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MIGRATION AND ETHNICITY IN PREHISTORIC CYPRUS: TECHNOLOGY AS *HABITUS*

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Abstract: During the third millennium cal BC, there were major changes in many aspects of Cypriot material culture, technology and economy which characterize the division between the Chalcolithic and early Bronze Age on the island. Many innovations can be traced to Anatolian antecedents. These include a very wide array of domestic as well as agricultural and industrial technologies. Their nature and range make it possible to argue strongly for the movement of people to the island, rather than for other mechanisms of technology transfer and culture change. This identification of an intrusive group, with distinctive patterns of behaviour (*habitus*), opens up questions of prehistoric ethnicity, and the processes by which the initial maintenance of different lifeways by indigenous and settler communities eventually gave way to a common cultural system.

Keywords: archaeology, Bronze Age, Chalcolithic, Cyprus, ethnicity, migration, prehistory, technology

All living things come to an island with only the capital of their minds, their instincts and their genes. In the case of human beings, they also bring with them a select cargo of natural and cultural artefacts. Nothing is transported whole, however. The webs of significance are always darned.

(Denning 1992:308)

INTRODUCTION

The archaeological identification of migration implies the recognition of ethnicity. Only by defining a significant difference between indigenous and settler groups is it possible to build an archaeological argument for a population movement into previously occupied country. In most cases this is made more difficult by the many other factors which affect cultural differences, and by many other agents of change. In addition, terms such as 'migration' involve complex problems – conceptual, practical and ideological (Adams et al. 1978; Anthony 1990, 1997; Chapman

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1997). In this article, an argument will be advanced that innovations in the mid-third millennium BC in Cyprus can best be explained by a focal migration of people from south-western Anatolia: that is, by seeing material differences within the island as representing two ethnic groups, the indigenous 'Chalcolithic' and settler 'Philia' Bronze Age.

Like migration, 'ethnicity' is a difficult concept in the modern world and in archaeology. It is variously constructed, and recognized in different ways. For some, archaeology can only be used to examine diacritical markers of identity of ancient peoples identified from other sources (Hall 1997:142). For others, however, ethnicity can be approached archaeologically, often using the geographical extent of key material indicators to define cultural (hence ethnic) boundaries (e.g. Emberling 1997). In this analysis, however, the strategy adopted is a broader conceptualization of *habitus* as an appropriate identifier of ethnicity (see e.g. Shennan 1989a; Jones 1997). *Habitus*, following Bourdieu (1977), refers to all aspects of society, as lived through everyday experience. This can be considered as a primary locus of identity (Bentley 1987; Banks 1996:45). While overt symbols may be important, the recognition of *habitus* may best be attempted with more mundane aspects of life. As daily activities involve, and are conditioned by, material culture, they are readily amenable to archaeological identification. This may be approached at the level of very broad patterns of behaviour or, equally significantly, at the finest level of individual motor habits, where early training determines specific modes of action, typical of one society rather than another. A key aspect of the concept of *habitus* involves this process of individual enculturation and its implications for social reproduction. At a broader scale, patterns of learning are also a key part of arguments for migration, for the introduction of new materials and methods is far more efficiently achieved by the movement of experts than by other processes of technology transfer (e.g. Rogers 1983; Laudan 1984; cf. Polanyi 1962:53).

In this article, therefore, the concept of *habitus* (everyday practical behaviour) underpins the explanation of differences between the earliest Bronze Age people of Cyprus and their Chalcolithic neighbours as a matter of ethnicity, while the range and nature of new skills and technologies suggest that these differences resulted from the movement of people from Anatolia, rather than from an indigenous restructuring within the island (Frankel and Webb 1998).

This explanation runs counter to those which favour internal social evolution and reject the possibility of identifying prehistoric ethnicity. Knapp, for example, has recently argued that because the concept of 'ethnicity' is complex and has no simple material correlates, it should not be employed in prehistoric explanation (Knapp in press). The same may be said, of course, for every other category of social analysis – status, for example, is equally, if not more, complex in its formulation and material representation. Does this not mean that one should reject this notion as irrelevant in prehistory? There is no denying the reality and significance of ethnic groupings, however defined, in the present, or that significant numbers of people move from one country to another. Can we simply dismiss the possibility of somewhat equivalent prehistoric constructs and events, simply because they are

hard to define or perceive? To do so privileges – indeed forces – models of social unity and internal development at the expense of other modes of explanation.

CONTEXT

Geography

Cyprus is the third largest of the Mediterranean islands. Although it is only some 70 km from the southern coast of Turkey, this distance can be seen as a significant barrier to either casual or continuous contact: the opportunities for generalized diffusion of types, technologies or indeed people are therefore restricted, compared with continental circumstances. The island itself is geographically diverse. The distribution of natural resources is significant, and the relative importance or value of different regions has changed with different perceptions of the environment, and with different agricultural and industrial technologies (Fig. 1).

The structure of agricultural land and availability of water have always been key factors. The Troodos massif, with mountains rising to about 2000 m, not only divides the south coast from the central plain but has a major effect on rainfall. The landscape to the north of the ranges is more open than the narrower coastal strip of the south-west, which is cut by a series of rivers running south from the ranges. But these coastal areas – especially those of the south-west – are well-watered compared with those in the rain-shadow north-west of the mountains. Copper deposits are located in a belt around the fringes of the range and, at those times when this was a significant resource, contributed to the structuring of settlement patterns and social interaction.

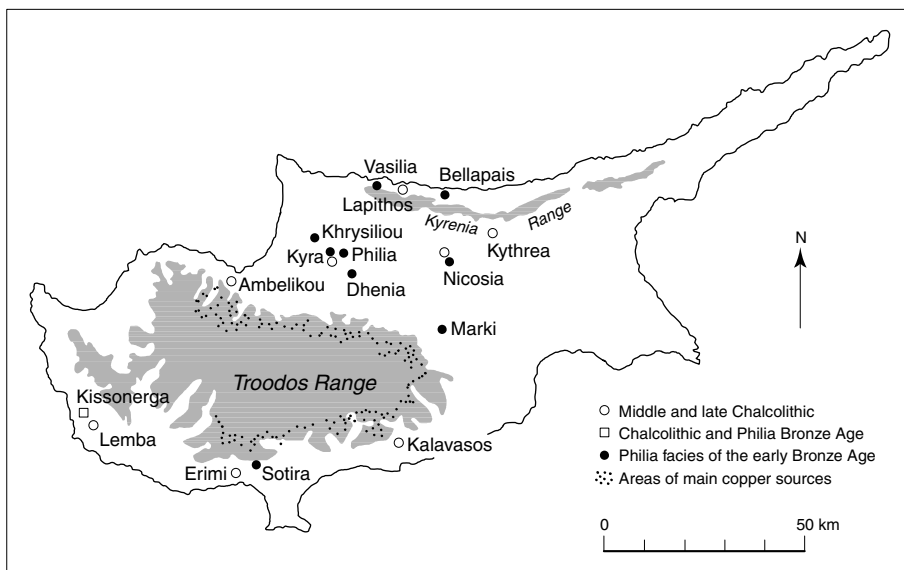


Figure 1. Map of Cyprus showing major geological features and key sites of the later Chalcolithic and earliest Bronze Age.

Archaeology

Although a topic of considerable debate for many years, discussions of cultural change in the third millennium were until recently based largely on finds from cemeteries (Dikaïos 1962; Stewart 1962; Catling 1966). Extensive excavations at settlement sites now not only provide stratified sequences but also domestic material which allows a significantly different approach to explanation. During the last 25 years, Edgar Peltenburg has excavated two sites (Lemba *Lakkous* and Kissonerga *Mosphilia*) in the south-west of Cyprus which form the basis for knowledge of the first half of the third millennium BC (Peltenburg et al. 1985, 1998). Both sites span the transition from middle Chalcolithic to late Chalcolithic, about 2800 BC. In the context of this discussion some aspects of the late Chalcolithic – especially in periods 4 and 5 at Kissonerga (2700–2400 BC) – are of particular importance. Peltenburg has suggested that the late Chalcolithic represents in part a breakdown of the more cohesive middle Chalcolithic cultural system as an array of foreign elements were introduced (1993:18). These include a wider range of burial practices, new pottery wares, new types of pendants and the occasional use of small metal items. Despite these changes, other aspects of material culture and economy remained within the Chalcolithic tradition, characterized by hoe-based agriculture, herding of sheep, goat and pig, the use of independent round multi-function housing, intramural burial and fluctuating levels of socio-political complexity.

Unfortunately, the uppermost deposits (period 5) at Kissonerga are very poorly preserved. This latest occupation, dating to about 2400 BC, has a different array of ceramics from earlier phases and is also differentiated by the introduction of cattle and a range of new artefact types (Peltenburg 1998:52). The pottery and other material is characteristic of the Philia facies of the early Cypriot Bronze Age. This archaeological entity is now well represented in the earliest deposits currently being excavated at Marki *Alonia* in the centre of the island, but is otherwise known only from a series of cemeteries in the north-west, west, centre and south-west. A recent review shows that the Philia facies can be regarded as a coherent, homogeneous archaeological entity (Webb and Frankel 1999). The pottery from different sites is extremely uniform, and is associated with a number of other diacritical archaeological markers which set this facies apart from other units within the early Bronze Age, which develop at a slightly later time. Characteristic elements which differentiate the Bronze Age from the Chalcolithic are discussed in greater detail later.

Although absolute dating is still inadequate, it is now clear that there was considerable chronological overlap between the late Chalcolithic and Philia occupations (Peltenburg 1998:20–21; Webb and Frankel 1999). In addition, since sites of each type are found in close proximity to one another, there was no clear geographical separation between the two archaeological entities.

INNOVATIONS – NATURE, SOURCE AND SIGNIFICANCE

A wide array of innovations in material culture and technology appears in mid-third-millennium Cyprus. At Kissonerga some occur within late Chalcolithic

contexts, while others are more closely associated with only Philia material in the latest phase at that site (Peltenburg 1998: Table 14.7). Many others are seen in the earliest (Philia) deposits at Marki or are characteristic of the developed early Bronze Age of the later third millennium. These provide the basis for defining distinctly different Bronze Age and Chalcolithic ways of life.

Food preparation and consumption

There are fundamental differences between Chalcolithic and Bronze Age approaches to food preparation and consumption. Although Bolger suggests that some trays and forms of baggy holemouth jar may have been used for cooking at late Chalcolithic Kissonerga (in Peltenburg 1998:124), it is only in the Philia ceramic inventory that a specific direct fire-boiling vessel form can be identified (Webb and Frankel 1999:29). The introduction of these distinctive cooking pots can be used to argue for a significantly different cuisine, with an emphasis on boiling or stewing.

Jugs with tall pouring spouts are characteristic of the Philia facies, whereas Chalcolithic jugs typically have round mouths. The similarity of the highly distinctive Philia Bronze Age spouts to Anatolian types has long been recognized. Within Cyprus, they suggest a change in the way in which drinks were stored and served.

New forms of jugs and cooking pots have vertical handles, unlike the characteristically handleless Chalcolithic pottery. Bronze Age and Chalcolithic people, therefore, not only used a different suite of pottery, in some cases for different purposes, but also carried and handled their domestic vessels in different ways.

Chalcolithic round houses typically have large circular central hearths, perhaps



Figure 2. A hearth set within a plaster surround against the wall of a Bronze Age house at Marki.

used for light and heat rather than for cooking. At Bronze Age Marki, small hearths with semi-circular fenders were set against the side walls of houses and used for cooking (Fig. 2). The cooking pots were often set on horseshoe-shaped clay hobs or pot-stands, very similar to types well known from third-millennium Anatolia and the northern Levant (Fig. 3). This reinforces an understanding of Bronze Age food preparation and related activities as significantly different from those of the Chalcolithic.



Figure 3. A Bronze Age Cypriot clay hob or pot-stand from Marki.

Textile techniques

While modified sherds or other items may have functioned as spindle-whorls in earlier periods, Bronze Age spinners used specially made clay whorls on their spindles. Their form and decoration are closely reminiscent of those from western Anatolia (Fig. 4). Conical whorls at Marki and elsewhere typically show chipping and/or abrasion of the narrower terminal (Frankel and Webb 1996:192–195; Crewe 1998:59–62). This use-damage most probably results from the whorls striking the ground when used with drop-spindles, or when rested on the ground, and indicates that the whorls were mounted at the lower end of the spindle. Figure 5 shows that low-whorl spindles were in common use in prehistoric Anatolia, Greece and the Balkans, while high-whorl spindles are found in the Levant and Egypt (Barber 1991:56–64). Although the basic technology is the same, spinners trained in the use of low-whorl spindles have difficulty in handling high-whorl spindles, and vice-versa (Barber 1991:53). Motor habits such as these, learned in childhood, are difficult to change. They highlight aspects of enculturation and learned techniques typical of one society as opposed to another. In this case, they strongly suggest that Bronze Age spinners were working with craft techniques imported from the north (specifically Anatolia) at the beginning of the Bronze Age.

Two other aspects of textile crafts fit within northern mainland traditions. The weights of Bronze Age spindle whorls indicate that both flax and wool were worked in Cyprus as they were in Anatolia (Frankel and Webb 1996:195; Crewe 1998:32). It is possible that new types of fibres may have been introduced

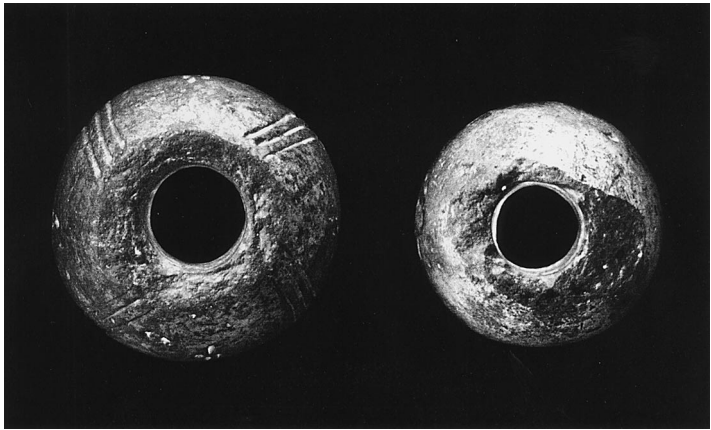


Figure 4. Evidence of use-damage on the narrow (lower) terminal of clay spindle whorls from Marki.

along with new techniques of textile production (Peltenburg 1998:199). Low-fired clay loom-weights, characteristic of the Bronze Age, show that weavers used vertical warp-weighted looms (Frankel and Webb 1996:194). No equivalent artefacts are known from the Chalcolithic, but there are similar examples from Anatolia, where the warp-weighted loom was the standard weaving technique (Barber 1991:91–113).

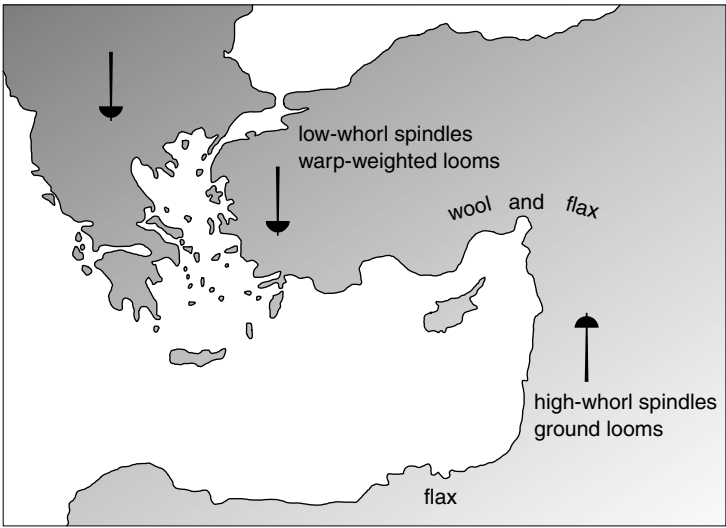


Figure 5. The distribution of different aspects of textiles in the eastern Mediterranean (Source: Barber 1991: Figures 1.8, 11.1, 11.2).



Figure 6. *Chalcolithic round house at Kissonerga.*



Figure 7. *Complex multi-roomed rectilinear Bronze Age architecture at Marki.*

Built environment

The built environment functions as the primary locus of social interaction and structures inter-personal relationships within and between households. There are fundamental differences between Chalcolithic and Bronze Age housing in construction technique, design and development (Swiny 1989).

Chalcolithic houses (Fig. 6) were typically discrete, single, multi-functional circular buildings, using 'mudwall' techniques (Peltenburg 1998:54). Bronze Age houses, in contrast, were rectilinear, multi-roomed and built of mould-made mud-brick laid on dry-stone footings. All of these traits show generic similarities to contemporary Anatolian settlements (Fig. 7). At Marki, it is possible to trace the evolution of part of the early Bronze Age settlement and to see the development of conjoined buildings as empty space was filled in and older structures renovated and rebuilt. Chalcolithic settlements are characterized by different internal processes, with no equivalent evidence of rebuilding and reuse of older structures.

The differences in the built environment, in both structure and house-form, may be correlated with other fundamental differences in society (Flannery 1972, 1993). They reflect very different personal associations and social relationships within and between families, acted out on a daily basis. One aspect of Flannery's general model is the link between house form and communal or family-based storage and risk (Flannery 1993; cf. Weissner 1982). This may find some archaeological expression in Cyprus, with evidence for communal storage at Chalcolithic sites such as Kissonerga, while Early Bronze Age storage and consumption took place at the household (individual family) level. Related to this difference in organization of storage is Peltenburg's (1993) analysis of fluctuating scales of social integration in Chalcolithic communities, which he sees as associated with periodic settlement fission. In contrast, Bronze Age settlements, such as Marki, show greater trans-generational continuity and transmission of property and greater autonomy at the individual household level (Webb in press).

While it may be possible to argue that changes in house-form and settlement structure follow an evolutionary trajectory as a by-product of a changing social order, the concomitant changes in building technique greatly reduce the force of such an explanation. Instead, it is more appropriate to see the introduction of new architectural systems as a clear break from pre-existing traditions and techniques.

At a finer scale, differences in domestic fixtures, as for example that noted earlier in the placement and function of hearths, also signal alternative ways of using domestic space and structuring social interaction.

Ceramic technology

Some new vessel types have been noted already. Apart from these new forms, related to new social practices and modes of manipulating artefacts, there are significant differences in manufacturing techniques between Chalcolithic and Bronze Age pottery. This is seen most obviously in the methods used to attach handles and bases. The potters belonged to different technological potting traditions, within which some techniques (such as the application of handles) have clear Anatolian parallels (Mellink 1991). Bronze Age cooking pots do not simply represent a new

shape, but from the earliest examples display an array of technological elements of fabric, shape and surface treatment designed to enhance their efficiency and longevity (Frankel and Webb 1996:166–170; Webb and Frankel 1999:29).

Metallurgy

Only a very few small copper items come from late Chalcolithic contexts; these may well be contemporary with, and even derived from, Philia Bronze Age associations. Copper-working was an important industry during the Bronze Age. While some of the earliest copper may have been imported (Gale 1991; Stos-Gale et al. 1991; Knapp and Cherry 1994), some must have been locally produced (Peltenburg 1998:189) as was metal later in the Bronze Age. In the absence of local predecessors, it is highly likely that the techniques and skills associated with this technology were introduced to the island, where they were applied to local conditions. Apart from the technology itself of mining, smelting and casting, new arrays of tools were available in the Bronze Age, carrying with them different attitudes towards raw materials and alternative modes of carrying out daily activities. Copper-working provided an additional and significant activity, affecting the scheduling and allocation of tasks, while the distribution of copper to regions away from the source areas provided a different framework or structure for inter-regional relationships. Areas near to copper sources, which were relatively unattractive for Chalcolithic communities, were more desirable for Bronze Age peoples.

Agriculture

Domestic sheep, goat, pig and wild deer are present in both Chalcolithic and Bronze Age sites (Croft 1991, 1998). Faunal remains from Philia deposits at Marki and Kissonerga show that cattle and equids (probably donkeys) were introduced to Cyprus at the start of the Bronze Age (Croft 1996, 1998; Webb and Frankel 1999:40). Their introduction required a complex of new skills of animal husbandry, to feed, breed, train and care for these animals (Frankel et al. 1996; Peltenburg 1996:23).

Apart from their primary products, donkeys were used for transport and oxen for ploughing (Fig. 8). There were concomitant implications for many activities, including the scheduling of work and organization of labour by age and gender. The change in scale made possible by new animals and new techniques is likely to have had a significant impact on the structure of production and the scale of productivity. The replacement of intensive hoe-based by extensive, more efficient, plough-based agriculture may have led to a restructuring of economic power relationships, as earlier controls over limited areas of highly productive land and of labour were undermined (cf. Peltenburg 1996:24).

It is also likely that there were significant implications for settlement patterns. The relatively low agricultural potential of the drier parts of the island would have been markedly increased by more extensive farming practices and consequently could have supported significantly larger populations. In some cases, as at Marki and similar sites situated on the north-western edge of the Troodos mountains, the greater agricultural potential was reinforced by the proximity to copper sources.

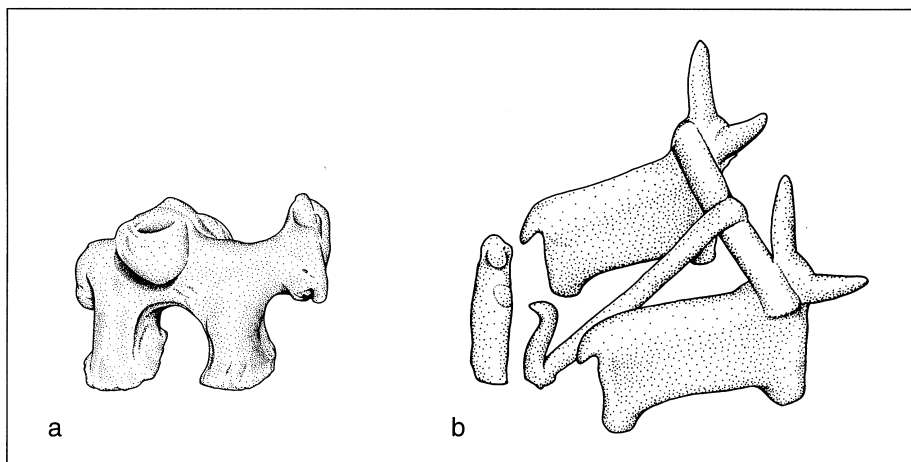


Figure 8. Bronze Age Cypriot models: (a) donkey, (b) ploughing scene.

Here those organizing the copper-plough economy carried with them very different perceptions of the environment in terms of resource distribution and potential.

Links between the social and economic implications of changing patterns of faunal use in prehistoric Cyprus have been considered by Keswani (1994). The use of new domestic animals probably had important concomitant ideological as well as economic and social implications, with different attitudes towards animals in Bronze Age and Chalcolithic communities.

The most probable source area for the introduced species is Anatolia, especially as the sole-ard ploughs adopted in Cyprus as an integral part of this new agricultural package fit within a northern technological tradition (see Fig. 9, also Sherratt 1981).

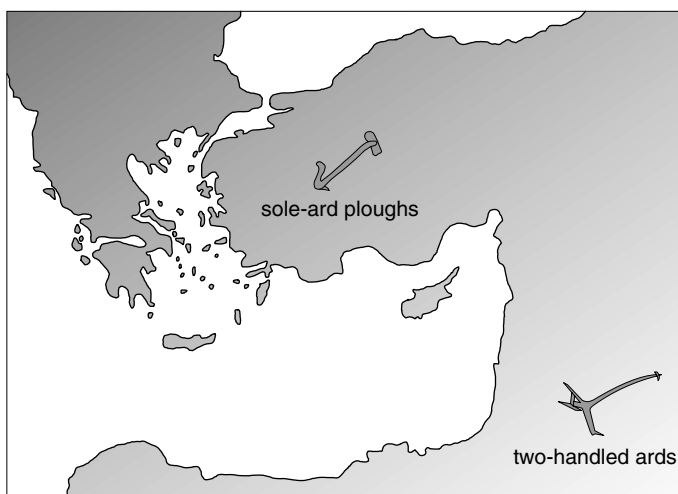


Figure 9. The distribution of alternative forms of plough in the eastern Mediterranean (Source: Sherratt 1981: Figure 10.7).

Burial customs

While Chalcolithic burials are, with few exceptions, intramural, or located within the settlement area, Bronze Age communities typically used cemeteries of rock-cut pits or chamber tombs placed at a distance from the settled area. In most cases, only small quantities of personal possessions, such as ornaments, accompany Chalcolithic burials. Bronze Age burials were accompanied by a wider array of domestic vessels showing signs of use and other equipment. Although any attempts to assign specific meanings to funerary practices remain at a general level (e.g. Webb 1992), these changes in burial practices suggest different attitudes to the dead and to the way in which the living continued to relate to the deceased in these two systems.

Discard and abandonment

In earlier periods, it is not uncommon to find large numbers of useable items left in their position of last use when new floors were laid or houses abandoned. Peltenburg has argued that these represent a regular practice involving the ritual closure of buildings (Peltenburg 1998:234). There is no equivalent behaviour in the Bronze Age. At Marki, as at other Bronze Age sites, most artefacts (and almost all curated artefacts) were removed on abandonment (Webb 1995, 1998), while some used items were removed to tombs. This approach to local house abandonment may have been related to the differences in overall site layout, histories and the inter-generational re-use of specific localities within the settlement but it is possible to see in this different treatment of domestic equipment a significantly distinct set of attitudes and behaviours.

Summary – difference as ethnicity

This brief presentation shows that Bronze Age communities were engaged in a very different set of social practices from those of Chalcolithic communities. Few aspects of daily life are similar. Pervasive differences involved all sectors of society. At every level, from perception of the environment and hence settlement pattern and intra-regional relationships to the specific ways in which people manufactured and handled tools, there are significant differences. Varied scheduling and allocation of agricultural and industrial tasks, alternative foods and their preparation and serving, the disposal of material on abandonment, and attitudes towards death and burial reinforce the argument of behavioural and conceptual separation. This must have carried through into inter-personal relationships within households, between neighbours, and probably between villages. It must also have involved the structure and patterns of age and gender relationships.

As noted earlier, we can now recognize that there was a considerable chronological overlap of late Chalcolithic and the earliest Bronze Age communities in some parts of the island (Webb and Frankel 1999). We may envisage two contemporary groups of people within the island living and working in very different ways for at least several generations. In other words, we have two sets of people with very different *habitus* carrying out tasks and structuring their lives in distinct fashions.

If, as Jones (1997:128) suggests, the specific concept of ethnicity only comes into force where distinctions move away from primordial 'subliminal modes of behaviour' and are 'objectified' – that is, have some instrumental value in formalizing or signifying differences between groups – is it appropriate to see these two modes of behaviour as representing prehistoric ethnicities?

In order to address this, it is now necessary to identify the source or cause of these differences, to assess the nature of interaction between these two communities, and to understand the processes whereby these differences disappeared.

ORIGINS AND TECHNOLOGY TRANSFER

Similarities between Cypriot and Anatolian Bronze Age material have been noted and accepted by several generations of archaeologists: some of these have been referred to here. There are, however, major disagreements concerning their significance. In contrast to those who argue for a diffusion to Cyprus instigated by an emergent Cypriot elite (e.g. Knapp 1993; Manning 1993), it is possible to see a more complex pattern within which the Philia facies of the Bronze Age represents a focal migration (Anthony 1990) of settlers from southern, and more specifically south-western, Anatolia (Frankel et al. 1996; Peltenburg 1996, 1998). A few items in the Cypriot inventory are identical to those in contemporary Anatolian contexts but the argument rests on a broader conceptualization of general patterns, rather than individual elements, and on a consideration of modes of action, specific techniques and the problems involved in technology transfer.

The transmission of technical skills and other aspects of behaviour normally includes much tacit or implicit knowledge – tricks of the trade – individually learnt from observation and long association with expert practitioners, rather than more formal training and explicit instruction. Personal observation and learning must be based on proximity and long periods of exposure. In continental circumstances, this may lead to technical diffusion but cannot account for the transfer of technologies to an island where there is no possibility of this form of casual interaction.

While formal or informal learning at the individual level requires a close association between individual experts and novices, it is equally important to recognize that a more general adoption of an innovation requires broader community acceptance. In traditional societies, where children's informal learning of specific technical skills cannot be separated from other aspects of social enculturation and transmission of attitudes and behaviour, new ideas and techniques have to overcome deeply entrenched attitudes and practices. Increased efficiency may, in some cases, supply a reason for the adoption of new materials or new methods (Schiffer 1992), although relative advantage is a matter of cultural perceptions rather than absolute measurement. Even where it can be demonstrated that new technologies are more efficient in production and productivity than old ones, and specific attempts are made to introduce new ideas, it is normally hard to persuade people to adopt them (Rogers 1983).

In this Cypriot case, although we may regard ploughing as more efficient than hoe-based techniques, clearly late Chalcolithic Cypriots did not, or at least did not immediately accept its advantages. In addition, few of the newly introduced techniques have any obvious superiority to those previously in use on the island. There is no particular reason why a specific method of food preparation or of spinning and weaving should be preferred to another, why mud-bricks should be adopted in the place of mudwall construction, or why jugs should have handles.

While we cannot confidently assert which tasks were performed by men and which by women, the wide range of new elements indicates that all sectors of society must have been involved. It is therefore most appropriate to see new techniques as introduced by the migration of entire communities to Cyprus, rather than by a more generalized diffusion of better methods or the deliberate importation of 'prestige' items. When we recognize that skills and techniques are socially constructed and integrated into complex webs of personal, economic and political relationships, we can see them also as part of the broader inter-generational process of social reproduction, which subconsciously constitutes *habitus*. A cognate series of arguments regarding the fundamental tendency of societies toward continuity in the transmission of cultural systems reinforces this model of external forces in the introduction of innovations (Shennan 1989b).

Following a period of resistance, there was an island-wide adoption of new ways of doing things. These developments may be seen in terms of the relationship and perhaps inter-dependency or 'coupling' (Schiffer 1992:80–85) of many different elements: fibres and spinning techniques, animal products and cooking techniques, architectural design and building techniques, farming practices and settlement size and structure.

MAINTAINING AND ERODING DIFFERENCE

Figure 10 schematically represents relationships between migrant and indigenous communities in third-millennium Cyprus. Each group underwent a process of transformation, adaptation and acculturation. This was neither symmetrical nor directly equivalent. On the one side, we can postulate a sequence of exploration, settlement, adaptation and development by settlers (cf. Schwartz 1970). On the other side we may identify the reaction, acculturation and finally assimilation on the part of the indigenous people.

Exploration and settlement

As argued earlier, the links between the earliest Bronze Age in Cyprus and an Anatolian source are not based on the similarity to any one site or region, but rather on the transfer of technologies and general patterns of behaviour. A few minor items of specific Anatolian types can be identified in Chalcolithic sites. These may represent a period of occasional contact, perhaps of exploration, which

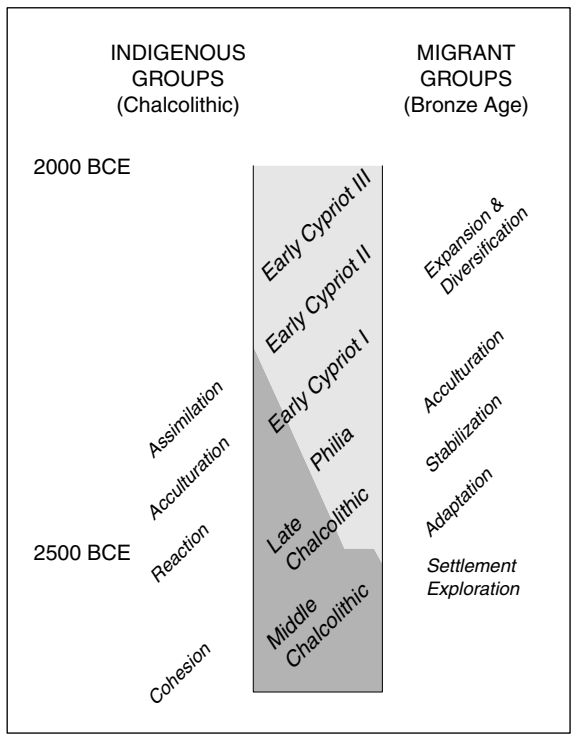


Figure 10. Schematic representation of the relationships between cultural entities in third-millennium Cyprus.

provided the basic knowledge necessary for any successful migration. This exploration doubtless included discovery of viable copper sources on Cyprus, which may be seen as one major attraction of the island, a primary incentive for a 'focal' migration (Anthony 1990). People moving to the island must have brought with them appropriate supplies, equipment, breeding stock and the like. The presence of foreign copper in Chalcolithic and early Bronze Age sites in Cyprus may represent part of an initial importation, obviously necessary before local copper sources were exploited. Adaptations to specific circumstances by such small groups of people could lead to a rapid divergence from the source area

in the precise form and overall array of artefacts. One general strategy involves experimentation with alternatives followed by a narrowing of the range, once an appropriate or efficient solution is achieved (Kirch 1980). We have, as yet, no clear evidence of such an initial phase of settlement and adaptation: indeed such material may never be forthcoming.

Consolidation and stabilization

The putative settlement phase was succeeded by a period of consolidation and stabilization (Schwartz 1970). This is archaeologically visible as the Philia facies of the early Bronze Age, which can now be seen as not only distinctive but also as an homogenous archaeological entity (Webb and Frankel 1999). Although locally made, Philia pottery from various sites exhibits a high degree of uniformity across the island. Other distinctive diacritical markers are also widespread, as exemplified by copper earrings, terracotta beads or toggles and stone or shell pendants. Several factors may be at work here. There can be no doubt that close connections were maintained between different communities, serving to distribute raw materials (such as copper) from the source areas to more distant localities and at the same

time consolidating and transmitting common ideas and techniques. The development and maintenance of these distinctive forms also served to set the settler communities apart from their indigenous neighbours. In this way material culture and broader aspects of daily life reinforced identification within the Philia cultural system and created a separation from that of the Chalcolithic. In other words, we can now see an instrumental aspect to what was initially a primordial acting out of social patterns.

There are only a handful of foreign items, and no other evidence of external contacts following this relatively short mid-third millennium period of interaction. Until well into the middle Bronze Age, after 2000 BC, Cyprus was once again an isolated, closed cultural system. The developments which took place during this time were independent of outside influences.

Interaction and acculturation

Some elements of the pre-existing indigenous *habitus* must have crossed the social barrier separating Philia and late Chalcolithic groups. One example of this is the adoption by Bronze Age communities of picrolite as a valued raw material. Chalcolithic use and distribution of this soft stone for pendants and other, presumably valued, items have been well documented (Peltenburg 1991; Xenophontos 1991). It was adopted by and used for a range of objects in the Philia facies of the early Bronze Age (Webb and Frankel 1999:41). But there is far more evidence of acculturation to the settler system by indigenous people: it was not a symmetrical process.

Peltenburg has identified a number of new elements within late Chalcolithic phases at Kissonerga and other sites, characterizing this period as one of a breakdown of the more cohesive and integrated system of the middle Chalcolithic (1993, 1998:256–258), with an earlier ‘contact phase’ followed by one of more intensive interaction. These innovations and transformations can be attributed to the gradual intrusion of Philia Bronze Age material, with, for example, occasional trinkets or small tools of copper, the adoption of new ways of decorating pottery and the occasional appearance of items such as spindle whorls. However, at Kissonerga, these minor introductions did not occur simultaneously, nor were they accompanied by the adoption of Bronze Age house-forms or agricultural technologies. Only later, for example, is there evidence of cattle at the site. We can begin to see a complex process of cultural interaction and an initially slow transformation of the indigenous *habitus* in the continued presence of their settler neighbours.

Evolution and assimilation

The material culture characteristic of the Philia facies evolved into the widespread forms typical of the normative early Cypriot Bronze Age, with no obvious changes in technology or social forms. This may be seen as what Schwartz has termed ‘consolidation factionalism’ (1970:180–181). Within one or two centuries of the arrival of new settlers on the island, there is no further material evidence of the typical Chalcolithic way of life. Neither distinctive types of pottery and other items nor the characteristic circular housing can be found. While it is possible that

descendants of the indigenous people may have maintained some conscious knowledge and identity in later periods, this process of acculturation was so comprehensive that all of Cyprus became, archaeologically at least, part of a single cultural system. Where the initial importation of an array of new technologies and behaviours to the island can be seen as indicative of a migrant population, this later adoption of these elements reflects a complex process of increasing interaction and cultural transformation.

There is no evidence to suggest that this process was a violent or traumatic one. This may have been due to a combination of factors. The small size of the initial settler population and the very different economic base of the two communities may account for the lack of an immediate competition for resources. Continual exposure to Bronze Age technology and associated behaviour, and a permeable boundary between the two groups, provided a context within which Chalcolithic communities overcame their resistance to change and gradually adopted new materials and practices.

IMPLICATIONS

This series of explanations for a short period of significant change in mid-third millennium Cyprus has many implications for culture history, archaeological method and our understanding of culture process.

In the source area, there must have been both the social and economic context allowing or promoting emigration and the technical ability to transfer groups of people and livestock. This implies the presence of and familiarity with sea-going boats, not otherwise represented in the archaeological record. This movement may also be seen within a broader context of other more or less contemporary developments in the Aegean, with the movement of people and technology to Crete and other islands. As noted already, this period of Anatolian associations is followed by a considerable time when there were few, if any, connections between Cyprus and the mainland. When these were re-established, the main connections are to the east rather than to the north, and represent a very different pattern. In addition, this argument for a third-millennium migration from Anatolia may become relevant to discussions of language, as both northern and eastern relationships have been suggested for the still undeciphered script of the Cypriot late Bronze Age.

Methodologically, this approach to understanding the nature of groups and relationships with one another on the basis of a wide array of social structures and specific activities provides a broader basis than one based on the selection of specific ideological symbols as markers of identity. While the separation of Cyprus from the mainland limited and structured the nature of foreign interaction and processes of technology and population movement, the subsequent isolation of the island provided an environment in which a complex process of interaction and acculturation took place. Part of this process was the adoption of an array of new technologies – some simple and more directly compatible with pre-existing knowledge and practice, others more complex and leading to, or requiring, more substantial re-adjustments in attitude and concepts (cf. Rogers 1983:15).

In this specific prehistoric case, we may be in a position to trace a process of both technological innovation and social transformation leading to a complete acculturation, if not assimilation, of an indigenous community to modes of life initiated by settlers from abroad. The lack of any obvious evidence of conflict during this period of innovation, adaptation and culture change provides a prehistoric example of inter-group relationships very different from most of those observed in the recent colonial past or current political climate.

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BIOGRAPHICAL NOTE

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ABSTRACTS

Migration et ethnicité dans la Chypre préhistorique: technologie en tant qu'*habitus*

David Frankel

Les changements profonds qui prirent place dans de nombreux aspects de la culture matérielle cypriote, de la technologie et de l'économie pendant le troisième millénaire BC, caractérisent, dans l'île, la division entre le chalcolithique et l'âge du bronze ancien. Bon nombre d'innovations peuvent être reliées à leurs antécédents anatoliens. Celles-ci comprennent un large ensemble de technologies domestiques, agricoles et industrielles qui à cause de leur nature et leur importance permettent de démontrer de façon convaincante que ces innovations sont dues à un afflux de populations nouvelles sur l'île. Il n'est donc pas nécessaire d'invoquer d'autres mécanismes de transfert de technologie et de changement de culture. L'identification d'un groupe intrusif à comportement distinct (*habitus*), permet de s'interroger sur l'ethnicité préhistorique ainsi que sur le processus qui a servi à maintenir initialement un style de vie différent pour les communautés indigènes et pour celles des immigrants, avant que celle-ci ne soit remplacé petit à petit par un système culturel commun.

Migration und Ethnizität im prähistorischen Zypern: Technologie als *habitus*

David Frankel

Während des dritten Jahrtausends kal. BC fanden wichtige Änderungen in vielen Aspekten der zyprischen materiellen Kultur, Technologie und Ökonomie statt, die Trennung von Chalkolithikum und Frühbronzezeit auf der Insel charakterisieren. Viele Innovationen können auf anatolische Vorläufer zurückgeführt werden. Diese Innovationen schließen eine beachtliche Reihe von sowohl häuslichen als auch landwirtschaftlichen und industriellen Technologien ein. Ihre Art und ihr Umfang sprechen weit eher für die Wanderung von Menschen als für andere Mechanismen des Technologietransfers und Kulturwandels. Diese Identifikation einer eindringenden Gruppe mit andersartigen Handlungsweisen (*habitus*) eröffnet Fragen zur prähistorischen Ethnizität und zu den Prozessen, durch die ursprüngliche Beibehaltung der verschiedenen Lebensweisen der Einheimischen einerseits und Siedlergemeinschaften andererseits letztlich einem gemeinsamen kulturellen System Platz machte.