

Andrea Manzo

Social complexity and cultural contacts in Northeastern Africa between 3000 and 1000 B.C. : a provisional model

It cannot be doubt that there were contacts and communication in the Neolithic Northeastern Africa. Some stylistic and technological similarities in ceramic production allow us to point out contacts between the Western Desert and the Nile Valley (Hassan 1986; Caneva 1991a, b; Caneva & Marks 1990). These contacts may be explained by the environmental stresses of the IV millennium B.C. A linguistic interpretation was recently proposed (Caneva 1991b; Marks 1991; Haaland 1991). However, the linguistic interpretation of archaeological data is always a debatable general problem (see Renfrew 1987). In a similar way North-South riverine communications were also distinguished.

Sometimes we cannot know if the diffusion of technological elements was North-South or South-North oriented: e.g. the black topped ware is suppose to have diffused from South to North (Arkell 1975; Adams 1978; Trigger 1983) whereas the rippled ware may have diffused from North to South (Krzyszaniak 1977: 164-167).

The Eastern Desert was also involved in these contacts, as suggested by Red Sea shells found in many Neolithic sites in the Valley and the hinterlands (Lower Nubia: Nordström 1972; Egypt: Vandier 1952; Neolithic Kadada: Geus 1984b, Gautier 1986; Neolithic Kadero: Krzyszaniak 1991). Moreover, Badarian (Tutundzic 1989) and Naqadian (Trigger 1987) interest in the routes to the Red Sea as the, probably Pre- and Protodynastic, graffiti in the Wadi Hammamat (Emery 1961) suggest, show that the coastal route may have been very ancient. Chemical and physical analysis of the archaeological materials may point to specific contacts that a stylistic study only could not find. For example some vessels found at Kadada were made in the Wad Ben Naga region (De Paepe 1986); the rhyolite found at Kadero and Rabak was imported from the VI cataract (Krzyszaniak 1991; Haaland 1989); the black flint found at Shaqadud was imported from the Valley (Marks 1989); the porphyrite used in making the maceheads of the Butana Group was imported from the Eastern Desert (Marks & Sadr

1988; Marks 1991); the obsidian used in Egypt was usually imported from Ethiopia (Lucas 1964; Renfrew et al. 1966, 1968).

These contacts began at least in the IV millennium B.C. and were favoured by ecological and environmental stress and new modes of adaptation or by the lack of important raw materials, for example obsidian. This was the case with the contacts between the Western Desert and Nile Valley and the links between Eastern Desert and Southern Atbai.¹ However, materials obtained in such a way may have had a social and ideological meaning as well. Sea shells, rhyolite, amazonite and malachite were usually used in producing specific kind of objects, for example the funerary goods found at Kadero (Krzyzaniak 1991), the mace-heads of the Butana Group in Southern Atbai (Marks & Sadr 1988; Marks 1991), the necklaces and mace-heads found at Kadada and the mace-head from Geili (Geus 1984; Gautier 1986; Caneva this volume). The most important persons in an age- or sex- hierarchy or, in the more complex societies, the chiefs or kings, have to control the relationships between their group and others so that foreign goods were probably used as symbols of their rank.²

These relationships involved southern groups characterized by the same or similar degree of social complexity. But we may pose the following question: what kind of feedback did the rise of the state in Egypt cause? We will consider this question further, after outlining the archaeological evidence of relationships and social complexity in the region during the III and II millennium B.C. (Fig. 1).

The examination of the funerary assemblages suggests a gradually increasing social complexity in the A-Group culture (Nordström 1972; Smith 1991). The funerary goods included luxurious and imported Egyptian goods (Adams 1977; Nordström 1972). The ceramic production of the Pre-Kerma culture (Bonnet 1988, 1990, 1991a; Privati 1988) is characterized by some similarities with the A-Group pottery. However, there are no imported Egyptian goods. The rise of social complexity in Upper Nubia is suggested by the Late Neolithic evidence from Kadruka (Reinold 1991).

The C-Group culture (Adams 1977; Bonnet 1986a; Bietak 1968; Trigger 1976) is characterized by an increasing presence of Egyptian imported goods. The funerary goods, settlement patterns and architecture clearly show the rise of a complex society (Sauneron 1965; Trigger 1965).

The settlement patterns and the hierarchy in cemeteries or funerary goods (Gratien 1978) make evident the rise of a complex society in the Kerma culture. The seals are administrative devices (Bonnet 1991a; Gratien 1991). In 2300-2200 B.C. the site of Kerma was a true capital city with monumental buildings, a royal cemetery and a life style we could term urban (Bonnet 1986b; [ed.] 1990; 1991a;

¹ Trade in antiquity and its features were examined by Chang (1975), Johnson (1975), Lamberg-Karlovsky (1975) and Polanyi (1957, 1975).

² The role played by the chief in socio-cultural contacts was discussed by Claessen and Skalnik (1978), by Service (1975) and Polanyi (1968). Liverani (1990) stressed that the diplomatic and commercial role of the Near-Eastern kings of the 2nd millennium B.C. was based on the same anthropological background.

| B.C. | Egypt | Nubia Lower Upper | Western Desert | Eastern Desert | Southern Atbai | Butana | Middle Nile | Gezira |
|------|--------------------|-------------------------|--|-------------------|--------------------------|----------------------|-----------------------------|----------------------------------|
| 3000 | Predynastic | A- Group | Laqiya ceramic group | ? | Butana Group | Late Neolithic | Kadada Late Neolithic | Late Neolithic |
| | Proto Dynastic | ? | N u b i a n elements | | | | | |
| 2500 | Old Kingdom | Buhen | N u b i a n elements | | | | | |
| | | ? | | | | | | |
| 2000 | 1st Intern. period | | | | | | | |
| | Middle Kingdom | C Group | ? | Pan Graves | Gash Group | Shagadud Sequence | | Rebak Seq. |
| | | | | | | | | |
| 1500 | 2nd Intern. Period | | | | | | | |
| | New Kingdom | Egyptian | | | Jebel Mokram Group | | ? | Jebel Moya cultural tradition |
| | | | | | | | | |
| 1000 | 3rd Intern. Period | ? | | | | | | |
| | Late Period | Napata | | | | | | Napata |

Fig. 1. The cultural sequence.

Bonnet 1991b; the rise of cities: Liverani 1986; Childe 1951). Many elements suggest relationships with the C-Group and Egypt (Gratien 1978; Reisner 1923). However according to Bonnet (1991b), the lack of Egyptian objects during some cultural phases shows that Kerma may have had hostile relations with Egypt. Egyptian military activity caused the fall of Kerma in 1450 B.C. (Bonnet 1986b; 1991b; Bonnet [ed.] 1990).

In 3500 B.C. the Butana Group settled in the southeastern Sudan. The sites of this culture are considered temporary camps but three main sites were occupied at least seasonally for a long time. The pottery evidence shows some technical similarities with the A-Group and there are imported goods (Marks & Sadr 1988; Marks 1991; Sadr 1988).

The Gash Group, dated between 2500 and 1500 B.C. is characterized by a complex and hierarchic settlement pattern. Tokens found at Mahal Teglinos and a similar cultural evolution suggest the rise of complex society. Moreover, there is evidence of contacts not only with the Kerma culture, the C-Group, and the Pan-Grave culture but also with southern Arabia and Ethiopia. Some sherds of imported Egyptian wares have been found at Mahal Teglinos (Fattovich et al. 1987; Sadr 1986, 1988; Fattovich 1989b, 1991; Fattovich et al. unpublished; Capuano et al. in press; Manzo 1991).

The Jebel Mokram Group, dated between 1500 and 500 B.C. (Fattovich 1989a; Fattovich & Marks 1989), has a very dispersed and not very structured settlement pattern (Sadr 1986, 1988). The ceramic material shows very strong relationships with the Pan-Grave culture of the Eastern Desert. There is however no evidence of contacts with the Nile Valley (Sadr 1987, 1990; Manzo 1991; Marks 1991).

The only post-Neolithic data from the Middle Nile Valley are a few atypical sherds found at Kadada (Geus 1984; Reinold 1987) and a tumulus at Jebel Makbor (Lenoble 1987; Privati 1987). A new system of adaptation may have supported a pastoral exploitation of the hinterland (Haaland 1989). In the Butana the sherds dated to the III-II millennium B.C. found at Shaqadud and at surrounding sites show links with the Gash Group (Marks et al. 1985). In the III-II millennium B.C., the situation is not very different at Rabak, Gezira, where the Jebel Moya Tradition is characterized by many Gash Group elements (Haaland 1987, 1989; Clark 1973; Manzo 1991).

After the end of the Laqiya Tradition, the Wadi Shaw and the Wadi Howar had different cultural assemblages which were also characterized by the presence of Nubian-like evidence (Kuper 1989; Schuck 1989; Richter 1989; Bonnet 1991a; Edwards & Hope 1989).

A final point is that the Pan-Grave people, perhaps settled in the Eastern Desert, had contacts with Egypt (Bietak 1966), Upper and Lower Nubia (Sadr 1991) from 1800 to 1400 B.C., and with the Southeastern Sudan (Sadr 1988), beginning ca. 1500 B.C. Several Pan-Grave, C-Group and Kerma elements have been found in the Wadi Gabgaba and Allaqi (Castiglioni et al. in press)

Fig. 2 and 3 show the relationship of the different regions between 3000 and 2800 B.C. and between 2500 and 1500 B.C., as well as the evidence of social complexity as suggested by the presence of: luxury goods, a hierarchy of funerary goods, a hierarchy of grave types and settlements, administrative devices (i. e. tokens or seals), and monumental architecture. It is not possible to suggest a specific model for the situation between 2800 and 2500 B.C. because of our scanty knowledge of the transition from Pre-Kerma to Early Kerma.³ After the Egyptian occupation of Upper Nubia in 1500 B.C. there is no evidence of contacts between the new Egyptian province and the southeastern Sudan. It seems likely that contacts between Egyptians and southern resource areas, in particular Erythrea and northeastern Ethiopia, by-passing the southeastern Sudan, were established. Anyway there is not enough archaeological evidence suggesting a more specific model⁴.

It was stated above that the chief played a very important role in the relationships between social groups and imported goods symbolized his rank. Moreover, there is generally a direct link between import of luxury foreign goods and the management of internal agricultural surplus (Earle 1991a; Kristiansen 1991; Polanyi 1975). In Egypt the pharaoh played this role, and the court may have confirmed its supremacy by using imported goods. The court may have had a monopoly of distribution of these goods (Earle 1991b; Krzyzaniak 1977: 166). The monopolistic character of Egyptian trade and contacts with other human groups makes evident this aspect. The Egyptian attitude towards southern people was characterized by the need to maintain relationships, increase contacts and by the need to have direct access to the resource areas. These needs led to Egyptian southern military expansion, to the A-Group's demise, to the Egyptian occupation of Lower Nubia between 2100 and 1800 B.C., and to the conquest of Upper Nubia in 1450 B.C. The rise of the state in Egypt increased the demand for luxury goods (Trigger 1976; 1983; 1984; 1987). In general, we suggest that a wide-ranging trade network, created by increasing Egyptian demand, was superimposed on the existing interregional relationships (on this subject see also: Hassan 1977; Beale 1973; Polanyi 1975).

Lower and Upper Nubian cultures were affected by increasing interaction within a socially complex culture, and by increasing military stress. The Nubian societies, characterized by some social hierarchies since Late Neolithic times, had eminent persons who may have controlled part of the long-distance economic relations, for example with the Egyptians (Fig. 4). The growth of such contacts may have caused augmented distributive control by eminent persons and, finally, strengthened their position. We cannot exclude the possibility that Egyptians

³ According to Reinold (pers. com.), the cultural passage between Pre-Kerma and Kerma culture "est là". However, the transitional sites, dated between 2800 and 2500 B.C., have not yet been found.

⁴ The idea (Sadr 1991) that during the period of the Jebel Mokram Group culture the Southeastern Sudan kept its previous commercial role is not likely. On the contrary, the archaeological data suggest a new situation (see Manzo 1991).

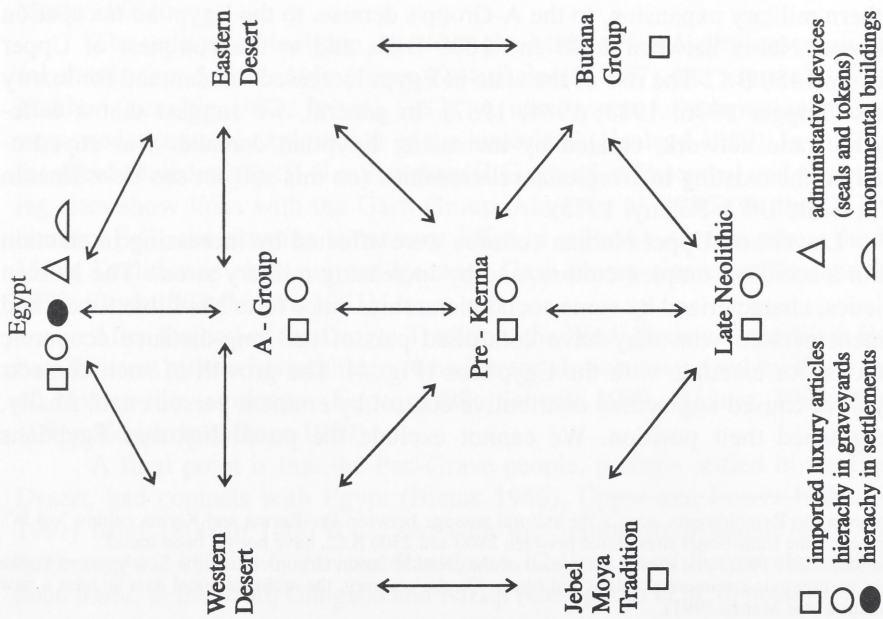


Fig. 2. Social complexity and cultural contacts, 3500-2800 B. C.

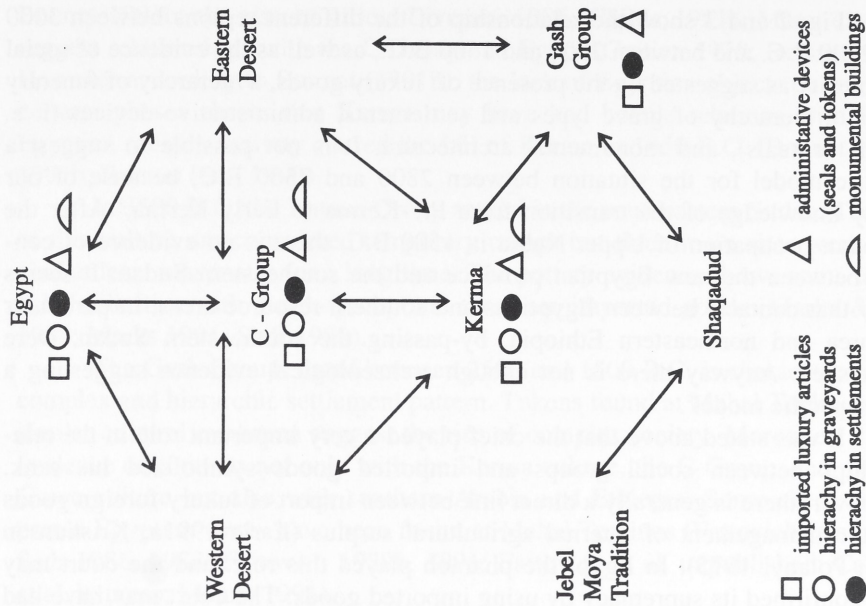


Fig. 3. Social complexity and cultural contacts, 2500-1500 B.C.

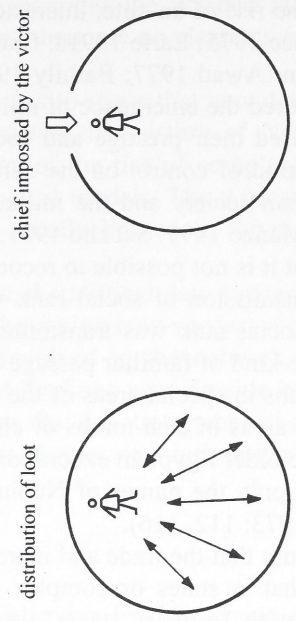
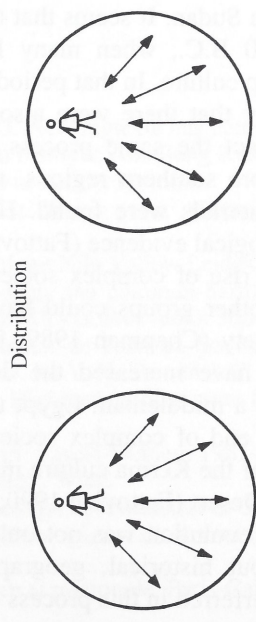
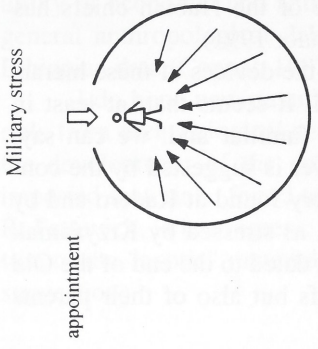
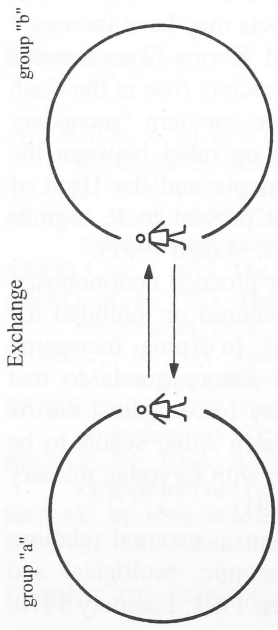


Fig. 4. Exchange of goods between two groups and its feedback.

Fig. 5. Military stress and its feedback.

would contribute to the rise of an elite, interested in keeping up the relationships (Renfrew 1975; Service 1975; Earle 1991a; Caneva 1991b; Morkot 1991; Manzo 1991; medieval Sudan: Awad 1977; Bathily 1977). The military stress (Caneiro 1970) may have favoured the emergence of military leaders (Fig. 5). Distributing loot may have increased their prestige and social position, and the victor must have imposed some kind of control on the defeated group. The emergence of a military rank in Nubian society and the military role of the Nubian chiefs has already been stated (Manzo 1991; Sackho 1991; O'Connor 1991).

At this moment it is not possible to reconstruct the devices of these hierarchy and how the transmission of social rank worked. It seems that, at least in some societies, the social rank was transmitted in a familiar and, we can say, "dynastic" way. Some kind of familiar passage of power is suggested by the concentration of rich tombs in special areas of the cemetery found at Kadero and by the presence in these areas of rich tombs of children, as stressed by Krzyżaniak (1991). Moreover, the older Egyptian execration texts, dated to the end of the Old Kingdom, record not only the names of Nubian chiefs but also of their parents (Abu Bakr & Osing 1973: 112, 116).

There is no doubt that the trade and increased contacts favoured the rise of "secondary states", that is states or complex societies appeared and increased because of contacts with "primary states", in this case Egypt (Renfrew 1975; Webb 1975). Here we consider Egypt as a "primary state"; however, the Mesopotamian influence, dated to the beginning of the I Dynasty, cannot be forgot, as stressed by Emery (1961), Trigger (1983; 1984) and Krzyżaniak (1977).

The same situation was repeated between Nubia and the southern Sudan, in particular southeastern Sudan. It seems that these contacts may have increased between 2500 and 1500 B.C., when many Kerma and Kerma-like elements appear in the Gash Group culture. In that period complex society rose in the Gash Delta. So it seems likely that there were also other more southern "secondary complex societies". In fact the same process may have operated between the Southern Sudan and more southern regions, mainly Ethiopia and the Horn of Africa where luxury materials were found. However, at present these regions offer very little archaeological evidence (Fattovich in press; Manzo 1991).

Nevertheless, the rise of complex societies did not proceed continuously. The relationships with other groups could have both favoured or inhibited the growth of complex society (Chapman 1989; Earle 1991). In Nubia, increasing social complexity may have increased the demand for luxury goods so that Nubian cultures became a middleman. Egypt used military force against the A-Group and Kerma. The end of complex society in southern Atbai seems to be connected with the end of the Kerma culture in Nubia and with Egyptian military activities in the Eastern Desert (Fattovich 1990; Manzo 1991).

Moreover, social evolution was not only dependant on external relationships (Connah 1987) but historical, geographical, economic, ecological and demographic factors interferred in this process (Kristiansen 1991; Flannery 1972;

Webb 1975; Champion 1989). For example, the Western Desert was crossed by many important tracks; nevertheless, there are no elements suggesting the rise of a complex society in that region.

The main aim of this paper was to stress that new data from Northeastern Africa may contribute to reconstructing the history of Northeastern Africa as regards the anthropological problem of the rise of complex societies and to the utility of economic and anthropological models. The African contribution to the general anthropological debate is usually limited to Egyptian and, sometimes, Ethiopian data (Connah 1987).

I do hope new quantitative and statistical data concerning imported materials from archaeological sites of the region may suggest more specific trends in the development of the cultures involved in the network. A similar study of imported materials, found at Mahal Teglinos near Kassala by the Mission led by R. Fattovich, is in progress. It seems that the stratigraphical and statistic distribution of the "exotic" materials might give us very interesting historic and cultural suggestions.

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