## The problem of foreign north-eastern relations of Upper Egypt, particularly in Badarian period: an aspect

The importance of the west-east axis is considerable for the consideration of the development and character of prehistoric Egypt. It has been until recently relatively ignored due to the dominating and thus partially seductive interest for relations along the Nile axis. In addition to this, western Egyptian relations cannot be fully understood without the awareness of the eastern relations and vice versa.

The understanding of the development of Chalcolithic Upper Egypt depends to a considerable degree on the knowledge of the origins and the nature of the Asian influence, since these eastern relations were of specific importance for the development in question. These connections, and the role played by the populations living on the Red Sea coast, contain latent explanations of some aspects of the development of Chalcolithic Upper Egypt and, in an indirect sense, not only of it but also of the preand proto-historic Egypt as a whole.

There are now more indications of the existence of a direct, most probably via Red Sea, connections between Upper Egypt and the Sinai Peninsula not only during the Gerzean but also during earlier periods, in particular the Badarian. These are the import of native copper or copper objects in addition to turquiose from the Sinai into Badarian Egypt, something the latest research on the Sinai confirms to a considerable degree; the possibility of an early appearance of sea navigation speaking in general as early as the Mesolithic, a case that has been demonstrated by analysis of obsidian; considerable closeness of the Sinai and Upper Egyptian Red Sea coasts; a certain existence of traces similar to the Badarian culture on the Eastern Desert sea coast, etc. However, a definite proof is still lacking, a fact which should be attributed to the very nature of the phenomenon of sea communication which is hard to grasp, particularly when it is not a question of an island, as is this particular instance; to highly inadequate archaeological field investigations outside the valley and to an incomplete application of strictly scientific methods to the relevant material. Underwater research in the Upper Egyptian coastal region, in the so-called Red Sea channels and their lateral "openings" and directions towards the Sinai coasts and its narrow gulfs, have not as yet been planned, as far as we know, while an adequate survey which would cover the Eastern Desert with its coastal belt again has not been carried out, in spite of the fact that results obtained hitherto such as, for instance, those given by G. W. Murray and F. Debono, offered more than encouraging data in this direction.

The elements for and against the existence of Upper Egyptian direct, most probably maritime connections with the Sinai and in the final consequence with its Asian hinterland during the Badarian and Amratian periods have been presented in a longer article (Tutundžić, forthcoming) the scope of which would not fit into the framework of a symposium. However, we present one of its aspects here, *i.e.* a complex phenomenon which in this case plays at least a twofold role. This is the appearance of a far earlier use of copper in Upper Egypt than was the case in the north, *i.e.* the long duration of Neolithic cultures in the Egyptian North parallel with the existence of the Chalcolithic in the South.

There are not many authors, however, who have even raised the question of the reason for a considerable delay in the use of copper in North Egypt in spite of excellent communications between the two parts of the same country. The actual existence of this problem was seen, after W. C. Hayes (1965) also by B. G. Trigger, who touched up on it some sixteen years ago in a similar way to that of the preceding author (Trigger 1968: 68). However, it does not appear to us today – after the discovery by B. Rothenberg's expedition, of the exploration of native copper in the south-western Sinai in Wadi Ba'ba, made by Elatians (Rothenberg 1979: 138) - that this phenomenon of delay unavoidably indicates that the use of copper in the Upper Egyptian Valley came about independently of south-western Asia. In addition, it appears that the ways of exchange between Egypt and the Sinai lead roundabout the potential intermediatory of the so-called Lower Egyptian Neolithic.1 It could hardly be the case that the inhabitants of Upper Egypt in the Badarian period from its beginning, and maybe even before (Tutundžić, forthcoming), obtained turquiose from southwestern Sinai, i.e. the vicinity where traces of exploitation remained without repercussions on the advance of their own use of copper at the onset of the same period. It seems that an early use of turquoise occuring in the area of native copper was a decisive moment for the early start of using this metal by the Badarians by whom it was, characteristically, appreciated as jewelry. As Baumgartel (1960: 1) cautiously noticed, even if native copper had been located in the Eastern Desert "it would not prove that it was in Egypt that the use of copper was first discovered" or, we would add, that its use in Upper Egypt began independently of the Sinai. A conclusion recently presented and well argumented by Beit Arieh (1980: 61), that the Ghassulian exploitation of turquoise in the south-western Sinai, northeast of Serabit El-Kadim, was

<sup>&</sup>lt;sup>1</sup> The possibility of importing copper and the knowledge of its use from Asia — explicitly from the Arabian Peninsula — via the Red Sea into the early Badarian Egypt has been briefly mentioned, as far as we know, only by Arkell and Ucko (Arkel and Ucko 1965: 150; Arkell 1975: 12, 30).

"destined mainly for Egypt" and not for the northern hinterland of the Peninsula which was at the time chalcolithised, and in spite of smaller quantities of this semi-precious stone in the Eastern Desert, should be applicable to a considerable degree to the earlier exploitation of copper in the Sinai as well. It seems that the phenomenon supposed by Beit Arieh was more or less a repetition of the practice valid in the same area in respect to copper. Of course, comparative chronology plays an important role in the problem of relations between the Badarian Egypt and the Elatian Sinai. Their contemporaneity has been still argued (Rothenberg et al. 1979: 238; Rothenberg and Ordentlich 1979: 233f).

Previously, particularly before Rothenberg's discovery in Wadi Ba'ba mentioned above, one could logically suppose that the earlier use of copper in Upper Egypt as compared to Lower Egypt was because copper ore existed in the Eastern Desert (Trigger 1968: loc. cit.; Baumgartel 1960: loc. cit.). However, it is not certain that copper ore does not occur in the Lower Egypt. As it will be noted, there existed links of the North Egyptian Neolithic settlements not only with the Mediterranean but also with the Red Sea coast and on the direction of the latter is Gebel Ataqa whose supposed copper ore (cf. Nibbi 1979: 42) was used within the Maadi culture (Hayes 1965: 122). Yet, generally, alongside the exchange of small quantities of copper it was the spread of the idea of the use of copper, first of all of native (Wertime 1973: 876, 880, 885), and then perhaps the idea of obtaining it from ores, that was the crux of the matter. The latter idea originated in Egypt from the use of native copper nodules, in connection with other needed experiences, or was transmitted from southwestern Asia where the use of copper ores had appeared earlier. It is characteristic here that the idea of the use of copper, as it appears, was not introduced into North Egyptian cultures by the Badarians and probably also not by the Amratians and not by land via the Sinai - at least during the Badarian period. The reasons are to an extent clear and complementary. This phenomenon, lasting at least till the time of El-Omari settlement, was a consequence of poor relations which existed between the Egyptian southern and northern cultures, poor development of the use of copper in the South and its direct relations with Asia.

There is a noticeable lack of traces of copper objects in the North Egyptian cultural assemblages till the time of El-Omari, or till the beginning of Naqada II in Upper Egypt. Even the pottery find of the "cashe fields" at Sedment, now re-studied and shown to have belonged to a period between El-Omari and Maadi, is not, it appears, accompanied by even a single trace of copper (Williams 1982: 213f), although on the ground of that find one cannot draw far-reaching conclusions regarding copper use. It is hard to accept that transport of native copper by the Lower Egyptians, or via their territory, was not accompanied by their own use of copper, in particular if such a transit was practised over a longer period of time. Even if one could suppose that the copper objects have been overlooked in the North Egyptian Neolithic sites, such objects would most probably occur very rarely. Such a restricted ownership of copper, obtained through direct exchange, would hardly be sufficient to make a local

redistribution possible. Exchange over long distances does not necessarily leave traces in the region of transit. But in this case there is no question of such an exchange. The Lower Egyptians would have found themselves in the position of proportionally close receivers and givers, *i.e.* carriers, or, in the final consequence, their territory would have been the stage of direct transport of copper to the Badarians. Red Sea shells at Fayum A and Merimde Beni Salame settlements (Hayes 1965: 95, 116), originating probably from the Gulf of Suez if not obtained in the exchange from the South (which is far less probable) demonstrate that their inhabitants too, directly or indirectly, had connections with the north-eastern Egypt; a trade route for copper along the Suez Isthmus and the northernmost part of the Eastern Desert would not have remained unknown. The tradition of the imports of Red Sea shells into North Egyptian cultures was continued at El-Omari (Debono 1948: 567, 568; 1956: 338).

It could be expected that the amount of imported goods or raw materials decreased with the distance from place of their origin (Renfrew 1975: 46 - 51). On the assumption of overland transport from the Sinai Peninsula, the Neolithic sites of North Egypt are closer to the copper and turquoise deposits in the Sinai than the region of Asyut; they would be in the so-called contact zone. In addition to this, it is logical to suppose that the intensity of exchange decreases with the pasisng into foreign cultural zones. This phenomenon, for instance, was noted in the case of the exchange of obsidian (Renfrew et al. 1968: 329), although it should be borne in mind that the easternmost Lower Egypt may not have been under the control of native Neolithic inhabitants.

Regardless of the real causes and the reasons for the lack of traces of copper objects in the North Egyptian cultural assemblages during and after the El-Omari episode, which we can now but surmise, it seems rather certain that the beginning of the Chalcolithic period (not in the sense of the cultural stage but in the sense of the presence of copper tools) in Upper Egypt appeared considerably earlier than in Lower Egypt. It is true that especially in the Badarian times, the eastern Lower Egypt (the Delta), had not been yet well known and it is not clear yet whether it was at all inhabited to any greater extent during this period (Trigger 1968: 71 - 72)2; still, the excavated part of the El-Omari site may present a general characteristics of the North Egyptian cultural groups, the preceeding as well as the one of its own time, in respect of the use of metal. Thus, the factor of the so-called negative evidence is somewhat lessened. Until we have not a single site contemporary to the Badarian in the Eastern Delta, i.e. until this area is not archaeologically clear, the lack of copper objects in Lower Egypt contemporary to the Badarian culture before the appearance of the Amratian cannot serve as a proof of direct relations with the Sinai. However, it would appear that this phenomenon may be taken as one of the indications of the existence of

<sup>&</sup>lt;sup>2</sup> Butzer himself, who in the first place on the ground of geological investigation supports the opinion that the Delta could be inhabited in prehistory, adds that because of several reasons it could be "underdeveloped" and that it is possible that it was the region of endemic malaria (Butzer 1976: 94, 96).

direct, most probably Red Sea contacts of the Badarians and perhaps even the Amratians with the Sinai, and in the final consequence its hinterland.

Two phenomena: a lack of knowledge of copper in the Neolithic of the Lower Egypt and its simultaneous use in Upper Egypt, and loose contacts between the two parts of Egypt at this time, appeared in the situation of a lack of crucial differences in the ecological conditions, and the geographical barriers between these two parts of Egypt. To the contrary, they are linked by the Nile Valley and by a perfect waterway which, in addition, runs against the wind. But the inhabitants of the Middle Egyptian Valley in the Badarian period had no definite motivation to develop their contacts with Lower Egypt. They had enough arable land and even pastures, and the North had no special trade attractions since it was not in a position to supply raw materials which were available for the Badarians from the east.

The Upper Egyptian by-passing the sphere of the Lower Egyptian Neolithic complex, and developing a direct connection with the Sinai — overland *via* the north-eastern part of Egypt or more probably *via* the Red Sea route, or both ways — caused, in consequence, the deepening of the differences in the development between the Neoli thic of Lower Egypt and of the contemporary Badarian culture in Upper and MiddleEgypt.

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