

Late Bronze Age settlement patterns in Southern Cyprus : the first Kingdoms ?

Alison South-Todd

Citer ce document / Cite this document :

South-Todd Alison. Late Bronze Age settlement patterns in Southern Cyprus : the first Kingdoms ?. In: Cahiers du Centre d'Etudes Chypriotes. Volume 32, 2002. Hommage à Marguerite Yon. Actes du colloque international «Le temps des royaumes de Chypre, XIIIe -IVe s. av. J.-C.» Lyon, 20-22 juin 2002. pp. 59-72;

http://www.persee.fr/doc/cchyp_0761-8271_2002_num_32_1_1404

Document généré le 04/05/2017

LATE BRONZE AGE SETTLEMENT PATTERNS IN SOUTHERN CYPRUS: the First Kingdoms?

Alison SOUTH

Introduction

The subject of this article ¹ is the nature and organisation of the Late Bronze Age, especially 14th-13th century B.C., settlements in southern Cyprus, first taking as an example the fairly detailed picture shown by the results of recent excavations and survey at Kalavastos and Maroni, and then trying to widen the focus to see how these settlements relate to the island-wide situation.

The Kalavastos-Maroni area is located in the middle of the south coast, 36 km west of modern Larnaca, where the Vasilikos and Maroni rivers run from the Troodos mountains to the sea. The landscape, including coastal plain, river valleys and hillier country inland, is typical of much of the southern coastal parts of the island; and the presence of a major copper-mining area north of Kalavastos means that study of this area can pose questions concerning the international copper trade which was an important feature of the Bronze Age economy. Much recent information is available from the archaeological surveys and excavation of the Vasilikos Valley Project (1976-1998, directed by Ian Todd and the writer; Todd 1986, 1996), the Maroni-Vournes excavations (1982-1993, directed by Gerald Cadogan; Cadogan 1992, 1996) and the Maroni-Tsaroukkas excavations and Maroni Valley Archaeological Survey Project (MVASP, 1990-present, directed by Sturt Manning; Manning *et al.* 1994; Manning, De Mita 1997).

Kalavastos-Ayios Dhimitrios

The largest settlement in the area is Kalavastos-Ayios Dhimitrios, where excavations in recent years have revealed a Late Cypriot town, located on gently sloping land next to

1. I am very happy to have participated in this conference in honour of Marguerite Yon, whom we have been fortunate to have had as a friend, a most cooperative colleague, and director of a neighbouring project in investigations of the southern coastal regions of Cyprus for many years.

a good crossing point on the Vasilikos River, 3.75 km from the coast and 8 km south of the Kalavassos mining area (South 1995, 1996, 1997). As far as is known, the river was not navigable, certainly not by sea-going ships. The extent of the site is 11.5 ha, as known from excavation and surface finds. Within this, 13th century architecture, always with the same orientation, has been found in all the various areas which have been excavated, often with some traces of 14th century and possibly earlier remains partly preserved underneath. There are also many tombs within the site, dating from Late Cypriot IIA to IIC. A quarter of administrative and industrial buildings, several of which were built with ashlar masonry, is located in the north-east part of the town, with more modest, but still fair-sized buildings to the south, and slightly smaller and poorer ones in the west. Up to now, no evidence has been found for a defensive wall. The town plan includes several streets, one at least 160 m long and 4-6 m wide; all were provided with drains to carry away rain water. The site was abandoned at the end of LC IIC (about 1200 B.C.).

Outside the official and/or administrative part of the town, there are a number of multi-roomed buildings of 100-600 m² which appear to be mainly domestic in function. The material found in them is mostly Cypriot, but a few imports (Mycenaean pottery, Canaanite jars, imported stone objects; South *et al.* 1989), an important group of weights (Courtois 1983) and a few cylinder and stamp seals (Porada in South *et al.* 1989, 33-37) show that the users of these buildings were not by any means of a very low economic class, but had access to some imported goods and were involved in trade and administrative activities. Two buildings (Buildings I and III) have small presses for oil or wine (Hadjisavvas 1992, 24, Fig. 43; South 1983, 103, Fig. 3, Pl. XV:5). Another (Building IX) was used for small-scale copper-smithing work, the finds including fragments of oxhide ingots (South 1982, 64-65). Copper slag and other finds from most of the excavated areas show that metallurgical activity was definitely going on, although no large metal production area has been identified.

In the North-East part of the site (*Fig. 1*), at the north end of a major street, lies a complex of buildings which are clearly differentiated from those elsewhere by their size, functions, and massive, often ashlar construction (South 1988, 223-227; 1997, 151-159). In a dominant position, at the north end of the major street, is Building X, a square, ashlar building with a tripartite plan, covering about 1000 m². To the west of Building X, and divided from it by a narrow street, are several apparently industrial buildings. To the south is a partly excavated, badly robbed-out, probably square, ashlar building or courtyard of uncertain purpose (Building XII). A narrow street runs around the west, north and east sides of Building X and continues towards the south-east. On the north and east, and continuing to the south-east, Building X was bounded by an ashlar wall which perhaps formed an enclosure wall around this administrative and industrial quarter which altogether occupied at least 4000 m² or more. Further to the south, a trial trench between two excavation areas (the North-East and East areas) showed that the major street continued, and more ashlar walls were located, thus the area of administrative, mainly ashlar buildings around Building X may be even more

extensive than mentioned above. A little further to the south on the same street (in the East Area) were two large rectangular rooms which also seem to follow the “official” style of architecture, near some of the domestic buildings.

Building X was massively constructed with ashlar masonry used mainly on the exterior faces, the courtyard and some other features. The ground floor seems to have been devoted to storage and administration, but there was almost certainly an upper storey, perhaps with elite living quarters. Among the finds from within the building were several stamp seals and five clay cylinders with Cypro-Minoan inscriptions (Masson 1983; Smith 2002, 20-25), suggesting administrative activities. A large group of pottery found in a deep shaft included 56% Mycenaean and local Mycenaean style, mainly cups and bowls, demonstrating considerable access to imports and taste for using Mycenaean tableware on the part of the people who used the building (South 1988, 227-228). Much of the space on the ground floor was reserved for storage, including a storeroom with small and large pithoi in the north-west, and a larger, pillared hall in the west which was filled with double rows of very large pithoi; the two magazines have a capacity of about 50,000 litres, and Gas Chromatography analyses have shown that many of the pithoi contained olive oil (Keswani in South 1992, 141-146).

Installations for producing olive oil on a large scale existed in Building XI (South 1992, 135-139) immediately to the west, where a pebble floor sloped towards a huge monolithic rectangular stone basin, and also in the north-west part of Building X, where there is a similar arrangement but the basin has been removed by stone robbers. Other buildings nearby (Building XIV, XV) seem to be industrial, but their precise purpose is more difficult to determine.

Tombs have been found in most parts of the site area, and several rich ones (Tombs 11, 12+13, 14, 21) were located adjacent to Building X, mostly in the street to the west (South 1997, 159-171; 2000). These date to various parts of the period from Late Cypriot IIA to IIC, and the finds show that their users had access to many luxuries and imported goods. There were considerable quantities of Mycenaean pottery (e.g. at least 41 vessels in Tomb 13), including eight complete pictorial kraters, the most recently discovered being a huge chariot krater (54.5 cm high) and a very unusual example showing exclusively a procession of women, both from Tomb 21. Large amounts of Red Lustrous Wheelmade ware lentoid flasks, spindle bottles and arm-shaped vessels may have been manufactured in Cyprus, or elsewhere. The Cypriot wares (White Slip, Base-ring, Monochrome, and Plain wares) included many fine examples such as a pair of large identical Base-ring bull rhyta from Tomb 11, and several very large Base-ring I style jugs from other tombs. Much gold and silver jewellery was found (especially in Tomb 11 with 432gr of gold). Glass and faience vessels included some of Egyptian types, as well as others which may have been made in the Levant or Cyprus. Numerous ivory objects included rods with decorated heads, cylindrical pyxides with lids decorated with rosettes, or in one case a pictorial scene of animal combat, and duck vessels. Among other types of objects in the tombs were glass and faience gaming boards and pieces; stamp and cylinder seals; inscribed signet rings; and a silver Hittite figurine

(South 1997, Pl. XV:1). Thus from at least LC IIA:2 (Tomb 11), there must have been valuable commodities, presumably including copper, being exported from the area in return for these imports. The rich and varied repertoire of grave goods in these tombs clearly shows that the elite inhabitants of Ayios Dhimitrios ranked equal in wealth and sophistication with the people of the other major contemporary sites in Cyprus.

It is clear that within the large settlement of Ayios Dhimitrios, major agricultural resources (olive oil), copper production and export, and possibly other industries, were centrally controlled by an elite who perhaps lived in Building X, the largest and most impressive building known in the town. The quantities of oil involved would be more than sufficient to issue rations of oil to all the people of the town, and/or to mining or agricultural workers. It is difficult to calculate the population, as architecture in some parts of the site may have been lost through erosion, remains which have not yet been excavated may not all be contemporary with those so far discovered, and it is already clear that many of the buildings were not domestic (*cf.* Yon 1992, 19-21). However estimates by various methods have suggested between 750 and 1500 people (South 1996, 40; Keswani 1993, 77), although the number might easily have been more if most of the site area was residential.

The settlement pattern in the Vasilikos Valley

Although Ayios Dhimitrios is certainly by far the biggest Late Bronze Age settlement in the Vasilikos Valley, it did not stand in isolation. Several contemporary sites are known from survey (Todd, South 1992, 201-203, Figs 4-5), many of which were probably agricultural villages, farmsteads, processing or storage facilities (with finds from the various sites including pithoi, stone grinding equipment, large stone weights probably for oil or wine presses) while some are in rather secluded locations in small subsidiary valleys, and may have had specialised functions (woodcutting? goat-herding?). The stone for the ashlar blocks at Ayios Dhimitrios almost certainly came from the **quarries at Tokhni** about 4 km away to the north-east, in the neighbouring valley of the smaller Tokhni river between the Vasilikos and the Maroni, where calcareous sandstone of identical appearance to that used at Ayios Dhimitrios has been quarried in recent times. The area controlled by the town of Ayios Dhimitrios probably comprised about 30 km², assuming it included at least all the land within the watershed of the Vasilikos from the coast to the mines, or perhaps more if the Tokhni area was included. A pottery manufacture site where White Slip ware seems to have been produced was located at Sanidha 13 km north-west of Ayios Dhimitrios (Todd and Pilides 2001), but it is not known whether this was controlled by the people of the Vasilikos Valley.

No definite traces of Late Bronze Age mining have yet been found in the Kalavassos mining area (however, ancient remains may have been disturbed by, or buried beneath, modern mining operations, and part of the mining area is a military zone where survey

is impossible). Late Bronze Age sherds have been found within 500 m of the mines, and there is a site (Ora-Beteleyi) in a good defensive position on a prominent steep-sided, flat-topped hill overlooking the mining area.

A very important question concerns whether there was any port or anchorage at the mouth of the Vasilikos river in the Late Bronze Age, from which copper or other products of the area could have been exported. Whereas there were no settlements close to the coast in the Vasilikos Valley in the Middle Bronze Age, there is some evidence of coastal occupation in the Late Bronze Age at Tokhni-Lakkia a little to the east of the mouth of the Vasilikos (sherds including White Slip (South, Steel 2001, Fig. 2), Base-ring and pithoi, ceramic wall bracket, stone mortar), and there may have been an anchorage here (where there was to be a port town in Late Roman times: Manning *et al.* 2000; Manning 2002, 77-78) or nearby at the mouth of the river. The coast here is partly sheltered from westerly winds by Cape Dolos, and is the location of two small modern ports at Zyyi and Vasiliko (for the export of carobs and cement). No underwater survey has been carried out adjacent to the mouth of the Vasilikos, and the immediate area has probably been badly disturbed by the construction of the modern port. We can only conclude that it is very likely that Late Bronze Age ships could have anchored or beached in this area, but this may never be known for certain.

In summary, the settlement pattern in the Vasilikos Valley included a very large settlement at Ayios Dhimitrios, located about 40 minutes' walk from a probable anchorage at the coast and a little over twice that distance from the mines, and at a cross-roads of the route from the coast inland to the mines and a natural route linking the south coast with more central parts of the island to the north-east. Other, much smaller settlements were scattered along the valley all the way from the coast to near the mines. It is very difficult to estimate the population, but with Ayios Dhimitrios and the other sites this may have been around 2000 people or more.

The Kalavassos and Maroni areas (Fig. 2)

Turning to the relationship of Ayios Dhimitrios and its territory with the rest of the island, its nearest neighbour was another major Late Bronze Age centre, remarkably close by at Maroni only 6.5 km away (distance from Ayios Dhimitrios to Maroni-Vournes), but rather different in type and location. At Maroni there was what appears to be on present evidence a major cluster of small sites (rather than a large built-up town as at Ayios Dhimitrios), including the Ashlar Building at Vournes 500 m inland, the settlement and cemetery right on the coast at Tsaroukkas at the mouth of a small stream, and Maroni-Aspres a little to the west of Vournes. Although the coast at Tsaroukkas seems quite exposed except for a tiny inlet at the mouth of the stream, there was definitely a Late Bronze Age anchorage here, with evidence for use especially in LC I as shown by the important underwater work by Sturt Manning's team (Manning *et al.* 2002). Other Late Bronze Age sites are known in the Maroni area (some of them earlier than the mainly LC IIB-C phase settlement pattern which is being discussed here) but

pending publication of the results of survey it is impossible to comment on the full details of the settlement pattern.

There exist both many similarities, and many striking differences between Ayios Dhimitrios and its situation within the Vasilikos Valley, and the Maroni group of sites. The well-planned town with long streets and several ashlar buildings at Ayios Dhimitrios seems to represent a rather different expression of organised society (and possibly a larger concentration of population?) than does the cluster of sites at Maroni. However, the range of activities and administrative functions at both sites may have been much the same, with both having large ashlar buildings (both considered by the excavators to be administrative centres), large-scale production and storage of agricultural produce presumably for redistribution, evidence for metallurgical industry, textile production and food preparation and other daily activities. Building X at Ayios Dhimitrios is a little larger than the Ashlar Building at Maroni, and its central courtyard and pillared hall more impressive; but if considered together with its adjacent West Building (a large rectangular three-aisled building, perhaps having a storage function, similar to that of the hall filled with pithoi in Building X; Cadogan and Domurad 1989, 79), the Ashlar Building complex becomes more comparable to Building X. The plans of the two buildings have a number of similarities, but are far from identical. On the other hand, Building X was an integral part of a large town, and surrounded by other buildings (several of them industrial), whereas the Ashlar Building appears to be much more isolated (Cadogan 1988, 230-231). One respect in which the two sites definitely appear equal is the range and quantity of luxury and imported goods found in their tombs (for the Maroni tombs see Johnson 1980; Manning, Monks 1998). Mycenaean pottery including many examples of pictorial kraters, a few Minoan vessels, gold and silver jewellery, ivory objects, glass and faience are among the plentiful imports and luxuries in the richer tombs at both sites. One of the most important differences is in the geographical situations: the Maroni cluster of sites is located on and very near the coast, and on a probable overland route along the coast, while Ayios Dhimitrios is inland and at a cross-roads of internal routes.

The relationship between Ayios Dhimitrios and Maroni is intriguing. The two major settlements are only about 2 hours' walk from each other by an easy, direct route mostly across fairly flat coastal plain. It might have been expected that one or other would have come to assume a more dominant role, especially in controlling the export of copper and other produce, and that this might more likely have been Maroni with its coastal location. However, from the archaeological evidence the two sites appear very similar in rank and functions. As argued above, Ayios Dhimitrios probably had its own anchorage near the mouth of the Vasilikos River 3.75 km from the site, and it does not seem particularly likely that it had to rely on Maroni, twice the distance away (7.75 km from Ayios Dhimitrios to Tsaroukkas), to export its products as has been suggested (e.g. Negbi 1986, 107). Ayios Dhimitrios is well placed to control the route to the mining area, and people coming from Maroni, if following the natural and easy route, would have had to pass by Ayios Dhimitrios and then on up the Vasilikos Valley to reach the

mines. The two centres seem to have existed, probably peacefully, side by side and somehow shared the local copper resources. Although they are quite close, each one perhaps had originally grown up within a sufficient territory of agricultural land to support its population (e.g. a catchment of within one hour's walking distance, or of 5 km radius, would give only a little overlap between the two), so they need not have been in competition for subsistence resources. But in addition to the basic functions of a rural population centre, each developed its own different, but equally viable, role (port for Maroni, inland cross-roads and control of the route to the mines for Ayios Dhimitrios, but both much involved in international trade). The histories of the two sites are far from identical: at Maroni there is considerable evidence for occupation in LC I, especially at Vournes (Cadogan *et al.* 2001), whereas Ayios Dhimitrios essentially developed from LC IIA onwards (although there is LC I material from elsewhere in the Vasilikos Valley and a very few sherds from Ayios Dhimitrios). Maroni, at least the Ashlar Building, may have been abandoned a little earlier than Ayios Dhimitrios (Cadogan 1992, 57), thus there is a possibility that Ayios Dhimitrios took over some of its functions by the latter part of the 13th century. These historical differences warrant more detailed examination as studies of both sites progress further. The existence of two major sites in close proximity is paralleled in the cases of Kition and Hala Sultan Tekke, harbour towns only *ca* 5 km apart, or the rather different case of Kourion-Bamboula and Alassa *ca* 9.5 km apart in the same major river valley.

The regions immediately east and west of the Kalavasos-Maroni area are not well known archaeologically. The land to the west is rather barren and poorly watered even now, with no significant rivers until those at Moni and Pyrgos 10-11 km to the west of the Vasilikos. This area has not been systematically surveyed archaeologically, and the nearest known Late Bronze Age site appears to be at Moni (Catling 1962, 167). To the east of the Maroni Valley, however, there are several large and small river valleys (Pendaskhinos, Xeropotamos, Pouzis, Tremithos etc.) between the Maroni sites and the cluster of sites in the Larnaca Bay area (Klavdhia and Arpera near the Tremithos are the closest to the Maroni area) and it would be useful if this area could be surveyed to ascertain whether it contains any Late Bronze Age towns or small villages, or is really almost lacking in settlements (except for a little-known settlement and cemetery at Kivisil-Gyppos at the mouth of the Pouzis, 14 km east of Tsaroukkas: Catling 1962, 164). On present evidence, therefore, the concentration of population represented by the Maroni and Ayios Dhimitrios pair of large Late Bronze Age settlements with their territories and copper mining area may have been rather isolated, with far less densely populated regions on each side of it.

The Kalavasos-Maroni area compared to other regions of the island

The two major sites which have been discussed here are of course only two examples among the considerable number of Late Bronze Age sites of various sizes which are

known in most parts of the island. There have been a number of attempts to classify these into various types, functions and sizes, including a threefold division into rural (agricultural) sites, sites near the mining areas, and large rich coastal sites involved in international trade (Catling 1962, 144-145); or urban settlements (mostly coastal, but with a few inland) and non-urban (Negbi 1986); and more recently, there has been extensive discussion especially by Keswani and Knapp. Keswani (1993) proposed a fourfold division into agricultural villages, mining settlements, inland sanctuaries where secondary refining and transshipment took place, and primary coastal centres. Knapp (1997) suggests primary urban centres, secondary towns, tertiary sanctuary sites, and peripheral agricultural and mining villages.

The writer believes that the huge size estimates for some sites, especially Kition and Kouklia (e.g. Knapp 1997, Table 2 and references therein; Merrillees 1992, 317-318), may be very exaggerated (South forthcoming). If this is true, then the largest settlements may have been up to *ca* 25 ha, such as Hala Sultan Tekke (perhaps not reaching this size until LC III?) and perhaps Kition, while there were several around half this size (including Enkomi and Ayios Dhimitrios, for both of which the size is well defined), with some which are substantial clusters of smaller sites rather than large continuously built-up towns (e.g. Maroni, possibly Toumba tou Skourou (?): Vermeule, Wolsky 1990, 15) and of course many smaller.

The settlement pattern in the Kalavassos and Maroni area does not fit very well into some of the more elaborate schemes of up to four or five different levels of settlements which have been proposed. Here we have only one large, highly organised town at Ayios Dhimitrios; a cluster of sites, probably of similar importance and functions at Maroni; and a scatter of much smaller, probably mainly agricultural settlements, which with detailed study or excavation might be further classified e.g. as agricultural villages, farmsteads, storage and processing facilities, mining, quarrying or coastal settlements, etc. The intermediate levels of settlements, such as the rural sanctuaries which seem to have played a significant role especially in more inland regions, or "secondary towns" have not been identified in this area. This may simply be a result of the geographical setting. Here the extent of the area of agricultural land around each major settlement was relatively limited, confined to a fairly narrow coastal plain and part of the river valley at Maroni, and within a narrow valley for Ayios Dhimitrios. Therefore there was less need for intermediate centres for collection or storage of produce, and lesser distances for people to walk from their residence to their agricultural work, in comparison with the more extensive areas of arable land available in the central plain, or around Larnaca Bay where there was a clear pattern of smaller settlements grouped around the larger coastal centres. Importantly, the Kalavassos copper mining area is located fairly close to the coast (about 12 km). Thus the position of the large centre at Ayios Dhimitrios partway between the sea and the mines means that it and the mines, the smaller agricultural settlements and the coast were all within less than half a day's walk of each other, and there was no requirement for another administrative centre nearer the mines (although

there would be need for a miner's village very close to the mines) (cf. Keswani 1993, 79).

Ayios Dhimitrios has all the qualifications to be considered "primary" (e.g. size, complex organisation, writing, specialised functions including metalworking, large (ashlar) administrative buildings, large-scale storage facilities, plentiful luxury and imported goods), although it lacks the coastal location which several of the most important primary sites do have. Its situation inland, but not far from the sea, has resulted in some confusion concerning whether it should be classed as "coastal" (Knapp 1986, 52 n. 9) or "inland" (Knapp 1997, Table 2). In fact, several other sites have a similar location a short distance inland, including Kourion-Bamboula (although called "coastal" by Knapp, it is 2.65 km from the nearest part of the coast near Ayios Ermoyenis, or 4 km from the mouth of the Kouris River – while Ayios Dhimitrios is 2.75 km from the coast at the nearest point or 4 km from the mouth of the Vasilikos) and Kouklia (*ca* 2.2 km inland). The truly coastal sites, which also tend to be the largest (Enkomi, Kition, Hala Sultan Tekke) are almost all in the eastern part of the island, and had real natural harbours which are quite rare along the coasts of Cyprus (Catling 1962, 135-136). In other regions, there are no good harbours and very few large sites actually on the coast (e.g. Maroni) (Toumba tou Skourou was probably a river port: Vermeule and Wolsky 1990, 9). It may be that the great eastern sites grew to prominence largely because of their good harbours and proximity to Levantine markets, but that a rather different evolution of settlement types applies in other regions, where local geography, close proximity to the copper mines, availability of arable land and evolution from earlier settlement patterns contributed to the growth of the rather varied, but highly organised polities (cf. Keswani 1996, 236-239).

Chieftdoms or kingdoms?

It remains to consider whether these large sites such as Ayios Dhimitrios or Maroni with their surrounding territories should be classed as kingdoms. According to most definitions, a kingdom would be a socio-political unit with a much larger population and a much greater level of complexity, bureaucracy and specialisation than we see in the Cypriot sites. An excellent example, spatially and chronologically close to the Cypriot Late Bronze Age towns, is Ugarit with its territory of about 2,000 km², population possibly 35,000, and capital city of *ca* 25 ha and 6-8,000 people (Yon 1992, 1997). Clearly the much smaller Cypriot polities do not qualify as kingdoms; although if the island was ever unified under the king of Alashia, this would have been a far larger kingdom than Ugarit. Colleagues who have extensively analysed the settlement patterns of Late Bronze Age Cyprus (mostly according to American anthropological theories) have concluded that the level of organisation can best be defined as that of "complex chieftdoms" (Keswani 1996; Smith 1994); or if we want a more neutral term, we may follow the current fashion for "polities" (of which a dictionary definition is simply "an organised society"). However, even if we agree that the Cypriot polities were not quite

kingdoms, and their ashlar buildings were not quite palaces, they do show quite a complex level of organisation, the size of the towns is considerable and their ashlar buildings very impressive in view of the relatively small territories which they controlled. The wave of prosperity, urbanisation, construction of ashlar buildings and so on, developed rather suddenly and reached its height only in the thirteenth century B.C., and there can be little doubt that international trade was the main impetus.

Archaeologically, the evidence does not support an island-wide kingdom of Alashia, as there were clearly a number “chiefdoms” of approximately equal size and complexity, and no site outranks the others in such a way that it can be identified as the capital of Alashia (Enkomi, traditionally considered to be Alashia, is not the largest, and its apparently greater wealth is largely due to the fact that so much of it has been excavated) (although Merrillees (1992, 318) points out that size need not equate with political weight). The conflict between the archaeological evidence and the historical picture of the king of Alashia who wrote to the pharaoh of Egypt as “my brother” and was able to export huge quantities of copper, remains unresolved. Recent analyses of the clay of the Amarna tablets themselves have introduced new complications which have to be taken into account, by showing that these letters were probably written somewhere in south central Cyprus (Goren *et al.* 2003).

To what extent the Late Bronze Age “chiefdoms” were the ancestors of the Iron Age kingdoms is a very complicated question which has been extensively discussed elsewhere (e.g. Iacovou 1989, 1994, 1999); it is well known that while there was continuity at some sites (Enkomi-Salamis, Kition, Kouklia), many others were abandoned, and immense changes took place following the upheavals at the end of the Bronze Age. In the case of Kalavassos and Maroni, these two prosperous Late Bronze Age polities, well endowed with agricultural and mineral resources, were completely abandoned by about 1200 B.C., and although there is plentiful evidence for occupation having resumed in the Iron Age, they never regained their previous wealth and importance. Indeed, in this region the political pattern changed out of all recognition, with Amathus taking over as the centre of a kingdom, and the Maroni and Vasilikos valleys found themselves in the borderlands at the outer edge of the hypothesized extent of the kingdom (e.g. Rupp 1989, Fig. 38.5).

BIBLIOGRAPHY

- CADOGAN (G.), 1988, « Maroni IV », *RDAC*, 229-231.
- CADOGAN (G.), 1992, « Maroni VI », *RDAC*, 51-58.
- CADOGAN (G.), 1996, « Maroni: change in Late Bronze Age Cyprus », in P. Åström and E. Herscher (eds), *Late Bronze Age Settlement in Cyprus: function and relationships* (SIMA Pocket-book 126), Jonsö, 15-22.
- CADOGAN (G.), DOMURAD (M.), 1989, « Maroni V », *RDAC*, 77-81.
- CADOGAN (G.), HERSCHER (E.), RUSSELL (P.), MANNING (S.) 2001, « Maroni-Vournes: a long White Slip sequence and its chronology », in V. Karageorghis (ed.), *The White Slip Ware of Late Bronze Age Cyprus*, Vienna, 75-88.
- CATLING (H.W.), 1962, « Patterns of Settlement in Bronze Age Cyprus », *OpAth* 4, 129-169.
- COURTOIS (J.-C.), 1983, « Le Trésor de poids de Kalavassos-Ayios Dhimitrios 1982 », *RDAC*, 117-130.
- GOREN (Y.) *et alii*, « The Location of Alashiya: new evidence from petrographic investigation of Alashiya tablets from El-Amarna and Ugarit », *AJA* 107, 1-24.
- HADJISAVVAS (S.), 1992, *Olive Oil Processing in Cyprus* (SIMA XCIX), Nicosia.
- IACOVOU (M.), 1989, « Society and Settlements in Late Cypriot III », in E. Peltenburg (ed.), *Early Society in Cyprus*, Edinburgh, 52-59.
- IACOVOU (M.), 1994, « The Topography of 11th century B.C. Cyprus », in V. Karageorghis (ed.), *Cyprus in the 11th Century B.C.*, Nicosia, 149-165.
- IACOVOU (M.), 1999, « Excerpta Cypria Geometrica. Materials for a History of Geometric Cyprus », in M. Iacovou and D. Michaelides (eds), *Cyprus, the Historicity of the Geometric Horizon*, Nicosia, 141-166.
- JOHNSON (J.), 1980, *Maroni de Chypre* (SIMA LIX), Göteborg.
- KESWANI (P.S.), 1993, « Models of Local Exchange in Late Bronze Age Cyprus », *BASOR* 292, 73-83.
- KESWANI (P.S.), 1996, « Hierarchies, Heterarchies, and Urbanization Processes: the View from Bronze Age Cyprus », *JMA* 9:2, 211-250.
- KNAPP (A.B.), 1986, « Production, Exchange and Socio-political Complexity on Bronze Age Cyprus », *Oxford Journal of Archaeology* 5:1, 35-60.
- KNAPP (A.B.), 1997, *The Archaeology of Late Cypriot Society: The Study of Settlement, Survey and Landscape*. University of Glasgow, 1997.
- MANNING (S.W.) *et alii*, 1994, « Maroni Valley Archaeological Survey Project. Preliminary Report on 1992-1993 Seasons », *RDAC*, 345-367.
- MANNING (S.W.), DE MITA (F.A.), 1997, « Cyprus, the Aegean, and Maroni-Tsaroukkas », D. Christou *et al.* (eds), *Cyprus and the Aegean in Antiquity*, Nicosia, 103-142.
- MANNING (S.W.), MONKS (S.J.), 1998, « Late Cypriot tombs at Maroni-Tsaroukkas, Cyprus », *BSA*, 297-351.
- MANNING (S.W.), MONKS (S.J.), SEWELL (D.A.), DEMESTICHA (S.), 2000, « Late Roman Type 1a amphora production at the Late Roman site of Zygi-Petrini, Cyprus », *RDAC*, 233-257.
- MANNING (S.W.), SEWELL (D.A.), HERSCHER (E.), 2002, « Late Cypriot IA Maritime Trade in Action: Underwater Survey at Maroni Tsaroukkas and the contemporary East Mediterranean Trading System », *BSA* 97.
- MANNING (S.W.), 2002, *The Late Roman Church at Maroni Petrera*, Nicosia.
- MASSON (E.), 1983, « Premiers Documents chypro-minoens du site Kalavassos-Ayios Dhimitrios », *RDAC*, 131-141.
- MERRILLEES (R.S.), 1992, « The Government of Cyprus in the Late Bronze Age », *Acta Cypria* 3, 310-329.
- NEGBI (O.), 1986, « The Climax of Urban Development in Bronze Age Cyprus », *RDAC*, 97-121.
- RUPP (D.W.), 1989, « Puttin' on the Ritz: Manifestations of High Status in Iron Age Cyprus », in E. Peltenburg (ed.), *Early Society in Cyprus*, Edinburgh, 336-362.

- SMITH (J.S.) 1994, *Seals for Sealing in the Late Cypriot Period*, PhD dissertation, Bryn Mawr College.
- SMITH (J.S.), 2002, « Problems and Prospects in the Study of Script and Seal use on Cyprus in the Bronze and Iron Ages », in J.S. Smith (ed.), *Script and Seal Use on Cyprus in the Bronze and Iron Ages*, Boston, 1-47.
- SOUTH (A.K.), 1982, « Kalavasos-Ayios Dhimitrios 1980-1981 », *RDAC*, 60-68.
- SOUTH (A.K.), 1983, « Kalavasos-Ayios Dhimitrios 1982 », *RDAC*, 92-116.
- SOUTH (A.K.), 1988, « Kalavasos-Ayios Dhimitrios 1987: an Important Ceramic Group from Building X », *RDAC*, 223-228.
- SOUTH (A.K.), 1992, « Kalavasos-Ayios Dhimitrios 1991 », *RDAC*, 133-146.
- SOUTH (A.K.), 1995, « Urbanism and Trade in the Vasilikos Valley in the Late Bronze Age », in S. Bourke and J.-P. Descoeudres (eds), *Trade, Contact, and the Movement of Peoples in the Eastern Mediterranean*, Sydney, 187-197.
- SOUTH (A.K.), 1996, « Kalavasos-Ayios Dhimitrios and the Organization of Late Bronze Age Cyprus », in P. Åström and E. Herscher (eds), *Late Bronze Age Settlement in Cyprus. Function and Relationship*, Jonsered, 39-49.
- SOUTH (A.K.), 1997, « Kalavasos-Ayios Dhimitrios 1992-1996 », *RDAC*, 151-175.
- SOUTH (A.K.), 2000, « Late Bronze Age Burials at Kalavasos-Ayios Dhimitrios », *Acts of the Third International Conference of Cypriot Studies*, Nicosia, 345-364.
- SOUTH (A.K.), forthcoming, « The size of Late bronze Age Kition: a Factoid », *RDAC*.
- SOUTH (A.K.), STEEL (L.), 2001, « The White Slip Sequence at Kalavasos », in V. Karageorghis (ed.), *The White Slip Ware of Late Bronze Age Cyprus*, Vienna, 65-74.
- SOUTH (A.K.), RUSSELL (P.), KESWANI (P.S.), 1989, *Vasilikos Valley Project 3: Kalavasos-Ayios Dhimitrios II, Ceramics, Objects, Specialist Studies (SIMA LXXI:3)*, Göteborg.
- TODD (I.A.), 1986, « Vasilikos Valley Project: Fifth Preliminary Report 1980-1984 », *RDAC*, 1986, 12-27.
- TODD (I.A.), 1996, « The Vasilikos Valley: Its Place in Cypriot and Near Eastern Prehistory », J.E. Colson and V.H. Matthews (eds), *"Go to the Land I Will Show You", Studies in Honor of Dwight W. Young*, Winona Lake, 317-351.
- TODD (I.A.), PILIDES (D.), 2001, « The Archaeology of White Slip production », in V. Karageorghis (ed.), *The White Slip Ware of Late Bronze Age Cyprus*, Vienna, 27-43.
- TODD (I.A.), SOUTH (A.K.), 1992, « The Late Bronze Age in the Vasilikos Valley: Recent Research », in G.C. Ioannides (ed.), *Studies in Honour of Vassos Karageorghis*, Nicosia, 191-204.
- VERMEULE (E.D.T.), WOLSKY (F.Z.), 1990, *Toumba tou Skourou. A Bronze Age Potters' Quarter on Morphou Bay in Cyprus*, Cambridge, Massachusetts.
- YON (M.), 1992, « Ugarit: the Urban Habitat. The Present State of the Archaeological Picture », *BASOR* 286, 19-34.
- YON (M.), 1997, *La cité d'Ougarit sur le tell de Ras Shamra*. Paris.

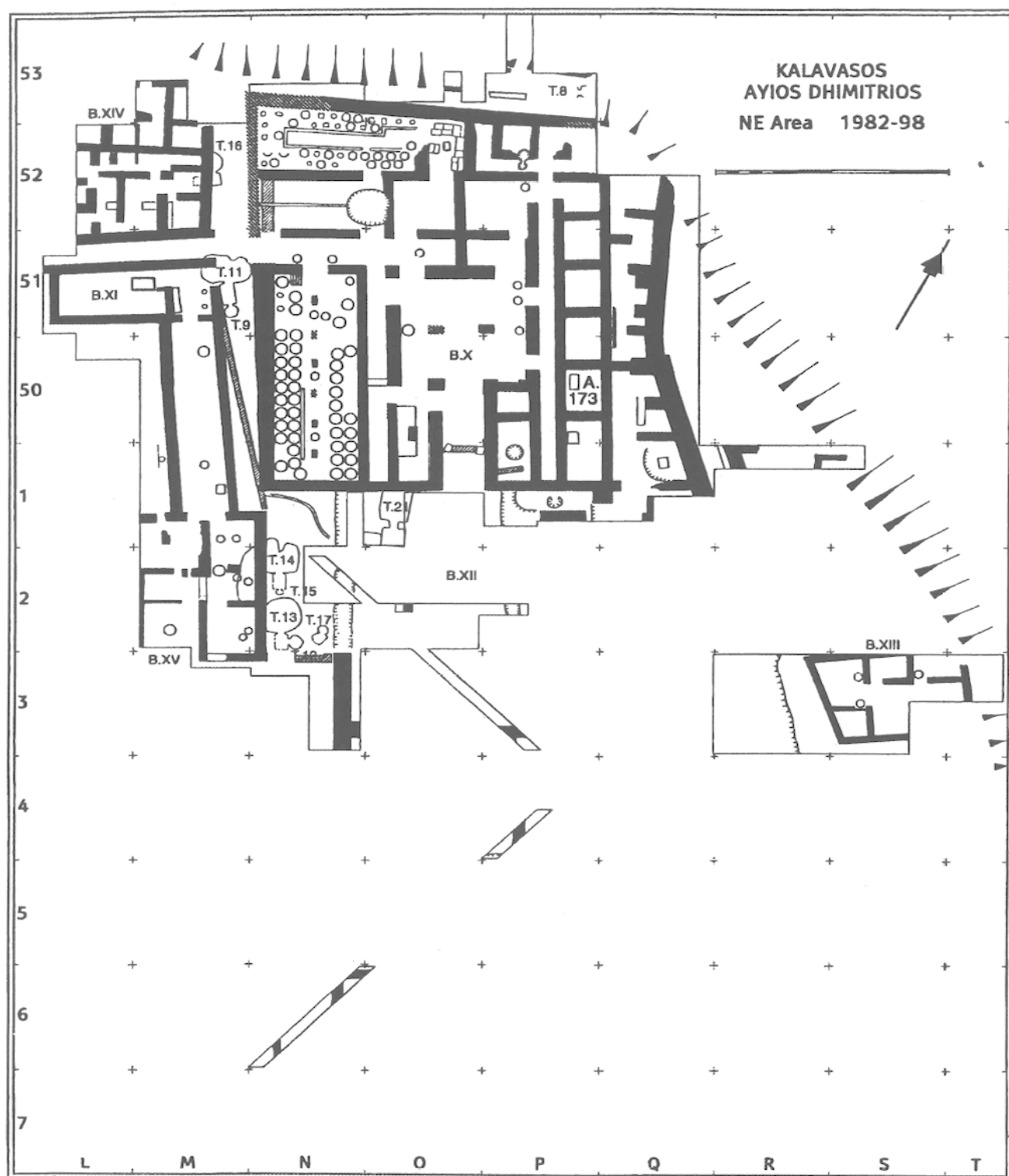


Figure 1. Plan of the North-East Area of excavations at Kalavasos-Ayios Dhimitrios.

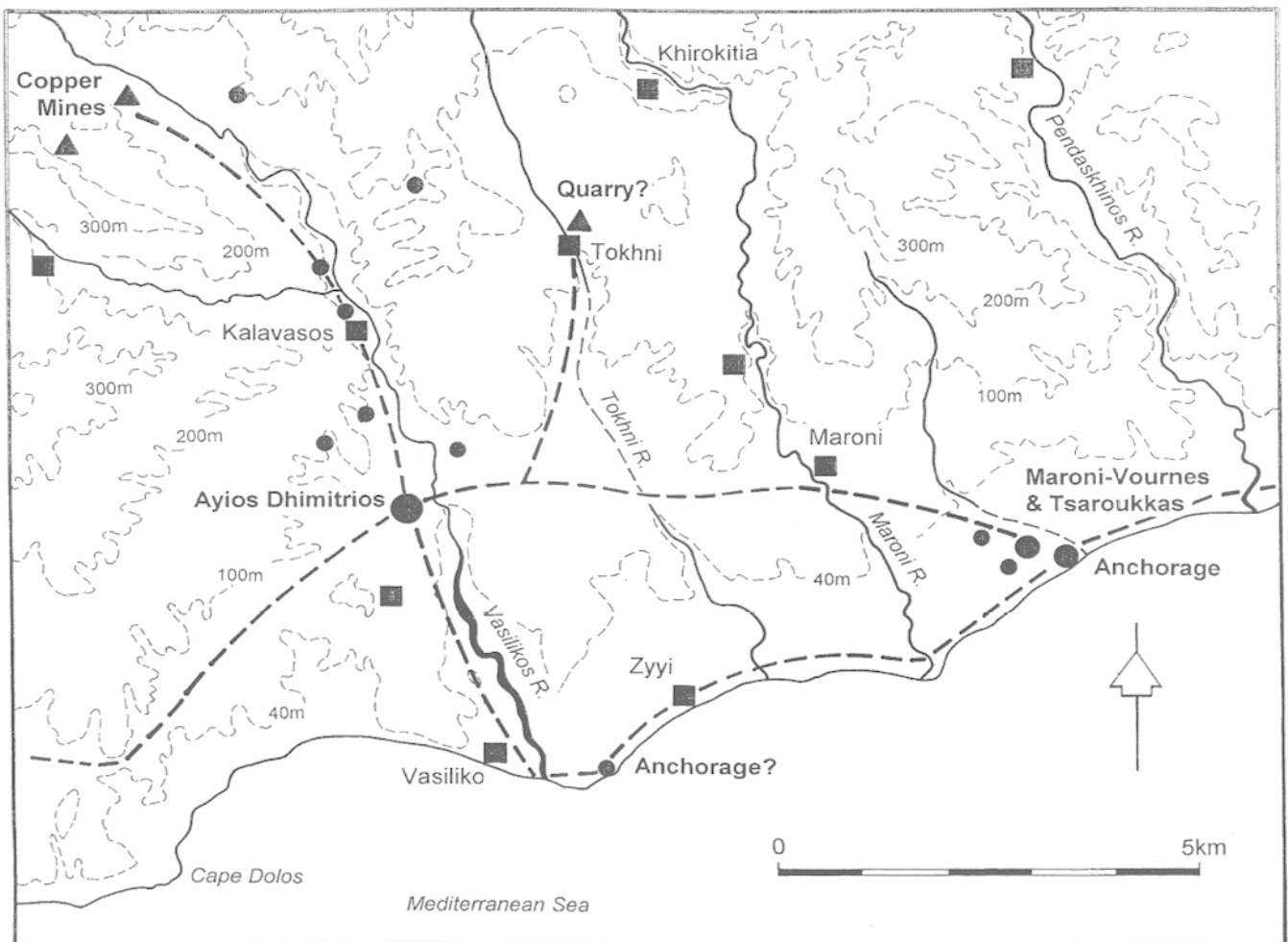


Figure 2. Map of the Kalavasos and Maroni areas showing Late Bronze Age sites. (Major and minor sites indicated by large and small dots, modern villages by squares, conjectured routes by dashed lines.)