



The death of collective tombs in Middle Bronze Age Crete: new evidence from Sissi

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The abandonment of collective tombs in Middle Bronze Age Crete testifies to substantial transformations in funerary, ritual and social practices on the island. Yet, the processes and timing of this abandonment were not uniform, and each cemetery can potentially offer new insights. While some collective tombs fell gradually into disuse, others were deliberately and ritually terminated. Here, the authors explore the cemetery at Sissi, where gradual abandonment in some areas contrasts with the ultimate demolition and burial of tombs in Zone 9 during a ceremony that marked a major shift in the social history of the associated community.

Keywords: Mediterranean Europe, Minoan, Middle Bronze Age, archaeoethanatology, mortuary practices, processes of change

Introduction

The landscape of Prepalatial Crete (Early Minoan (EM) I to Middle Minoan (MM) IA; see [Table 1](#)) was dotted with collective burial structures. Monumental circular tombs ('tholos tombs') were especially favoured in south-central Crete, while rectangular tombs ('house tombs') were more common in the northern and eastern regions of the island ([Figure 1](#)). These collective tombs, burial in which was probably regulated to some extent by kinship,

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Table 1. Relative and absolute chronology in Bronze Age Crete.

Period	Phase	Approximate dates BC (after Warren 2010)
Prepalatial	Early Minoan I	3000–2650
	Early Minoan IIA and IIB	2650–2200
	Early Minoan III	2200–2050
	Middle Minoan IA	2050–1900
Protopalatial	Middle Minoan IB	1900–1800
	Middle Minoan IIA and IIB	1800–1700
Neopalatial	Middle Minoan IIIA and IIIB	1700–1600
	Late Minoan IA and IB	1600–1430
Final Palatial	Late Minoan II	1430–1390
	Late Minoan IIIA1	1390–1360
Postpalatial	Late Minoan IIIA2	1360–1330
	Late Minoan IIIB	1330–1190

remained in use for centuries, sometimes up to a millennium. Cemeteries of Prepalatial collective tombs served not only as burial settings but also as communal gathering places for the performance of funerary and non-funerary ceremonies, functioning as major arenas of social negotiation (e.g. Branigan 1993; Legarra Herrero 2014). The abandonment of these structures during the Middle Bronze Age (2050–1600 BC) therefore testifies to fundamental changes in funerary and ritual practices and, more importantly, in the role played by burial practices in the evolving sociopolitical organisation of the island.

Recent research has challenged the long-standing interpretation of the adoption of clay burial containers (pithoi and larnakes) in EM III–MM I and the desertion of collective tombs as a reflection of the breakdown of kinship structures, favouring instead the rise of individual status in a context of increasing sociopolitical complexity and emerging palatial

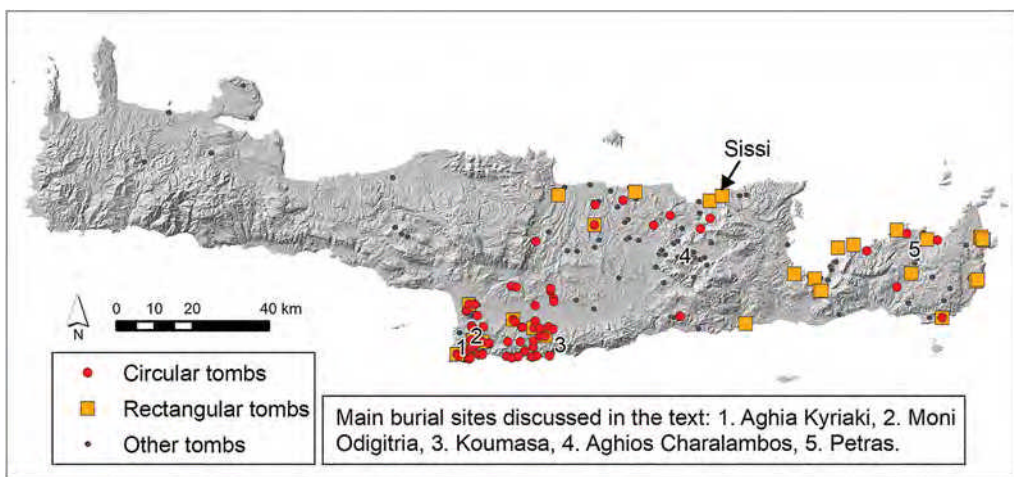


Figure 1. Distribution of Prepalatial and Protopalatial tombs, with the location of the main cemeteries mentioned in the text (S. Déderix).

systems (e.g. Glotz 1952: 159; Branigan 1970: 131; 1993: 137–41; Manning 2008: 110). Updated chronological data reveal that collective tombs were not all abandoned suddenly when the first palaces were constructed but rather fell into disuse gradually over the course of the Middle Bronze Age: circular and rectangular tombs were in use in 49 to 58 cemeteries in MM I, in 17 to 27 cemeteries in MM II and in nine to 12 cemeteries in MM III (Figure 2) (several Prepalatial and Protopalatial collective tombs await final publication; their chronologies, and therefore the estimates of tombs in use, remain imprecise). Furthermore, funerary

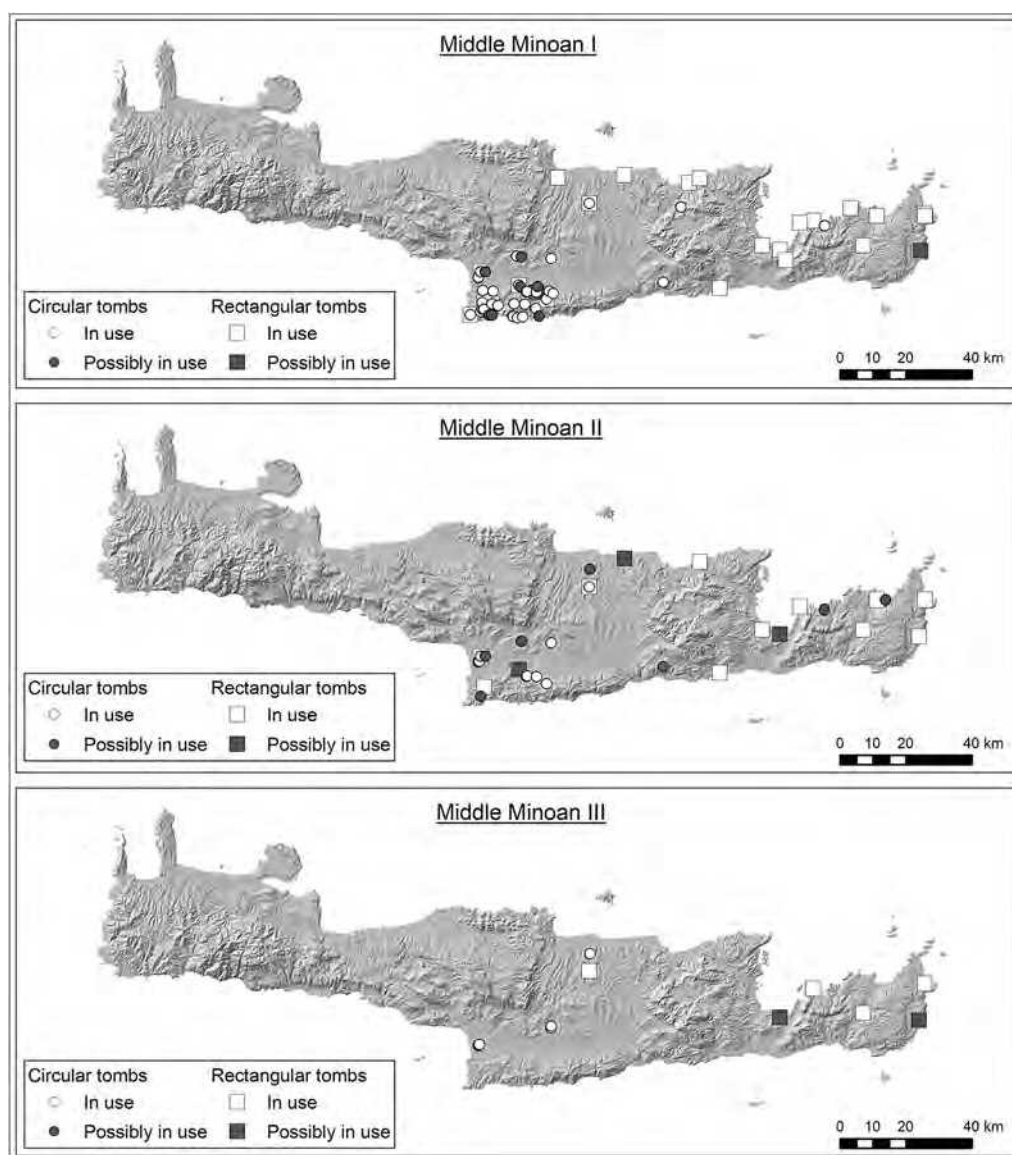


Figure 2. Distribution of cemeteries with at least one circular and/or rectangular tomb in use in MM I, MM II and MM III (S. Déderix).

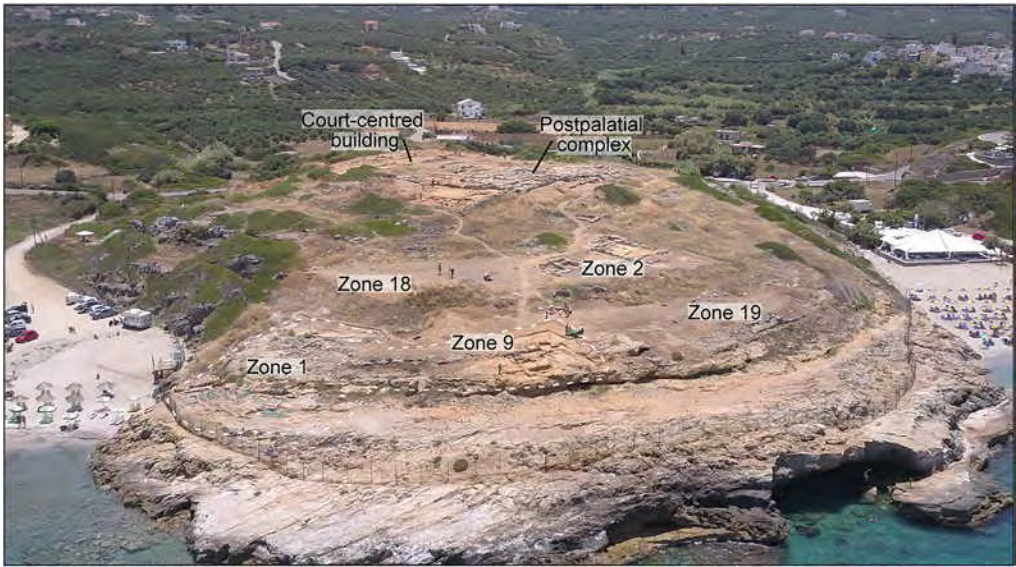


Figure 3. The archaeological site of Sissi, seen from the north. The white dotted line indicates the limits of the cemetery (Zones 1 & 9) (© Belgian School at Athens, N. Kress).

and ritual activities in the cemeteries still used during the Protopalatial period (MM IB–MM IIB) continued to emphasise community over the individual (Caloi 2011; Legarra Herrero 2016a). Even the pithoi and larnakes in collective tombs often served for several successive primary burials or for secondary depositions of bones belonging to multiple individuals (Vavouranakis 2014; Legarra Herrero 2016b). This gradual shift away from collective tombs is now seen as part of a move towards non-funerary ritual settings such as palatial court-centred buildings, peak sanctuaries and sacred caves (e.g. Haggis 1999; Vavouranakis 2007; Legarra Herrero 2016a; Driessen & Letesson 2024). Such regional meeting places were better suited than local cemeteries to hosting inter-community gatherings at a time when the sociopolitical dynamics of interaction, competition and integration were being played out at increasingly larger spatial scales. For the mortuary realm, the consequences were profound: as collective tombs lost their roles as prime social arenas, they ceased to be used and archaeologically invisible ways of dealing with the dead were adopted, leaving us clueless as to the funerary treatment of most of the Neopalatial population (MM IIIA–Late Minoan (LM) IB) (Devolder 2010). In this context, the construction of a handful of new circular and rectangular tombs in MM II (e.g. at Kephala Petras, Kamilari Mylona Lakkos and Knossos Ghypsades) and the continued use of a few collective tombs in MM III–LM I may reflect local attempts to hold onto ancestral mortuary traditions and, perhaps, resist sociopolitical transformations.

The desertion of Prepalatial collective tombs can therefore no longer be viewed as a uniform, island-wide phenomenon within a narrow timeframe and, as a result, it becomes necessary to focus on the local scale, to examine each cemetery in its own spatio-temporal and social context and investigate the processes of its abandonment. How was the cemetery abandoned, and at what pace? Did it fall out of use gradually, with some community

members still buried there while others were treated in the new, archaeologically invisible way? Or was it deserted abruptly, following an active decision by the community at a specific moment in its history? Addressing these questions is essential to understanding the causes and consequences of the transformation of mortuary, ritual and social practices in Middle Bronze Age Crete.

Most collective tombs rediscovered in the early and mid-twentieth century were excavated hastily and published only briefly. However, over the last two decades, burial sites excavated in the mid- and late twentieth century have been (re)studied (e.g. Tholoi Γ and E at Archanes, Moni Odigitria, Kamilari, Tholos A at Apesokari) and, more importantly, new tombs have been excavated following up-to-date protocols and methods (e.g. Livari, Kephala Petras, Mesorachi, Koumasa), yielding fine-grained data on the variation and evolution of mortuary practices in Early and Middle Minoan Crete (e.g. Panagiotopoulos 2002; Vasilakis & Branigan 2010; Papadatos & Sofianou 2015; Girella & Caloi 2019; Tsipopoulou & Rupp 2019). In particular, recent excavation data from the Prepalatial and Protopalatial cemetery of Sissi provide unparalleled evidence on the timing and processes of its abandonment, indicating that, in some instances, the abandonment of collective tombs was intentional, planned and ritualised.

The Prepalatial and Protopalatial cemetery at Sissi

The archaeological site of Sissi occupies a coastal hill approximately 4km east of the Palace of Malia in north-east Crete. Excavations conducted since 2007 (Belgian School at Athens, dir. J. Driessen) have revealed a settlement inhabited from EM IIA to LM IIIB, a Neopalatial court-centred building (MM IIIA–LM IA) and a large Postpalatial complex (LM IIIA2–LM IIIB), as well as a cemetery of Prepalatial and Protopalatial house tombs (EM IIA–MM IIB) (Figures 3 & 4). Covering at least 750m², this cemetery developed through a continuous process of tomb rebuilding, modification, abandonment and new construction. Approximately 35 rectangular compartments have so far been recognised on two bedrock terraces on the north slope of the hill, overlooking the sea (e.g. Driessen *et al.* 2012: 27–51; 2018: 59–76; Driessen 2021a: 35–57). On the lower and narrower terrace, rectangular compartments are arranged in a row, following the orientation of the hillside, while extended burial structures with multiple compartments occupy the upper and wider terrace.

The house tombs of Sissi mainly contained primary burial deposits in superimposed strata (Crevecœur *et al.* 2015; Schmitt & Déderix 2021). The bones lay directly on the floor or in individual containers; a few neonates were buried in medium-sized vases in EM IIA and EM IIB, adults were sometimes deposited in larnakes and pithoi in MM I–MM II and the position of several skeletons suggests that perishable containers (e.g. wooden coffins) or textiles (e.g. shrouds, bags) were used as well. Previous burials were often disturbed by new deposits, pushed aside or cleared out to make room. It is relevant, in this respect, that Compartment 1.9 and Space 9.10 (see Figure 4) appear to have contained secondary deposits of human bones retrieved from elsewhere in the cemetery (Schmitt & Déderix 2021).

To date, a minimum of approximately 100 individuals have been counted in Zone 9 but the total number of deceased buried in the house tombs of Sissi cannot be determined due to repeated cycles of use and reuse, in the course of which innumerable burials could have been cleared out. As a result, the burial deposition rate and, by extension, the size and nature of

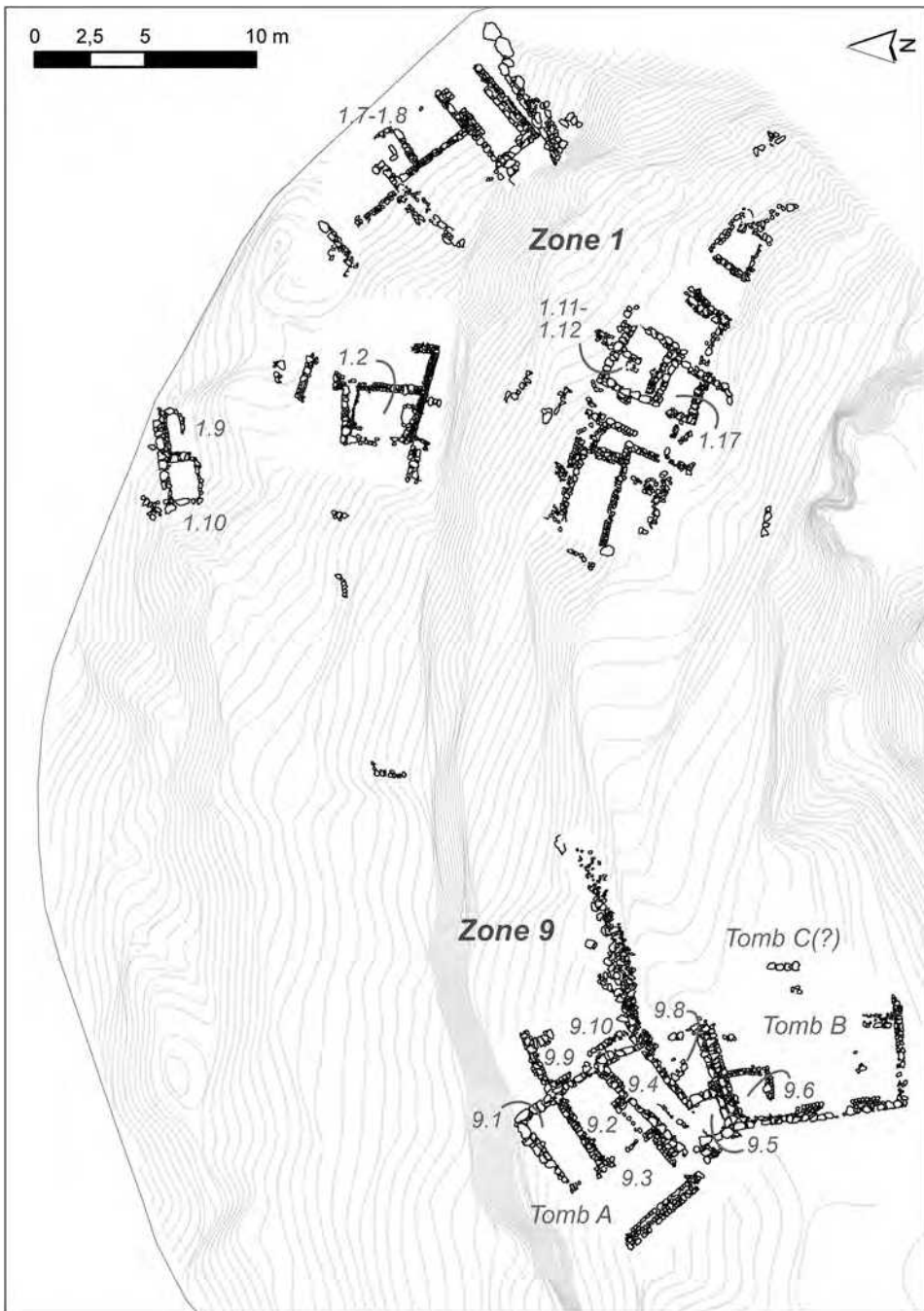


Figure 4. Layout of the Sissi cemetery (© Belgian School at Athens, E. Zographou, modified).

associated social groups are uncertain, although the presence of bones belonging to women, men and subadults of all ages suggests that burial rights did not depend solely upon biological sex or age.

Final phases of the Sissi cemetery

Mortuary activity at the Sissi cemetery in MM I was intense; the lower terrace and the eastern part of the upper terrace (Zone 1) witnessed the reconstruction of old tombs (e.g. 1.11–1.12) and the construction of new ones (e.g. 1.7–1.8, 1.9–1.10, 1.17) (Figure 4). It was probably also in MM I that the cemetery expanded towards the west, particularly onto the western part of the upper terrace (Zone 9) (Figure 5). Indeed, even though levelling fills on the bedrock contained EM II and EM III sherds, all archaeological layers and mortuary deposits excavated thus far inside the house tombs of Zone 9 date to MM I and MM II. During the last phase of the Protopalatial period, the focus of funerary activities shifted to Zone 9 while most of the tombs in Zone 1 were abandoned by the end of MM IIA and only one burial is securely dated to MM IIB (pithos burial in Compartment 1.2; Schoep *et al.* 2017: 373, 376). In addition, architectural, stratigraphic, osteoarchaeological and ceramic evidence from the terrace of Zone 9 illuminates the final sequence of actions in the cemetery and the process of its

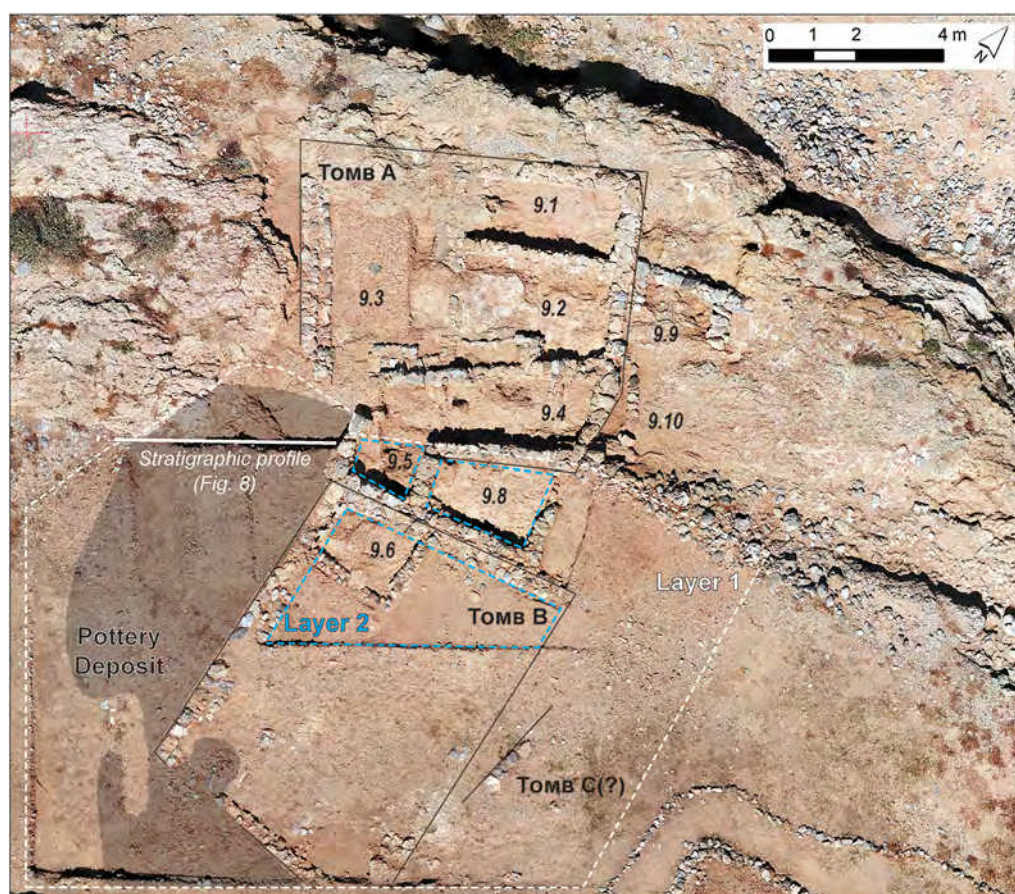


Figure 5. Zone 9 at Sissi, showing the extent of Layer 1 (outlined in white), Layer 2 (outlined in blue), the Pottery Deposit (shaded in black) and the location of the stratigraphic profile illustrated in Figure 8 (unbroken white line) (© Belgian School at Athens, N. Kress, modified).

ultimate abandonment in MM IIB. This evidence is presented below by archaeological layers and in chronological order, thus starting with the burial strata in the compartments of Zone 9 and continuing with Layer 2, the Pottery Deposit and Layer 1 (Figure 5), all of which pertain to the termination of Zone 9.

Burial strata in Zone 9 (MM I–MM II)

Excavations in Zone 9 uncovered two main burial structures (Tombs A and B), additional compartments to the east of Tomb A and between Tombs A and B, and a potential third tomb (Tomb C) to the east of Tomb B (Figure 5). Tomb A initially consisted of Compartments 9.1, 9.2 and 9.3 (approximately 7.35–8 m × 5–6 m). The south wall and the south-east corner of 9.2 were later rebuilt, and the tomb was expanded towards the south (Compartment 9.4) and the east (Compartments 9.9, 9.10, and perhaps others now eroded). Compartments 9.1 and 9.2 contained the remains of primary burials installed on successive floor levels and often disturbed by subsequent depositions, along with one secondary deposit. Space 9.10 yielded a secondary deposit of human bones on the bedrock, while, in the eastern part of 9.4, a deep pit dug in older burial strata was filled with about 30 successive perinate burials (22 weeks of *amenorrhea* to two lunar months post-partum; analysis is ongoing), primary and secondary deposits of bones belonging to a minimum of nine adults, and an MM IIB ceramic cup. In contrast, no human bones were found in Compartments 9.3 and 9.9 (Driessen *et al.* 2012: 49; Driessen 2021a: 41–43). Rubble stones inside Tomb A demonstrate that the building collapsed at some point during MM II, but Tomb B and Compartments 9.5 and 9.8 remained in use in MM IIB.

In the larger Tomb B (7.5–8.6 m × 5.8 m), only Compartment 9.6 (in the north-western corner) has been fully excavated (Driessen 2021a: 53–54). Besides a few stray bones (i.e. probable remnants of old burial deposits since cleared out), this compartment has yielded three primary burials in fragmentary clay containers, each of which lay in a shallow pit dug into the floor and its underlying preparation layer (Figure 6). An infant (1–2 years old) was found in the first of these three clay containers (FE147), while the other two (half-pithoi cut lengthwise) contained an adolescent (FE149) and an adult (FE148), respectively. All three skeletons were incomplete, damaged and partially disturbed. In particular, the high degree of fragmentation and the displacement by 50–100 mm of the bones in the upper part of the deposits suggest that the contents of 9.6 were levelled when the compartment was abandoned.

Compartments 9.5 and 9.8 were built after Tomb A and Tomb B, filling the original space between them. In Compartment 9.5, several small vases (e.g. cups and lamps) but only two bones were found on a series of superimposed pebble surfaces dated to MM IB–MM II. In contrast, human remains were plentiful in 9.8. Disarticulated bones scattered on the oldest floor likely came from old burials cleared out of the compartment before a new floor was installed. Four pits (labelled FE113, FE114, FE121 & FE128) were then dug into this new floor in MM II (Figure 7). Pit FE128 held two large pithos fragments (FE127) arranged into a small enclosure for a primary burial. The south-eastern corner of 9.8 and the gap between FE127 and the edge of pit FE128 were filled with secondary bone deposits, while pit FE113 contained the skeleton of an individual laid on their left side, in a

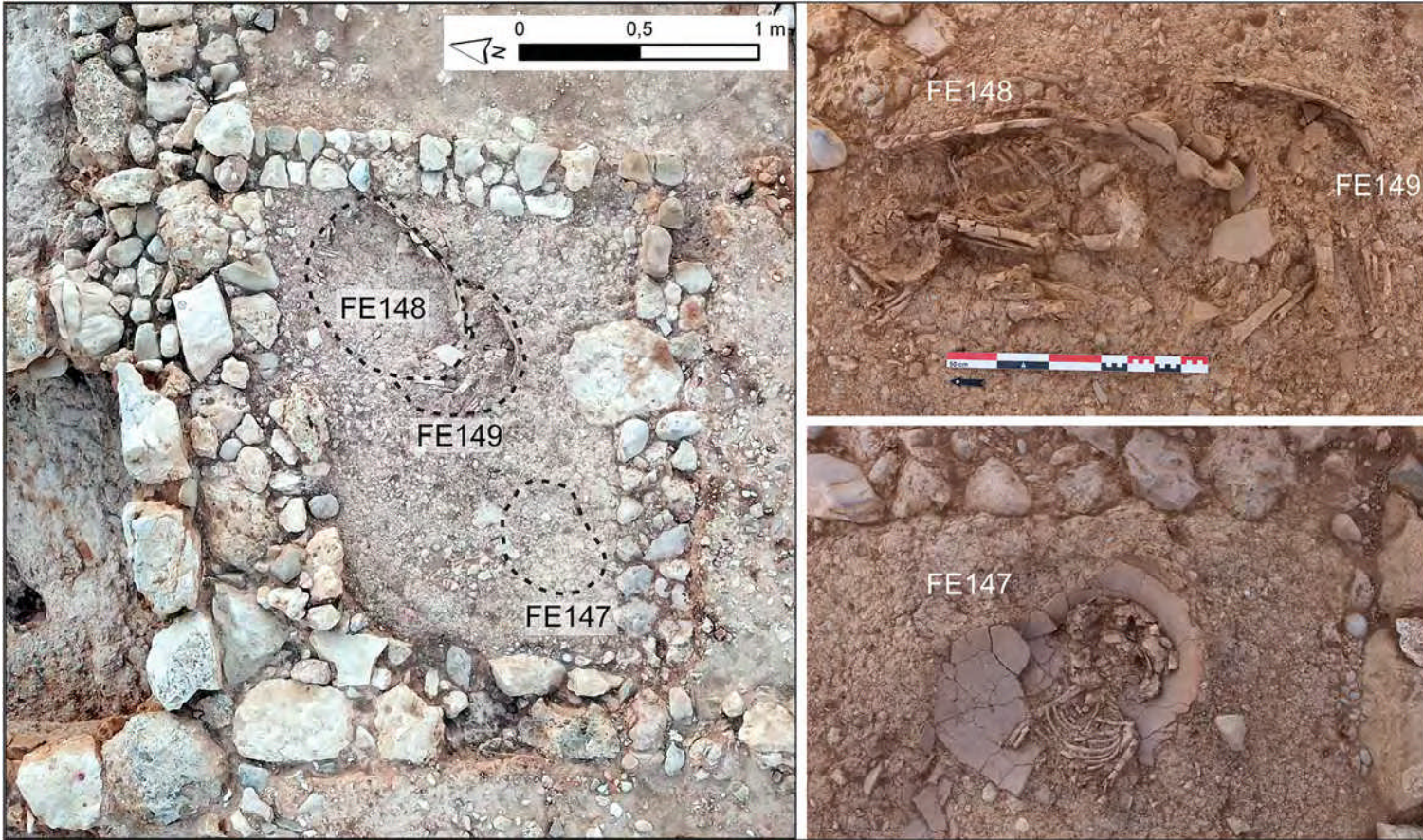


Figure 6. Compartment 9.6, with the location of clay containers FE147, FE148 and FE149 (left) and details of the clay containers during excavation (right) (© Belgian School at Athens, N. Kress, A. Schmitt).

hypercontracted position that suggests that the corpse was tightly bound or wrapped in cloth, leather or basketry. In the northern part of Compartment 9.8, pits FE114 and FE121 each contained a half-pithos (cut lengthwise) and a primary burial, the upper part of which was disturbed in the same way (and arguably during the same levelling operation) as the three primary burials in Compartment 9.6. The skeleton in FE114 lacked its cranium, some cervical vertebrae and the bones of the lower limbs, fragments of which were found disarticulated and mixed in the upper part of the burial's fill. The skeleton in FE121 suffered similar disturbance: the cranium was incomplete, and the bones of the hands and feet had been displaced upwards. The same levelling operation that disturbed the primary burials in FE114 and FE121 also damaged pithos FE127, the upper part of which protruded well out of the pit and was therefore splintered, but did not affect the thinner secondary bone deposit in the south-eastern corner of Compartment 9.8.

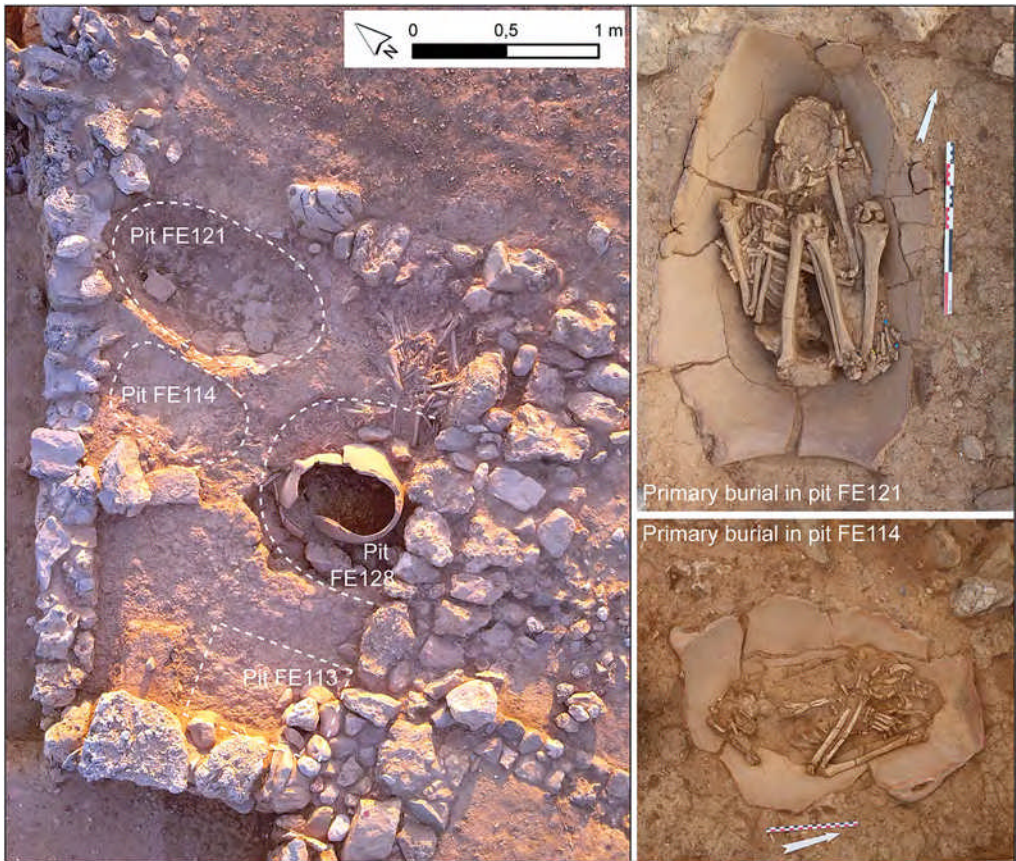


Figure 7. Compartment 9.8, with the location of Pits FE113, FE114, FE121 and FE128 (containing the pithos fragments labelled FE127) (left) and details of the primary burials in pits FE114 and FE121 (right) (© Belgian School at Athens, N. Kress, A. Schmitt).

Layer 2 (MM IIB)

Tomb B and Compartments 9.5 and 9.8 did not contain collapsed rubble stones at the time of their discovery—unlike the adjacent Tomb A, the walls of which crumbled and tumbled down. Instead, their contents and the north, west and inner walls of Tomb B were sealed under a thin layer of yellow-brown silty soil with a few pottery sherds, human bone fragments and small stones (labelled ‘Layer 2’; [Figure 5](#)). Thus, Tomb B and Compartments 9.5 and 9.8 were dismantled before they had time to decay and collapse. Their contents were then levelled, and it was this levelling operation that caused the disturbance, fragmentation and commingling of the upper part of the primary burials in Compartments 9.6 (in FE147, FE148 and FE149) and 9.8 (in FE114 and FE121), while also damaging the upper part of the large pithos fragments FE127.

Pottery Deposit (MM IIB)

The area to the west and south-west of Tomb B was occupied by a massive pottery deposit (approximately 40m²; [Figure 5](#)) comprising broken sherds mixed with small complete and semi-complete vases as well as shells, some possible stone tools and a few bone fragments. Due to time constraints, only the northern part (3.5m²) of this deposit was excavated, revealing a thickness of up to 0.4m to the west of Compartment 9.5 ([Figure 8](#)). The excavated assemblage (roughly 13 000 sherds) consists of drinking vessels and coarse cooking ware dating mostly to MM IIB, except for a few EM III–MM IA and MM IB vases. Post-excavation processing is ongoing, but a minimum number of 120 vessels have so far been catalogued. Straight-sided and carinated cups are especially frequent ([Figure 9](#)), while jugs, amphorae, tripod cooking pots, cooking plates, shallow bowls and miniature vases are also present. Although not yet confirmed by the ongoing pottery study, stratigraphic data suggest that this Pottery Deposit is the result of a single episode of deposition, which probably happened at the end of a large feasting event.

Layer 1 (MM IIB)

Both Layer 2 and the Pottery Deposit were found sealed directly under a homogeneous layer (approximately 0.1m thick) of soil containing many worn pottery sherds, pebbles and small stones, which was labelled ‘Layer 1’ ([Figures 5 & 8](#)). This layer stretched over Tomb B, Compartment 9.8 and the southern part of Compartment 9.5, as well as to the west, south and east of Tomb B. The date (MM IIB), classes and shapes of the pottery from Layer 1 are similar to those of the Pottery Deposit, including Plain Ware in semi-fine and semi-coarse fabrics, Monochrome Ware and Cooking Ware, with one-handled conical cups and carinated cups the most common shapes, followed by shallow bowls, large plain bowls with relief decoration, tripod cooking pots and cooking dishes ([Figure 10](#)). However, the pottery in Layer 1 consists exclusively of small worn sherds: there are no complete vessels, few fragmentary vases and no joining fragments, except for two parts of the same hemispheric bowl in black serpentine ([Figure 10A](#)). Layer 1, which was reached immediately below the topsoil, corresponds to the latest action documented in Zone 9.

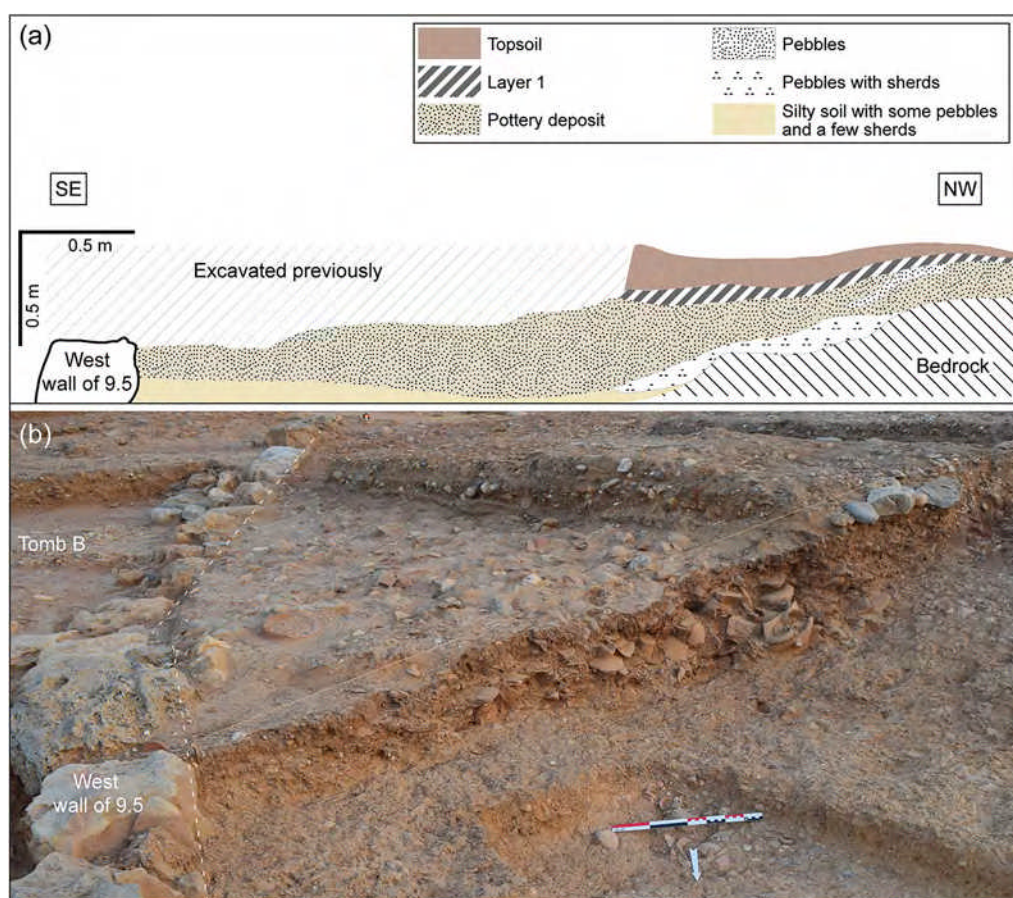


Figure 8. The Pottery Deposit to the west of Tomb B: a) stratigraphic profile; b) view from the north (© Belgian School at Athens, S. Déderix).

Termination rituals in the Sissi cemetery

Based on architectural, stratigraphic, osteoarchaeological and ceramic data, the sequence of actions in the final phase of Zone 9 (and, by extension, in the final phase of the Sissi cemetery) can be reconstructed as follows. In contrast to Zone 1, where funerary activity had all but ceased by the end of MM IIA, Zone 9 (and Tomb B and Compartment 9.8, in particular) continued to be used for burials in MM IIB, even after Tomb A had collapsed. In MM IIB, Zone 9 also hosted a communal feast involving serving and drinking vessels that were then discarded to the west and south-west of Tomb B. The absence of Neopalatial sherds in Layer 1 (except for a few worn fragments at the interface with topsoil) indicates that it was in MM IIB that Tomb B and Compartments 9.5 and 9.8 were also dismantled and levelled (thus forming Layer 2) and then sealed off under Layer 1. The fact that Layer 1 was found directly on top of both the Pottery Deposit and Layer 2 indicates that Layer 1 was spread across Zone 9 before sediments had time to naturally accumulate on top of these two deposits. This suggests that the sequence of actions occurred within a short time span, and the Pottery Deposit likely

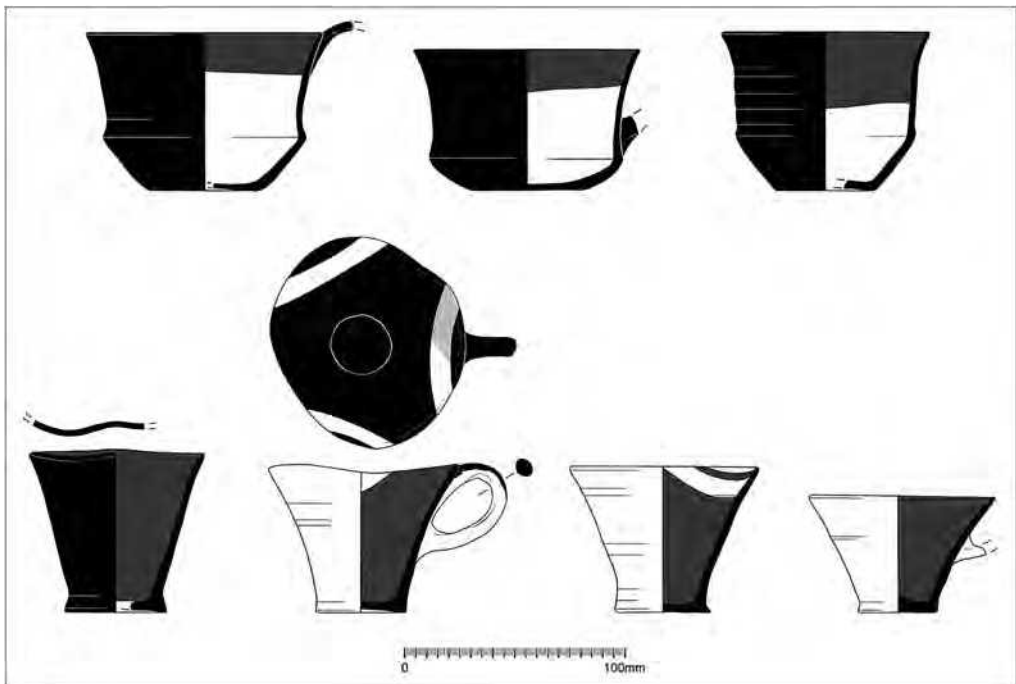


Figure 9. MM II drinking cups from the northern part of the Pottery Deposit in Zone 9 (© Belgian School at Athens, A. Sanavia).

resulted from a feast associated with the dismantling of the tombs (rather than on the occasion of funerals).

Overall, the data from Zone 9 thus reveal that Tomb B and Compartments 9.5 and 9.8 were intentionally deconstructed and buried during a communal ceremony that involved a large-scale feast (as indicated by the size of the Pottery Deposit) and was held after the last burials had (at least partially) decomposed—since the upper part of the burials in Compartments 9.6 and 9.8 were disturbed during levelling operations—but before the buildings could decay and collapse. In other words, the Sissi cemetery and in particular the last burial compartments that were still in use on the terrace of Zone 9 were not simply abandoned; rather, they were deliberately and ritually terminated.

Termination rituals (also known as structured abandonment or ritual closure) mark the end of the use-life of built spaces. Despite cross-cultural variations (e.g. Webley 2007; Denti 2014; Lamoureux-St-Hilaire *et al.* 2015; Adams 2016), these rituals commonly involve the planned and final deconstruction, burning or destruction of architectural features, followed by the burial of their remains, which (perhaps paradoxically) enables their preservation. At Sissi, dismantling part of Zone 9 and sealing it off under Layer 1 had the effect of protecting the lower part of the tombs and their mortuary deposits. The homogeneity of Layer 1 testifies not only to its intentional character but also to the care involved in its laying out. As further demonstrated by the Pottery Deposit, which testifies to the size of the group that participated in the accompanying feast, such an undertaking was a large-scale,

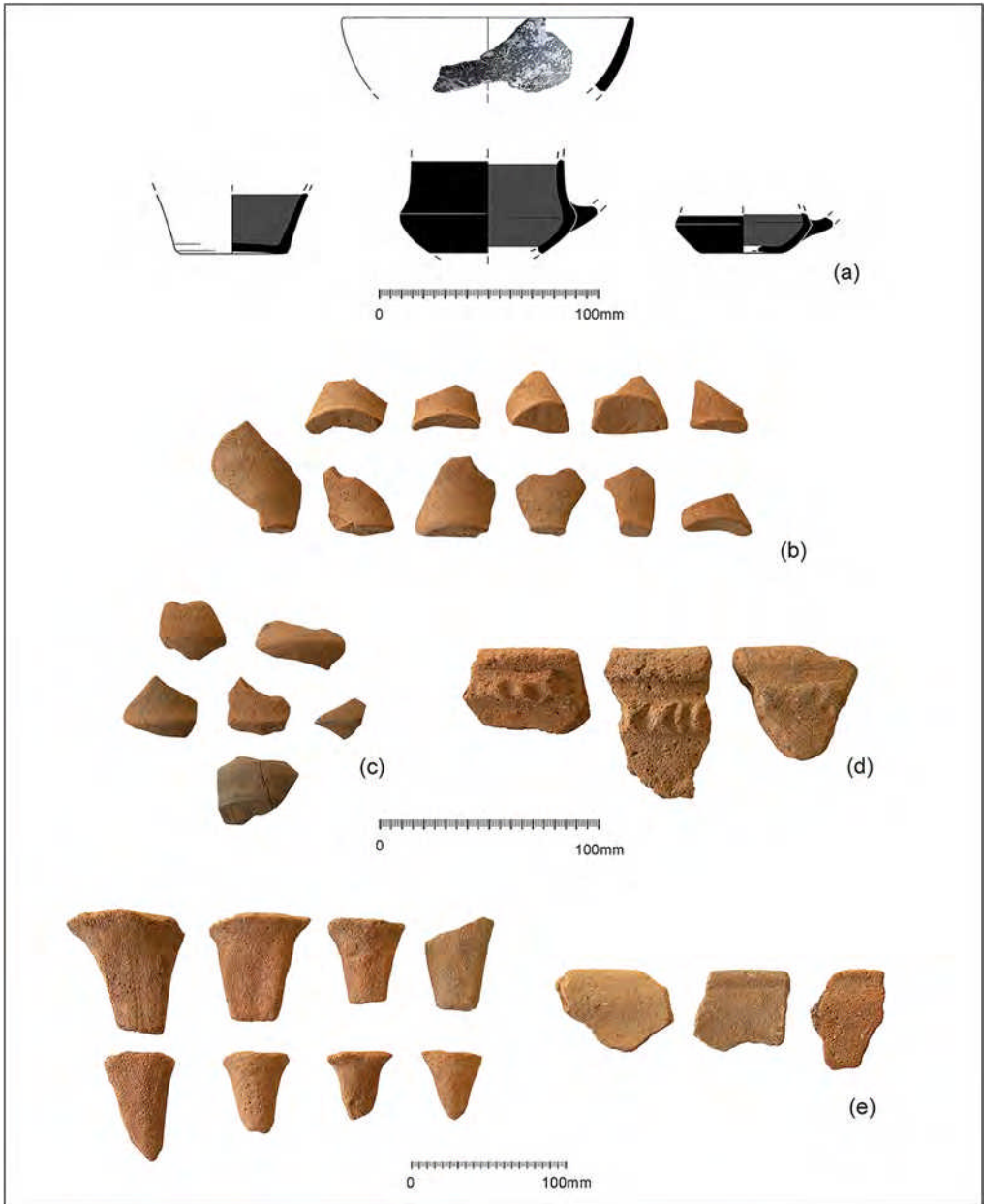


Figure 10. MM IIB material from Layer 1: a) partially reconstructed stone and pottery vessels; b) fragments of straight-sided cups; c) carinated cups; d) bowls with relief decoration; e) cooking vessels (tripod pots) and dishes (© Belgian School at Athens, I. Caloi, A. Sanavia).

communal event. This defining event for the community took place at a key moment in its history, as it was in MM IIIA that the construction of the court-centred building at Sissi started (Driessen 2021a). In this way, the ritual termination of the cemetery contributed

to shaping the collective memory (remembering by forgetting; Bradley 2002) and social identity of the Sissi community during a transitional period that saw the establishment of a new social and communal order, the reproduction of which relied on large-scale ceremonial gatherings in the court-centred building—as suggested by the size of the central court that could accommodate 165 to 300 standing individuals (Driessen 2021b).

Following the termination of Zone 9, the Sissi cemetery remained unoccupied while Neopalatial buildings were constructed in the nearby Zones 2, 18 and 19 (Figure 3). The old burial site thus became an undisturbed and enduring place of communal memory. Even when archaeologically visible forms of burial were adopted again in LM III, Zones 1 and 9 were left untouched, while new tombs were established on the terrace of Zone 18 (unless burials already begun there in the Neopalatial period) and in the valley around the hill (Driessen 2021a: 63–108, 447–86).

Termination rituals in Minoan collective tombs

Excavations across the Aegean world and Minoan Crete have yielded evidence of diverse ritual acts of termination targeted at objects and built spaces (e.g. Haggis 2013; Harrell & Driessen 2015). For example, stone figurines placed on the floor of Neopalatial houses at Sissi and Malia are interpreted in the context of the buildings' ritual closure (Driessen 2017). In the funerary realm, the exact sequence of actions documented in MM IIB in Zone 9 at Sissi is without parallel, but termination rituals have nevertheless been recognised in two other cemeteries: Moni Odigitria and Kephala Petras. At Moni Odigitria, in south-central Crete, Tholos A was gradually abandoned in EM III/MM IA, while Tholos B continued to be used until MM IB, when burial remains were cleared out and redeposited in an adjacent pit. Fragments of over 100 MM IB cups were found scattered in the entrance of Tholos B, suggesting that the second and last tomb used at Moni Odigitria was “closed with due ceremony, which involved a large part of the local population” (Vasilakis & Branigan 2010: 252). At Kephala Petras, in north-eastern Crete, the extended cemetery of rectangular tombs (EM IIA–MM IIB) witnessed major transformations in EM III: House Tombs 5, 6 and 7 were partially destroyed, House Tomb 15 was emptied and House Tomb 12 was cleared out and filled with stones, in acts of “symbolic killing” and “forceful forgetting to enable the construction of a new collective ... social memory of place” (Tsipopoulou & Rupp 2019: 89–90). These termination rituals thus marked a turn in the use of the cemetery rather than its final abandonment as at Sissi and Moni Odigitria.

Termination rituals were certainly not performed in all Prepalatial and Protopalatial collective tombs. On current evidence, many cemeteries appear to have fallen out of use gradually, and some continued to be visited for commemorative purposes even after burials ceased (e.g. Kamilari A: Caloi 2011; Apesokari B: Vavouranakis 2016). Nevertheless, it is argued here that several sites—especially Koumasa, Aghia Kyriaki and Aghios Charalambos—warrant reconsideration in light of the data from Sissi, Moni Odigitria and Kephala Petras, as these may also, though in different ways, reflect the practice of varied forms of termination rituals. At Koumasa (EM I–MM IIA), Xanthoudides observed that before Tholos E was closed for good, burial remains were gathered in a pile, most grave goods were removed and white clay was laid out, as though the circular chamber was “tidied up ready for new

interments” (Xanthoudides 1924: 34). While periodic clearance episodes were part of the cycle of use and reuse of Minoan collective tombs (Legarra Herrero 2014), the lack of subsequent burials in Tholos E at Koumasa raises the possibility that this specific ‘tidying up’ episode was perhaps meant as a form of planned, ritualised closure. Similarly, the remarkable scarcity of human bones in Tholos A (EM I–MM I) at Aghia Kyriaki (Blackman & Branigan 1982) may perhaps result from thorough clearance as part of ritual termination, as in Tholos B at Moni Odigitria. As to the ossuary of Aghios Charalambos, it may represent the other side of the coin: in MM IIB, burial remains of over 1000 individuals were retrieved from one or more unknown Final Neolithic, Prepalatial and Protopalatial tomb(s), before being re-deposited together in the cave of Aghios Charalambos (Betancourt 2014). This relocation, possibly part of a remarkably large-scale termination ritual of (an) old tomb(s), was accompanied by a feast, evidence of which was found outside the cave.

Conclusion

The abandonment of ancient cemeteries and collective burial practices in Crete during the Middle Bronze Age undoubtedly testifies to major transformations in funerary, ritual and social practices. However, evidence is accumulating that demonstrates that neither the processes of abandonment nor its timing were homogeneous across the island, underlining the heterogeneity of the sociopolitical strategies at play in Middle Minoan Crete. Some burial sites gradually fell into disuse before eventually being deserted (except, in some cases, for occasional visits within the framework of non-funerary rituals). Others, however, were the subject of intentional and planned termination rituals, which may have occurred following a period of gradual decrease in their use—as was the case at Sissi, where only a few compartments yielded MM IIB burials. Termination rituals implied clearing, dismantling and/or burying the tombs during a ceremony which, at least in some cases, involved communal gathering and feasting. As a result, these rituals participated in the creation of the collective memory and the social identity of the associated community during a period of change, marking both the end of an era and the establishment of a new order. If these rituals indicate actual community involvement and collaboration in the ongoing change, the nature and timing of the shift must be assessed on a site-by-site basis before drawing conclusions about patterns of sociopolitical transformation across the island.

Data on processes of abandonment (either gradual or planned, intentional and ritualised) in Minoan tombs remain scarce, due to old excavation strategies. It is surely no coincidence that some of the most compelling evidence on ritual termination comes from Sissi and Kephala Petras, two cemeteries excavated recently with the contribution of field anthropologists and following up-to-date archaeological protocols. We can therefore expect data to continue accumulating as new burial sites are uncovered and investigated, thus enabling a clearer understanding of the death of collective tombs and its relation to sociopolitical transformations in Middle Bronze Age Crete.

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References

- ADAMS, E.C. 2016. Closure and dedication practices in the Homol’ovi settlement cluster, Northeastern Arizona. *American Antiquity* 81: 42–57.
<https://doi.org/10.7183/0002-7316.81.1.42>
- BETANCOURT, P.P. 2014. *Hagios Charalambos: a Minoan burial cave in Crete. I. Excavation and portable objects* (Prehistory Monographs 47). Philadelphia: INSTAP Academic Press.
- BLACKMAN, D. & K. BRANIGAN. 1982. The excavation of an Early Minoan tholos tomb at Ayia Kyriaki, Ayiofarango, southern Crete. *The Annual of the British School at Athens* 77: 1–57.
<https://doi.org/10.1017/S0068245400005025>
- BRADLEY, R. 2002. *The past in prehistoric societies*. London: Routledge.
- BRANIGAN, K. 1970. *The tombs of Mesara: a study of funerary architecture and ritual in southern Crete, 2800–1700 B.C.* London: Duckworth.
- 1993. *Dancing with death: life and death in southern Crete, c. 3000–2000 BC*. Amsterdam: A.M. Hakkert.
- CALOI, I. 2011. Changes and evolution in funerary and non-funerary rituals during the Protopalatial period in the Mesara plain (Crete): the evidence from Kamilari and from the other tholos tombs. *Rivista di Archeologia* 35: 97–110.
- CREVECOEUR, I., A. SCHMITT & I. SCHÖP. 2015. An archaeoethnological approach to the study of Minoan funerary practices: case-studies from the Early and Middle Minoan cemetery at Sissi, Crete. *Journal of Field Archaeology* 40: 283–99.
<https://doi.org/10.1179/2042458214Y.0000000003>
- DENTI, M. 2014. Rites d’abandon et opérations d’oblitération « conservative » à l’âge du Fer. *Revue de l’Histoire des Religions* 4: 699–727.
<https://doi.org/10.4000/rhr.8328>
- DEVOLDER, M. 2010. Étude des coutumes funéraires en Crète néopalatiale. *Bulletin de Correspondance Hellénique* 134(1): 31–70.
- DRIESSEN, J. 2017. Closing deposits comprising stone figurines at Sissi?, in N.C. Stampolidis & P. Sotirakopoulou (ed.) *Cycladica in Crete: Cycladic and Cycladicizing figurines within their archaeological context. Proceedings of the International Symposium, Museum of Cycladic Art, Athens, 1–2 October 2015*: 317–24. Athens & Rethymno: Museum of Cycladic Art & University of Crete.
- 2018. *Excavations at Sissi IV: preliminary report on the 2015–2016 campaigns* (Aegis 13). Louvain-la-Neuve: Presses Universitaires de Louvain.
- 2021a (ed.). *Excavations at Sissi V: preliminary report on the 2017–2019 campaigns, volumes 1 & 2* (Aegis 21). Louvain-la-Neuve: Presses Universitaires de Louvain.
- 2021b. Revisiting the Minoan palaces: ritual commensality at Sissi. *Antiquity* 95: 686–704.
<https://doi.org/10.15184/aqy.2021.30>

- DRIESSEN, J. & Q. LETESSON. 2024. The gathering: collectivity and the development of Bronze Age Cretan society. *Journal of Archaeological Research* 32: 1–58.
<https://doi.org/10.1007/s10814-023-09183-1>
- DRIESSEN, J. et al. 2012. *Excavations at Sissi III: preliminary report on the 2011 campaign* (Aegis 6). Louvain-la-Neuve: Presses Universitaires de Louvain.
- GIRELLA, L. & I. CALOI. 2019. *Kamilari: una necropoli di tombe a tholos nella Messarà (Creta)* (Monografie Della Scuola Archeologica Di Atene e Delle Missioni Italiane in Oriente 29). Athens: Scuola archeologica italiana di Atene.
- GLOTZ, G. 1952. *La civilisation égéenne*. Paris: Albin Michel.
- HAGGIS, D.C. 1999. Staple finance, peak sanctuaries, and economic complexity in Late Prepalatial Crete, in A. Chaniotis (ed.) *From Minoan farmers to Roman traders: sidelights on the economy of ancient Crete*: 53–85. Stuttgart: Franz Steiner.
- 2013. Destruction and the formation of static and dynamic settlement structures in the Aegean, in J. Driessen (ed.) *Destruction: archaeological, philological and historical perspectives*: 63–81. Louvain-la-Neuve: Presses Universitaires de Louvain.
- HARRELL, K. & J. DRIESSEN (ed.). 2015. *Thrausma: contextualising the intentional destruction of objects in the Bronze Age Aegean and Cyprus* (Aegis 9). Louvain-la-Neuve: Presses Universitaires de Louvain.
- LAMOUREUX-ST-HILAIRE, M., S. MACRAE, C.A. McCANE, E.A. PARKER & G. IANNONE. 2015. The last groups standing: living abandonment at the ancient Maya center of Minanha, Belize. *Latin American Antiquity* 26: 550–69.
<https://doi.org/10.7183/1045-6635.26.4.550>
- LEGARRA HERRERO, B. 2014. *Mortuary behavior and social trajectories in Pre- and Protopalatial Crete* (Prehistory Monographs 44). Philadelphia: INSTAP Academic Press.
- 2016a. Primary state formation processes on Bronze Age Crete: a social approach to change in early complex societies. *Cambridge Archaeological Journal* 26: 349–67.
<https://doi.org/10.1017/S0959774315000529>
- 2016b. Bodies in a pickle: burial jars, individualism and group identities in Middle Minoan Crete, in M. Mina, S. Triantaphyllou & Y. Papadatos (ed.) *An archaeology of prehistoric bodies and embodied identities in the Eastern Mediterranean*: 180–88. Oxford: Oxbow.
- MANNING, S.W. 2008. Protopalatial Crete. The formation of the palaces, in C.W. Shelmerdine (ed.) *The Cambridge companion to the Aegean Bronze Age*: 105–20. Cambridge: Cambridge University Press.
- PANAGIOTOPOULOS, D. 2002. *Das Tholosgrab E von Phourni bei Archanes: Studien zu einem frühkretischen Grabfund und seinem kulturellen Kontext* (British Archaeological Reports International Series 1014). Oxford: Archaeopress.
- PAPADATOS, Y. & C. SOFIANOU. 2015. *Livari Skiadi: a Minoan cemetery in southeast Crete. 1: excavation and finds* (Prehistory Monographs 50). Philadelphia: INSTAP Academic Press.
- SCHMITT, A. & S. DÉDERIX. 2021. Too many secondary burials in Minoan Crete? *Journal of Anthropological Archaeology* 64.
<https://doi.org/10.1016/j.jaa.2021.101354>
- SCHOEP, I., I. CREVECOEUR, A. SCHMITT & P. TOMKINS. 2017. Funerary practices at Sissi: the treatment of the body in the house tombs, in M. Tsiopoulou (ed.) *Petras, Siteia: the Pre- and Proto-palatial cemetery in context: acts of a two-day conference held at the Danish Institute at Athens, 14–15 February 2015* (Monographs of the Danish Institute at Athens 21): 369–81. Aarhus: Aarhus University Press.
- TSIPOPOULOU, M. & D.W. RUPP. 2019. The Pre- and Proto-palatial cemetery at Petras-Kephala: a persistent locale as an arena for competing cultural memories, in E. Borgna, I. Caloi, F.M. Carinci & R. Laffineur (ed.) *Μνήμη/ Mneme. Past and memory in the Aegean Bronze Age. Proceedings of the 17th International Aegean Conference, University of Udine, Department of Humanities and Cultural Heritage, Ca' Foscari University of Venice, Department of Humanities, 17–21 April 2018* (Aegaeum 43): 82–94. Leuven: Peeters.
- VASILAKIS, A. & K. BRANIGAN. 2010. *Moni Odigitria: a Prepalatial cemetery and its environs in the Asterousia, southern Crete* (Prehistory Monographs 30). Philadelphia: INSTAP Academic Press.
- VAVOURANAKIS, G. 2007. *Funerary landscapes east of Lasithi, Crete, in the Bronze Age* (British Archaeology Reports International Series 1606). Oxford: Archaeopress.
- 2014. Funerary pithoi in Bronze Age Crete: their introduction and significance at the threshold of

- Minoan palatial society. *American Journal of Archaeology* 118: 197–222.
<https://doi.org/10.3764/aja.118.2.0197>
- 2016. A posthumanocentric approach to funerary ritual and its sociohistorical significance: the Early and Middle Bronze Age tholos tombs at Apesokari, Crete, in A. Dakouri-Hild & M.J. Boyd (ed.) *Staging death. Funerary performance, architecture and landscape in the Aegean*: 253–74. Berlin: De Gruyter.
- WARREN, P.M. 2010. The absolute chronology of the Aegean circa 2000 B.C.–1400 B.C. A summary, in W. Müller (ed.) *Die Bedeutung der minoischen und mykenischen Glyptik*. 6. *Internationales Siegel-Symposium aus Anlass des 50 jährigen Bestehens des CMS, Marburg, 9.–12. Oktober 2008* (CMS Beiheft 8): 383–94. Mainz am Rhein: Philipp von Zabern.
- WEBLEY, L. 2007. Using and abandoning roundhouses: a reinterpretation of the evidence from Late Bronze Age–Early Iron Age southern England. *Oxford Journal of Archaeology* 26: 127–44.
<https://doi.org/10.1111/j.1468-0092.2007.00277.x>
- XANTHOUDIDES, S. 1924. *The vaulted tombs of Mesara: an account of some early cemeteries of southern Crete*. London: University Press of Liverpool.