

APPROACHES TO ANTHROPOLOGICAL ARCHAEOLOGY

Metal, Nomads and Culture Contact

The Middle East and North Africa



Nils Anfinset

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Preface

Working in an area of conflict is difficult in many ways and the history of the southern Levant has made place names a central issue in the current conflict, also with reference to archaeological sites. This is reflected at a number of sites which may both have an Arabic name, Hebrew name and an English transliteration where the spelling may alter from publication to publication. I have chosen to use the place names found in the major publications, without considering the religious or political connotations.

Similarly the place and sites names in Egypt and Lower Nubia also have a number of different ways of spelling. I have here used the names and spellings found in the major publications, though this may slightly alter from both the local knowledge and other publications.

A note on dates is also necessary as this work covers a large area with different traditions and also different ways of expressing dates in a scientific manner. Throughout the book calibrated BC dates are kept as far as possible in line with Hassan (2002), basically because the main material stems from the southern Levant where this is the tradition. However, in Egypt and Nubia there is to a large degree, particularly in the prehistoric periods and environmental studies, a tradition of expressing calibrated BP dates. In order not to lose the original BP dating, these have been kept here, though this is generally followed by some comments placing the date within a BC framework. In terms of politics and religion BCE could have been used, though I have here chosen to use BC, without any specific meaning other than as a framework for dating.

Lastly, a note needs to be made on the geographical regions used. I have tried as much as possible to use common terminology, though this has not been easy as different disciplines use different terms. However, when referring to the southern Levant I basically refer to Israel, the Palestinian Territories and Jordan, though also including Sinai. When referring to northeast Africa I have Egypt and Sudan in mind, although this is an extremely narrow geographical definition. The term 'Middle East' basically refers to a broad geopolitical region from Libya in the west to Iran in the east, and Turkey in north and Sudan in the south (cf. Anderson 2000). Sometimes, particularly in Chapter 5, the term 'Near East' occurs as it is used by some of the main authors, though implying more or less the same geographical region. However, Khazanov (1994) does have a slightly different, narrower definition of the term 'Middle East'.

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Introduction

The regions of both northeast Africa and the southern Levant witnessed a number of major cultural changes from about 5000 BC to ca. 3000 BC, which must be seen in a context of important, widespread changes in animal husbandry, agriculture, expanding exchange and interaction over vast areas. As various modes of living advanced, it initiated constant communication over enormous areas between different regions where ideas diffused. The use and development of exotic materials and other commodities was also initiated through progressive exchange or barter. Copper was probably one of several items that became slowly integrated into an exchange system between the southern Levant and northeast Africa, where pastoral nomads in various forms played a significant role. These cultural changes ended with the culmination of the Dynastic periods in Egypt and the development of urban city-states in the southern Levant slightly later, while the Nubian A-Group disappeared from the map just after the First Dynasties in Egypt were established. In many ways, the gradual transformations of the 5th and 4th millennia BC led to a totally new and different way of life and interconnections, developing the cultural setting known even today in large parts of northeast Africa and the southern Levant. Northeast Africa is here used in a narrow sense basically including Egypt and the northern part of Sudan defined as Lower Nubia.

The aim here is to make a synthesis of some of these cultural changes. In order to approach some of these transformations, a broad culture-historical perspective is needed to understand developments. This of course reduces the focus on specific, local features, at the cost of the wider regional and interregional setting. A local perspective on these processes may easily turn explanations and interpretations into local developments and innovations, without understanding the wider interregional context. Developments through the 5th and 4th millennia BC will be followed with reference to the introduction of copper and metallurgy, as well as the development of specialized pastoralism. Here, the focus is on processes and developments over a long period of time, and the aim is to challenge some of the earlier approaches to the regions discussed here, and provide insight and a synthetic framework which may be applied on a more general level.

Commencing with a discussion of several central analytical perspectives and approaches, including relevant aspects of secondary products, this is connected to approaches on interregional contact and economic systems. Central aspects of the material culture will then be discussed, as these have relevance for the classification and contextualization of the objects discussed. In Chapters 3 and 4, the culture-historical frame is set for Chapters 5, 6 and 7, but also discussed generally is the past and the present environment of the region. Chapter 3 in particular discusses central issues of the Late Neolithic, Chalcolithic and Early Bronze Age I of the southern Levant. In Chapter 4, the culture-historical setting of northeast Africa is discussed, from the Neolithic period through large parts of the 4th millennium BC in Egypt, Lower Nubia and the adjacent desert regions. From this point, the role of present day nomadic pastoralists is discussed in Chapter 5 in addition to the timeframe considered here, noting also particular cases where there are pastoral nomads in the present day. Further, the role of copper artefacts in both the southern Levant and northeast Africa is analysed in Chapter 6, discussing the metallurgy, as well as copper artefacts and their contexts. In Chapter 7, these issues are drawn together with consideration of contact and exchange in the 5th and 4th millennia BC. The increase of specialization and ritualization, and the role of copper both in the regions and on a comparative cross-cultural level, are discussed.

2 Perspectives and Approaches

This chapter discusses the analytical approach connected to the analysis of the early copper. It especially focuses on the secondary products of wool, milk and traction, as well as more analytical concepts connected to economic systems of exchange, material culture and technology. These not only refer to the metal and metallurgy, but also to new technologies connected to food production and adaptation.

Secondary Products and Nomads

One of the central issues here is the development and the implication of secondary products as it is argued these have significant and important effects well beyond the new products and technologies themselves. Andrew Sherratt's (1981) article, 'Plough and pastoralism: aspects of the secondary products revolution', points to a number of technological, biological and social implications and developments connected to the use of these new products and technologies. Among these new technologies are carts or wagons and the use of the plough, which will not be discussed here as this is not central to the material presented or the themes in focus here. At the same time Thomas Levy's (1983) article has a more specific contextual focus on the emergence of specialized pastoralism in the southern Levant with particular focus on the secondary products. Here, the focus is rather connected to the use and the implications of milk and wool, as well as, to a lesser extent, animals used for transportation and traction, especially in an agricultural setting. The use of milk and related products, as well as the use of wool, leads us to carefully consider the implications of these products in a wider regional and interregional context, in particular with the development of specialized pastoralism.

However, first let us turn back to the issue of milk, wool, transportation and traction. The development of milk and milk products is extremely important to the understanding of the growing economic specialization found at sedentary agricultural sites in the Levant and northeast Africa, in a context where specialized pastoralism develops.

Sherratt (1981:282–3) argues that the evidence of woollen textiles in the Near East is meagre compared to the evidence of the waterlogged bogs and lakes of northeast Europe

which occur from the mid 3rd millennium BC, suggesting that wool had developed not long before in the Near East. Reviewing the evidence of both linen and wool, McCorriston (1997) suggests that during the late 4th millennium BC there seems to be a major shift towards wool production. This also fits well with the evidence of spindle whorls from sites like Hacinebi Tepe in southern Turkey (cf. Keith 1998). Using the pictographic evidence from Uruk, a few early Dynastic sculptures and cylinder seals, and the Old Babylonian lists, Sherratt suggests that wool may have played a significant role in the extension of the urban networks in Mesopotamia of the 3rd millennium BC. The question is, however, are there other avenues of dating the utilization of wool? Strikingly, Sherratt does not consider other archaeological material to a great extent, such as large scrapers, spindle whorls and loom weights, although these may indirectly lead us towards a further understanding of the use of wool. However, we must be aware of the fact that spindle whorls and loom weights may have been used for producing plant-derived textiles using such as flax. Clearly, these artefacts may have been used for other purposes, although a standardization of spindle whorls, for example, may give indications of use. One issue is the actual production of wool. Another is the economic and social implications. On a social level, Sherratt suggests that an expansion of textile production leads to a predominance of males in agricultural activities, while women were left to spin and weave within the household production. As discussed below, wool, along with milk and milk products, must have been some of the prerequisites for developing specialized pastoral nomadism as a specialization in a wider economic setting. Without this know-how and these resources, the basic element of specialized pastoralism would not be in place. In other words, it would not be possible to economically use dry or semi-dry regions for other purposes than pastures connected to meat production.

Milk and related products are one of the main reasons for the new exploitation of animals, as well as new modes of living. Sherratt (1981) highlights not only the dietary advantages of milk, but also the problems of animals not especially bred for the purpose of producing large quantities of surplus and the practical and biological difficulties of limited tolerance of human populations to milk. Sherratt (1981:278–9) points to cylinder seals from the Uruk period of the late 4th millennium, which clearly illustrate milk products, as well as a later scene of milking on a frieze in the temple to Nin-Hursag from the First Dynasty of Ur dated to the mid 3rd millennium BC. The latter is especially interesting as it appears in a temple context, clearly pointing to the significance of milk—possibly in a ritual context. This has recently been attested by evidence from the Chalcolithic temple at Gilat and analysis of pottery residues. The picture here clearly points in the direction of a number of substances such as milk and olive oil with long traditions in cultic practices in the region (Levy 2006c). Other archaeological material includes pottery and pottery forms, which may point indirectly to the process of milking and the utilization of milk products. For the region considered here, Sherratt (1981, 1983) has on several occasions directed attention to the pottery forms of the Chalcolithic period of the southern Levant, with particular emphasis on the female figurine from Gilat bearing a churn on her head, which was found in what is interpreted as a sanctuary. In addition, rams or bulls with churns and cornets carried on their backs have also been found in contexts interpreted as sanctuaries (cf. Sherratt 1983:fig. 7.5). Again, as previously mentioned, we see a link to a luxury and ritual context which we later observe in Mesopotamia too. A difficult question to answer is whether the milk utilized came from sheep and/or goat or cattle. In regard to the southern Levant, it is tempting to focus on

sheep/goat milk rather than cow milk—this will become more apparent in a later chapter on pastoral nomadism. However, at this point, it is sufficient to know that evidence of the technology of milking is attested in the early part of the 4th millennium in the southern Levant and somewhat later in Mesopotamia. There is also another major difference in the regional contexts of these finds. The Chalcolithic of the southern Levant cannot be described as an urban society, but rather a village-based society with relatively few indications of social differentiation. The later Mesopotamian case is an urban example where there is increased social differentiation.

Consequently, milk products and wool are truly one of the preconditions or prerequisites for the development of specialized pastoralism. Without the utilization of these products, specialized pastoralism would not be possible and the drier regions would not have the same economic significance. However, is the development of these new milk products and wool coherent in time, or do they have different chronologies? This issue will be addressed later, when considering in greater detail the sites and archaeological material connected to specialized pastoral activities in the southern Levant and in northeast Africa, in addition to the spread of metals and metallurgical know-how.

This utilization of specialized pastoral activities inspires new and different settlement patterns, including sites in more arid regions, such as the Sinai Peninsula and the deserts to the east and west of the Nile, in this case. It is exactly this development in drier regions that would play a significant role in interregional trade and contact (cf. Sherratt 1976, 1981). As Sherratt (1981:286ff) points out, this coincides with an agricultural intensification, in addition to the development of specialized pastoralism based on milk and wool using different ecological resources and symbiotic social systems (cf. Barth 1956). There may be large differences in economic basis and adaptation between the southern Levant and northeast Africa, but Sadr (1991) has noted similar developments in northeast Africa, especially on the peripheries of Predynastic and Dynastic Egypt. Sadr's (1991) study of the development of nomadism in northeast Africa focuses to a great extent on the identification and the importance of nomadic groups operating in a symbiosis with and on the borders of state-level societies (cf. Barth 1956), possibly even before the development of such state-level societies. The important factor in Sadr's model is that nomadic societies are more often closely related to settled societies and cooperation, rather than conflict, as argued with the Naqada III and the Nubian A-Group (Sadr 1991:129). However, the implications of secondary products, in particular milk products and wool, are not considered with reference to specialized pastoralism. These issues will be readdressed later, but for now it is important to keep in mind the advantages as well as the symbiotic relationship developing between agriculturalists and specialized pastoral nomads, both with reference to village-based societies and, later, to state-level societies, creating contacts over large distances.

While there is a clear potential for interregional contacts, it is necessary to examine what this means to archaeology and how this has been applied previously. Are the developments that we see during the 5th and 4th millennia BC in the southern Levant and northeast Africa the beginning of an increased interregional interaction based on secondary products and the introduction of metal, which develops into a 'world-system' by the late 4th and early 3rd millennia in both Mesopotamia and Egypt? This brings us to another important part of this book: the development of economic systems and the relationship to the secondary products.

Economic Systems and Archaeology

No world system is global, in the sense that all parts articulate evenly with one another, regardless of whether the role they play is central or peripheral. Even today, the world, more globally integrated than ever before in history, is broken up into important subspheres or subsystems... (Abu-Lughod 1989:32).

Though Abu-Lughod (1989) discusses the world system 1250–1350 AD before the European hegemony from an anthropological perspective, her argument may have relevance for how we consider systems, connections and indirect contacts in prehistory. During the late 5th and 4th millennia there seems to be a considerable development leading to the first complex societies, where exchange played an important role. However, this must be contextualized with reference to social processes (specialization, organization, mode of exchange, etc.) and technological achievements. Was there a core-dominating system developing during the 5th and 4th millennia in the southern Levant and northeast Africa, or are there other alternatives of interregional interaction? Do any relationships exist between these societies?

A prerequisite to answering these questions would be analysis of the region where social complexity is developing, in addition to the adjacent or neighbouring regions where increased social complexity seems to develop at a later stage. This will be achieved with a close examination of the introduction of copper to these regions, as well as the role of pastoral nomadism. However, it is necessary to first take a closer look at some central theories focusing on interregional interaction and what implications this may have for the analysis here.

Considering systems or other forms of interaction, a basic premise is that the societies of the 5th and 4th millennia BC cannot be viewed as closed, separate units. Archaeological cultures are modern constructions, as are modern cultures and these must be seen in relation to each other, whether they are modern or ancient. One needs to see the archaeological cultures in a wider social setting, which implies a focus more on factors bringing about cultural change. Additionally, it is necessary to consider a wider geographical setting in order to understand impacts and effects in several adjacent regions. One possibility is to try to understand the societies of the southern Levant and northeast Africa within a 'formative system', where the southern Levant and Nubia are supply zones to Egypt.

Trigger (1989:333) has argued that Childe, as early as 1928 with his book, *The Most Ancient East*, used a core-periphery perspective when he studied the economic interaction between the Near East core area and the European periphery. Many European archaeologists are therefore predisposed to accept Wallerstein's theory of world-system. He argues further that: 'This approach involves the study of large-scale spatial systems, assuming an interregional division of labour in which peripheral areas supply core ones with raw materials, the core areas are politically and economically dominant, and the economic and social development of all regions is constrained by their changing roles in the system' (Trigger 1989:332). The concept of world-system theory has been frequently used in a number of studies with modifications to Mesopotamian civilization, especially after 3000 BC (e.g. Lamberg-Karlovsky 1975; Kohl 1978; Alden 1982; Edens 1992; Algaze 1993; and most recently Stein 1999). It has been argued that the developments in Mesopotamia are part of a much larger system of cultures developing in the region, influencing both political and economic developments over large areas. The concept has also been applied to a number of studies outside Mesopotamia, especially on the Bronze Age of western Asia and Europe (Ekholm and Friedman 1979;

Kohl 1987; Kristiansen 1987 etc.). Recently the concept has been applied to eastern Africa as part of the Indian Ocean world-system (Mitchell 2005). Although this has been within a context of growing globalization, the emphasis on world-system theory has not gained any influence (e.g. Hodder 2001). However, one recent exception is Gosden (2004) who uses a long-term view on culture contact in a colonial perspective. Alternatively, the world-system theory focuses on connections and is a good alternative to particularistic explanations and theories.

Wallerstein's world-system is basically a theory of economic relationships of complex societies, where the economic periphery area is linked and exploited by the economic core area. Dark (1995:131) has suggested the model incorporates both Marxist and system theory elements and the theory has found many supporters in both processual and Marxist explanations in archaeology. For a Marxist approach, the issue was related, to a large degree, to domination, resistance and growing social inequality. It has been applied in various forms in Mesopotamia at an early stage, due to increased social inequality and the development of social classes. Much of the recent discussion has focused on *when* and *how* we may speak of a world-system (cf. Gunder Frank and Gills 1993; Wallerstein 1993; Wilkinson 1995a, 1995b; Chase-Dunn and Hall 1997). Strangely, the world-system theory or modifications on the theory have never really been used in the Levant and Egypt. This is likely to be due to political or methodological reasons, but may also be due to the strong impact of culture-historical archaeology, the extreme desire to establish archaeological cultures on the basis of pottery types (as a substitute for text), or a strong focus on settlement patterns, which have indeed led to the reduction of the importance of interaction between societies.

In order to approach the study of interaction between societies on a more theoretical level, Lamberg-Karlovsky (1985a, in Trigger 1989:332) has used the historian Braudel's concept of the *longue durée* to distinguish between gradually cumulative processes and periods dominated by alternating forces that transformed the social and cultural order in Mesopotamia and the Iranian Plateau. The *longue durée* has recently been applied to the southern Levant (Levy 1998c) with the assumption that socio-economic change can be understood in a long-term perspective. Warburton (2001:207) argues that little attention is paid to the specific character of events, such as for example, the introduction of secondary products and metal. However, Levy (1998a) is one of the few looking at a broad timeframe, although he lacks the interregional diversion where the southern Levant (or the Holy Land) is placed in a larger regional setting. In the Levant, it is impossible not to consider a wider setting in order to understand the short-term, medium-term and long-term socio-economic processes that Levy wants to focus on. More recently Levy and van den Brink (2002) have to a large extent discussed and analysed the use of both world-systems models and a local peer polity perspective of core and periphery Egyptian-Levantine, where the interaction phase is much less understood in the early than those that are seen in the late EB I and early EB II contemporary with the formation process in Egypt.

Stein (1999:27) has argued that the world-system theory has been attractive to archaeologists because it links politics, economics and geography into a coherent framework that may be applied on the development of complex societies on an interregional scale. Obviously, the theory has been applied mostly to societies and states after 3000 BC, such as, the Roman Empire, Mesoamerica and Mesopotamia, which has a significant and vast impact over large regions. In such a context, the world-system and a core-periphery relationship