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Eastern desert ware : traces of the inhabitants of the eastern desert in Egypt and Sudan during the 4th-6th centuries CE

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APPENDIX ONE

Initial Research Questions and Preliminary Answers by Selected Experts

Questions

1- Is the name 'Eastern Desert Dwellers' preferable over 'Blemmyes', 'Megabari' and 'Trogodytes', or vice versa, and should the name 'Blemmyes' be considered a collective word, more like 'Belgian', 'Arab' or even 'gypsy'?

2- What was the livelihood of the dwellers of the Eastern Desert in the 4th-6th centuries CE and how does their lifestyle compare to that of the present-day nomads?

3- What artefacts other than pottery can be attributed with any certainty to the dwellers of the Eastern Desert in the 4th-6th centuries CE?

4- What archaeological finds would be expected when reading the historical sources concerning the southeast of Egypt and the northeast of Sudan in the 4th-6th centuries CE and what references would be expected in those sources when looking at the actual finds?

5- How can the geographical distribution of the Eastern Desert Ware be explained and how can its remarkable archaeological distribution, always among a much larger selection of other sherds?

6- Where was the pottery now known as Eastern Desert Ware produced, close to the Nile or in the desert proper, in one or more specific areas or where ever the need occurred and was this done by men or women, in specialized work-shops or as household production?

7- What were the routes, annual or over another period of time, of the nomads through the Eastern Desert in the 4th-6th centuries CE and how do these compare to those of the present-day dwellers of the Eastern Desert?

8- Would the dwellers of the Eastern Desert in the 4th-6th centuries CE have considered themselves an ethnic unity as suggested by the similarities of Eastern Desert Ware found in far removed regions?

9- What can be the reason that so few precursors of Eastern Desert Ware have been found and why did its production so suddenly stop?

10- Can firm results, like the actual geographical source or the contents of the vessel, be expected from the laboratory research of the Eastern Desert Ware, or will this just provide additional attributes by which individual sherds can be grouped?

11- Are the current inhabitants of the Eastern Desert to be considered the ethnic descendants or the cultural heirs of their ancient counterparts, in other words, can the present-day nomadic group that calls itself 'Beja' be identified with the 'Blemmyes' which are mentioned in the ancient sources?

12- Can all the graves which resemble the graves containing Eastern Desert Ware, like those in Wadi

Qitna, be attributed to the 'Eastern Desert Dwellers' and are the sherds found in those graves from re-used utilitarian vessels or representatives of a separate corpus?

13- What was the true relation of the Eastern Desert Dwellers with their neighbours, ranging from assisting with the harvest in the Nile Valley to raiding early Christian monasteries, and how were internal conflicts solved?

14- Can the desert settlements described as '*Fluchtdörfer*' by Ricke (1967) and as 'enigmatic settlements' by Sidebotham, Barnard and Pyke (2002) be attributed to Eastern Desert Dwellers as suggested by the authors?

First respondent

Question 1-Response 1: I think that 'Eastern Desert Dwellers' is preferable when we mean the people bearing the 'Eastern Desert Culture', which we identified mainly on the basis of pottery. Blemmyes, Megabarri, Trog(l)odytes are labels given by Graeco-Roman and Byzantine writers. These names correspond to ancient ethnic groups, and the relationship between ethnic groups and material culture is highly controversial and sometimes not univocal.

Q2-R1: We can imagine more permanent settlements near wells, near mines exploited in ancient times in the hinterland, and along some tracks, much like the 'Beja towns' mentioned by Arab writers in Early Islamic times. Perhaps, a small part of the population lived permanently in such settlements, but we can imagine that the larger part was dispersed on the territory with herds of camels. Most likely they moved a lot and only left traces in the archaeological record. In their movements they reached the Nile Valley, the Red Sea coast and, more to the South, the Eritrean-Sudanese lowlands. These movements might have been seasonal, linked to the seasonal rains (which are more abundant in the southernmost areas) or to other seasonal events, like the harvesting in the Nile Valley. We cannot exclude the exploitation of other kinds of (seasonal?) resources on the Red Sea coast. I think that a very important moment in the adoption of this kind of livelihood coincided with the introduction of the camel. It favoured the mobility of the inhabitants of the Eastern Desert and also their involvement in brigandage and in the trade, i.e. in the exchange of products of the Eastern Desert or passing through it. Before the introduction of the camel their livelihood could only have been less mobile and was, most likely, based on sheep and goat herding.

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Q3-R1: Some of the tumuli and grave mounds might be ascribed to the Eastern Desert dwellers, but a clear confirmation of this is still lacking.

Q4-R1: We can expect light traces of mobile groups (camps), some cemeteries, and a few more substantial settlements. All these traces can be expected to cluster around ancient tracks, wells, and ancient mines. The archaeological evidence we have seems to fit with the historical sources, perhaps except for the more substantial settlements. This might be due to the fact that large regions of the Eastern Desert have not yet been systematically explored.

Q5-R1: The distribution of the EDW fits well with the general model I proposed in my response to question 2. In some regions, like the Nile Valley and the Red Sea coast, the people using EDW were living close to culturally different groups and this explains the mixture of EDW with different kinds of materials. The people using EDW must have exchanged products with other groups and this might explain the mixture of EDW and other kinds of pottery also in the hinterland.

Q6-R1: I think that, given the availability of suitable clay and fuel for the kiln, EDW was produced in different places according to need. I think we can expect to have very various results of chemical and petrographic analyses of EDW, originating from many different sites, but similar stylistic traits in terms of shape, decoration, and surface treatments.

Q7-R1: The general routes are the ones illustrated in my response to question 2. I do not think that after the introduction of the camel there were big changes in the mobility patterns.

Q8-R1: I would like to reply with another question: Do we think that the pottery evidence is enough to say that they considered themselves as a unique ethnic group? (I think we need further investigations to say so).

Q9-R1: Perhaps the precursors are somewhere in the Eastern Desert hinterland. But, of course, this is highly hypothetical. In any case, we start to detect EDW when the people producing and using this pottery started to visit the Nile Valley and the Red Sea coast more frequently, perhaps to be involved in the caravan trade or perhaps to expand their political control of the region. This enlargement of their 'action-radius' started in the 3rd century CE as a consequence of the decreasing power of centralized states in the Nile Valley and of the adoption of the camel by the Eastern Desert dwellers.

Q10-R1: I think that chemical and petrographical analyses may help us to reconstruct some, seasonal, movements of these people and identify region(s) where EDW was produced. As stated in my response to question 6, I have the feeling that it was produced in a number of different regions.

Q11-R1: I think that basically they are the descendents of their ancient counterparts, as we have no evidence of a gap in the occupation of the region. Nevertheless, the arrival of small Arab groups cannot be excluded.

Q12-R1: Yes, the graves of that type can be attributed to Eastern Desert dwellers, but they may also have used other types of graves. The comparative analysis of sherds from the graves and from settlements might help us to reply to the second part of the question.

Q13-R1: The written sources mainly stress the aggressive and negative aspects of these relations. Archaeology can balance this. Most likely, these relations were not dissimilar to the ones between residential agro-pastoral groups and pastoral nomads, i.e. changeable, depending also on the political development of the groups involved.

Q14-R1: They might be. Like with the graves (cf. my response to question 12) the settlements can be expected to vary between different areas according to the geographical setting and the period, and season, when they were inhabited.

Second respondent

Q1-R2: Eastern Desert Dwellers is certainly preferable to terms like Blemmye, Trogodyte, and Bega since it assumes no specific ethnic identification. This is particularly important because terms such as Trogodyte, Blemmye, and Bega are themselves collective terms for the same peoples, but whose usage varied chronologically, spatially, and culturally. So, Trogodyte and Blemmye are both attested in Hellenistic texts, the former in Greek geographic and administrative contexts and the latter in Egyptian contexts, so, for example, Megabari could be treated as Trogodytes or Blemmyes depending on the type of text. During the Roman period, however, Blemmye gradually ousted Trogodyte as the standard term for the inhabitants of the eastern deserts in all types of texts. By the same token, however, in Axumite texts the term Bega replaces both terms for the same populations.

Q2-R2: While the peoples of the Eastern Desert may have been related, there is no reason to expect uniformity in the life-ways, particularly in late antiquity. This is concealed to some extent by the fact that the fullest ethnography of the region—Agatharchides' account of the Trogodytes—refers to the inhabitants of the Red Sea hills during the 3rd and 2nd centuries BCE but was copied by later writers well into the Roman period. Late ancient, Axumite, and Arabic references suggest a variety of life-ways including that would include towns, mining settlements, caravaneers, and even large scale stock raising. Hellenistic and Axumite texts refer to Bega having live stock holdings, the latter referring to thousands of cattle. At any particular time the range of life-ways in the desert would be heavily conditioned by the nature of the interaction between the 'Eastern Desert Dwellers' and the inhabitants of the Nile Valley.

Q4-R2: The range of possible types of sites should be wide since would it include those appropriate to the range of life-ways indicated in my reply to question 2. One should also include in this range reused Roman sites

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such as probably the settlements connected with beryl mines (Mons Smaragdus) attested as under Blemmye control in the late 4th and 5th centuries.

Q5-R2: The answer to this question by the first responder seems probable.

Q6-R2: Barring discovery of the actual production site or sites, chemical analysis of the clay, stylistic analysis, and a clearer picture of the ware's distribution would seem our best hope.

Q7-R2: Beyond suggesting a general similarity to later patterns not much can be said at this time. The archaeological surveys of the Eastern Desert road and settlement network during Roman times, among others conducted by the Delaware-Leiden expedition should help for the Eastern Desert of Egypt. For the regions south of Egypt there is no real evidence as yet.

Q8-R2: Only in the most general sense if at all. As already mentioned, Graeco-Roman texts indicate that Trogodyte and Blemmye are collective terms and the same is likely true for Bega. Unfortunately, the component groups are likely to be the most significant for cultural studies and at present the evidence does not allow them or their locations to be identified.

Q9-R2: Given that archaeological exploration of the Eastern Desert has barely begun it is premature to suggest explanations, when it is not yet clear if we have correctly defined the phenomenon to be explained.

Q10-R2: Laboratory analysis would seem the best hope for suggesting possible centres of production.

Q11-R2: It is likely that this is generally true since Medieval Arabic descriptions of the area do not indicate that major ethnic changes took place.

Q12-R2: The first alternative is likely to be true, but one caveat is in order. Until there is more comprehensive documentation of the region, it will not be clear if the ware is indicative of Eastern Desert Dweller material culture in general or is limited to particular areas. The second cannot yet be determined.

Q13-R2: As pointed out there is no true relation between Eastern Desert Dwellers and the inhabitants of the Nile Valley but a continually changing pattern of interactions as the textual corpus clearly indicates. In any given period Eastern Desert Dweller sites may represent primary or secondary settlement types depending on the nature of the relationship between the Nile Valley and the desert peoples.

Q14-R2: Possible but not determinable.

Third Respondent

Q1-R3: The name 'Eastern Desert Dwellers' is a collective name without ethnic connotation joining all the different tribes living in Eastern Desert. Therefore, in this stage of research, it seems preferable.

Q2-R3: There were some permanent settlements, but most of the people were nomads. Some of them, living on the edge of Nile Valley, became warriors attacking Upper Egyptian cities.

Q3-R3: Archaeologically nomads do not leave many traces and, if so, these are culturally unspecific, except pottery.

Q4-R3: Mostly temporary camps, a few small permanent settlements, small sized cemeteries, wells etc. can be expected.

Q5-R3: The emerging picture of a very wide distribution of the EDW cannot be taken as evidence that all the places where it was found were settled by Eastern Desert Dwellers. I would prefer a hypothesis of a distinctive ware, produced by a few or more local pottery kilns (future analyses and comparisons should determine some of them). This ware became dispersed over a larger territory by commercial exchange (e.g. for food from the Nile Valley) with different cultural groups (having their own pottery of other, mostly imported, origin).

Q6-R3: EDW was most probably produced multifocally, according to needs, but always keeping the same shapes and decoration patterns which became a fashion. If it was close to the Nile or deep in the desert, should be determined by the forthcoming analyses.

Q7-R3: Again, tracing of the desert routes is a future research task. With the introduction of the camel, older routes, along points with wells, could have been exchanged by more direct connections because of a decreased dependency on water.

Q8-R3: The Eastern Desert Dwellers were very probably not an ethnical unity as evidenced by the numerous ethnic names available in the written sources. There were perhaps even more groups, never mentioned by the ancient authors.

Q9-R3: Precursors of EDW could have existed in some, not yet investigated, area. What seems to be a sudden beginning was possibly a gradual process before the use and vogue for EDW dispersed over larger territories.

Q10-R3: Chemical analyses of the content of the vessels could furnish data on the food composition and its relation to the environment in different places where the EDW was found. It should, therefore, be attempted.

Q11-R3: For resolving the question if the Beja are the descendents of the Blemmyes more physical anthropological research is necessary. We will need several series of human skeletal remains from different periods between 4th-5th centuries CE and recent times, well dated, as well as more measurements of living Beja. Until now we have 3 or 4 possibly Blemmyes series (from Sayala) and only small groups of Beja measured by anthropologists (one was obtained by the Arab-Czechoslovak expeditions in 1965-7).

Q12-R3: It would be misleading at this stage to attribute all the graves in which EDW was found to Eastern Desert Dwellers. Nobadian groups, which resettled in Nubia during the 3rd century CE, could have gained EDW by commerce. The type of grave found in the desert and in the fringe of the Nile Valley (like in Wadi Qitna and Kalabsha) could have been built by different cultural or even ethnic groups. They are mostly

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simple heaps, using the only abundant material of such regions, stone. Those in the desert proper should be studied more profoundly to be compared with those in Wadi Qitna and Kalabsha.

Q13-R3: We have ample evidence from Sayala concerning the warrior nature of the desert population. This is confirmed by the ancient written sources but can be mostly connected to groups living relatively near regions of Upper Egypt, or elsewhere. Nomads coming from the interior parts of the desert could have behaved much more decently when coming to exchange their products for food.

Q14-R3: Until we have excavated at least some of these settlements, their attribution is merely hypothetical.

Fourth Respondent

Q1-R4: My problem is not so much with the name, but as to what we mean when we use it. The ancient texts refer to several groups which may or may not be congruent - just east we have a similar issue with respect to such terms as 'Saracens' and 'Arabs'. However, the question is really not archaeological as aside from some relatively small quantities of pottery, assumed to derive from some desert group or groups, we do not have an archaeological culture. In fact, when referring to the pottery, we ought not to connect it with a culture group as we have no good archaeological associations yet for any such group. EDW is a good appellation for the pottery, but we actually have very little evidence as to what group this ware is associated with.

Q2-R4: We have literally no archaeological evidence on this matter. The ancient texts hint to some kind of pastoral nomadic groups, but in reality we know very little. And texts are remarkably problematic on such issues. For example, although the Nabateans are universally perceived as a pastoral nomadic people, in fact we have only a single paragraph in a single source, quoted from a yet earlier source, on which that perception is based. All the rest of the texts referring to the Nabateans view them as fully urban and sedentary.

Q3-R4: Desert surveys, conducted using the methods of prehistoric archaeology, have almost always proven remarkably efficacious in finding the remains of even the most pathetic nomads. We find tent remains, hearths, corrals, special extraction sites, ceramics, metals, milling stones of various types and other site furniture. Prehistorians find tiny scatters of lithics dating to tens of thousands of years ago. Pastoral nomads had much larger social groups than middle Palaeolithic hunter-gatherers. The problem is more one of recognizing the remains, than of their poorness, or absence.

Q4-R4: Ethno-archaeological study of remains of nomadic encampments and archaeological study of nomad groups from roughly the same period in Sinai, Negev and Jordan, show a full range of site sizes, types and remains. These have been well documented and

intensive survey in the Egyptian Eastern Desert would be expected to pick up similar remains.

Q5-R4: There are a number of possibilities and it is still difficult to model. Although the working hypothesis underlying much of this discussion is that EDW is the product of Eastern Desert Dwellers, this does not really answer questions of mechanisms of dispersal. Nor is it really a necessary assumption to explain the distribution of EDW. For example, are there no local indigenous peasant groups engaged in trade? Perhaps EDW ought actually to be considered a fine ware, of greater value. Perhaps it is to be associated with specific functions with symbolic loading, which rendered Roman or Byzantine wares inappropriate. Too many questions and still too little hard data.

Q6-R4: These are precisely the questions that need to be answered archaeologically.

Q7-R4: Again, this requires intensive archaeological survey, beyond the known roads and trade routes, into the desert hinterlands.

Q8-R4: What is an ethnic unity? Are modern day Bedouin groups an ethnic unity? How do we define the ethnic boundaries of modern Bedouin groups, whose group identities are fluid, and whose tribal affiliations adjust regularly to realities of territory and politics?

Q9-R4: I cannot comment on precursors. Cessation of production can be caused by any number of factors. I am not well enough acquainted with the particulars of the historical and archaeological sequences of the region, but the Islamic conquests may well have disrupted trade relations, ending or changing the distribution patterns of the EDW. However, this is pure speculation.

Q10-R4: Presumably the compositional analyses of the actual ceramic materials should provide information on source. Petrography could be very useful here too. For example, one ought to be able to distinguish Nile sand from desert dunes, if these appear in the matrix of the ceramics.

Q11-R4: I think it very unlikely. Nomadic groups migrate over the long term as well as the short term, in response to changing social, political and environmental factors. Over the past two millennia there have been constant streams of nomadic groups moving through the entire Arabian-Saharan desert strip. Even were we able to demonstrate that the current residents of the region are indeed genetic descendents of the 'Blemmyes', we must avoid assuming that their cultural, social and also ecological adaptations are fundamentally similar. In fact, we must assume that these groups are just as historical as any other, and have undergone historical transformations like any other group. Any similarities must be proven, not assumed.

Q13-R4: Anthropologically, nomads are dependent on the settled zone for a wide range of goods and services. The nature of the relations with the settled zone varies with the regime in power. The assumption that one can characterize a culture just because it is nomadic is unwarranted. Is the United States warlike, or peaceful?

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How about the Koreans? Beyond this, I am extremely sceptical of the reliability of the historical sources in relation to 'barbarians'. There are too many agendas. We are very much lacking in good evidence to adequately characterize relations.

Q14-R4: Maybe, maybe not.

Fifth Respondent

Q1-R5: In the present state of our knowledge, the more nearly neutral the term we use to denote the unidentified people(s) whose material remains we find in the Eastern Desert the better. Even 'dwellers' is not entirely neutral. The distribution of archaeological remains and the exiguous ancient textual material suggest that some of the members of the groups attested in the desert dwelt in the Nile Valley, and the present lifestyles of the Ababda and Beja support this conclusion. On the analogy of usage in Nubian studies, we might have referred to 'Eastern Desert Groups' (subcategorized as A, B, C, etc.); but current terminology seems to have taken root. It is probably better to retain 'Eastern Desert Dwellers' than to introduce competing labels, but to agree upon a conventional definition of what that designation implies. As for 'Blemmyes', it too is a designation of uncertain scope and application and is probably best used only when an ancient source specifically uses the word. For the moment, it is not possible to associate with certainty specific archaeological remains with people so designated, and the textual evidence is not decisive for any given time-span. For me, the problem of identifying the Blemmyes is comparable to that of identifying the Funj in Sudan, and even less likely to be solved.

Q2-R5: On the assumption that environmental conditions in the area between roughly 15° and 27° N were not greatly different from those prevailing today, I am inclined to expect that life in the Eastern Desert during that period was comparable to what we observe today among the Ababda and Bisharin. I imagine the bulk of the population subsisting on herding ovicaprids and camels, supplemented by hunting and fishing, by the exploitation of natural plant resources and perhaps by occasional gardening. I expect that some of the population lived in the Nile Valley, providing both a channel for trade and other relations with the dominant peoples settled there and a refuge during periods of environmental stress. I also expect that some desert dwellers provided labour and services for Nile Valley people who entered the desert to exploit its minerals, metals and stones. Probably there was also trade in animals, medicinal plants and charcoal. This would have drawn some into the money economy of the time and contributed to the economic and social differentiation of a desert dweller elite such as I think we glimpse in the written sources. Raiding from the desert occurred, but it is uncertain whether this was an institutionalized social practice or an occasional CE hoc exploitation to opportune conditions.

Q3-R5: The distribution and setting of the circular, dry-stone-built tombs, which have been dubbed '*ekratels*', borrowing a term from the Hadendowa, strongly indicates that they were the work of people for whom the desert was their homeland. Recent work shows they are frequent in areas not exploited by people from the Nile Valley, and they are prominent on '*hamada*' ridges with superb views over landscapes characteristically exploited by modern pastoralists. Their chronology and typology are still in need of exact study. Some of them probably belong in the period immediately preceding the introduction of Islam and are associated with petroglyphs that link them to camel herding. Some of the petroglyphs in mountain valleys also merit consideration in this context.

Q4-R5: I think it unlikely that temporary campsites will be found, but it is possible that excavation of '*medinas*', such as those at Nugrus, Gelli, and Sikait, might yield finds that could be compared with those from Nile Valley sites datable to the period of Blemmy occupation. Prominent on a ridge between ruined buildings at Kab Marfu'a there is a classic '*ekratel*'. Without excavation, however, relative chronology remains uncertain.

Q5-R5: The location of the finds is probably a significant factor. The presently recorded distribution suggests that the vessels were used where people were living for extended periods rather than when they were on the move. The association of EDW with vessels produced outside the desert would also fit in with this. Function may have played a role in the relative frequency of wares at a site: the EDW may have been used in some specialized social context(s) comparable to '*jebana*' coffee-making among the Ababda and Beja today, while the other vessels may have been used in a broader range of activities.

Q6-R5: More data, such as that to come from our research project, is needed before this question can be answered. As an example of the complexity that may be latent in the interpretation of such material one may consider the distribution of hand-made talc bowls in the Eastern Desert today. They can be seen beside many Moslem graves scattered over a wide area of the Eastern Desert in the south of Egypt. A couple of informants said such vessels are no longer made but could formerly be purchased at Edfu. Another informant said they were still being made about three generations ago. Yet another informant said such bowls had been made at a talc factory not far from Barramiyah, north of the Edfu-Marsa Alam road. No informant offered an explanation for how these vessels were used or why they were placed at the graveside.

Q7-R5: Ancient nomad routes are not likely to have been the same as those established for mining, quarrying and commerce. Insofar as nomads frequented tracks, and did not move opportunistically according to the random availability of water and vegetation, such tracks are likely to have been determined by ecological conditions

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prevailing at the time and consequently will be difficult to discern in the archaeological record. On the assumption that past environmental conditions were not very different from today's, one would expect to find tracks in the same valleys where one presently finds trees and which have a wide catchment. Where there was internal trade, routes may have been in frequent use and bear the marks of regular passage, like for instance petroglyphs.

Q8-R5: Again on the analogy of the modern Ababda and Beja, it would not have been unlikely that the desert peoples recognized varying degrees of affinity; but this can scarcely be demonstrated on the basis of artefacts. Compare the relations among the tribes of North America.

Q9-R5: Precursors? If EDW is associated with a specific set of people(s), then it will not be manifest until those people(s) are present. Suddenly? What time span warrants the designation sudden?

Q10-R5: A laboratory analysis of the constituents and contents of EDW vessels may help in locating where they were made, but only if the data obtained can be matched with parallel data that is geographically specific (trace elements from distinct geological formations) or indicates contents that have specific associations (for instance oils from specific plants known to grow only in the Eastern Desert). Most likely the data will not exhibit the degree of specificity desired, but will become part of a set of observations amenable to several interpretations.

Q11-R5: What is the difference between ethnic descendants and cultural heirs? Do the present day Hadendowa and Amarar call themselves Beja? And what about the Ababda and Ma'aza? At all events, the Blemmy-Beja equation is attested in a medieval text from Qasr Ibrim. But whose perceptions does that text reflect?

Q12-R5: All? Resemble? How many graves are there that contain EDW and how are they distributed? Do we actually know anything specific about the function of EDW vessels? As for resemblance, much needs to be done before a typology of graves in the Eastern Desert is adequate to support detailed comparisons.

Q13-R5: Social-anthropological studies have shown how complex the relations among nomad groups and settled people are, and they are not likely to have been less so in the past. If by true relation one means a consistent or stable relation, then the data presently available are inadequate to furnish a basis for an answer to this question. Chronology must also be considered. I doubt that the desert folk were consistent in their attitudes or dealings with people in the Nile Valley. Some texts record them raiding churches but there is also one telling how they conducted a Christian delegation to Alodia. As for internal conflicts, I know of no evidence on which to base a reply to this question.

Q14-R5: I am inclined to regard '*medinas*', like Nugrus and Gelli, as having been occupied, if not founded, primarily by desert folk, during the period of 'Blemmy'

domination, and it would not be surprising if the 'enigmatic settlements' were as well (cf. my response to question 4).

Sixth Respondent

Q1-R6: At this stage of the research, I think that it is both correct and neutral to use the collective umbrella term 'Eastern Desert Dwellers' because the other names indicate specific ethnic identifications. As mentioned in the fourth response, we should be more concerned with what exactly is meant by these different terms.

Q2-R6: On the basis of archaeological evidence from the southern Red Sea Hills, Sudan, and the preliminary results of pollen analysis (on animals dung and soil samples) there is reason to believe that the main livelihood of the population in the period between the 4th and 6th centuries CE was based on animals keeping. This pastoral mode of life seems confirmed by the historical sources. Unlike the present day situation, in which the herding of goats and camels predominate, large scale herding of cattle was possible as the environment was probably four to five times wetter than at present.

Q3-R6: Archaeologically, it is difficult, if not impossible, to find traces of ancient nomadic dwellings or other material culture remains in northeast Sudan. The main reasons are the rocky topography of the area, the short duration of the camps, the portable dwellings and perishable nature of both the building material and most of the equipment/tools used. Grinding tools, mostly broken, are often found. As these are surface finds and not in situ they are difficult to date.

Q4-R6: The sites in northeast Sudan are mainly those of way stations, mining activities, sea ports and some localities with rock drawings of unknown dates. Ancient nomadic sites are difficult to find for reasons stated in my response to question 3.

Q5-R6: Although I am not ceramics specialist, I dare to suggest cautiously that the wide distribution of this type of ware must have been, at least partly, connected to the movements of people back and forth between the economic areas mentioned in my response to question 4. I agree with, and have nothing more to add to, the points mentioned in the first response regarding the second part of this question.

Q6-R6: Laboratory analysis, as already suggested in the first response, may help finding out where EDW was produced. Historical sources, early Arab travellers and ethnographic studies strongly suggest that women have been, and still are, the producers of the pottery for household use in northeast Sudan.

Q7-R6: To establish these, a combination of archaeological inspection and a survey of the literary sources are required.

Q8-R6: Ethnicity and ethnic studies are beyond my expertise. However, results of archaeological as well as ethnographic research done in sub-Saharan Africa

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indicate that it is not always the case that a specific ware is associated with a specific ethnic group.

Q9-R6: I did not know that the production of EDW suddenly seized. It would be interesting to know roughly when this did happen and to find out if another type of ware was introduced after the production of EDW stopped and the origins of this ware. It will be important to take a look at the literary sources in order to learn what happened in the area after the production of EDW ended.

Q10-R6: I think that laboratory research will yield valuable data regarding the contents and the source of EDW, providing some of the basis for the interpretation of the archaeological finds.

Q11-R6: It is essential to emphasize the point that the contemporary nomadic tribal groups in northeast Sudan, collectively known as Beja, did not call themselves Beja until recent times. Historically the name 'Beja', or 'Buga' or 'Bega', is known and used at least since the late 8th and early 9th centuries CE. Historical research on the contemporary Beja shows that scholars and researchers are in disagreement as regards the relationship between the contemporary and ancient population(s) of in southeast Egypt and northeast Sudan. Perhaps an attempt to run DNA tests on samples taken from the contemporary population as well as ancient skeletal remains might help cast some light on this issue. For this the problem remains to find the right ancient material remains but it would be worth trying as the question of origins is vital to the current research on the Eastern Desert Dwellers.

Q12-R6: Excavation of some graves, followed by radiocarbon dating and comparative analysis of the remains, might help providing concrete evidence on this issue.

Q13-R6: Ancient written sources indicate that the relationship of the nomadic Eastern Desert Dwellers with the Nile Valley population was a complex one ranging from a sometimes peaceful relation, via a tensed and troubled one, to open aggression at other times. However, these texts often fail to explain the reason(s) behind these fluctuations. Economic interests and political ambitions would have been among the main reasons. Studies among contemporary nomadic groups and settlers in the same area and elsewhere in sub-Saharan Africa reflect similar patterns.

Q14-R6: I hold the same opinion as that phrased in the answer to this question in the third response.

Seventh Respondent

Q1-R7: Eastern Desert Dwellers is certainly preferable to terms like Blemmyes, Trogodytes, and Megabari as these are not self-references, as far as we know. The term is also more appropriate as 'dwellers' refers to a certain lifestyle and not to a fixed identity (cf. my response to questions 11 and 13).

Q2-R7: The people living in this geographical area might have had diverse lifestyles. As nomads, their lifestyle would have cantered around their cattle or camels, depending on the climatic conditions in the area that might have been different from current conditions. The current edge of the 'Sudanic Belt' might resemble those conditions. This area covers a zone of transition between, from north to south desert, arid savannah and grassland areas. In the Sudanic Belt one can find nomads, which are seen and who see themselves as belonging to the same ethnic group, herding camels in the north and cattle in the south.

One or more of the following life-styles might have been taken up at one time or the other by the Eastern Desert Dwellers:

- they could prioritize their nomadic life-style and wander from one grazing area to the next depending on the season and on the, highly variable, rainfall;
- they could engage in large stock raising near an abundance of fodder and water with sufficient defence facilities;
- they could participate in trade caravans using camels for transportation or as part of large herds of cows, or camels, to be sold at central markets;
- they could engage in raiding expeditions of (the same) caravans; at the southern edge of the Sudanic Belt this option was one of the main reasons behind the foundation of the pre-colonial so-called 'warrior-states' that were situated along the main caravan routes;
- apart from visiting sedentary groups for water and grazing, and possibly also the exchange of animal products for agricultural and handicraft products, nomads would also engage in foraging for wild fruits and seeds. They might even divide their group so that the women, children and elderly could gather or grow some of the staple foodstuff, during the rainy season, while a small group of young and strong men would go with the herd to grazing areas in more arid places (cf. my response to question 6).

Q3-R7: If compared to current use of artefacts by nomads:

- calabash gourds, reworked with leather or 'zaḥ' matting and coated with mud for making clarified butter and transporting milk or honey;
- containers for salt and sweetening products;
- leather ornaments and straps, leather or 'zaḥ' luggage bindings;
- wooden artefacts like digging sticks or (part of) hoes and axes;
- metal (iron, copper or silver) artefacts and ornaments like knives, swords, hoes and jewellery;
- media of exchange like shells or beads (cf. my response to question 6).

Q5-R7: The exchange in barter with other nomads and sedentary peoples, the leaving behind of pots at pre-determined places for silent barter, as well as the loss of pottery at often visited water and grazing might account for that.

Appendix I: Questions and Answers

Q6-R7: Chemical analysis could point at possible sites of manufacture. If compared to current-day nomads, pottery is produced in all contexts mentioned: unfired pottery might have been made by all members of the nomadic group, specifically by women, when the need arose and when the material to make the pottery was available. Fired pottery might have been made by a specific sub-group (lineage, class or even caste). Among the Zaghawa and other contemporary nomadic groups fired pottery is made by women of the '*hadadeen*'. Men are the black-smiths and leather tanners, occasionally also cotton spinners and weavers, while women make pottery. Both are using fire for their production and deal with materials directly from the earth, which makes them a despised caste allegedly once attached to the nomadic clans as slaves. Nowadays, pottery is made by groups of women in the dry '*wadi*' beds by means of rolling and pressing clay-strings on top of each other, slapping the pot into a coherent form. The wooded riverbanks provide the wood for the kilns in which the pots are collectively fired (and nowadays also bricks).

Q7-R7: The mapping of locations where pottery is found, and possibly manufactured, of watering and grazing areas, graves, temporary settlements, markets and of defence fortifications might point at main routes of the Eastern Desert Dwellers. Locations along the Nile and the wadi's might be fixed points of all routes, although the course of rivers might have changed over time.

Q8-R7: The use of ethnic labels, suggesting the existence of a nameable bounded group, is still heavily debated. A specific life-style and related similarity in culture, and thus in the use of pottery, would mark the ethnic identity of a group of dwellers in a specific context. A (forced) change of life-style might result in importing some of these cultural habits, usages and values into the new life-style and, in the long run, change of ethnic identity (cf. my response to question 13).

Q10-R7: As suggested in previous responses, laboratory analysis of the sherds might point at certain locations of production, probably wadis, or other sites where a combination of clay, sand and fuel (wood) would be present. Also the use of the pots can be established by analyzing the contents of the vessels as well as the sherds themselves.

Q11-R7: In the light of frequent (forced) changes of life-style, which might have meant a change in ethnic identity (see the response to question 13) it is doubtful that the Beja can be considered the cultural heirs or descendants of the Blemmyes of the ancient sources. As climatic conditions might have been different, the life-style of the Blemmyes might differ from that of the Beja dwellers in the same area in the present-day. Moreover, intermarriage and the adding of 'client' groups as new lineages to the existing nomads might have changed the ethnic composition of the dwellers over time. Particularly the immigration of nomads from the Arabian Peninsula or from West-Africa may have added new

elements to the culture of the Eastern Desert Dwellers. However, as life-style is the primary condition for cultural belonging, the Beja might in that respect be considered the present-day counterparts of the ancient Eastern Desert Dwellers.

Q13-R7: Theories on the construction of ethnic groups and identities point out that the need to specify oneself as belonging to a specific ethnic group seems to be most urgent at the boundaries where 'different' ethnic groups meet. Most of the time the cultural specifics of these groups differ less than one might expect from the names taken and given to neighbouring ethnic groups. Current examples from dwellers in the Western Desert, such as the Cyrenaica Bedouin, and from Darfur, such as the so called 'Arab' cattle and camel herders (Bagara and Awlad x, y, z respectively) and the Zaghawa semi-nomads, show a flexibility in taking up an ethnic identity belonging to a certain lifestyle. Sedentary farmers might invest in cattle or camels and give them to seasonally migrating nomads to tend for them, taking them to watering and grazing places in agricultural areas during the dry season, in exchange for the milk and part of the off-spring. However, given the animosity between nomads and sedentary peoples, this always involves a risk and a farmer could (and, as examples indicate, would) take up a nomadic lifestyle tending his own herd after his herd became large enough. This makes him a nomad; he becomes a Baggara or an Arab. Although the first generation of such new nomads would be singled out for being 'not good enough', the change of ethnic identity related to lifestyle was in itself not contested. The same is true the other way round. Women, children and elderly people from a nomadic group would be the first to settle, or be left behind from their perspective, when a drought reduced the herd and thus the number of people it could sustain. Young men would be those who would migrate further north and south than usual, with smaller herds and less people, in order to survive at all. If this did not succeed, due to continued drought, cattle diseases or raids, a sedentary lifestyle would become the basis of survival. Particularly nomads that had an exchange relation with certain sedentary peoples would ask for refuge and land, often using their temporary homesteads ('*farikh*') as a base. Often, to acknowledge a political or socio-economical relation, and to secure the future in case of such a calamity, daughters would be married to leaders or lineage heads of sedentary communities. However, there are other nomadic peoples who abhor the sedentary lifestyle to such an extent that the loss of their livelihood would make them pick up a hunter-gatherer lifestyle, rather than become farmers.

So, when comparing the Eastern Desert Dwellers to current groups living in similar arid areas, there might have been a certain relation between the diverse groups in terms of trade and the exchange of food or other consumer goods, resources (hunter-gathering), brides (grooms), battles and even (temporary) life-styles (ethnic identities).

Eastern Desert Ware

Q14-R7: They might have been temporary sites near settlements of sedentary peoples or settlements located off-course due to climatic conditions, threats of war, other raiding nomads or another, unknown reason. They also have been the basis for a more permanent settlement (see the response to question 13) when a nomadic life-style was (temporarily) impossible to maintain.

Eighth and Ninth Respondent

Q1-R8&9: Before answering this question, we should first realize the diachronic development inherent in it. The Graeco-Roman sources (e.g. Pliny the Elder) first attached a variety of names to the peoples living in the Eastern Desert (Blemmyes, Megabari etc.). In Late Antiquity these peoples came to be known under a single name, the Blemmyes. As yet, no satisfactory explanation has been given for this development. Until now historians have tried to write a coherent history, often with a strong bias towards political history, on the basis of too little written sources. The complexity of tribal societies and the nature of the concepts behind the Graeco-Roman perspective on 'the Blemmyes', a good comparison would be the Saracens, was often not taken into account. Before we create another, highly hypothetical, 'history of the Blemmyes' we should therefore first discuss the basic problems involved.

So we should ask ourselves the question: what do we mean by Eastern Desert Dwellers? Taking the historic sources into account three groups should be distinguished:

- the Blemmyes' as described in the Graeco-Roman sources, 'outside' sources, usually of a literary nature;
- people who would designate themselves as 'Blemmyes', 'inside' sources, mainly documentary or epigraphically (contrary to what some respondents seem to think, 'Blemmyes' is also attested a self-designation);
- people who are not mentioned in the written sources, but who may have left archaeological remains.

To better understand the 'Eastern Desert Dwellers', we should turn to anthropological models and apply these to the information obtained from the written sources, in particular the 'inside' sources (second group above). However, these sources are from urban sites in the Nile Valley. The people living in the Eastern Desert proper, and also the people making and using EDW, may differ considerably from the authors of these texts. Until now, general conclusions have been drawn about 'the Blemmyes' from the written sources, whereas we are highly sceptical whether these conclusions have any bearing at all on the dwellers of the Eastern Desert. They may merely apply to fringe groups that may have been 'marginal' both ways, both from the perspective of the Nile Valley as well as from that of the desert.

Q2-R8&9: What is lifestyle? As is clear from our response to question 1, we feel that it will first be necessary to establish what is meant by 'Eastern Desert

Dwellers' before attempting a comparison with present-day nomads.

Q3-R8&9: There are written sources concerning 'the Blemmyes', and partly stemming from them, but how these relate to the groups inhabiting the Eastern Desert, remains to be established (see our response to question 1). Additional survey and excavation work will have to give us more data from the Eastern Desert itself.

Q4-R8&9: The existing written sources on 'the Blemmyes' presuppose a settled or semi-settled people active in and around the Nile Valley in Upper Egypt and Lower Nubia. It can be expected that their artefacts are mixed with the artefacts of other groups settled in the Nile Valley (e.g. 'the Noubades' of the sources) and that a Byzantine influence is seen as well. Moreover, next to the proximity of a (foreign) 'status culture', a growing social complexity should be reflected in the material remains. If the EDW horizon does not fit these characteristics, it may be doubted whether written sources will be of any help at all.

Q6-R8&9: This question is beyond our expertise. Again, the study of anthropological parallels may help to answer the question.

Q7-R8&9: Additional survey work is required to answer to this question. We would be especially interested in any routes leading from the Nile Valley south of Philae, the Dodecaschoinos, to Berenike.

Q8-R8&9: The relationship between pottery and people is extremely complex and we cannot decide whether the people making and using EDW are an ethnic unity. Anthropological comparisons could clarify what is at stake here. However, even the concept of 'ethnic unity' itself is problematic.

Q9-R8&9: A whole set of factors could be responsible for such developments. It would be wise to collect parallels for similar developments under similar circumstances.

Q11-R8&9: It is a priori highly unlikely that the 'Beja' could be considered the cultural heirs of the 'Blemmyes'. The arrival of the Arabs and Islam, resulting in the spread of an Arabo-Islamic concept of society, provoked profound cultural changes all over north-eastern Africa. As a result, also the Graeco-Roman concept of the 'Blemmyes' became obsolete. It would not surprise us that with the disappearance of the name 'Blemmyes' coincided with the arrival of the Arabs.

For the question whether the 'Beja' could be the ethnic descendants of the 'Blemmyes', a linguistic comparison (in recent years only attempted by Satzinger) could be rewarding, even if the material is meagre.

Q13-R8&9: As suggested in our response to question 1 these two questions can best be answered by first studying anthropological parallels and using anthropological models. Moreover, the complexity of what is asked here should be realized. The Eastern Desert Dwellers lived at a crossroads of peoples, societies and religions, stretching geographically from southern Egypt to northern Ethiopia.

Appendix I: Questions and Answers

Tenth Respondent

Q1-R10: Eastern Desert Dwellers is a convenient label for what at present is a loosely defined group of people that may well incorporate more than one ethnic group.

Q2-R10: Comparison of what is thought to be the past environment with the present one should enable this question to be addressed in terms of available resources. A comparison of present day and past levels of technology will also be relevant.

Q3-R10: As far as I know there are no portable ones at present. The association between EDW and all other types of artefacts, architectural as well as portable, should be examined.

Q5-R10: EDW may have been used exclusively at sites that were seasonally, or otherwise only shortly occupied by Eastern Desert Dwellers and therefore little trace has been left. Elsewhere EDW occurs in association with Roman material on sites of more permanent occupation, and it is these sites for which we have evidence. The presence of EDW on Roman sites would most likely result from either the co-habitation of nomads and Romans on the same sites, or the barter or exchange of EDW with Romans on sites occupied exclusively by Romans. The possibility also exists that some sites were occupied by Eastern Desert Dwellers who used both EDW and Roman pottery, but this is more difficult to interpret (cf. my response to question 14). The growing number of sites with EDW will be fundamental in interpreting the overall distribution of this ware.

Q6-R10: As a model I would suggest that the ware was the result of household production with bonfire kilns, but that given the quality of the vessels some specialization was involved. Identification of Nile silt alluvium or desert clays through chemical analysis may enable broad source regions to be suggested, but I would suspect that a variety of locations, both in the Nile Valley and in the desert, are involved. Fabric analysis should isolate variability in potential source areas, although not their exact locations. Broader analysis of the sherds, including technology and style, will address questions regarding organization and scale.

Q7-R10: This question should be addressed through the comparison of distributions of ancient artefacts with known modern routes.

Q8-R10: This question can be investigated through the stylistic analysis of EDW. If one cohesive style is apparent throughout its temporal and spatial distribution, it might suggest some unification in their identification. More diverse styles may indicate a more fragmented identification.

Q9-R10: See my response to question 11 and the answer of the third responder to this question. Is there evidence for any occupation in the Eastern Desert during the early Arab period (7th-10th centuries CE)?

Q10-R10: Scientific analysis should enable discrete groups to be identified, but these will not necessarily

relate to source. A distinction between alluvial or calcareous clays may help to separate Nile from desert groups (cf. my response to question 6). I am eager to learn whether the results of contents analysis are useful.

Q11-R10: At present it seems that the Eastern Desert Dwellers either ceased or left no material remains of their existence after the 6th century CE. This hiatus in occupation of non-sedentary peoples in the region makes any tracing of direct descent difficult. The identification of Eastern Desert Dweller graves, and DNA comparison with modern groups would be the only definitive method by which to address this question.

Q12-R10: The few graves with which I am familiar that contain only handmade pottery seem to comprise vessels related to EDW, but not the classic, highly burnished cups. Whether this represents the difference between utilitarian and funerary assemblages, or reflects ethnic, chronological or source difference is unclear. More evidence is needed.

Q13-R10: The possibility of co-occupation exists (cf. my response to question 5). The exact nature of their co-existence will probably be best addressed through ethnographic parallels.

Q14-R10: Unfortunately I have not been able to get a copy of these articles as yet, but if I understand correctly I feel that Christianity is the motivating force behind these settlements.

Eleventh Respondent

Q1-R11: Defining ethnic groupings on the basis of limited written sources is always contentious, and gives rise to what Collis has called 'text-hindered' archaeology. Eastern Desert Dwellers is a term which is sufficiently loosely defined to have utility, and which it may be possible to refine at some future time.

Q2-R11: This question clearly requires a good deal of further investigation, but one might suppose that a nomadic lifestyle based around a limited selection of drought tolerant livestock is the most likely. However, good palaeo-environmental evidence is needed before more firm suggestions can be made.

Q4-R11: This too is largely beyond my expertise, however, some degree of caution must be exercised in using the texts as a 'guide' to the archaeology. As we know from archaeology generally, those artefacts which are 'typical' are not necessarily the most abundant, and those which attracted the attention of classical sources need not be the ones which were most relevant to the people(s) themselves.

Q6-R11: Household production of this ware seems the most likely. It is probably produced in open-firings, perhaps even at the domestic hearth. Analysis of the fabrics should give valuable information on the clay sources, but one might expect that, given a nomadic population, a variety of sources would be used. If, when analyzed, sources are limited this might indicate that pottery was made only during part of the annual nomadic

Eastern Desert Ware

cycle, perhaps at a time when the population was settled in one place for several months. The ware is often of high quality and shows real expertise with the material, probably indicating specialization within the household unit. However, whether this was the work of one particular sex is not readily ascertainable at present. Ethnographic evidence might suggest that it was the work of women, but it is dangerous to assume this to be so on present evidence.

Q8-R11: This is an extremely difficult question to answer. Cohesion of ceramic style throughout the Eastern Desert need not mean ethnic unity. It is, for example, possible that certain groups had greater specialization in pottery than did others, and that they exchanged this for other goods. There are also well attested examples of ceramic styles being produced as a result of the movement, through marriage, of women from one group into other groups so that the pottery itself, whilst perhaps marking 'Eastern Desert Dwellers', may have no meaning in terms of overall ethnic identity (other than that of its female producers).

Q9-R11: This may have to do with changes in territorial range, access to resources or some change in lifestyle. Steatite may have been used more extensively earlier and later. However, I do not know enough about post 6th century finds from the area to be confident that we have sufficient evidence for the later period generally.

Q10-R11: I would expect that source locations for the fabrics might be found by scientific analysis, and this may help us to understand aspects of the territory of the

groups. Contents analysis may prove successful too, and provide valuable evidence for the lifestyle of the users.

Q11-R11: DNA analyses would be necessary in order to determine ethnic descent. Cultural inheritance might be suggested once more is known of the economy of the Eastern Desert Dwellers.

Q12-R11: This almost takes us back to question 1 and the attempt to link ethnic groups to archaeological material, and I don't think it can be satisfactorily answered with our present state of knowledge.

Q13-R11: This too is difficult to determine on the present evidence. Records from their neighbours do not, of course, speak in terms of 'Eastern Desert Dwellers' (see the response to question 1) which brings us back to the difficulty of comparing archaeological and literary evidence. It is possible that we will find that the clays used for EDW are from sources in the Nile Valley, and this may indicate that the groups co-existed on the Nile for parts of the year, possibly at times of harvest.

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