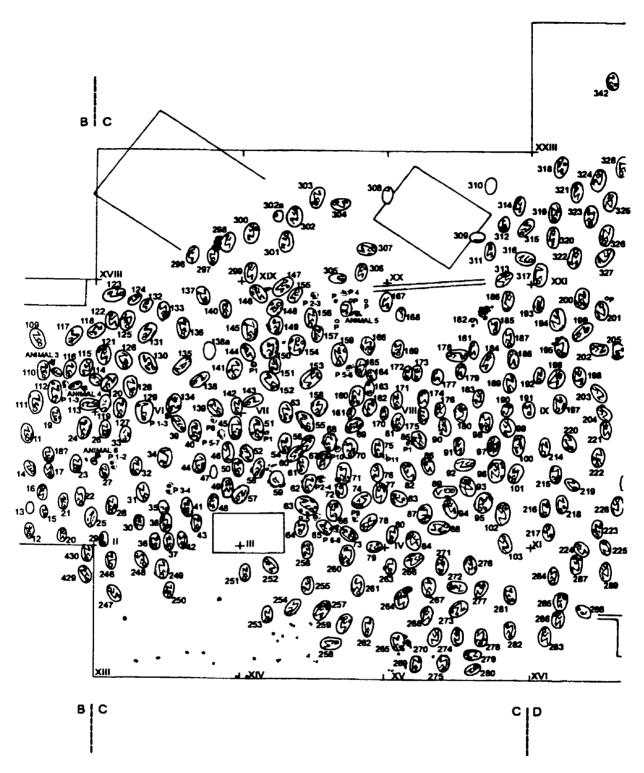


Figure E.7: Wadi Digla Cemetery Detail 3

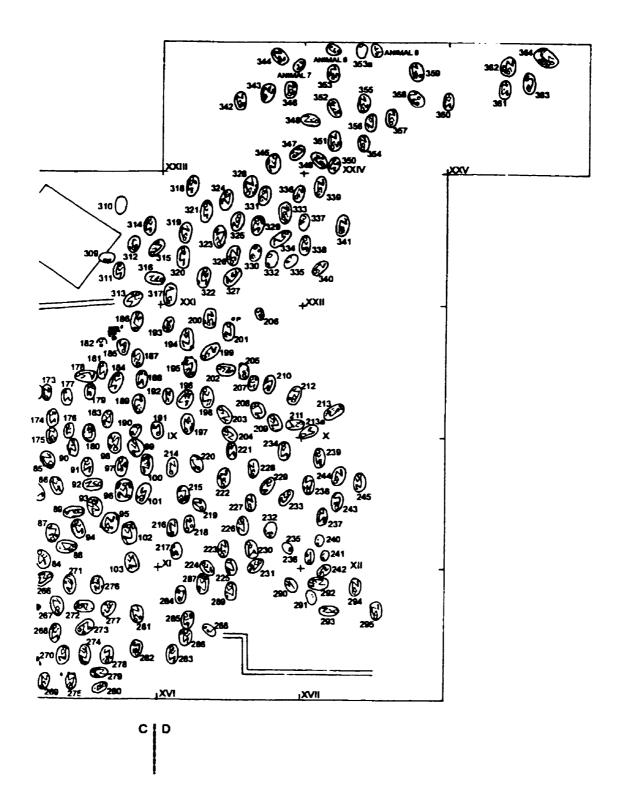


Figure E.8: Wadi Digla Cemetery Detail 4

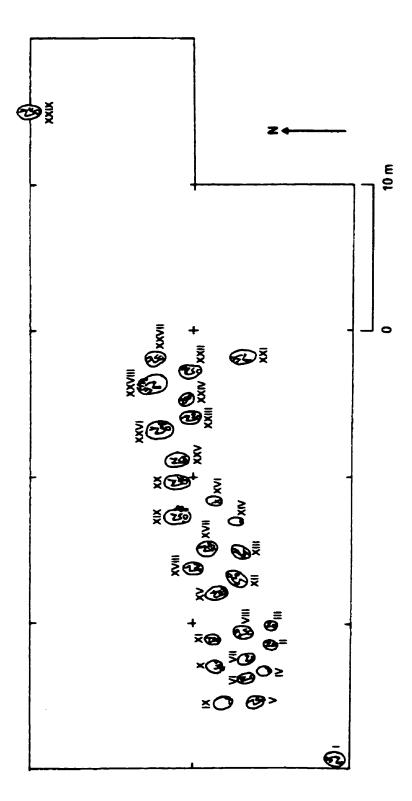


Figure E.9: Wadi Digla "Eastern Group"

A-Group

Shellal: Cemetery 7A (Graves 201-268)1

Cemetery Shellal 7A	Grave Catalog	on Map	Designated Culture
graves & loci	64 ^a no	63 ^b	Early A-Group (?)
human graves	51ª	50	Early A-Group
animal graves	10	10	Early A-Group

a) 62 locus numbers are described in the text; 1 grave number (224) is used for both an animal grave and the later human grave that cut it; 1 grave number (202) is used for both an original and superimposed grave (both human); for the purposes of this Table, these graves are counted separately (total 64 loci). (ASN I 1910a:33-42) b) Although the 2 grave numbers used to designate 4 graves appear only once (each) on the map, for the purposes of this Table, they are counted twice. 1 grave (240) described in the grave catalog does not appear on the cemetery map (ASN I 1910b:Plan X). c) 1 grave number (244) not described in the grave catalog appears on the map; 1 grave number (242) appears twice on the map, but only once in the grave catalog; another grave number (221) also appears twice (separately designated "a" and "b") on the map, but only once (not identified as either "a" or "b", but identifiable, based on the description, as "a") in the grave catalog. d) 3 of the loci (242, 243, 265) described in the grave catalog are not graves.

Khor Bahan: Cemetery 17A

Cemetery Bahan 17A	Grave Catalog	on Map	Designated Culture
graves & loci	90° no	85 ^b 6 ^c	Early A-Group
human graves	61 ^d	60°	Early A-Group
animal graves	15	15	Early A-Group

a) 1 grave number (8) is used for both an animal grave and the earlier human grave on which it was superimposed; 1 grave number (7) is used for both an original and superimposed grave (both human); for the purposes of this Table, these graves are counted separately. b) Although the 2 grave numbers used to designate 4 graves appear only once (each) on the map, for the purposes of this Table, they are counted twice. Although 1 locus number (63) appears twice in the grave catalog (as two separate graves), based on the grave list in Index II (ASN I 1910a:363), one of them is identifiable as grave 62. 2 locus numbers (34, 61) appear in the grave catalog, but not on the map. The 3 loci associated with grave 66 (42, 52, 53) do not appear on the map (ASN I 1910b:Plan XIV). (1) In the grave catalog, 1 locus number (75) is stated not to have been used, but it appears on the cemetery map. 1 locus number (79) appears twice on the map, but only once in the grave catalog. 4 additional locus numbers (16, 72, 85, 96) appearing on the map do not appear in the grave catalog. 3 loci on the map are not numbered (and not included in this count). d) Several locus numbers listed in the grave catalog are associated with specific graves (locus/grave: 47/46, 49/50, 73/60, 92/6(although locus 92 is said to be associated with grave 62 (ASN I 1910a:127) which is not in its immediate vicinity, it appears to have actually been associated with grave 6 (see ASN I 1910a:116) to which it is adjacent), 80/81, 40/64, 42.52.53/66) (ASN I 1910a:114-139); in some cases the nature of the association is not stated and in two cases the locus and grave (47/46, 73/60) are not adjacent to each other on the map and thus appear to represent separate graves (this is particularly true for locus 47, described as just south of grave 46, but on the map it appears quite a distance to the northwest); for the purposes of this Table, they are not counted as separate graves. 1 additional locus (31) is not a grave; 4 additional loci (10, 34, 39, 41) may not be graves. (c) Grave 61 does not appear on the map.

¹In ASN I 1910a:33, this patch of graves is designated "201-261", but the grave numbers on the map as well as in the grave catalog run up to and include 268.

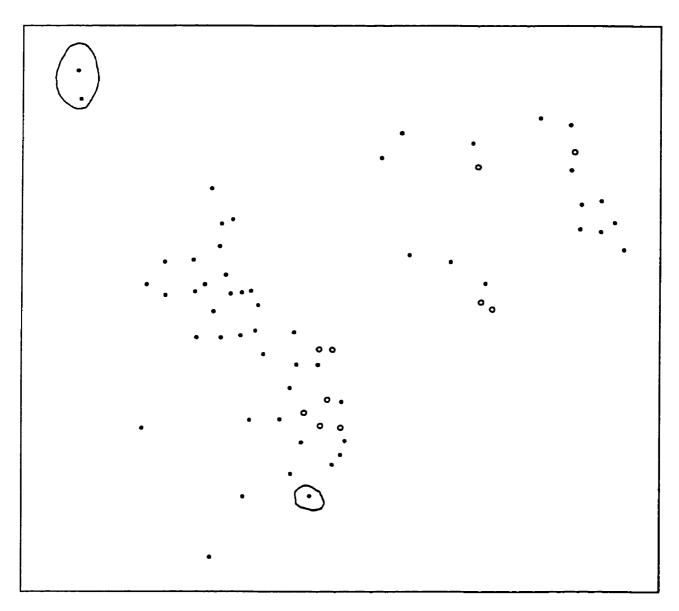


Figure E.10: Shellal: Cemetery 7: Grave Distribution

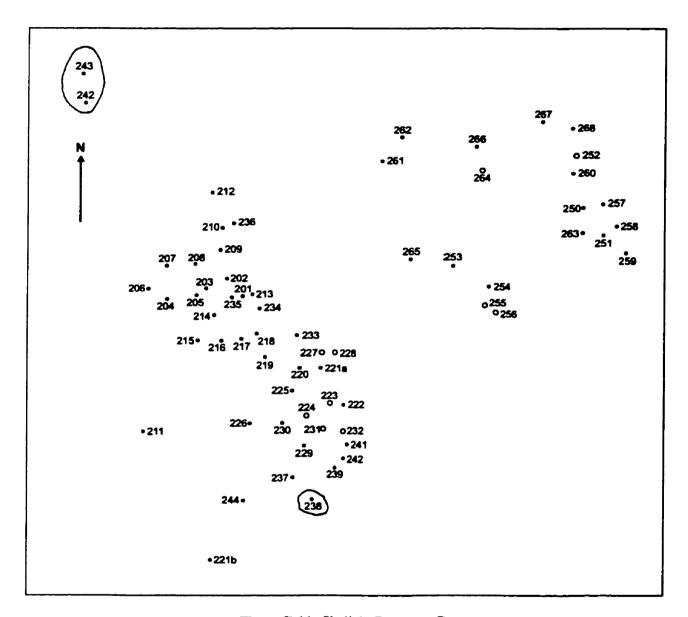


Figure E.11: Shellal: Cemetery 7

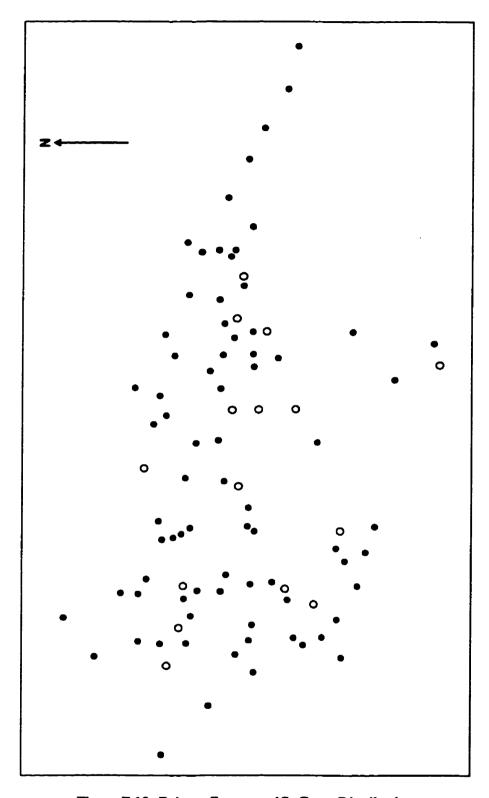


Figure E.12: Bahan: Cemetery 17: Grave Distribution

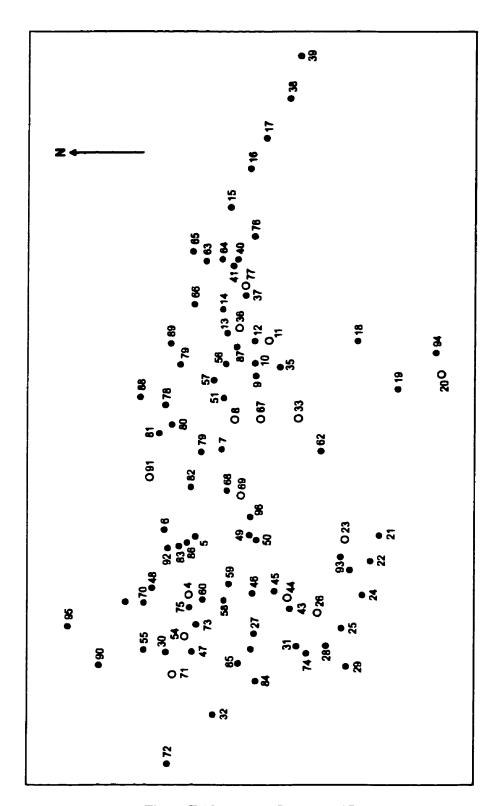


Figure E.13: Bahan: Cemetery 17

Cemetery	Grave	on	Designated
Risqalla 30	Catalog	Мар	Culture/Date
graves & loci	114	116	Early A-Group
	3 ^c	no	(?) A-Group
	8	8	Early C-Group
	19	18	C-Group
	10	10	New Kingdom
	70	ാർ	(2)

human graves animal graves 8

Early A-Group

Risqalla (Wadi Qamar): Cemetery 30

Meris: Cemetery 41/100 (Graves 101-123)

Cemetery Meris 41B	Grave Catalog	on Map	Designated Culture
graves	23	204	A-Group
human graves	21	19	A-Group
animal graves	2	1	A-Group

a) In several cases on the published cemetery map, the accompanying grave numbers are not fully legible. The partial numbers are here assumed to be: 105, 106, 107, 111, 121; this leaves graves 101 (animal), 122, and 123 unaccounted for on the map (ASN I 1910b:Plan XXV:41B).

Meris: Cemetery 41/200 (Graves 201-243)

Cemetery Meris 41L	Grave Catalog	on Map	Designated Culture
graves	44ª	36 ^b	Early A-Group
human graves	41	35	Early A-Group
animal graves	3	1	Early A-Group

a) 1 grave number (211) was used for 2 adjoining graves (ASN I 1910a:211-215); for the purposes of this Table, it is counted twice. b) The grave number used for 2 adjoining graves appears only once on the cemetery map (ASN I 1910b:Plan XXV:41L); for the purposes of this Table, it is counted twice. 6 human graves and 2 animal graves do not appear on the map.

a) One locus number (36) was assigned to both a grave and an overlying pile of debris from another (unidentified) plundered grave; for the purposes of this Table, it is counted twice. b) Although the locus number used to designate both a grave and the overlying pile of debris appears only once on the cemetery map, for the purposes of this Table, it is counted twice. c) These 3 graves were originally designated "Early Dynastic" (ASN I 1910a:194). d) 2 numbered loci (51, 52) appearing on the cemetery map (ASN I 1910b:Plan XX) are not mentioned in the grave catalog. e) 2 loci (36, 40) were not graves (see ASN I 1910a:191-194).

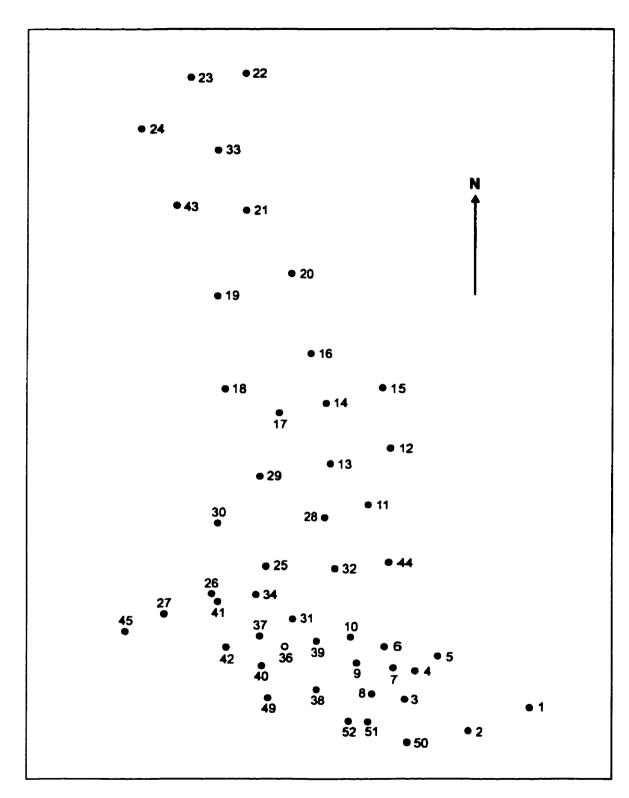
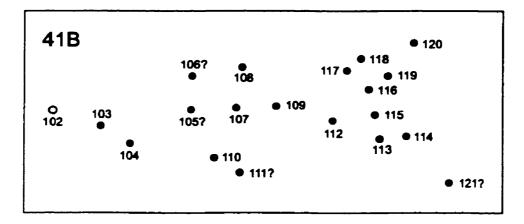


Figure E.14: Risqalla: Cemetery 30



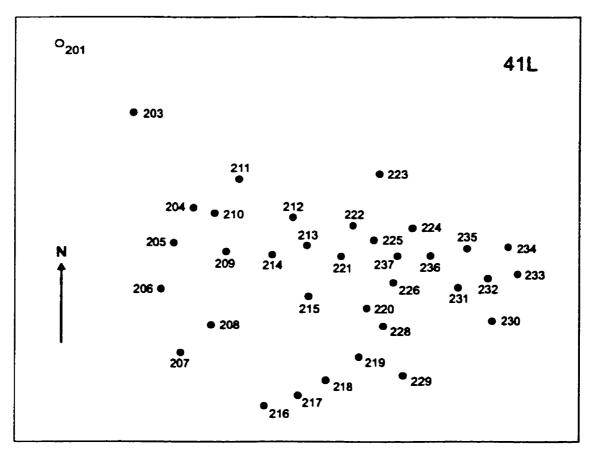


Figure E.15: Meris: Cemetery 41

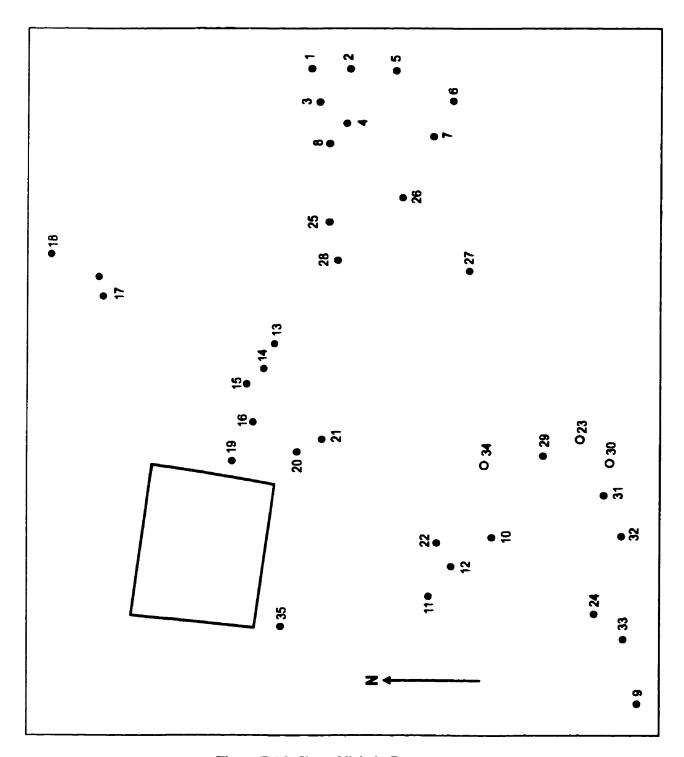


Figure E.16: Shem Nishei: Cemetery 44



Figure E.17: Gerf Husein South: Cemetery 79

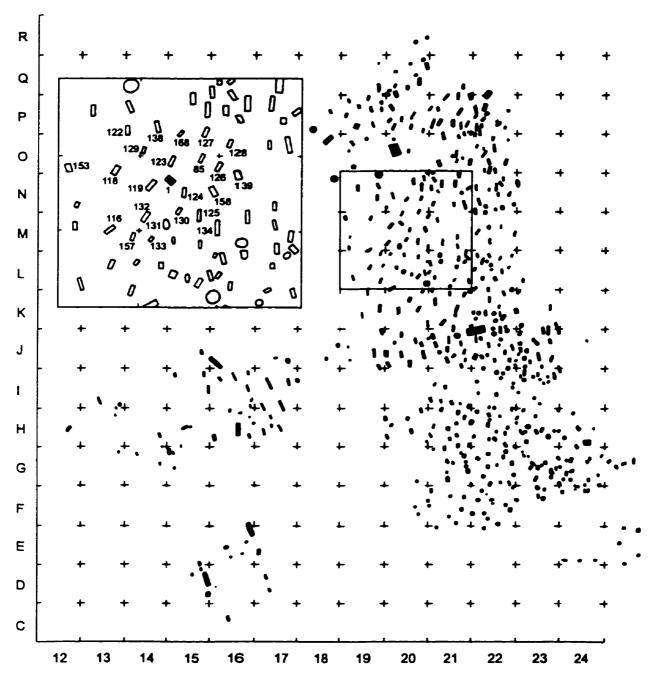


Figure E.18: Kubanieh South

Cemetery	Grave	on	Designated
Shem Nishei 44	Catalog	Map	Culture
graves & loci	34 ^a	34	A-Group
	no	1 ^b	(?)
human graves	30°	30	A-Group
animal graves	34	3	A-Group

a) 33 loci are listed in the grave catalog in ASN I 1910a:256-258; I additional grave is listed in the grave catalog in ASN I 1910c:167. b) 1 numbered locus (33) and 1 unnumbered locus appearing on the map (ASN I 1910b:Plan XXVIII) are not mentioned in the grave catalog; the unnumbered locus is not included in this count. c) 1 of the 33 loci listed in ASN I 1910a is not a grave. d) Only 2 of the 3 graves identified as containing animals in ASN I 1910c:167 appear in the grave catalog in ASN I 1910a:258 (there listed as empty).

Sources for maps not analyzed: Gerf Husein South, Figure E.17 (ASN II 1912b:Plan XIV); Kubanieh South, Figure E.18 (Junker 1919).

Classic/Terminal A-Group Elite Cemeteries

Naga Wadi: Cemetery 142

Cemetery Naga Wadi 142	Grave Catalog	on Map	Designated Culture
graves & loci	16	15 31"	A-Group (?)
human graves	11	11	A-Group
animal graves	5	4	A-Group

a) 30 unnumbered loci appear on the cemetery map (ASN IV 1927:Plan XII). 1 numbered locus (10) appearing on the cemetery map is not listed in the grave catalog (ASN IV 1927:213-217). H.S. Smith suggests that some of the ca. 20 round and oval plundered graves in this cemetery may date to the Early A-Group period (1991:107-108).

Qustul: Cemetery L

Cemetery	Finds	on	Designated
Qustul L	Register	Мар	Culture
graves & loci	334	31 ^b	A-Group
human graves	25	23	A-Group
animal graves	7	7	A-Group
empty animal(?) grave	1	1	A-Group

a) Finds Register (OINE III 1986:198-388). b) Cemetery map (OINE III 1986:Plate 4).

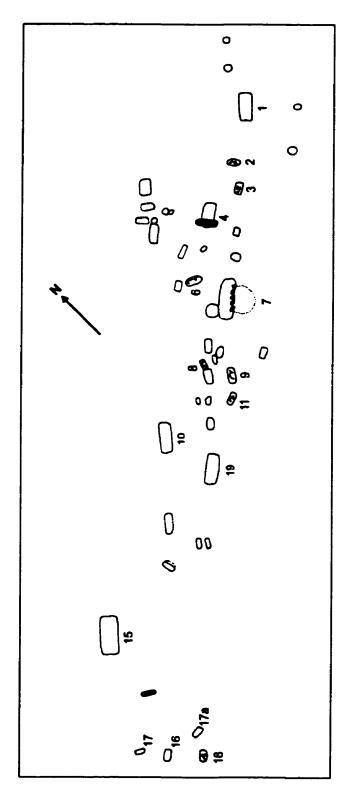


Figure E.19: Naga Wadi: Cemetery 142

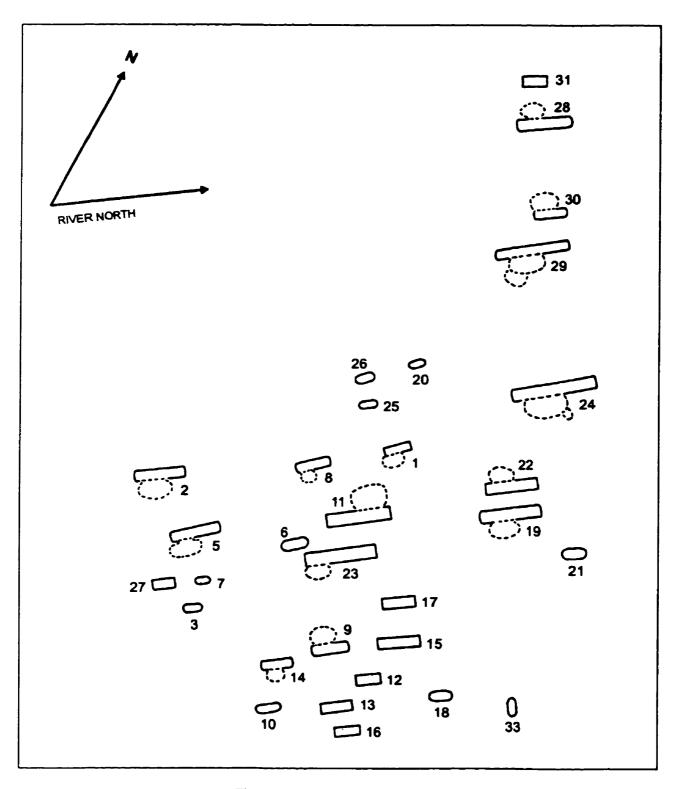


Figure E.20: Qustul: Cemetery L

ANIMALS IN HUMAN GRAVES

In the following Tables, an attempt has been made to account for all graves appearing on the published cemetery maps; graves with animals are a subset of the total number of human graves. Maps of cemeteries with only one instance of a human burial accompanied by an animal are not reproduced here.

Badarian Culture

Due to the dispersed distribution of these graves, the cemetery map is not reproduced here. This analysis is included solely as an explanation for the grave totals listed in Appendix B.

Mostagedda: Cemetery 300/400²

Mostagedda 300/400	totai Number	Register	Text	on Map	Designated Culture
graves & loci	23ª	234	214	216	Tasian
	87	53 ^c	73 ^d	86°	Badarian
	16	<i>9f</i>	48	15 ^k	Naqada
	3	2 ⁱ	2^i	3 ⁱ	Fourth Dynasty
	7			7 j	(?)
graves	108k			106	Tasian/Badarian
graves w/ animals	3			3	Badarian

a) Twenty-four 400-series loci are listed in the "Tasian Graves and Town Groups" register (Brunton 1937:Plate VII). Twenty-three of these 400-series loci are mentioned in the text (Brunton 1937:5-6). Four of these are superimposed graves designated by the same grave number subdivided alphabetically (all four cases represent 2 graves each); for the purposes of this Table, these are counted as separate graves. 2 of these subdivided graves are half Tasian/half Badarian. 1 of the Badarian half-graves is listed in the Tasian register; 1 of the Badarian half-graves is unregistered; these 2 Badarian halves are included in the Badarian grave counts. b) Although the superimposed graves designated by single grave numbers subdivided alphabetically appear only once each on the map, for the purposes of this Table, they have been counted as separate graves (Brunton 1937:Plate III). (1) Nine 300-series, forty-two 400-series, and one 5200-series loci are listed in the "Badarian Graves and Town Groups" register (Brunton 1937:Plates VII, VIII, X); plus the one Badarian grave listed in the Tasian register: combined total 53. Four of these are superimposed graves designated by the same grave number subdivided alphabetically (3 cases represent 2 graves each, 1 case represents 3 graves); for the purposes of this Table, these are counted as separate graves. d) Seven of the 300-series, thirty-one of the 400-series, and the one 5200-series registered loci (total 39) are mentioned in the text; an additional five 300-series generically numbered (numbered 300) and three 300-series numbered unregistered graves (total 300-series unregistered: 8) and ten 400-series generically numbered (numbered 400) and sixteen 400-series numbered unregistered graves (total 400-series unregistered: 26) are also mentioned in the text (Brunton 1937:33-37). e) Although the superimposed graves designated by single grave numbers subdivided alphabetically appear only once each on the map, for the purposes of this Table, they have been counted as separate graves. All nine 300-series, all forty-two 400-series, and the one 5200-series registered Badarian loci (total 52) appear on the cemetery map; all five 300-series generically numbered (numbered 300) and all ten 400-series generically numbered (numbered 400) unregistered Badarian graves (total 15) appear on the map. All three 300-series and all sixteen 400-series (total 19) numbered unregistered Badarian graves appear on the map. One 300-series, six 400-series, and two 5200-series loci (total 9) are listed in the "Predynastic Graves and Town

²Area numbers 300 and 400 were used for several different localities, not all of which appear of the regional map (Brunton 1937:4/22). All appearing on the regional map (Brunton 1937:Plate I) are in close proximity to the modern village of Mostagedda. Cemetery 300/400 (including Area 400A/5200 – Area 5200 was apparently equivalent to Area 400A (see Brunton 1937:79) – and Area 400B) (Brunton 1937:22/Plate III) lay on two adjoining spurs immediately behind the village of Mostagedda. Several 5200-series grave numbers also appear in this cemetery.

Groups" register (Brunton 1937:Plate XXXIX, XXXI); 4 of these loci were not graves. 8) The one 300-series and one of the 400-series registered graves and an additional two 400-series (1 numbered and 1 generically numbered (numbered 400)) unregistered predynastic graves are mentioned in the text (Brunton 1937:69/79). h) The one 300-series numbered predynastic grave does not appear on the cemetery map (located on next spur to the north). In addition to the six 400-series and two 5200-series registered loci and the two 400-series (numbered and generically numbered) loci mentioned above, 5 unregistered numbered graves appear on the map in an area of the cemetery where the graves are attributed to the Predynastic period (Brunton 1937:79). These have been included in the predynastic count. Three 400-series generically numbered (numbered 400) and one unnumbered (no number) loci clearly marked as predynastic appear on the cemetery map; as they are marked as not being graves these 4 loci have not been included in the count. 1) Two 300-series graves are listed in the "Fourth Dynasty Tombs" register. One of the 300-series registered and one 300-series unregistered Fourth Dynasty graves are mentioned in the text (Brunton 1937:97/Plate XLV). These 3 graves appear on the cemetery map (see Brunton 1937:78). 1) Four 400-series numbered unregistered graves appearing on the map are probably Second Intermediate Period. Two 300-series numbered unregistered graves appearing on the map are probably Badarian. One grave numbers are considered unidentified (total 7). 4) Two of the Tasian loci are not graves.

Nagada Culture

Matmar: Cemetery 2600/2700

Matmar 2600/2700	total Number	Register	Text	on Map	Designated Culture
graves	205	1224	1396	118°	Naqada (late I-IIcd)
graves w/ animals	7	7	7	6 ^d	Naqada (late I-IIcd)

a) Ninety-seven 2600-series and twenty-six 2700-series graves are listed in the "Predynastic Graves" register, including one 2700-series grave that may not be Naqada culture. This grave does not appear on the map and is not included in this count (total 122) (Brunton 1948:Plates VIII-IX). b) Forty-four of the 2600-series and twelve of the 2700-series (not including the grave that may not be Naqada culture) registered graves (total 56) and an additional 83 unregistered (presumably generically numbered either 2600 or 2700) graves are mentioned in the text (combined total 139) (Brunton 1948:12-14). c) All ninety-seven 2600-series and twenty-one of the 2700-series registered graves appear on the cemetery map (total 118). Four of the 2700-series registered graves (including 1 containing an animal) do not appear on the cemetery map. No generically numbered (either 2600 or 2700) unregistered graves appear on the cemetery map (Brunton 1948:Plate XIX). d) Grave 2654 does not appear on the cemetery map.

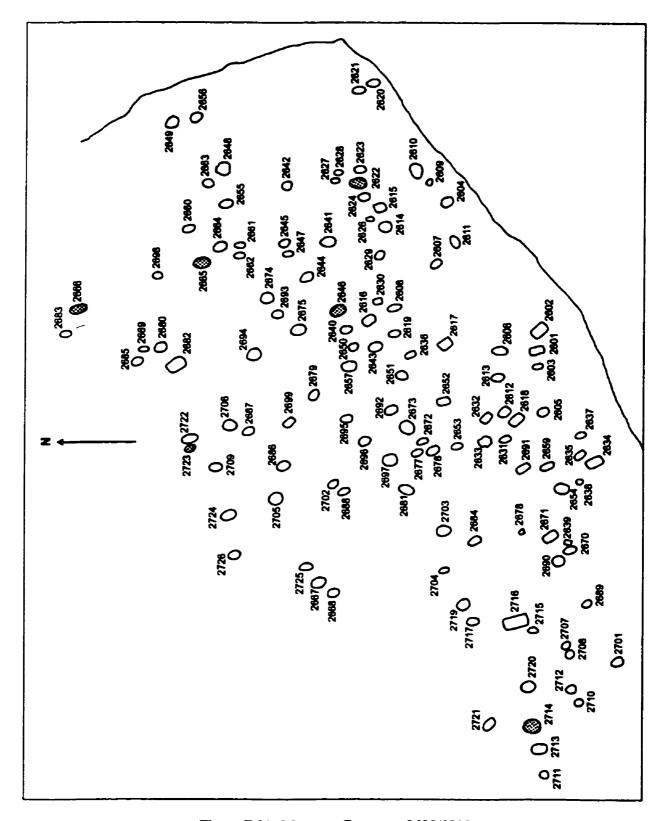


Figure E.21: Matmar: Cemetery 2600/2700