

Exploiting a damaged and diminishing resource: survey, sampling and society at a Bronze Age cemetery complex in Cyprus

Jennifer M. Webb & David Frankel*

Is a cemetery that has been robbed and pillaged for generations worthy of systematic research? It certainly is, given the application of a well conceived and executed project design. The authors show that the precise investigation of tomb architecture and identification of residual pottery can allow the detailed mapping of funerary practice over large areas of space and periods of time. Here they develop a narrative of increasing population and funerary investment through the Bronze Age in central north Cyprus. And having recorded 1286 pillaged tombs they call attention to the value of what still remains and the dangers that such monuments still face. The fact that a cemetery has been damaged is no reason to sacrifice it to the bulldozer.

Keywords: Cyprus, Bronze Age, mortuary practice, burial rite, project design, CRM

Introduction

Readers of *Antiquity* will be aware of the increasing destruction of archaeological sites through development and illegal excavation. Nowhere is this of greater concern than on the small Mediterranean island of Cyprus. There is a consequent imperative to develop appropriate research questions and field approaches to mitigate impacts and exploit surviving, if damaged, sites. In this paper we describe one such project, where an extensive area of Bronze Age tombs has been damaged by agricultural and housing development and subject to the depredations of looters for generations. By changing the focus of research, places widely considered of little scientific value can be shown to have significant potential.

The Bronze Age cemeteries which extend over 6ha beside Deneia village in north-west Cyprus (at localities Kafkalla, Kafkalla tis Malis and Mali) have been known since the early twentieth century (Figure 1). They belong to an island-wide tradition of extramural necropoli containing both pit and chamber tombs, typically with multiple burials and quantities of ceramic and other grave goods (Keswani 2004). While some rescue work has been carried out at Deneia (Åström & Wright 1962; Hadjisavvas 1985; Nicolaou & Nicolaou 1988; Webb & Frankel 2001), most archaeologists have rejected the idea of working there, on the

* *Archaeology Program, La Trobe University, Melbourne, Australia (Email: jenny.webb@latrobe.edu.au; d.frankel@latrobe.edu.au)*

Received: 19 May 2008; Accepted: 1 September 2008; Revised: 16 September 2008

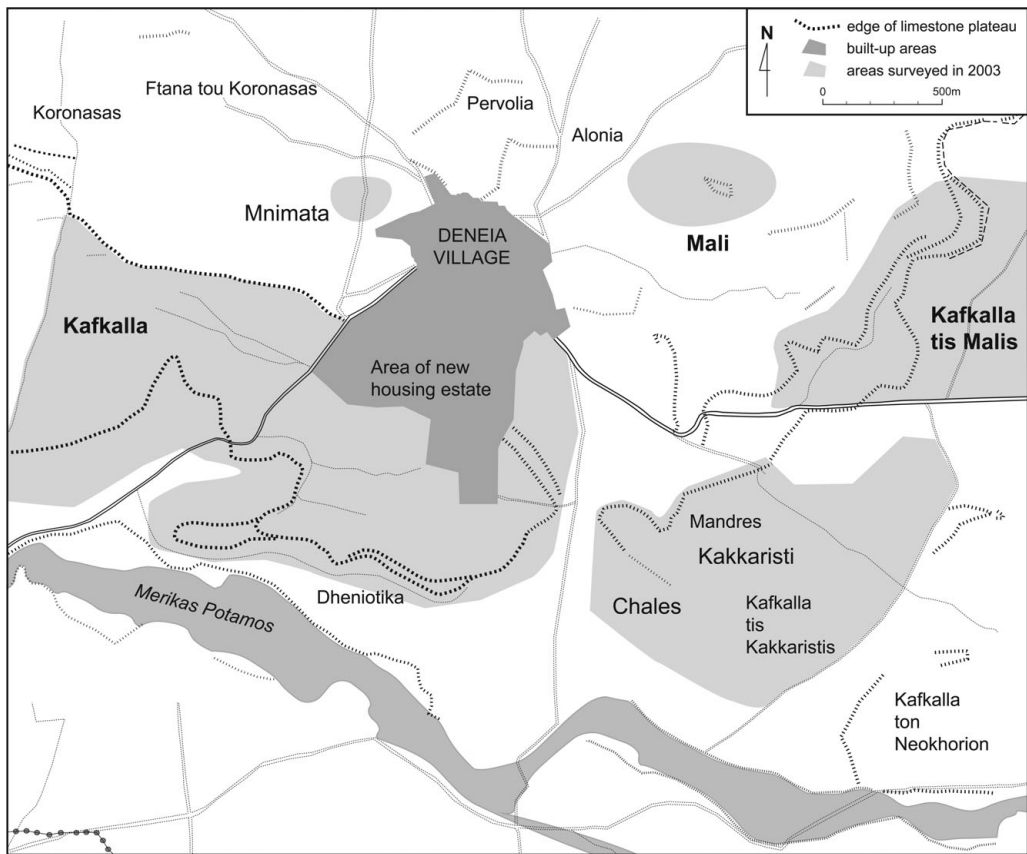


Figure 1. The area around Deneia village, showing the location of the main cemetery areas.

grounds that the extent of looting has caused irreparable damage. This owes as much to prevailing approaches to research as it does to the condition of the site.

Until the 1980s the archaeology of the Early and Middle Bronze Age in Cyprus was based almost entirely on evidence from cemeteries. This was the result of a number of factors; including imperatives to undertake rescue excavations once looters had identified cemeteries, the pressure (prior to 1960) to obtain museum pieces to repay support from institutional donors and a research focus on artefacts and typologies. Over the last 25 years, excavations at the settlements of Marki (Frankel & Webb 1996, 2006a, 2006b), Sotira (Swiny *et al.* 2003), Alambra (Coleman *et al.* 1996) and Pyrgos (Belgiorno 2004) (Figure 2) have provided a new research context in which different questions can be asked of the cemeteries. These include consideration of cemeteries as entities, replacing the traditional focus on complete tomb-groups and artefacts. Allied to this is a different understanding of the nature of the archaeological record, which regards looting as a form of taphonomic process, akin to those which operate to construct the settlement record.

We came to Deneia following a long-term involvement with settlement archaeology (Frankel & Webb 2006a, 2006b), prepared to consider the cemeteries within similar conceptual frameworks (see also Sneddon 2002). In particular, we were interested in tracing

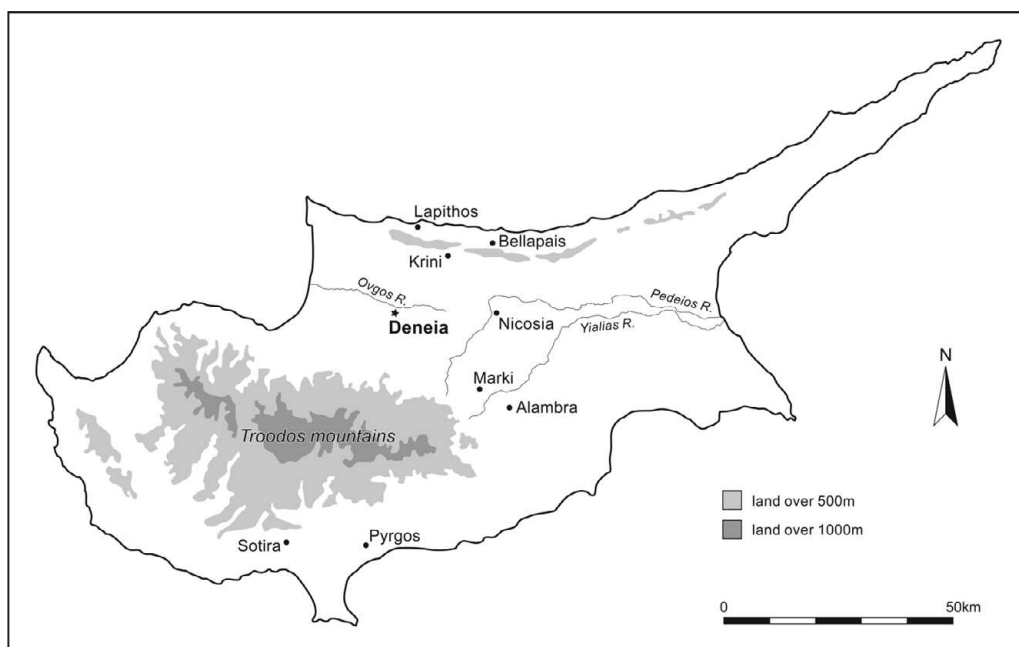


Figure 2. Map of Cyprus showing the location of Deneia and other relevant sites.

the size, structure and growth of the cemeteries, as indicators of changes in population size and relationships within the associated settlement or settlements and between different regions. Samples of sherds, the mainstay of settlement archaeology, are no less valuable for this exercise than whole vessels, while the complete groups so valued by earlier archaeologists are less necessary when tombs are seen as equivalent to the transformed and partial assemblages typically found on settlement sites. This paper summarises and extends observations contained in the final report on our investigations at Deneia (Frankel & Webb 2007) and offers a particular reflection on the capacity of residual assemblages to contribute to an understanding of inter- and intra-site relationships.

Research strategies

Two stages of fieldwork at Deneia were planned. The first was an intensive surface survey, documenting the location of identifiable tomb shafts using a high-precision GPS and recording all visible features and associated ceramic material. This was carried out in 2003. The second involved a sampling strategy, both of tombs and within tombs. As well as fitting in with our broad approach, this was a practical issue, given the great number of tombs and the large quantity of sherds left in each. Several seasons of fieldwork were planned. We were, however, forced to truncate the initial 2004 season and cancel subsequent work for health and safety reasons. Within a fortnight of beginning work that year, half of our team succumbed to murine typhus, a disease previously unknown to archaeologists in Cyprus. The particular circumstances at Deneia, where many tomb shafts are used for garbage

disposal, has encouraged a resident population of rats and other vermin, hosts for the fleas which carry this rickettsial infection.

Despite this major setback to our plans, sufficient information on the size and structure of the cemeteries and on the nature and contents of the tombs was collected to build, in conjunction with previous research, a good picture of the history of the site (Webb & Frankel 2001; Frankel & Webb 2007).

Tombs and cemeteries

The cemeteries at Deneia are located on top of and immediately below an extensive hard limestone plateau, which forms part of the largest continuous block on the island. A total of 1286 tomb shafts were identified and documented in the three localities of Kafkalla, Kafkalla tis Malis and Mali (Figure 1). The original number was likely to be two to three times higher, with many tombs destroyed by housing construction or covered by agricultural work. The associated settlement or settlements have not yet been found.

The earliest tombs date to the Early Bronze Age (*c.* 2400-2000 BC) and are located at the edge of the main limestone plateau and in the softer soils below at Kafkalla. The great majority of tombs, however, comprising a minimum of 764, were cut in the Middle Bronze Age (*c.* 2000/1900-1650 BC). These are located on and immediately below the hard limestone plateaux at both Kafkalla and Kafkalla tis Malis. Several tombs at Kafkalla continued to be used during the Late Bronze Age but no new tombs were cut in this cemetery after the end of the Middle Bronze Age. Some new tombs were dug in the Late Bronze Age at Mali, which appears to have served as the main cemetery for the associated settlement until its abandonment in the early twelfth century BC.

The form of the Deneia tombs varies according to the topography. Those on the plateaux have vertical primary shafts, either rectangular or circular in plan, about 0.8 to 1m across and generally about 1m in depth. Secondary tunnel-like openings were cut from the base of these shafts and curve down to chambers hollowed out below the limestone capping. These were blocked by large close-fitting stone slabs (Figure 3). On the steep slopes below the plateaux simple rather than bipartite shafts run horizontally into the hillside.

Figures 4 and 5 show the distribution of different sizes and shapes of shafts at Kafkalla. There is a general trend in size, with a greater proportion of larger shafts in the south-east compared with the north-west. The difference in shape is more marked, with a clustering of circular examples in the south-west and along the scarp edge and of rectangular shafts in the north-west. This is likely to have some chronological significance and fits broadly with other indications of earlier tomb construction in the south and later initial burials in the north-west. Elsewhere, however, the two shapes are interspersed; suggesting that identity, status, family or lineage-based affiliations also affected the choice of shaft shape.

The argument for an areal spread of the Kafkalla ground from south to north through time receives additional support from another line of evidence. Among the tombs near the western fringe of the Kafkalla cemetery are 22 unfinished shafts. Some have only the outline pecked into the limestone surface; others were cut to a greater depth (Figure 6). These provide an insight into the techniques of the tomb-diggers and suggest that the cemetery



Figure 3. Entrance to a tomb at Deneia Kafkalla showing the blocking stone.

was expanding in this direction when tomb cutting ceased in this burial ground at the end of the Middle Bronze Age.

Chronology, duration and intensity of tomb use

Two weeks of sampling in 2004 produced over 22 000 sherds and partial vessels from 17 tomb chambers. They provide an almost complete conspectus of the main ceramic types known from Bronze Age Cyprus. Classification of this assemblage, together with detailed documentation of 1100 diagnostic items (available via a Luna Insight digital archive at <http://library.latrobe.edu.au/record=b2234894>), provided a basis for assessing the proportion of wares in each tomb and thus their duration and relative intensity of use. This clearly demonstrates the value of residual tomb assemblages as indicators of chronology and history, while, as discussed below, other aspects of the ceramic data provide evidence of social relationships within and beyond Deneia.

The great bulk of the pottery belongs to the Middle Bronze Age. There is some Late Bronze Age material, generally typical of the mass-produced types seen at all sites of the period. A handful of items are imports, including a small quantity of Late Helladic pottery from the Mycenaean world, and a faience cylinder seal of Syrian origin. There are very

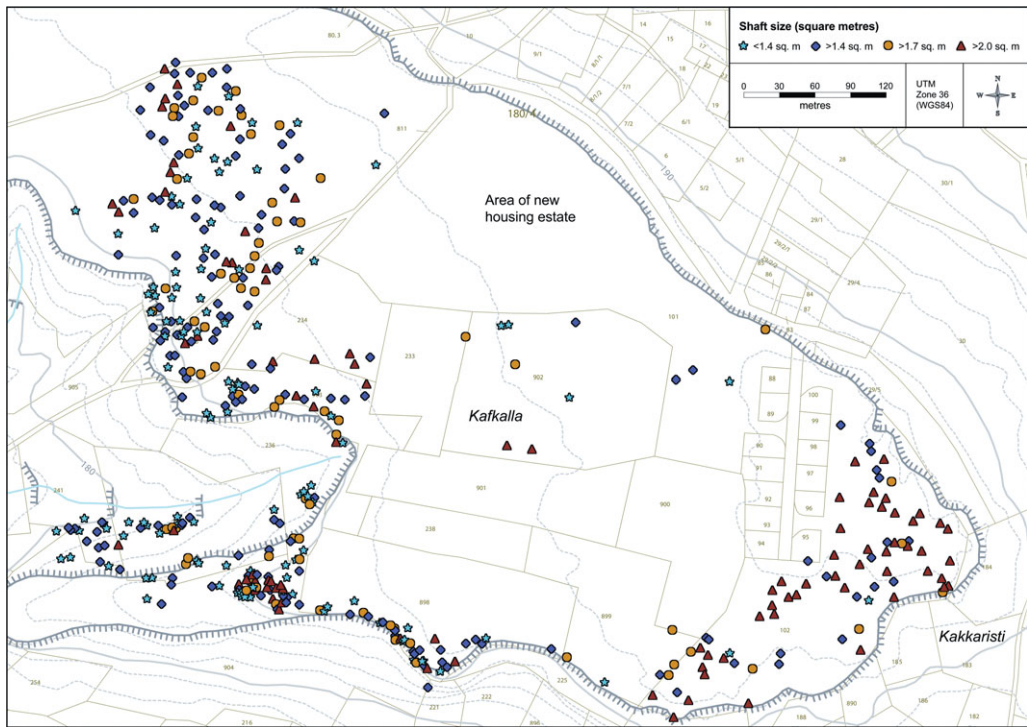


Figure 4. Distribution of tomb shafts of different sizes in the Kafkalla cemetery.

few such exotics, however, compared with the quantities found at the coastal cities that developed in Cyprus at this time.

Figure 7 gives a general impression of the age and duration of tombs sampled at Kafkalla in 2004 based on the ceramic samples. Most were constructed at the beginning of the Middle Bronze Age and remained in use for three centuries, with some continuing on a much-reduced scale through the Late Bronze Age.

Deneia and contemporary cemeteries

While the evidence from Deneia is broadly in keeping with the funerary record of Early to Middle Bronze Age Cyprus (Davies 1997; Keswani 2004), in many respects the Kafkalla, Mali and Kafkalla tis Malis burial grounds stand apart from contemporary cemeteries, especially during the Middle Bronze Age.

In the first instance the Deneia cemeteries are much larger and contain many more tombs than any other known Bronze Age burial ground on the island (compare, for example, 164 tombs in the two cemeteries at Bellapais Vounous). Tomb chambers at Deneia are also considerably larger (Figure 8). The mean chamber floor area recorded for other Middle Bronze Age sites on the island of 8.3m² (Keswani 2004: 118, Figure 5.5) may be compared with a mean chamber floor area for 11 fully documented tombs at Deneia of 26.2m². Similarly, the largest chambers at Deneia are much larger than any recorded elsewhere. The largest chamber at the major north coast site of Lapithos, for example, has a floor area of

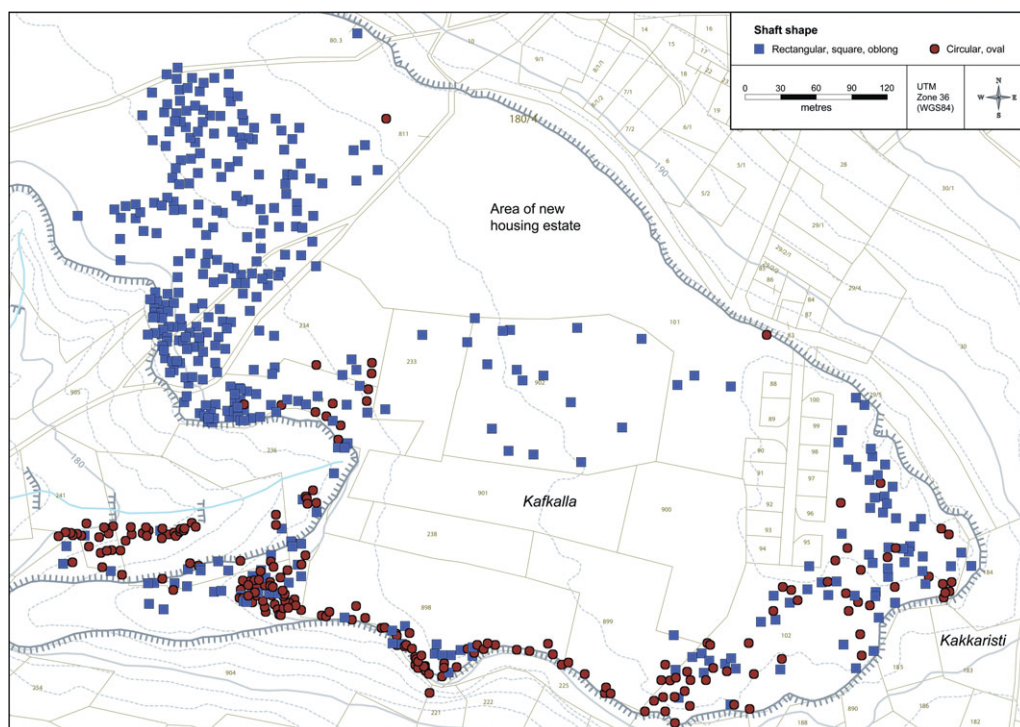


Figure 5. Distribution of different-shaped shafts in the Kafkalla cemetery.

20m² (Keswani 2004: 45), compared with estimated minimum floor areas of 34m² for Tomb 789, 55m² for Tomb 787 and 33m² for Tomb 6 at Deneia.

The available data and the size of the tomb chambers also suggest significantly higher numbers of burials per tomb than elsewhere. The presence of 10 individuals in Tomb 48 (Nicolaou & Nicolaou 1988: 73) and a minimum of 46 in Tomb 789 (Tucker & Cleggett 2007: 131, Table 7.2) may be compared with a mean number of 1.59 burials per chamber at Bellapais Vounous Site A, 2.68 at Bellapais Vounous Site B and 4.19 for Middle Bronze Age tombs at Lapithos (Keswani 2004: 53, Table 4.2). The very large number of sub-adult burials in the Tomb 789 sample, where 62 per cent of 46 individuals died at the age of 12 years or less (Table 1), is also at odds with data generally reported for Bronze Age burials in Cyprus, where comparatively few sub-adults have been identified, leading to suggestions of differential interment practices for infants and children (Keswani 2004: 30, 52; see also Todd 2007: 330).

Cemetery size and population

While estimating population numbers for prehistoric communities is fraught with difficulty, some, albeit speculative, figures can be suggested which provide a basis for understanding aspects of the history of the site. In particular we are concerned to identify whether the population was stable, with increases due to intrinsic factors, or subject to inward or outward migration (Chamberlain 2006: 26).

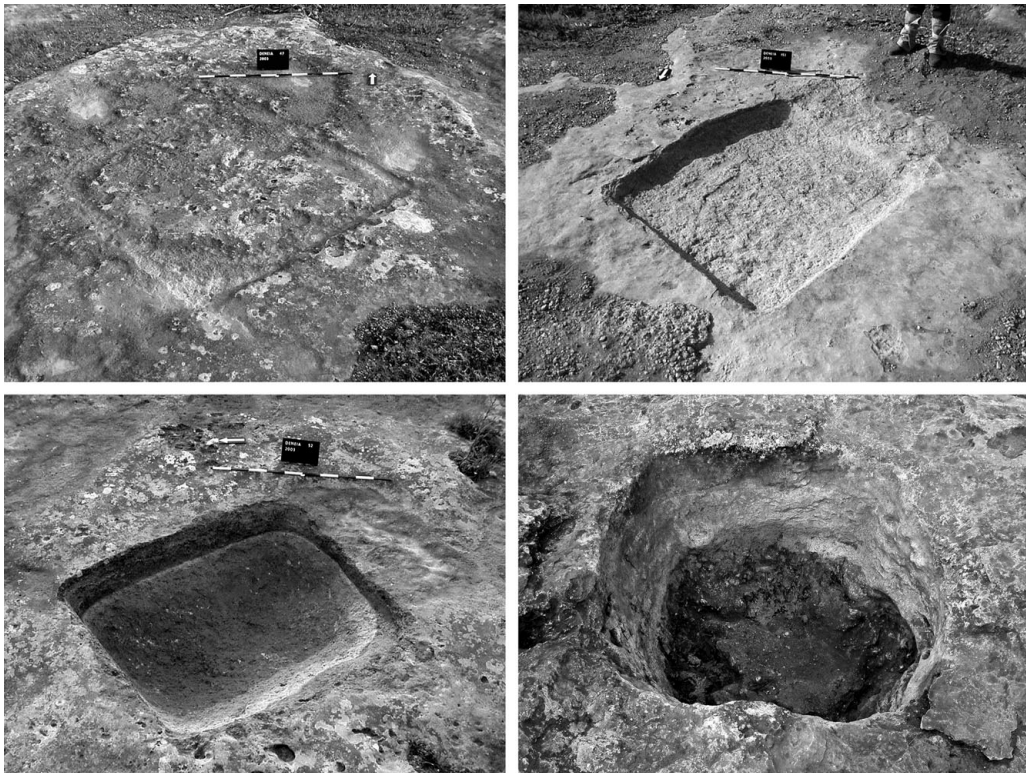


Figure 6. Unfinished tomb shafts at the western edge of the Kafkalla cemetery.

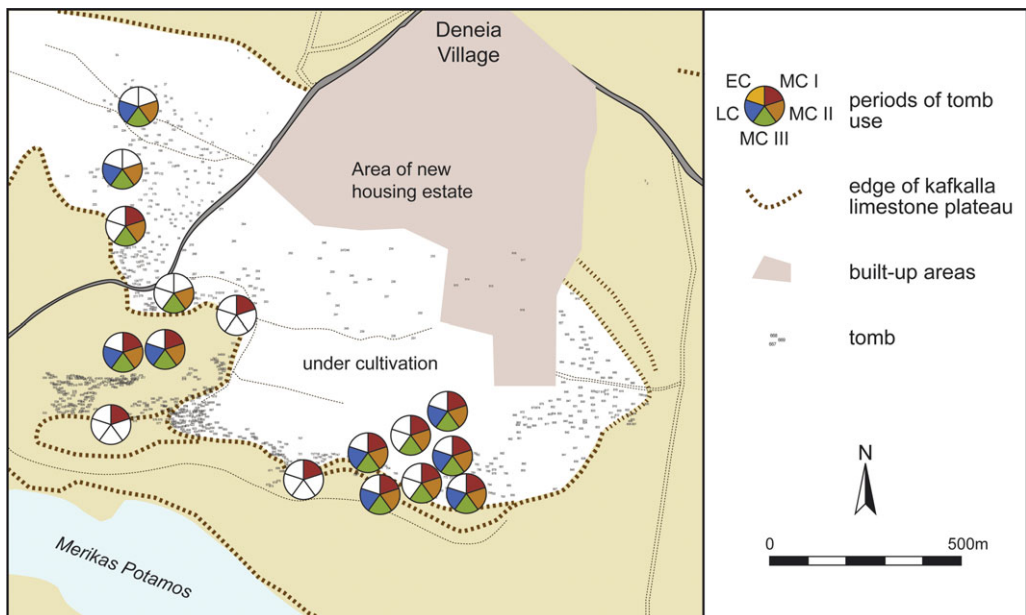


Figure 7. Periods of use of tombs sampled at Kafkalla in 2004, based on relative quantities of chronologically distinct pottery.

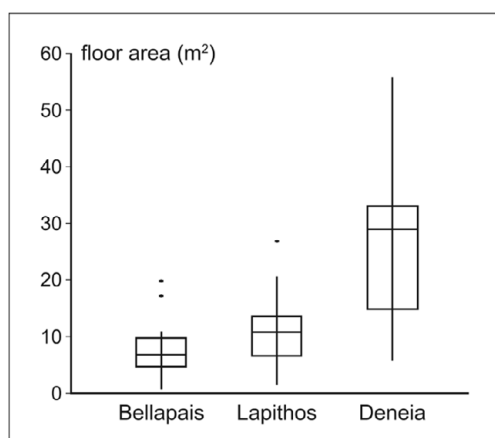


Figure 8. Box and whisker plots of chamber size for Middle Bronze Age tombs at Deneia (data from Frankel & Webb 2007: Table 8.2), Bellapais Vounous and Lapithos (after Keswani 2004: Figure 4.3).

Setting aside catastrophic and other historically contingent factors, stable or quasi-stable populations tend to increase, although the rate at which this occurs differs significantly. Hassan, for example, has suggested a general growth rate of 0.52 per cent for equivalent societies, which leads to a doubling of the population every seven generations or 133 years (1981: 140; cf. Chamberlain 2006: 36-7). Figure 9 models population figures for Deneia using this generalised rate of natural increase. As the size of the initial population is a critical factor, three scenarios are shown, suggesting a population ranging from 100 to 300 at the beginning of the Middle Bronze Age. The comparatively small number of Early

Bronze Age tombs gives little reason to

suppose that the number of inhabitants was any larger at this time. Toward the end of the Middle Bronze Age, at which time the population began to contract, there might have been between 400 and 1200 inhabitants.

The evidence from Tomb 789 suggests that only about one third of the population reached adulthood. This matches general cross-cultural parallels of age profiles (e.g. Angel 1971: 69-76; Hassan 1981: 103-23). On this basis very general estimates can be made of the total number of adults who died over the three centuries of the Middle Bronze Age (Table 2). This figure varies depending on the average age at death of adults, here expressed as the number of years of adult life. We can use this to suggest that a naturally increasing stable population would have had between 1300 and 5100 deceased over 300 years. The higher figure, based on a starting Middle Bronze Age population of 300, is less likely than mid-range estimates of between 2500 and 3400.

These estimates may be compared with estimates of the likely number of burials in the tombs (Table 3). The size of the chambers at Deneia and the minimum figures for Tombs 48

Table 1. MNI estimates based on the samples of human bone from Kafkalla Tomb 789.

Age grade	MNI	%
Foetal/perinatal	19	41.3
1-6 years	8	17.4
7-12 years	2	4.3
13-18 years	2	4.3
Younger adult	7	15.2
Older adult	8	17.4
Total	46	100

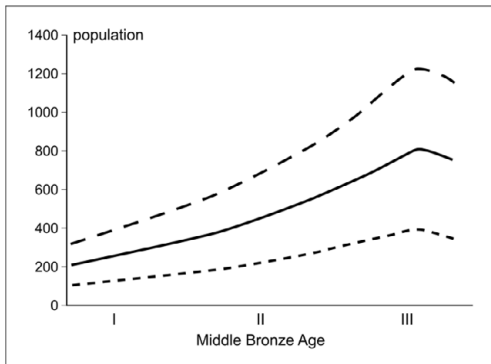


Figure 9. Modelling natural population increase at Deneia for three initial populations over 300 years of the Middle Bronze Age.

(10 adults) and 789 (17 adults) suggest an average number of adult burials per tomb of at least half-a-dozen and perhaps far more. As already noted, a minimum of 764 Middle Bronze Age tombs were identified. Local informants, although inclined to exaggerate, suggest that there were once at least five times as many. Even if far more conservative estimates of between 1500 and 2500 Middle Bronze Age tombs are used, and relatively low figures for the average number of adult burials in each, the estimated total number of burials, at between 9000 and 20 000, is astonishing.

It is immediately apparent that these figures are at odds with estimates of the number of deceased adults based on generalised demographic increase, even if the maximum figure in Table 2 is compared with the minimum figure in Table 3. Natural increase in a stable population alone is clearly insufficient to account for the growth in size of the Deneia cemeteries from the Early to the Middle Bronze Ages. Rather, the figures suggest a major influx of people and a rapid growth of associated settlement in the area during the first phase of the Middle Bronze Age. The villages at Marki and Alambra are known to have been abandoned at this time. This may have been part of a broad trend, involving a major restructuring of settlement as people congregated in larger centres. While the reasons for this redistribution of settlement are unclear, the impact of such a *synoikismos* at Deneia is evident in the dramatic expansion of the cemetery area. An alternative explanation – that Deneia

Table 2. Estimates of the number of deceased adults over the 300 years of the Middle Bronze Age, for three initial populations and different mean years of adult life.

Adult population at:	Model a	Model b	Model c
Start of MC I	33	67	100
20 years of adult life	1300	2600	3890
15 years of adult life	1700	3400	5100

Table 3. Estimates of the potential number of adult burials over 300 years of the Middle Bronze Age, for different numbers of tombs and burials per tomb.

Number of tombs	Average number of adults per tomb		
	6	8	10
1500	9000	12 000	15 000
2000	12 000	16 000	20 000
2500	15 000	20 000	25 000

served as a regional burial centre – appears unlikely, given the existence of contemporary cemeteries at numerous sites in the near vicinity.

Negotiating identity and social interaction

The picture which emerges from mortuary architecture and practice at Deneia in the Middle Bronze Age is significantly different from that of the rest of the island. The longevity, size and quality of the tombs, the large number of tombs, burials and burial goods and the formal disposal of neonates, infants and children in chamber tombs are unparalleled. There can be little doubt that these aspects of funerary behaviour are in some way related to, and probably in large part to be explained by, the very significant and probably relatively abrupt increase in population at the site in the early years of the Middle Bronze Age. This must have required considerable adjustment in many dimensions of social interaction and negotiation, some elements of which can be seen in the archaeological record.

The remarkable size and careful construction of tomb chambers and large burial populations per chamber may be a response to the need for newly arrived communities to proclaim ties to non-ancestral burial grounds and negotiate intra-group status. There is every reason to believe (though no evidence to confirm) that tombs belonged to and were repeatedly used by specific families. The energy expended in private entrance shafts and large chambers is likely to mark the establishment of individual families and implies a conscious decision to provide a burial facility for future generations. As chamber tombs could not have been constructed in response to a recent death, there is a strong implication of planning for the future, of tomb-building as an assertive act of association and belonging with long-term implications of inherited rights and associations. Those who constructed these tombs would have done so in the belief that they were establishing long-term facilities for their descendants, ensuring continuity and succession. For later generations family tombs would have provided regular sites for the assertion of inherited status and a visual legitimisation of lineage-based rights and privileges.

Alongside this analysis of social processes based on the documentation of the tombs are issues raised by the types of pottery found in them. Local pottery production at Deneia shows several contrasting dimensions of association and identity. Linkages to other villages are apparent in the general styles of the dominant Red Polished and less common White Painted wares. These have their closest parallels with material from the important Middle Bronze Age cemetery at Lapithos on the north coast, and some individual vessels probably moved from one village to the other. Other aspects of the pottery, however, highlight differences, and are typical of, if not entirely confined to, Deneia and its immediate region. Black Polished ware, for example, which was used for a limited array of small, finely decorated vessels, is far more common at Deneia than anywhere else, and many examples found at other sites were probably imported from there. Typical, too, are large Red Polished vessels with elaborate relief decoration (Figure 10a), the use of very distinctive decorative motifs, and a range of unusual vessel forms. These are occasionally found elsewhere, primarily at sites on the route from Deneia to the north coast where they are almost certainly imports. They represent an assertive, idiosyncratic demonstration of a local community style and

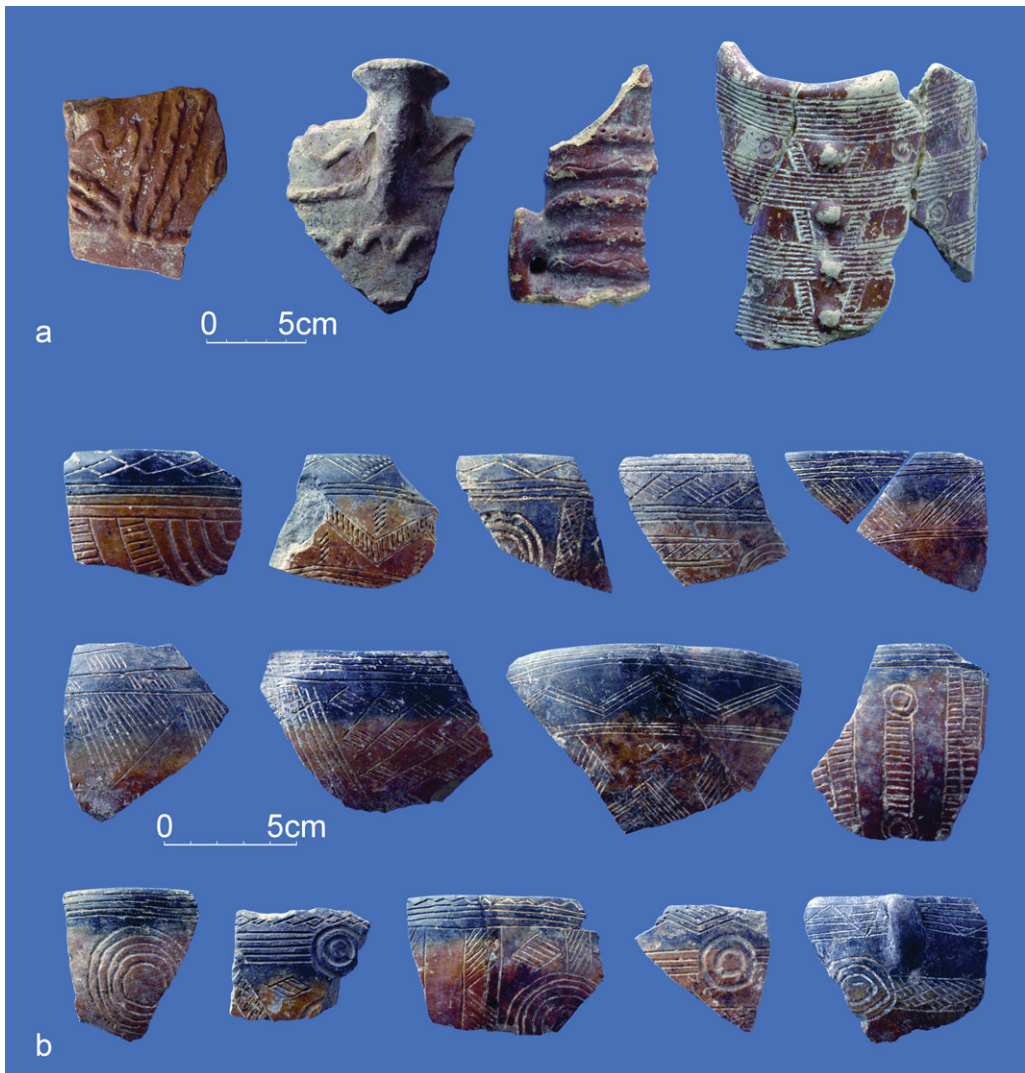


Figure 10. A selection of Red Polished ware sherds from Deneia: a) large basins and jugs of an assertive local style; b) small bowls with individualised incised decoration.

may be seen, like the tombs themselves, as part of a conscious construction of association or identity.

Within this broad assertion of a shared corporate identity, there is a counter-current of individuality in the ceramic products of Deneia. A deliberate variability is apparent. For example, although a limited repertoire of motifs was used to decorate the common small black-topped Red Polished ware bowls (Figure 10b), of the hundreds included in our samples no two vessels are exactly alike. This prompted Morris (1985: 323), in reference to similar material, to suggest that the potters *'are playing a game the rules of which demand that the decoration on every vessel shall be as different as possible from all others, while at the same time*

sharing with them as many individual elements as possible.' A similar, overtly individualising style is occasionally visible in the ceramic record at other Early and Middle Bronze Age sites in Cyprus at particular times: in each case in a context of rapid site or population expansion, when the assertion of individuality within a broad local uniformity may have been an appropriate way of negotiating personal identity and status (Webb & Frankel 2008).

Conclusion

Deneia was first used as a burial ground at the very beginning of the Bronze Age. At this time it was one of several small settlements along the Ovgos River, linked by a shared symbolic system and material culture as well as practical interaction, which probably included the transmission of copper from ore bodies in the north-west Troodos to major sites such as Vasilia on the north coast (Webb *et al.* 2006). During the succeeding phases of the Early Bronze Age, when greater regional variation can be seen, Deneia appears to have been no more important than many other small villages, some situated in better agricultural land, others in closer proximity to copper sources.

During the early years of the Middle Bronze Age, however, this system was transformed, as populations shifted from dispersed settlements to congregate in larger centres. At Deneia this was a period of rapid growth and intense social transformation, as new population groups with links to a widespread network of parent villages negotiated for status and resources both within their own communities and between groups with recently developed exchange relations. The expansion of the extensive burial grounds on the plateaux at Kafkalla and Kafkalla tis Malis is likely to have led to a strong sense of 'place-value' (Higham *et al.* 2007: 649), strengthening ties within initially disparate communities into a significant socio-political force. Deneia may at this time have played an important role in the movement of copper to the north: perhaps serving as a central node in a regional network headed by Lapithos, with authority over intermediate, perhaps dependent settlements south of the Kyrenia Range. The pottery demonstrates both internal social linkages and inter-site interaction (Frankel 1974), as well as being a vehicle for expressing individual identity and affinity to the local area. This function was shared with the investment in large family tombs, constructed with an eye to establishing a place within a rapidly expanding community and concepts of long-term association and continuity. Both suggest that a strong community affiliation and a deliberate crafting of a corporate identity were achieved at Deneia during the early years of the Middle Bronze Age.

By the later years of the Middle Bronze Age the boom times at Deneia were over. The Late Bronze Age saw the relatively rapid growth of a series of coastal urban centres, as Cyprus was drawn into the international trade systems of the eastern Mediterranean. The older networks linking the copper-rich areas of the north-west Troodos to the north coast became redundant, as new routes and spheres of influence developed. Deneia, for several centuries a major centre, was effectively by-passed. The locally distinctive pottery of earlier times was replaced by more uniform products manufactured in larger-scale production centres and distributed within networks of interaction now dominated by the coastal cities. Few

new tombs were constructed, as the settlement declined in size and importance following another population shift, this time to a different set of emerging centres.

Our research on the looted cemeteries at Deneia, despite its abrupt termination, has enabled us to build a far more comprehensive picture of the history and chronology of this important site than previously thought possible. More broadly, it demonstrates the value of adopting a problem-oriented approach and appropriate sampling strategies to investigate severely depleted archaeological landscapes and establish meaningful connections between residual assemblages and social context. Equivalent circumstances are unfortunately all too common in the Mediterranean region, where the problems of looting, which are by no means new, are being increasingly aggravated by the disturbance and even wholesale destruction of sites through development. The recognition that damage to sites does not mean the total loss of value, combined with the development and further refinement of appropriate research strategies, is critical if we are to exploit the remaining potential of diminishing archaeological resources.

References

- ANGEL, J.L. 1971. *The people of Lerna. Analysis of a prehistoric Aegean population*. Washington: Smithsonian Institution Press.
- ÅSTRÖM, P. & G.R.H. WRIGHT. 1962. Two Bronze Age tombs at Dhenia in Cyprus. *Opuscula Atheniensia* 4: 227-76.
- BELGIORNO, M.R. 2004. *Pyrgos-Mavroraki: 'Advanced technology in Bronze Age Cyprus', CNR-ITABC archaeological mission at Pyrgos, Nicosia, Archaeological Museum, 30 June – 30 July 2004*. Nicosia: Department of Antiquities, Cyprus.
- CHAMBERLAIN, A.T. 2006. *Demography in archaeology*. Cambridge: Cambridge University Press.
- COLEMAN, J.E., J.A. BARLOW, M.K. MOGELONSKY & K.W. SCHAAR. 1996. *Alambra. A Middle Bronze Age settlement in Cyprus. Archaeological investigations by Cornell University 1974-1985* (Studies in Mediterranean Archaeology 118). Jonsered: Paul Åströms Förlag.
- DAVIES, P. 1997. Mortuary practice in prehistoric Bronze Age Cyprus. *Report of the Department of Antiquities, Cyprus*: 11-26.
- FRANKEL, D. 1974. *Middle Cypriot White Painted pottery. An analytical study of the decoration* (Studies in Mediterranean Archaeology 42). Göteborg: Paul Åströms Förlag.
- FRANKEL, D. & J.M. WEBB. 1996. *Marki Alonia. An Early and Middle Bronze Age town in Cyprus. Excavations 1990-1994* (Studies in Mediterranean Archaeology 123). Jonsered: Paul Åströms Förlag.
- 2006a. *Marki Alonia. An Early and Middle Bronze Age settlement in Cyprus. Excavations 1995-2000* (Studies in Mediterranean Archaeology 123). Sävedalen: Paul Åströms Förlag.
- 2006b. Neighbours. Negotiating space in a prehistoric village. *Antiquity* 80: 287-302.
- 2007. *The Bronze Age cemeteries at Deneia in Cyprus* (Studies in Mediterranean Archaeology 135). Sävedalen: Paul Åströms Förlag.
- HADJISAVVAS, S. 1985. A Late Cypriote II tomb from Dhenia. *Report of the Department of Antiquities, Cyprus*: 133-6.
- HASSAN, F.A. 1981. *Demographic archaeology*. New York (NY): Academic Press.
- HIGHAM, T., J. CHAPMAN, V. SLAVCHEV, B. GAYDARSKA, N. HONCH, Y. YORDANOV & B. DIMITROVA. 2007. New perspectives on the Varna cemetery (Bulgaria) – AMS dates and social implications. *Antiquity* 81: 640-54.
- KESWANI, P.S. 2004. *Mortuary ritual and society in Bronze Age Cyprus* (Monographs in Mediterranean Archaeology). London: Equinox.
- MORRIS, D. 1985. *The art of ancient Cyprus*. Oxford: Phaidon.
- NICOLAOU, I. & K. NICOLAOU. 1988. The Dhenia Kafkalla and Mali tombs. *Report of the Department of Antiquities, Cyprus*: 71-120.
- SNEDDON, A.C. 2002. *The cemeteries at Marki: using a looted landscape to investigate prehistoric Bronze Age Cyprus* (British Archaeological Reports International Series 1028). Oxford: Archaeopress.
- SWINY, S., G.(R.) RAPP & E. HERSCHER. 2003. *Sotira Kaminoudhia: an Early Bronze Age site in Cyprus* (American Schools of Oriental Research Archaeological Reports 8/CAARI Monograph Series 4). Boston (MA): American Schools of Oriental Research.
- TODD, I.A. 2007. *Vasilikos Valley Project 11: Kalavassos Village Tombs 52-79* (Studies in Mediterranean Archaeology 71). Sävedalen: Paul Åströms Förlag.

- TUCKER, K. & S. CLEGGETT. 2007. Human remains from Tomb 789, in D. Frankel & J.M. Webb *The Bronze Age cemeteries at Deneia in Cyprus* (Studies in Mediterranean Archaeology 135): 131-6. Sävedalen: Paul Åströms Förlag.
- WEBB, J.M. & D. FRANKEL. 2001. *Corpus of Cypriote Antiquities 21. Eight Middle Bronze Age tomb groups from Dhenia in the University of New England Museum of Antiquities* (Studies in Mediterranean Archaeology 20). Jonsered: Paul Åströms Förlag.
- 2008. Fine ware ceramics, consumption and commensality: mechanisms of horizontal and vertical integration in Early Bronze Age Cyprus, in L. Hitchcock, R. Laffineur & J. Crowley (ed.) *Dais. The Aegean Feast. Proceedings of the 12th International Aegean Conference, University of Melbourne, Centre for Classics and Archaeology, 25-29 March 2008* (Aegaeum 29): 287-95. Liège: Annales d'archéologie égéenne de l'Université de Liège.
- WEBB, J.M., D. FRANKEL, Z.A. STOS & N. GALE. 2006. Early Bronze Age metal trade in the Eastern Mediterranean. New compositional and lead isotope evidence from Cyprus. *Oxford Journal of Archaeology* 25: 261-88.