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Late Minoan III and Early Iron Age Cretan Cylindrical Terracotta Models: A Reconsideration

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# LATE MINOAN III AND EARLY IRON AGE CRETAN CYLINDRICAL TERRACOTTA MODELS: A RECONSIDERATION<sup>1</sup>

## I. INTRODUCTION TO THE PROBLEM AND CRITIQUE OF MOST RECENT INTERPRETATIONS

CYLINDRICAL clay models, which are often referred to as ‘hut’-models or ‘hut-urns,’ first appear in the Cretan archaeological record in LM IIIA<sub>2</sub> and until the 7<sup>th</sup> century BC. This corpus of artefacts has been studied by Mavriyannaki, with more recent considerations of the available evidence by Hägg and Mersereau, who have also compiled illustrated catalogues of the known examples.<sup>2</sup> Of the 22 examples listed by Mersereau (the fullest catalogue so far published), 19 fall into the LM III–PG chronological range, with most examples concentrated in the LM IIIC and SM periods. To the same corpus an example from a late PG deposit in the Unexplored Mansion<sup>3</sup>, as well as a fragment of another model from Knossos North Cemetery tomb 219, which also dates to the late PG period,<sup>4</sup> can now be added.

<sup>1</sup> I wish to express my gratitude to Professor L. Platon (University of Athens, Department of Archaeology) for reading and commenting extensively on earlier drafts, as well as for his discussion on N. Platon’s excavation of the Rhotasi PG tholos tomb. Thanks are also extended to Professor B. Schmidt (University of Michigan) and Dr G. Vavouranakis (University of Crete) for providing otherwise unavailable literature on Emar, Professor E. Mantzourani (University of Athens, Department of Archaeology) for encouragement and, last but not least, to Dr Ch. Boulotis (Academy of Athens, Research Center for Antiquity) for commenting on some of these ideas. I am grateful to the Editor and the two anonymous referees of the *Annual* for their comments, which substantially improved the manuscript. Responsibility for remaining mistakes of fact or interpretation and all thoughts expressed herein naturally remains with the author. The following special abbreviations have been used:

Hägg = R. Hägg, ‘The Cretan hut models’, *OpAth* XVIII (1990), 95–107.

Löwe = W. Löwe, *Spätbronzezeitliche Bestattungen auf Kreta*, BAR S642, Tempus Reparatum, Oxford 1996.

*Maquettes Colloque* = B. Muller, [avec D. Vaillancourt] (eds.), “*Maquettes architecturales de l’Antiquité*”, Actes du Colloque de Strasbourg 3–5 décembre 1998, Travaux du Centre de Recherche sur le Proche-Orient et la Grèce Antiques 17, Paris: Bocard 2001.

Mersereau = R. Mersereau, ‘Cretan cylindrical models’, *AJA* 97 (1993), 1–47.

PM = Sir Arthur Evans, *The Palace of Minos: A Comparative Account of the Successive Stages of the Early Cretan Civilisation as Illustrated by the Discoveries at Knossos*, volumes I–IV and Index compiled by Joan Evans, London: Macmillan 1921–1936.

Schoep = “Home sweet home”: Some comments on

the so-called house models from the pre-hellenic Aegean’, *OpAth* XX (1994), 189–210.

<sup>2</sup> C. Mavriyannaki, ‘Modellini fittili di costruzioni circolari dalla Creta minoica’, *SMEA* 15 (1972), 161–170; Hägg; Mersereau 1–3. R. Hägg has arranged the material according to site, while Mersereau opted for a chronological sorting. Unlike Hägg, who stops in the PG period, Mersereau considers Middle/ or Late Geometric (Phaistos) and Orientalizing (Gortyn *keranoi*) examples in her study (see Mersereau 43–46, Cat. Nos. 20–22, figs. 30–35). The Gortyn *keranoi* have now been properly published by W. Johannowsky, *Il Santuario sull’Acropoli di Gortina* [Monografie della Scuola Archeologica Italiana di Atene e delle Missioni Italiane in Oriente XVI], Athens: S.A.I.A 2002, vol. II, 24, n.63. Johannowsky briefly mentions the LM ancestry of the artefact type without emphasizing the possible differences in form and function; moreover, he refers to the Archanes model as a ‘tempietto’ (at p. 24), which indicates a similar interpretation towards these models in general. Unfortunately, he does not refer to the studies by Hägg and Mersereau. On earlier Minoan architectural models (not including LM or later cylindrical models) one may consult Schoep, where methodological issues are raised.

<sup>3</sup> J. N. Coldstream, ‘Early Hellenic pottery’, in L. H. Sackett (ed.) *Knossos: From Greek City to Roman Colony. Excavations at the Unexplored Mansion II*, BSA Supplementary volume 21, London: Thames and Hudson 1992, 67–89 (68, 80, pls. 52, 60). The ‘round house model’ (no. GB 1) with painted decoration of chevrons was found in irregular pit 44 in Room B (deposit GB), which dates from late PG to PG B.

<sup>4</sup> J. N. Coldstream, ‘The Protogeometric and Geometric pottery’, in N. Coldstream and H. W. Catling, *Knossos North Cemetery. The Early Greek Tombs*, BSA

Hägg defines these cylindrical models as ‘terracotta objects in the shape of a circular hut with a front door’.<sup>5</sup> This is a rather subjective definition of this group of objects (their immediate identification as imitations of ‘huts’) rather than a brief description of their form. Hägg repeats the interpretative term in his more recent review of these artefacts.<sup>6</sup>

The LM III and Early Iron Age examples, which will be considered here and also constitute the vast majority of the published corpus of these artefacts,<sup>7</sup> form a more or less homogeneous group in terms of their morphological features.<sup>8</sup> They have more or less vertical wheel-made walls and ‘roofs’ (probably hand-made) ranging ‘from purely conical or concave (*sic*) conical to smoothly vaulted’.<sup>9</sup> The one feature that makes their identification as imitations of a specific architectural type highly likely is their *single* rectangular side opening, cut out of the wheel-made wall of the model. This is further exemplified by the presence of door-fastening devices, which are, however, presented on the *outside* of the supposed imitated building. These features will be discussed *infra*.

It can be confidently stated that these features clearly indicate the character of these artefacts as actual ‘architectural modes,’ as has already been suggested by Hägg. However, the Swedish scholar pays particular attention to door fastening device on the outside of the model, which he interprets as an ‘unrealistic’ technical convention that was exclusive to the reduced clay imitation of the actual building,<sup>10</sup> an issue that shall be discussed later on.

Both Hägg and Mersereau have published comprehensive reviews of past interpretations of these objects<sup>11</sup> and discussion here will only concern the validity of their interpretations.

Mersereau’s theory of an entirely symbolic significance of the form of these models deserves special mention. She admits that these models represent some architectural space, but does not accept that any specific architectural form was the prototype, preferring to adopt the hypothesis that these models developed out of the LM pyxis (or straight-walled alabastron); in other words, that Cretans transformed the form of an LM III pyxis into an artefact that symbolized architectural space in general, but not a specific type of building. Mersereau has argued that ‘such an abstract form of model was acceptable because the intention of the representation was to symbolize an architectural space rather than to depict any specific architectural type’,<sup>12</sup> a conclusion based on the reasonable assumption that, as wheel-made clay objects, these models were produced by potters, who also produced the morphologically ‘similar’ pyxides.

Supplementary volume 28, London: Thames and Hudson 1996, 217, 368 (no.219.86). It also bears painted decoration that allows its precise dating.

<sup>5</sup> Hägg 95 (abstract).

<sup>6</sup> R. Hägg, ‘The Minoan hut-models: Their origin and function reconsidered’, *Maquettes Colloque*, 357–361.

<sup>7</sup> Excluded here are the Orientalizing Gortyn *kernoi* (see *supra* n.2), not only because of their later date, but also for the reason that these models are attached on the top of composite ritual vessels, a practice unattested in previous examples. In view of their chronological and morphological isolation they should be treated separately. Mersereau includes them in her analysis, without questioning their classification in the same group as the earlier models. It is likely that the coincidence of the chronological and morphological difference indicate a serious difference in the significance and use of these models.

<sup>8</sup> In the most recent synthesis on Postminoan Knossian pottery, these artefacts are considered as a uniform group and are classified as ‘house models’. J. N. Coldstream, L. J. Eiring and G. Forster, *Knossos Pottery Handbook. Greek and Roman* [BSA Studies 7], London 2001, 46.

<sup>9</sup> Hägg (n. 6), 358.

<sup>10</sup> Hägg 101.

<sup>11</sup> Hägg, 101–102, Mersereau esp. 4–5 for a critical examination of possible identifications with known architectural forms. To the literature cited in these articles Hägg (n.6) should be now added, as well as G. Rethemiotakis, *Ανθρωπομορφική Πηλοπλαστική στην Κρήτη από τη Νεοανακτορική έως την Υπομινωική Περίοδο*, Athens: Athens Archaeological Society 1998, 155, n. 552–557.

<sup>12</sup> Mersereau 1 (abstract).

It would indeed be reasonable to argue, like Mersereau, that the manufacture of a model showed a certain degree of similarity to the manufacture of a pyxis,<sup>13</sup> despite some important differences imposed by the fact that, unlike the 'roof' of these models, the lid of the LM III pyxis is not always convex and that the potter had to fasten the 'lid' to the vessel in order to produce the form of the 'model.' However, it is not easy to see how this similarity in technique (approximate but scarcely close) could reflect a deeper conceptual link between pyxides and models. Assuming that such a 'link' was as meaningful as Mersereau suggests may imply that the models were actually a development made at potters' initiative (they being the craftsmen responsible for the manufacture of pyxides), an argument based on virtually no evidence. It would be far more convincing to regard new introductions to a potter's repertoire as responsive to new requirements, rather than initiated by the potters themselves. A more likely explanation for the apparent similarities between pyxides and the cylindrical models in question would be that LM III potters, having to meet a demand for the latter, employed technical skills and knowledge *already* developed in order to achieve the manufacture of pyxides. It is thus argued here that the observed similarities cannot explain the emergence of this new artefact.

The subsequent assumption of Mersereau is that the models have no precise prototype, but that their tectonic features, such as the entrance, can be explained by assuming that they represented 'symbols of architectural space, a space whose significance related to what happened therein or who inhabited that space rather than the physical form of the structure itself'.<sup>14</sup> However, in support of such a view, Mersereau anticipates the final goal of her analysis (the cultic significance of the models) as an argument supporting her initial argumentation, thus forming a circular argument: the assumption that such morphological abstraction was fitting to the 'purpose for which they were made and the nature of the cult in which they were utilised' is suspended, if their role in this cult is ultimately derived from this very feature.

Therefore, Mersereau's connection between pyxides and models can only refer to the process of manufacture of these objects; the essential questions of why these models were introduced into the Minoan material culture at the given moment, as well as their interpretation, cannot be sufficiently answered through such considerations. Although it is not impossible that pottery could be considered as a plausible prototype for any clay 'model' showing tectonic elements, such a possibility could only be strong if similar architectural forms did *not* exist in the contemporary material record. Discussion in the following section seeks to show that previous discussion and rejection of all candidate forms has not been fair.

In dealing with the issue of the prototype for these 'models,' it is remarkable that one thing most researchers agree on is that 'they *lack* equivalents in the existing real architecture'.<sup>15</sup> Hägg suggested that these models represented circular 'huts,' which were made of perishable

<sup>13</sup> Mersereau 7. The relation of models and *pyxides* had been already advanced by M. Seiradaki ('The pottery from Karphi', *BSA* 60 (1965), 1–37 at pp. 18, 28). Rethemiotakis (n. 11), 155, independently expresses a similar view with a similar argumentation with regard to the origin of the cylindrical model. He also argues that the models do not reflect any real architectural type, yet he generally agrees with their interpretation as *vαῖτοκοι* (the models are Indexed as such). He argues that their only realistic feature is the entrance. However, his adoption of Evans' view that these models derived from clay stands (*PM* II, 311–312), in addition to being

unlikely on typological grounds, does not consider the motivation for the need of this new artefact; more significantly, his assumption that the wide distribution of 'similar' objects (which are in fact extremely diverse in cultural setting, use and chronology) is indicative of a 'common' background of beliefs and ideas (at p. 155, n. 553) is not convincing.

<sup>14</sup> Mersereau 8–9.

<sup>15</sup> Hägg (n. 6), 358 [my italics]. Mersereau 2, 4–5, comes to the same conclusion, although she rejects *any* architectural form as a possible prototype.











LM IIIA2		<b>1</b>
LM IIIA - B		<b>2</b>
LM IIIB		<b>3</b>
LM IIIC		<b>6</b>
LM IIIC (- SM)	 	<b>11</b> <b>16</b>
(LM IIIC -) SM		<b>18</b>
PG B	 	<b>19</b>
MG - LG		<b>20</b>

FIG 1. Scheme showing the morphological development of the Cretan cylindrical terracotta models. Numbers (in bold) indicate numbers in Mersereau's catalogue. Drawings are not to scale (for actual dimensions see TABLE 1). Only safely dated and sufficiently preserved examples have been included herein. All drawings prepared by the author.

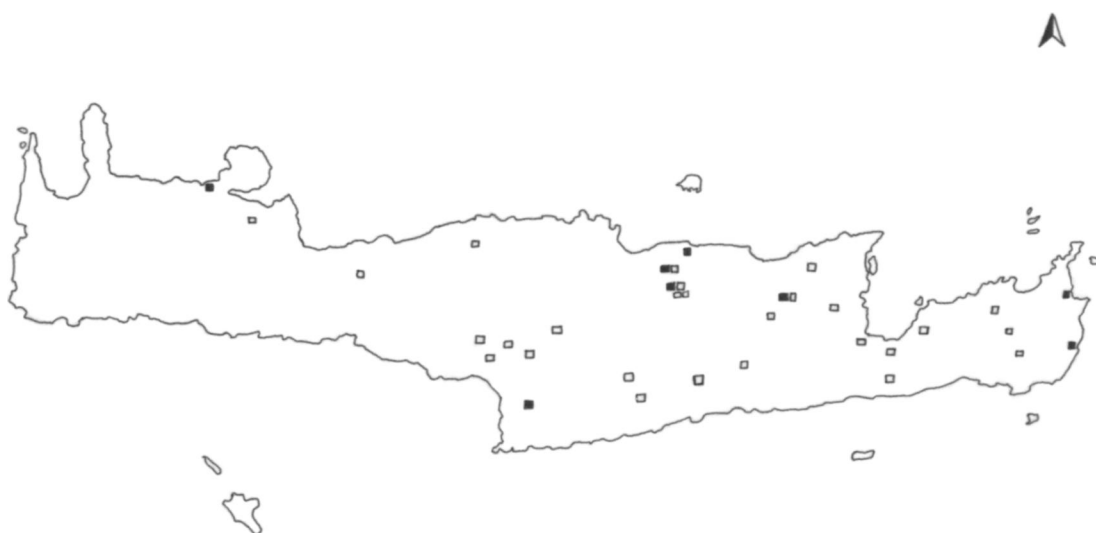


FIG. 2. Map of Crete showing the distribution of Cretan cylindrical terracotta models in relation with the distribution of tholos tombs with circular ground plan. ■ indicates the presence of cylindrical model(s) and □ that of tholos tomb(s). Map drawn and prepared by the author.

materials. However, he admits that there are no known examples of these constructions in the LM period.<sup>16</sup> Hägg overcomes this obstacle by suggesting that these perishable buildings ‘would not normally have left any discernible traces’.<sup>17</sup> However, the entire argument consists of two successive assumptions, the second introduced in order to support the first, *i.e.* that these models represent perishable huts *and* that not a single of these actual huts has been preserved. These arguments are based entirely upon negative evidence. Moreover, the statement that perishable buildings would not ‘normally’ be detectable in the archaeological record is far from true *per se*. In view of these facts, it could be far easier to take the other way round and suggest that, due to a complete lack of supporting archaeological evidence, the identification of these models as ‘hut models’ should be rejected, at least until a LM III or Early Iron Age circular hut is excavated. Moreover, their identification as simple circular huts does not explain the emergence and wide distribution (FIG. 2) of these models in *this* particular period, as circular perishable constructions could have existed earlier as well.

Nevertheless, the existence of an utterly tectonic feature, namely the rectangular side opening (‘door’) certainly indicates that a deliberate attempt to imitate an actual type of building does exist. Therefore, the real problem and a central one to the interpretation of these objects, is their identification with a specific architectural type. What one should be looking for is a construction with a circular ground plan, a *single* side entrance and a somehow

<sup>16</sup> Hägg 101. Hägg follows Evans, who had also suggested that small, circular huts made of perishable materials existed in Minoan times and were the prototypes of these hut models (*PM* II (1928), 132). Mavriyannaki (n. 2), 170, n.47, also inclines towards the identification of the models as ‘huts’, although she refers

to shepherd huts (which she compares to the modern Cretan *mitata*). Her conclusion is no less problematic, since there is no evidence that such constructions existed in LM III–Early Iron Age Crete.

<sup>17</sup> Hägg 101.

vaulted roof, which was in use during the LM IIIA<sub>2</sub>–Early Iron Age period. Mersereau has already reviewed the evidence for possible identifications with actual constructions.<sup>18</sup> Although she eventually rejects any specific architectural form as the prototype of these models (as discussed *supra*), she admits that, of all probable candidates ‘the most plausible is the corbel-vaulted tholos tomb’.<sup>19</sup> However, in stating so, Mersereau is not absolutely fair. Other candidates that she briefly mentions do not stand even the most superficial critique: circular cisterns and ‘dance-platforms’ are roofless, while the circular Maliote ‘silos’ belong with the Neopalatial complex. Therefore, and allowing for totally lost structures (for which no argument can be developed), it is fair to say that the LM corbel-vaulted tholos tomb of the ‘Mycenaean-type’ is not only the most likely, but also the *only* possible actual architectural prototype for these models, judging from a morphological/chronological point of view. In the following section, arguments will be presented, which support the view that corbelled vaulted tholos tombs were the prototypes for the objects under discussion.

## II. ARGUMENTS FOR MODELS OF LM III–EIA THOLOS TOMBS

The suggestion that a cylindrical model may represent tholos tombs has already been made with specific reference to the PG B model from Archanes (FIG. 1.19) by some scholars, including H. Müller-Karpe,<sup>20</sup> J. Boardman,<sup>21</sup> A. Snodgrass<sup>22</sup> and J. and E. Sakellarakis.<sup>23</sup> However, this interpretation is mostly made with regard to the contextual and morphological peculiarities of the Archanes model and never projected to other examples, either earlier or later. Any re-examination of the tholos tomb hypothesis should begin with the consideration of the evidence that has been used against such an interpretation for models other than the Archanes example.

Mersereau has examined this possibility and her work remains the most systematic survey

<sup>18</sup> Mersereau 4–5.

<sup>19</sup> Mersereau 4.

<sup>20</sup> H. Müller-Karpe, *Vom Afgang Roms*, Berlin 1959, 48, 82, 87–88, pl. 19. 4: ‘Nachbildungen der Gräbern’ (88). Although he does compare the Cretan models with Italian *Hausurnen*, Müller-Karpe argues about a more general utilization of these models in funerary ritual. Mersereau 2–4 has rejected the link with the Italian artefacts on the basis of chronological and contextual differences. However, a discussion of this link lies beyond the scope of the present work.

<sup>21</sup> J. Boardman, in ‘The Khaniote Tekke tombs II’, *BSA* 62 (1967), 57–75 (66), has suggested that the Archanes model could be an old tholos tomb, re-discovered in the PG period and mistaken for an underground shrine. Despite the remarkable ingenuity of Boardman’s interpretation, its acceptance involves that the inhabitants of PG B Knossos region did *not* know what a tholos tomb was, hence their supposed ‘misinterpretation’ of such a tomb as a shrine. However, there were at least two tholos tombs in use during PG B in the vicinity of Archanes: (1) Knossos *Khaniote Tekke* tomb 2, in which a PG B clay model imitating a rectangular house had been placed (Boardman, *ibid.*, 64–65, fig. 3) and (2) Eltyna tholos (PG B) (M. Englezou, ‘Η σχέση της Έλτινας με την Κνωσό’, in Cadogan, G., Hatzaki, E. and Vasilakis, A. (eds.)

*Knossos: Palace, City, State. Proceedings of the Conference in Herakleion Organised by the British School at Athens and the 23<sup>rd</sup> Ephoreia of Prehistoric and Classical Antiquities of Herakleion, in November 2000, for the Centenary of Sir Arthur Evans’s Excavations at Knossos* (BSA Studies 12), London: British School at Athens 2004, 421–431). The Tekke and Archanes models along with the slightly earlier (late PG) Knossos North Cemetery model (see *supra* n.3) are the only occurrences of such models in funerary contexts, which would support the view that the practice of placing clay models in tombs was a late PG–PG B phenomenon.

<sup>22</sup> A. Snodgrass, *The Dark Age of Greece*, Edinburgh: Edinburgh University Press 1971, 193, fig. 70. Snodgrass follows Boardman’s interpretation of the Archanes model representing ‘the accidental discovery of a tholos tomb.’ See *supra* n. 21 for an argument against Boardman’s interpretation.

<sup>23</sup> J. and E. Sakellarakis, *Archanes: Minoan Crete in a new light*, Athens: Ammos 1997, 35, fig.11, 566–567, figs. 565–566, where it is suggested that the context in which the model was probably found (funerary) indicates that it could well be the model of a tholos tomb. See the argument on the predictable discordance between a model’s context and its actual prototype (developed *infra*).

of these artefacts. Her first reservation against the tholos tomb hypothesis is that these constructions 'seem odd sources of inspiration for a LM III Cretan'.<sup>24</sup> Apart from its vagueness, some further observations can be offered on this.

We may not be able to know what may be considered as 'odd' for a LM III Cretan or any contemporary Aegean. Such characterizations should follow, rather than precede, extensive research of a range of information on a specific period or region. Moreover, arguing for 'odd' features in a past culture without related rich textual documentation is utterly subjective, anachronistic and, therefore, inappropriate. It is not clear why funerary practices and burial, such as the form of monumentalized burial constructions, should not be considered as likely themes for two- or three-dimensional imagery. Contemporary Aegean two-dimensional imagery surely connected with death and burial is well documented, such as the famous Haghia Triadha sarcophagus (LM IIIA<sub>2</sub>),<sup>25</sup> the pictorial representations on LM IIIA<sub>2</sub>–IIIB Cretan larnakes<sup>26</sup> or the Mycenaean larnakes from two chamber tomb cemeteries at Tanagra in Boeotia (LH IIIA–B).<sup>27</sup> In this context, a three-dimensional model of a built tomb type may seem less unlikely. It is not clear whether 'inspiration' would be an appropriate term to use when dealing with artefacts whose nature is still under consideration. One of the archaeologist's main aims should be to investigate what motivated their production and use in specific cultural contexts. The modern sense of 'inspiration' carries an individualistic

<sup>24</sup> Mersereau 5.

<sup>25</sup> C. R. Long, *The Ayia Triadha Sarcophagus. A Study of Late Minoan and Mycenaean Funerary Practices and Beliefs*, SIMA XLI, Göteborg: Paul Åströms Förlag 1974 is still a standard reference for the iconography of this artefact. See Löwe, 23–39, for a more recent survey of the significance of the sarcophagus' imagery in relation with LM mortuary practices, with earlier references. The conclusive dating of the sarcophagus to LM IIIA<sub>2</sub> is based on three independent pieces of evidence: (1) two cups dated in LM IIIA<sub>2</sub> and found under the foundation courses of Tomb 4 (first presented in V. La Rosa, 'The painted sarcophagus: Determining the chronology', in S. Sherratt (ed.) *Proceedings of the First International Symposium 'The Wall Paintings of Thera'*, Petros Nomikos Conference Center, Thera (Hellas), 30/08–04/09/1997, Athens: Nomikos, Thera Foundation 2000, volume II, 996–997). However, strictly speaking, the cups published by La Rosa date the tomb, not necessarily the sarcophagus. (2) A stylistic date of the sarcophagus paintings to LM IIIA<sub>2</sub> has been supported by the analysis by P. Militello, *Haghia Triada I. Gli Affreschi* [Monografie della Scuola Archeologica di Atene e delle Missioni Italiane in Oriente IX], Padova 1998, 305. (3) An LM IIIA<sub>2</sub> date for this uniquely elaborate burial container would make it contemporary with the one-off monumentality of Haghia Triadha in this period, noted by V. La Rosa, ('Haghia Triada à l'époque mycénienne', in J. Driessen and A. Farnoux (eds.), *La Crète Mycénienne. Actes de la Table Ronde Internationale Organisée par l'École Française d'Athènes 26–28 Mars 1991*, Paris: Boccard 1997, 249–266).

<sup>26</sup> N. Merousis, (Οι Εικονογραφικοί Κύκλοι των YM III Λαρνάκων. Οι Διαστάσεις της Εικονογραφίας στα Πλαίσια των Ταφικών Πρακτικών, Thessaloniki: University of Thessaloniki 2000) includes a catalogued and classified corpus of LM III decorated larnakes. Even if the themes

mostly do not depict aspects of funerary ritual *per se*, it should not be forgotten that it is an exclusively funerary artefact (a burial container) that was being decorated with those themes. This makes the characterization 'funerary iconography' absolutely justified. More explicit references are, however, occasionally encountered in larnax iconography: see K. Baxevari, 'A Minoan larnax from Pigi Rethymnou with religious and funerary iconography' in C. E. Morris (ed.), *Klados: Essays in Honour of J. N. Coldstream*, [BICS Supplement 63, London: Institute of Classical Studies 1995], 15–33, for a unique to date LM IIIA<sub>2</sub> larnax from Pigi where a *prothesis* scene with mourners is depicted.

<sup>27</sup> Löwe 27–28 with earlier references. The Tanagra larnakes with their painted processions of female mourners are generally examined with relation to Mycenaean and not Late Minoan burial customs, but, since the clay burial larnax constitutes a Cretan development, their reference here can be justified, as they verify the interest of Aegean LBA III imagery in themes connected with death. For the significant differences of the funerary iconography between LM III chest-shaped larnakes and the LH III Tanagra examples see the compelling arguments of N. Marinatos, ('Minoan and Mycenaean larnakes: A comparison', in J. Driessen and A. Farnoux (eds.), *La Crète Mycénienne. Actes de la Table Ronde Internationale Organisée par l'École Française d'Athènes 26–28 Mars 1991*, BCH Supplement 38, Paris: Boccard 1997, 281–292) and N. Merousis, 'Η εικονογραφία στα πλαίσια των ταφικών πρακτικών: Οι ενδείξεις από τις διακοσμημένες λάρνακες της YM III Κρήτης και της Μυκηναϊκής Τανάγρας', in V. Aravantinos (ed.), *Third International Congress of Boeotian Studies (Thebes, 4–8 September 1996)*, I: *Archaeology* (Επετηρίς της Εταιρείας Βοιωτικών Μελετών Γ' α'), Athens 2000, 264–285.

notion and indicates an inclination of art towards experimentation *per se*, which may be very anachronistic when dealing with the Aegean Bronze Age; the concepts and motivations mentioned above most probably involved entities much broader than the individual 'artist'.<sup>28</sup>

In the following subsections features of the cylindrical models, which may be used to support the view that these objects may represent tholos tombs, will be re-examined.

#### ARCHAEOLOGICAL CONTEXTS

The most significant argument against the interpretation of these models as three-dimensional images of tholos tombs involves an analysis of the archaeological contexts of the known examples. Mersereau points out that, with the exception of the PG B (second half of ninth century BC) model from Archanes, a product of an illicit excavation in the early post-war years,<sup>29</sup> not a single of these models has been found in a funerary context. Poursat also takes up this argument in his recent study on the symbolic functions of Aegean architectural models.<sup>30</sup> Moreover, as Mersereau correctly emphasises, the Archanes model is hardly representative of the Cretan cylindrical models. Its 'peculiarities' may be indicative of a semantic shift of this artefact type in the Early Iron Age: its elaborate painted decoration, as well as the figurines added on its roughly conical roof constitute unique features without predecessors among the LM examples. Moreover, its late chronology used to make this example appear as an isolated case (no longer a valid point as we now have the Knossos North Cemetery and UM examples, which are late PG and bridge the chronological 'gap'). In using this argument, Mersereau<sup>31</sup> supports the view that the typological peculiarities of the Archanes model may indicate that it was functionally and/or conceptually distinct from previous examples, an interesting suggestion which one certainly ought to have in mind, but virtually impossible to elaborate upon.

What needs to be questioned here is the nature of the concept of an architectural model or maquette and the significance of its context for the identification of its prototype. The view followed by a large number of scholars and repeated by Mersereau is that the context in which

<sup>28</sup> 'Art is responsive to the needs of the society that produces it, and in many ways is cogent with other, contemporary cultural forms . . . social and stylistic change are intimately related' (J. Whitley, *Style and Society in Dark Age Greece. The Changing Face of a Pre-literate Society 1100–700 BC* [New Studies in Archaeology], Cambridge: Cambridge University Press 1991, pp. 196–197). It must be noted that Whitley suggests that consideration of art in context is not sufficient for its interpretation, and that aesthetic analysis and 'acknowledgement of the motivation and prejudice of the present-day investigator' are necessary.

<sup>29</sup> As with every artefact that has been circulated in the antiquities market, the context of this model is not safely known. The model was found in 1949 and acquired by Giamalakis in the next year. Along with the rest of the Giamalakis private collection of Cretan antiquities, the model is now kept at the Herakleion museum (Inv. no. ΣΓ376). For a study of its origin and context, see J. A. Sakellarakis, 'Αρχαιολογική έρευνα για μια αρχαιοκαπηλία το 1949 στην Κρήτη', in *Φίλια Έπη εις Γ. Ε. Μυλωνάν* Β, Athens: The Athens Archaeological Society 1987, 37–70. Sakellarakis identified the plundered monument as a

built tomb at Pythies, N of Archanes. According to information gathered by interviewing villagers, this tomb, not locatable nowadays, was roofed with a 'bridge-like' dome. If this is reliable, it is likely that it was a vaulted tholos tomb, as noted by Mersereau 5, 40. However, the typological identification of the tomb is possible, not conclusive.

<sup>30</sup> J.-Cl. Poursat, 'Les maquettes architecturales du monde Créto-Mycénien: Types et fonctions symboliques', in *Maquettes Colloque*, 485–495 (488, n.9): 'les seules structures circulaires connues en Crète pendant cette période sont des petites tombes à tholos recouvertes d'une voûte; à une exception près, ces modèles n'ont jamais été trouvés dans des contextes funéraires'. The same view has also been held by R. Hägg and N. Marinatos, 'The Giamalakis model from Archanes: Between the Minoan and the Greek worlds', in *Atti del Convegno Internazionale 'La Transizione dal Miceneo all'alto Archaismo. Dal Palazzo alla Città'*, Roma: CNR 1991, 301–307 (305): 'The postpalatial and SM hut urns have usually been found in shrines or settlements, not in tombs'.

<sup>31</sup> Mersereau 5.

the cylindrical model is found should be identified with the architectural form that inspired its production. It is only through such a bold equation that a cylindrical model cannot be a model tholos *because* it is not found in funerary contexts.

The significance of context in the interpretation of an artefact is an important theoretical issue; certainly, no one can argue against the view that determining the nature of the context in which an artefact is found is of prime importance towards any attempt to understand the nature of the object itself and the concepts related to it. Thus, a 'grave-good' is defined by its occurrence in close physical proximity to human remains within a space intended for the deliberate deposition of the dead (i.e. a tomb).

Although the study of the context may illuminate such issues as the significance, use and functions of any artefact, identifying the prototype of an architectural model may require a rethinking of the straightforwardness of the information provided by a contextual analysis. A three-dimensional architectural model is an object representing the concept of a specific (type of) artificially constructed space. Its manufacture represents a deliberate attempt to retain those features of the actual building ('*prototype*') that would make it easily recognisable, usually in a much-reduced scale. In that sense, a model is entirely depended on its actual prototype for its semantic significance and it is certainly unthinkable independent of that 'real thing.' A model artefact is defined as a reduced scale imitation of something that already existed. Therefore, one of the prime reasons for the construction of a model is to make it a substitute for some of the properties (most likely the non-material symbolic ones) of the prototype.

If a cylindrical model in a way substitutes for its prototype, it would be quite expected for it *not* to be found within the prototype (as suggested herein, a tholos tomb), a situation that would undermine the very essence of substitution. Moreover, returning to the examination of context, it should be observed that, as the prime physical definition of a funerary context as the locale of burial practice is within the spatial limits of the tomb, a model of a tomb *represents* and/or *partly substitutes* for the tomb and, therefore, may symbolically represent the funerary context itself.

The only safe conclusion that can be reached by the absence of LM III cylindrical models from funerary contexts is that such artefacts were not used as grave goods during this period. The fact that they were placed in tombs in late PG (Knossos North Cemetery) and PG B (Archanes) indicates a shift in the significance of these artefacts (explored below in section III.a), rather than contradicts the theoretical point presented above. What has been so far argued, is that the context in which an architectural model is found has no straightforward relevance to the identification of their prototype. Therefore, the argument developed by most researchers (including Hägg and Marinatos, Mersereau and Poursat) is not valid.

Since the above consideration has so far been entirely theoretical, it should be backed with related evidence on contextual associations of other Aegean architectural models. In a recent survey of Proto- and Neopalatial (MM IIB–LM I) architectural models, Schoep has made the significant observation that, despite the diverse contexts in which three-dimensional architectural imagery of the periods has been found, 'none of them have been found in domestic contexts, nor, for that matter, in the structures commonly described as "villas".'<sup>32</sup>

<sup>32</sup> Schoep 195, n.30. The models from Knossos (Loomweight Basement) and Menelaion (the only Early Mycenaean example) were found in fills connected with the construction of buildings. The Iouktas and

Piskokephalo examples were found in 'ritual' contexts, and there are also the famous Kamilari models from an antechamber of a circular tomb of the Mesara type.

However, the morphological features of these earlier Minoan models would suggest that actual—even if abstracted to some degree—architectural prototypes did exist. The material analysed by Schoep does not share the uniformity of the Cretan cylindrical models, and therefore many diverse architectural prototypes are possible,<sup>33</sup> but the original intention to represent ‘actual albeit somewhat abstracted’ features is certain.<sup>34</sup> Therefore, it is important to note the ‘discordance’ between context and prototype; Proto- and Neopalatial architectural three-dimensional imagery has not been found inside the kind of contemporary architecture that seems to be most closely connected to the form of these models. The suggestion made here is that the same ‘discordance’ is also present in the later LM cylindrical models.

As already noted in passing, the PG practice of placing such models in tombs (late PG Knossos North Cemetery, PGB Archanes) could be an indication of a semantic change in the models themselves, a fact also seen in the dissociation of the other post-LM III examples from purely residential contexts (such as the Knossos Spring Chamber (FIG. 1.18) and Unexplored Mansion GB 1 examples). At this point, it should also be noted that in the Early Iron Age north central Crete, the practice of using terracotta architectural models as grave goods is extended beyond the cylindrical type discussed here, as the rectangular ‘house model’ from Tekke tomb 2 (also PG B) may indicate.<sup>35</sup>

Up to this point, an attempt has been made to demonstrate that the context allows for, and, more significantly, the general form of the objects themselves supports the tholos tomb hypothesis. There are some additional observations concerning the morphology and chronology of the models in question, which may add strength to this identification.

#### THE DOOR-FASTENING DEVICE

This device is observed in the majority of the examples preserving the model’s ‘entrance’.<sup>36</sup> As previously mentioned, Hägg has interpreted this feature as a convention of the potter who constructed the model and one which should be seen as non-realistic. Indeed, door-fastening *from the outside* does not make sense in any real dwelling. A tholos tomb is, precisely, a building with no residential function, so door-fastening from the outside is reasonable. The study of the architecture of the LM IIIA tholos tomb at Achladia *Platyskimos* by Paolo Belli enables us

<sup>33</sup> Schoep 195, 202–210.

<sup>34</sup> Schoep 203: ‘all individual features represented in the models usually find their counterparts in Minoan architecture.’ As Schoep suggests, ‘the individual construction elements do correspond with the remains but the combination of all elements into a single composition can and did result in a somewhat *fictive* construction’ [my italics]. However, given the virtual uniqueness of each Minoan (particularly Neopalatial) plan in its structural details, already noted by D. Preziosi and L. A. Hitchcock (*Aegean Art and Architecture* [Oxford History of Art], Oxford: Oxford University Press 1999, p. 110), one should not jump to fast conclusions about ‘fictive’ constructions, since not *every* Minoan building is known.

<sup>35</sup> Boardman (n. 21), 65, fig. 3. This is a rectangular house model, with clear architectural parallels in contemporary residential architecture of Crete and lacks the elaboration of the contemporary Archanes model.

Boardman (n. 21), 66, notes that all three examples of the ‘model in tomb’ were found in PG north central Crete (Knossos and Archanes). G. Hoffmann, *Imports and Immigrants. Near Eastern Contacts with Iron Age Crete*, Michigan: Ann Arbor 1997, 194, suggests that this pattern is meaningful and represents a *regional* adoption of this practice by PG Cretan elites. She further considers this practice as of Near Eastern origin, presumably imported and applied to artefacts of such clear LM III ancestry.

<sup>36</sup> EXAMPLES WITH NO SUFFICIENT PRESERVATION STATUS: LM IIIB1 Khania (only clay ‘door’ preserved) (Mersereau 27, no.5), LM IIIC/ SM Karphi (Mersereau, 32–33, no.13, fig. 21), LM IIIC/ SM Karphi (Mersereau 35, no.17) (only clay ‘door’ preserved); EXAMPLES WITHOUT DOOR FASTENING DEVICE: LM IIIA2 Kato Zakros (Mersereau, 23–24, no.1, fig. 8), two undated examples from Phaistos (Mersereau, 29, 30–31, nos.8, 10, figs. 15, 17) and the MG/ LG example from Phaistos (Mersereau, 43, no.20, fig. 30).

to note the existence of opposing side-niches roughly in mid-height, either side of the entrance.<sup>37</sup> The Achladia example may appear to be so far isolated, but it also remains the one LM tholos tomb whose architecture has been most meticulously published. However, a similar arrangement of side niches,<sup>38</sup> which may have facilitated some kind of door-fastening or, equally likely, securing of door-blocking is probably apparent in later tholoi, such as Praesos tomb A.<sup>39</sup> The parallelism of this feature of the models with the Achladia side niches is remarkable and supports the proposed identification of the cylindrical clay models as tholos tombs. It can be speculated that this feature indicates either *necrophobia* or the quite practical need of securing the tomb's entrance against looters, but conclusive evidence favouring either interpretation is lacking. In any case, its existence may point directly to the models in question.

#### OTHER MORPHOLOGICAL FEATURES OF THE CRETAN CYLINDRICAL MODELS SUPPORTING THE THOLOS TOMB HYPOTHESIS

The dimensions of the substantially preserved models published in Mersereau's catalogue show that the average ratio of height/ average diameter for these models is 0.92 with a standard deviation of 0.1579 (or 0.1634 if Kato Zakro example no.1 is excluded from the analysis) (TABLE 1). A close ratio has been found for the two fully preserved examples of LM tholos tombs with circular ground plan: 1.07 for Stylos *Sternaki* (h.: 4.6 m; diam.: 4.3 m.) and 1.03 for Achladia *Platyskinos* (h.: 4.12 m; diam.: 4 m). To these examples one must now add

<sup>37</sup> P. Belli, 'L'Architettura della Tholos' in Tsipopoulou, M. and Vagnetti, L., *Achladia. Scavi e Ricerche della Missione Greco-Italiana in Creta Orientale 1991 - 1993*, Incunabula Graeca 97, Roma 1995, 89-113, (especially 108, figs.70-71, pls. C and D); This is not the only evidence for door fastening from the outside in the Achladia tholos, as Belli has also noted the existence of 'a system of wooden poles against the entrance, for closing it *from the outside*' (Id., 'Architecture as craftsmanship: LM III tholoi and their builders' in R. Laffineur and P. P. Betancourt (eds.) *TEXNH. Craftsmen, Craftswomen and Craftmanship in the Aegean Bronze Age* [AEGAEUM 16], Liège and Austin 1997, volume I, 251-255 (quotation from p. 252 [my italics])).

<sup>38</sup> It could be, although demanding more evidence, that the 'side-niches' in the dromoi of the Isopata Royal Tomb and the Kephala tholos in the vicinity of Knossos are related to this feature. For the Isopata Royal Tomb (destroyed in WW II), see Sir Arthur Evans ('The prehistoric tombs at Knossos II', *Archaeologia* 59 (1905), 575-562), who had originally dated the tomb in the MM III-LM I period, according to the use of ashlar blocks with mason marks and the earliest sherd material found in it. However, he later revised his date to LM II, when the earlier pottery safely connected with interments is dated. The Kephala tholos, excavated in 1938, has been preliminarily published by R. W. Hutchinson ('A tholos tomb on the Kephala', *BSA* 51 (1956), 64-80), who assigned a LM IA date for the construction of the tomb. It must be noted that, strangely for a funerary context, 'no whole vase' was found, 'but only scattered sherds dating from MM IIIA to LM IIIA' (*ibid.*, p. 78). In reviewing Hutchinson's synthesis (*Prehistoric Crete*, Harmondsworth

1962), M. R. Popham suggested that the Kephala tholos should be 'LM II rather than LM IA as indicated by joining sherds in the fill' (*JHS* 84 (1964), 210). Pelon also favours a LM II date (O. Pelon, *Tholoi, Tumuli et Cercles Funeraires*, B.E.F.A.R. no.229, Paris: Boccard 1976, 265, n.2-3, 422-423). The existence of a Minoan building and Neopalatial fine ware on the top of the Kephala hill, 30 m to the E of the tomb (S. Hood and D. Smyth, *Archaeological Survey of the Knossos Area* [BSA Supplement 14], London 1981, 35, no.18) may account for the contamination of the chamber fill with pre-LM II material. A LM II date for its construction is here accepted. The Kephala tholos recently received final publication by L. Preston ('The Kephala tholos at Knossos: A study in the reuse of the past', *BSA* 100 (2005), 61-123), with new plans, photographs and an analysis of human remains by R. Gowland.

<sup>39</sup> R. C. Bosanquet, 'Excavations at Praesos I. Early Tombs. A', *BSA* 7 (1900-1901), 240-245. Löwe 159 points that its earliest material dates to Geometric, but Bosanquet suggests a LM III date, characterizing the Geometric material as evidence for ancestor cult. It must, however, be mentioned that Bosanquet's report illustrates a LM style gold repoussé rosette from Tomb A (*ibid.*, p. 243, fig. 12), which could support his hypothesis. Another feature that may be relevant to the degree of elaboration evident in LM III funerary architecture is the presence of pivot-holes at the entrance of the LM IIIB Maleme built tomb (just west of Chania) (see C. Davaras, 'Ανασκαφή θολωτού τάφου Μάλεμε', *PAE* 1966 (pr.1968), 185-188 (pivot-holes at pp. 187-188, pl. 155b).

TABLE 1. Table showing the measures analysed for the extraction of the average Height/Average Diameter ratio (in **bold**) in substantially preserved LM III and Early Iron Age cylindrical models. Measures were adopted from the catalogue compiled and published by Mersereau. When model walls were not absolutely vertical, the average diameter has been used. Note that the inclusion of the otherwise atypical Kato Zakro example (no. 1) does not affect at all the average ratio. The standard deviation from the average ratio has been calculated at 0.1579 (if no.1 is included) and at 0.1634 (actually 0.163392) (if no. 1 is not included).

	Height of sufficiently preserved examples (in cm)	Diameter of sufficiently preserved examples (in cm)	Catalogue number in Mersereau	Height / Average diameter ratio
	45	46.5	1	0.97
	7.2	7.9	2	0.91
	11.3	10.35	3	1.09
	11	11	4	1.00
	7.8	10.8	6	0.72
	7.4	8.5	7	0.87
	6.8	6.85	8	0.99
	6.8	7	9	0.97
	7.6	7.75	10	0.98
	6.8	10.5	11	0.65
	8.65	7.6	14	1.14
	4.6	6.4	16	0.72
	8.4	8.85	18	0.95
	18	15.4	19	1.17
	13	17.6	20	0.74
Average (no. 1 included)	11.36	12.2		<b>0.92</b>
Average (no. 1 excluded)	8.95	9.75		<b>0.92</b>

the Margharites tholos (h: 4.31 m; diam: 4.6 m) with a ratio of 0.937, extremely close to the ratio of the models.<sup>40</sup> These ratios fall within the standard deviation range calculated for the models and therefore allow for (but do not effectively prove) the identification of the models as representations of circular corbelled tholos tombs.

Another significant observation is *the absence of eaves* in the 'roof' of all the recorded models. If these models were intended to reproduce the form of an above-ground structure, the presence of this feature should have been expected. Abstraction cannot sufficiently account for the *consistent* absence of this feature in *all* models, which must be considered as regular in perishable huts, like those suggested by Hägg. In Crete, as in any region with seasonal rainfall, eaves are expected as a response to the practical need to protect the walls of a structure (especially perishable ones) by guiding rainwater away from them. Indeed, eaves (even

<sup>40</sup> Data for Achladia and Stylos were taken from measurements by W. G. Cavanagh and R. R. Laxton, 'Corbelled vaulting in the Late Minoan tholos tombs of

Crete', *BSA* 77 (1982), 65–77. For the Margharites tholos see E. Papadopoulou, 'Επαρχία Μυλοποτάμου: Μαργαρίτες', *ADeltion* 52 B'3 (1997), 1040–1041.

TABLE 2. Table showing the number of round tholos tombs in use during each pottery phase in Crete from LM IIIA to O (Date abbreviations as in APPENDIX I). Indications with asterisk are used for those cases where relevant literature did not record any more specific chronological indication. The table presents data from the list in APPENDIX I.

Region	Chronological phases									
	LM II	LM IIIA <sub>1</sub> – IIIA <sub>2</sub>	LM IIIB	LM IIIC	LM III*	SM	PG	G	O	EIA*
East Crete	–	1	1	6	4	7	8	1	1	1
Central Crete	1	3	–	1	11	8	9	11	1	–
West Crete	1	6	8	–	–	–	–	–	–	–

rudimentary) are present in most earlier Minoan terracotta models that preserve the roof, as well in Minoan architectural iconography.<sup>41</sup> Additional evidence for the widespread use of eaves in residential Aegean architecture is provided by the uniquely preserved buildings at Akrotiri (Thera).<sup>42</sup> If one attempts to explain their absence from the cylindrical models in question as a technical compromise to facilitate the production of these models, it must be admitted that it would have been equally easy (if not actually easier) for the model producers<sup>43</sup> to make two separate pieces of clay, one for the ‘roof’ and one for the vertical walls, and subsequently to join them, resulting in an explicit representation of the building’s eaves. However, the problem can be solved if it is suggested that the structures that served as prototypes of these models were partly or entirely subterranean. Boardman has long suggested that the presence of the figurines attached on the roof of the PG B Archanes model should be considered as an indication that the roof was at ground level.<sup>44</sup> It is highly likely that Boardman’s suggestion may be generalized to all cylindrical models by similarly interpreting the absence of eaves.

The general form of the models, with the more or less vertical lower part of the walls and the concave roof also shows close similarity with LBA tholos tombs (both Mycenaean and LM), whose lower walls consist of stone courses built within a cylindrical shaft cut in bedrock or (more rarely) soil.

Although LM III models rarely bear any kind of painted decoration, on at least one later (PG B) example the decoration is elaborate enough to be analysed, although the results of this analysis cannot be uncritically projected onto the earlier examples. The door of the Archanes model (PG B) is decorated with the chequered motif, which appears in Neopalatial and Final Palatial fresco painting as a conventional indication of masonry:<sup>45</sup> such an

<sup>41</sup> Schoep 191, 193 (drawings of architectural models in figs. 1, 4, 5, 7–9, 11, 13), 204–205, fig. 22 (two-dimensional representations).

<sup>42</sup> C. Palyvou, *Ακρωτήρι Θήρας: Η Οικοδομική Τέχνη*, Athens: Athens Archaeological Society 1999, 109–111, figs. 45–47. The Akrotiri eaves occur, naturally, above windows and in the horizon of upper floors or roofs.

<sup>43</sup> As almost all examples have wheel-made walls, their manufacturers were most probably potters, as Mersereau 6–7 correctly observed. As an additional point, it must be noted that the number of examples so far available from

any period suggests that they were *not* mass-produced and therefore no apparent motivation seems to exist for a technical compromise for the sake of faster and easier manufacture.

<sup>44</sup> Boardman (n. 21).

<sup>45</sup> Although such an interpretation of the chequered motif belongs to the Minoan world, it may not be insignificant to note the resurgence of Minoan elements that (along with Attic and Oriental elements) led to the formation of the PG B Knossian style (ca. 850–810 BC), as noted by Coldstream (n. 8, 66). The chequered motif is

interpretation is made explicit in the presence of this motif in two of the Knossos Loomweight Basement ‘house’ models (MM IIB or MM III/ LM I?).<sup>46</sup> It may not be entirely coincidental that the dry-stone blocking of the entrance would be the only part of a tholos tomb visible to someone attending its re-opening or any practice from the outside, the rest of it covered by earthen mound. Such a view would explain why the manufacturer of the Archanes model put particular emphasis on the decoration of this ‘door,’ in an obvious attempt to create an artefact that was intended for some kind of display, as its other decorative elements (attached figurines, other painted motifs notably not shared by the non- or minimally decorated LM III examples) indicate.

#### CHRONOLOGY AND DISTRIBUTION

Another observation involves the chronological and spatial distribution of LM III cylindrical clay models and tholos tombs (FIG. 2; Table 2). These models are essentially a LM IIIA2 development.<sup>47</sup> The earliest is the atypical Zakros example (FIG. 1.1), which comes from the LM IIIA2 re-use of a LM IB building<sup>48</sup>. It has been already mentioned that the majority of known examples date to LM IIIC-SM period. However, since no less than seven examples come from LM IIIC/SM Karphi (FIG. 1.11 and 16 for the two most substantially preserved), this LM IIIC/SM ‘concentration’ is highly suspicious for bias, thus making pointless to develop any argument from it.<sup>49</sup>

very rare in PG B and Coldstream (n. 8) 66, does not even mention it in its basic description of the main features of this style. Such a ‘revival’ of the Minoan significance of this motif in a PG B environment would agree with the features that make Coldstream regard the ninth century Knossians as ‘a truly conservative society’: J. N. Coldstream, ‘Minos redivivus: Some nostalgic Knossians of the ninth century BC (abstract)’, in W. G. Cavanagh and M. Curtis (eds.) *Post-Minoan Crete. Proceedings of the First Colloquium Organised by the BSA and the UCL 1995* [BSA Studies 2] London 1997, 58–61 (60). On the stylistic character of PGB see also the recent paper by I. Kaiser ‘Protogeometric B – Minoan and Oriental influences on a Cretan pottery style of the second half of the 9th century BC’ in *Proceedings of the 9th International Cretological Congress at Elounda 1–6 October 2001*, vol. A5, Herakleion: Etaireia Kritikon Meleton 2006, 63–70.

<sup>46</sup> Schoep 192, figs. 4, 5, 14, 16–18, 21. Discussion on the date of the deposit in which they were found is still not settled (Schoep 197).

<sup>47</sup> The only pre-LM III comparable artefact comes from Lebena *Yerokambos* tomb II (EM I-IIA), whose interpretation as a ‘house model’ is equally un-supported by contemporary EM architecture. It does not feature a single entrance, but bears various openings, which could well be windows, as well as an *opaiou*, an opening on the centre of its roughly conical roof. According to K. Branigan, *The Tombs of Mesara. A Study of Funerary Architecture and Ritual in Southern Crete, 2800–1700 BC* (Duckworth, London 1970), 146), ‘our only grounds for thinking that circular huts were used at all in the Early Bronze Age is the shape of the *hut-lamp* from Lebena, and even this, it could be argued, was made circular for ease of manufacture or convenience of use’. With regard to the interpretation of the EM Lebena and the PG B

Khaniale Tekke model as lamps, see also E. Parisinou, ‘Lighting practices in early Greece (from the end of the Mycenaean world to the 7<sup>th</sup> century BC)’ *OJA* 17:3 (1998), 327–343 (at pp. 336–337). Either a ‘hut’ or a ‘lamp’, the Lebena example is unique and, thus, quite difficult to interpret convincingly. However, what is certain is that it cannot be connected with the LM III–Early Iron Age examples considered here, because of serious differences in form (e.g. the presence of windows) and, primarily, because of the significant chronological gap. In the final publication of the site, this model is still interpreted as a ‘model of a round house (probably)’ and dated in EM I–IIA by its painted decoration (St. Alexiou and P. Warren, *The Early Minoan Tombs at Lebena, Southern Crete*, SIMA XXX, Sävedalen: Paul Åströms Förlag 2004, 114, no.512).

<sup>48</sup> Hägg, 103, figs. 14a–c, 107, Mersereau, 23–24, fig. 8, with extensive bibliographical notes. The absence of door-fastening devices, as well as the large size of the object, makes Hägg 100–101, very sceptical about it being the predecessor of the later examples. However, there are also major similarities, such as the single entrance and the overall shape, which allow the examination of the Zakros example along with all later ones. Its large size is an improper classification criterion and it should be noted that the absence of the door-fastening device is also a feature of some later examples (n. 36). In TABLE 1 it is demonstrated that the proportions of the Kato Zakro model are perfectly fitting with the rest of the cylindrical models.

<sup>49</sup> Mersereau is certainly right in noting that ‘seven models from one site may seem to be an extraordinarily large number, but this quantity must be viewed in the light of the fact that Karphi is the only extensively excavated LM IIIC town site’ (Mersereau 35).

However, there are a couple of facts one may relatively safely rely on. First, none of these artefacts appears before LM IIIA<sub>2</sub>, which, in the current state of knowledge, may be meaningful, as it makes their emergence roughly contemporary with or immediately following an episode of significant weakening of the Mycenaean administration at Knossos<sup>50</sup> and a subsequent expected shift in socio-political dynamics with serious repercussions on most aspects of life on the island. Second, their distribution seemingly covers the entire island of Crete and there is no discernible regional pattern.<sup>51</sup> Such uncertainty, even if not supporting the tholos hypothesis advanced here, does not allow refutation either. Tholos tombs, although widely distributed throughout the island, can rarely be safely associated with specific settlement sites and such association understandably depends on research opportunities rather than the actual state of the record. It may be significant that in three extensively excavated sites, Knossos, Archanes and Kaphi, the co-existence of tholos tombs and cylindrical models has been confirmed.

<sup>50</sup> Notwithstanding the date of the *final* destruction of the palace, it seems that various independent pieces of evidence (most to be discussed in section IV) indicate a severe episode of some Knossian decline in LM IIIA<sub>2</sub>, which is sufficient for our case. Unfortunately, this is not the place to discuss chronological arguments extensively. Discussion has so far focused on the refinement of the palace stratigraphy and LM III pottery development. However, even Mycenaean palaeography was drawn in the debate: J.-P. Olivier ('KN 115 = KH 115. Un même scribe à Knossos et à La Canée au MR IIIB: du supçon à la certitude', *BCH* 117 (1993), 19–33) had argued for the synchronism of the Knossos and the LM IIIB<sub>1</sub> Chania tablets, based on the alleged identification of a Knossian scribe working at Chania (or *vice versa!*); for its rejection see T. G. Palaima, 'Ten reasons why KH 115 ≠ KN 115', *Minos* 27–28 (1992–1993), 261–281, which led Olivier to withdraw the identification, but insist on a close palaeographical similarity ('KN 115 et KH 115: rectification', *BCH* 120 (1996), 823). Although it is true that much of the debate is actually generated from the deficiency of the documentation of the contexts from the palace (even understandably for an early and pioneering excavation), R. J. Firth ('A review of find-places of the Linear B tablets from the palace of Knossos', *Minos* 35–36 (2000–2001), 63–290, summary in pp. 278–281) has argued that at least some documents (his 'Group B') could date to LM IIIB. Although destruction horizons at Knossos may indeed be *more* than one, as J. Driessen ('Le palais de Cnossos au MR II-III: Combien de destructions?', in J. Driessen and A. Farnoux (eds.), *La Crète Mycénienne. Actes de la Table Ronde Internationale Organisée par l'École Française d'Athènes* 26–28 Mars 1991, Paris: Boccard 1997, 114–134) has most explicitly argued. The matter can only be indirectly settled through the identification of the repercussions that one such episode is expected to have had in the material record. One such strong indirect argument for a LM IIIA<sub>2</sub> date has been provided by recent research conducted by E. Hatzaki on the LM II–IIIB settlement surrounding the palatial complex. She has concluded that 'the archaeological data presently available suggest that LM IIIB Knossos was a poor relic of

its former 'palatial' self and not the seat of a palatial elite in charge of an elaborate administrative system controlling much of central and western Crete' (E. Hatzaki, 'From Final Palatial to Postpalatial Knossos: A view from the Late Minoan II to Late Minoan IIIB town', in G. Cadogan, G., E. Hatzaki and A. Vasilakis, (eds.) *Knossos: Palace, City, State. Proceedings of the Conference in Herakleion Organised by the BSA and the 23<sup>rd</sup> EPCA of Herakleion in November 2000 for the Centenary of Sir Arthur Evans's Excavations at Knossos [BSA Studies 12]*, London: BSA 2004, 121–126 (125)). More evidence on a LM IIIA<sub>2</sub> disruption from 2001–2002 excavations as well as from the 'drop' in the number of tombs used in cemeteries, such as Zapher Papoura, has been recently published (E. Hatzaki, 'Postpalatial Knossos: Town and cemeteries from LM IIIA<sub>2</sub> to LM IIIC' in A. L. d'Agata and J. Moody (ed.) *Ariadne's Threads. Connections Between Crete and the Greek Mainland in Late Minoan III (LM IIIA<sub>2</sub> to LM IIIC)*, *Proceedings of the International Workshop held at Athens SAI, 5–6/04/03* [TRIPODES 3], Athens: SAI 2005, 65–95).

<sup>51</sup> It could, of course, be suggested that, since the earliest one comes from eastern Crete (Kato Zakros), there is a possibility that the type developed in that region. However, this is not the correct methodology, since it may lead to absurd results. For instance, the only safely dated LM IIIB examples come from Chania, western Crete (Mersereau 25–27, nos. 3–5, figs. 11–12) and only one additional example comes from eastern Crete, from a late LM IIIB/ early LM IIIC context from Palaikastro *Kastri* (FIG. 1. 6) (Mersereau 27–28, no.6, fig. 13). Another example: it could be that the absence of models from LM IIIC - Early Iron Age western Crete is to be linked with the fact that round tholos tombs were seemingly no longer used there after LM IIIB (APPENDIX I, TABLE 2). However, we have material from only one W Cretan site (Chania), and the quantity of tombs known is also small. In order to have reliable results on this ground, significantly more material is needed. The possibility is not excluded that some regional pattern did exist; however, it cannot be detected on the basis of the evidence currently available.

It is of high significance that LM IIIA2 is the period when tholos tombs of the Mycenaean type (circular ground plan, partly or entirely subterranean, corbel-vaulted) have begun to increase in number and are found throughout the island. TABLE 1 (based on data of Appendix I) shows the increase of the number of tholos tombs in the LM III period, in all regions of Crete:<sup>52</sup> Apart from the Kephala tholos at Knossos, which is dated to the LM II period, and the tholos tomb at Armenoi, dated in LM II/ IIIA1, all other safely dated examples belong to LM IIIA1 onwards. This pattern should not be considered as merely coincidental, since it indicates a major change in funerary architecture and practice throughout the island in this period, a fact that will be discussed more extensively *infra*. Although built tomb types, such as the Prepalatial ‘house-tombs,’ are well attested in earlier periods of Cretan prehistory, the circular ground plan and the application of corbelling in the LM III tholos tombs points to the earlier Mainland examples,<sup>53</sup> especially SW Peloponnesian, which date from the end of the Middle Helladic period.<sup>54</sup> It is surely no coincidence that the key technical feature of the Mycenaean tholos tomb, the application of corbelling techniques, appears in funerary architecture no earlier than LM II (e.g. the Isopata Royal Tomb and the Kephala tholos).

For a variety of reasons, such as differences in burial customs, significant structural differences and chronological gap, the connection between EM circular tombs and the earliest Mainland tholos tombs cannot be followed.<sup>55</sup> The latter seem to have sprung out of the frequently underestimated early Mycenaean competence to invent new elaborate building techniques alongside eclectically utilizing elements of earlier Helladic forms, such as the mound covering the tholos dome, which links it to the MH tumulus, in order to serve the rising elite’s expected desire for display. Since the appearance of circular (partly or entirely) subterranean tholos tombs in post-LM IB Crete is apparently due to some kind of Mainland influence, a further question should be examined: Why do these models *not* occur in the Mainland, where this tomb type originally developed?

<sup>52</sup> One significant observation that needs to be stressed is that in the far west of Crete, the chronology of the dated models (LM IIIB) corresponds quite well to what Preston has called “the earliest evidence for large-scale mortuary ostentation” exemplified in the cases of Maleme and Stylos (see *infra* n.91, 342) at the very same period. Although Maleme is not a tholos tomb proper (see *infra* this footnote), it features the extremely rare -and regionally specific- ‘pyramidoid’ dome (also built with corbelling technique) and testifies for the interest of the local communities in mortuary elaboration. Although both the number of tombs and the number of securely dated models is not as great as to exclude the possibility of a coincidence, this correlation should be kept in mind. Another remark should be offered with regard to terminology. Unfortunately under the term ‘Tholos’ Löwe classifies nearly any built tomb type (even EM circular tombs, despite substantial structural and functional differences), while in this article it only refers to those with circular ground plan and corbelled domes. Belli (n. 37), 251, also made no clear-cut distinction between circular and square ground plans of LM III tholos tombs, a potentially crucial difference, since only circular ground-plans show direct affinities with the Mainland examples.

<sup>53</sup> The uniform building technique in LM and Helladic

tholos tombs has been demonstrated by the structural analysis of Cavanagh and Laxton (n. 40).

<sup>54</sup> One well-known example is the Koryphasion (Osmanaga) tholos, where matt-painted pottery of MH tradition has been identified. The tomb is still unpublished, apart from its pottery, for which see C. W. Blegen, ‘An early tholos tomb in western Messenia’, *Hesperia* 23 (1954), 158–162 and Y. G. Lolos, ‘The Tholos Tomb at Koryphasion: Evidence for the Transition from Middle Helladic to Late Helladic in Messenia’ in R. Laffineur (ed.) *Transition. Le monde égéen du Bronze Moyen au Bronze Récent* [AEGAEUM 3], Liège: Université de Liège 1989, 171–175. Additional reference should also be made to tomb 4 (late MH/ LH I) at the Niketopoulou knoll near Nichoria, published by A. Choremis, ‘Μυκηναϊκοί καὶ Προτογεωμετρικοί τάφοι εἰς Καρποφόραν Μεσσηνίας’, *ArchEph* (1973), 25–74 (at pp. 39–45).

<sup>55</sup> O. T. P. K. Dickinson, ‘Cretan contacts with the Mainland during the period of the Shaft Graves’ in R. Hägg and N. Marinatos (eds.) *The Minoan Thalassocracy: Myth and Reality. Proceedings of the 3<sup>rd</sup> International Symposium at the Swedish Institute at Athens, 31 May–5 June 1982*, Stockholm 1984, 115–118 (at p. 117) and G. S. Korres, ‘The relations between Crete and Messenia in the late Middle Helladic and early Late Helladic period’, *ibid.*, 141–152 (at pp. 148–149).

The answer may be derived from the observation of a much broader difference between Minoan and Helladic imagery. As Schoep has noted, Mycenaean architectural imagery is confined either to *unica*, like the LH IIB–IIIA1 Menelaion model,<sup>56</sup> or to representations that owe almost everything to the Minoan tradition.<sup>57</sup> Therefore, she seems justified to ‘wonder whether the Middle Helladic population or the Mycenaeans had any tradition of representing architecture at all’.<sup>58</sup> In the light of this important difference, it is absolutely understandable that no related Mycenaean artefacts have been found. Although exploring this difference in more depth is out of place here, it is evident that Mainlanders had not developed their own version of architectural imagery; therefore, it is only expected that Minoans, whose record has yielded architectural terracotta models from MM IIB onwards,<sup>59</sup> produced these artefacts as well.

### III. THE SIGNIFICANCE OF ‘THOLOS TOMB’ MODELS WITHIN CONTEMPORARY CRETAN SOCIETIES

#### III. A. CRETAN CYLINDRICAL MODELS AND THE ‘MINOAN GODDESS WITH UPRaised ARMS’

In two of the examples, from Knossos and Archanes, which are both late in the series (SM and PG B respectively), a female figurine with upraised arms has been preserved in the interior of the model. Based on these two examples, Mersereau has argued for a general connection of the appearance of the models with the emergence of a household cult of the so-called ‘Minoan Goddess with the Upraised Arms’ (hereafter MGUA), which developed in order to fill the vacuum in the religious field caused by the collapse of the LM palaces (following a LM IIIA<sub>2</sub> date for the Knossos destruction), in accordance to Renfrew’s theory of systems collapse.<sup>60</sup> However, in this supposedly Postpalatial environment, which Mersereau describes, there is a major problem: at Chania, where a palatial administration is known to have existed during LM IIB<sub>1</sub> (as indicated by the Linear B documents), at least two out of the three known cylindrical models date to this period (see one in FIG. 1.3),<sup>61</sup> weakening any close

<sup>56</sup> Schoep 193 (fig. 8), 194 (with past references), 195. As the excavator, H. W. Catling, has remarked, this could be a Minoan product, though it admittedly lacks close parallels from Crete. Another supposed Mycenaean (LH IIB) ‘house model’ has recently been reported from Midea. However, as ‘there is no indication that the model was attached to any sort of flooring’ (A. Ostenson, ‘The small finds’, in G. Walberg (ed.) *Excavations on the Acropolis of Midea. Results of the Greek-Swedish Excavation, Volume I: 1–2. The Excavation of the Lower Terraces 1985–1991* [Skrifter Utgivna av Svenska Institutet i Athen, 4<sup>o</sup>, XLIX: I: 1–2], Stockholm 1998, 165. pl. 119), I strongly prefer to accept the more prudent statement by Walberg that this artefact could also be ‘fragment of an incense burner’ (G. Walberg and K. L. Giering, ‘The stratigraphy’, *ibid.*, 45).

<sup>57</sup> Schoep (195–196, n.31–32) briefly refers to the golden plaque from the Mycenae Shaft Grave III, the famous ‘Siege Rhyton’ from Mycenae Shaft Grave IV and the golden plaque from Volos *Kapakli* tholos tomb 1 (Thessaly), as well as to depictions on LH IIIA–B palatial frescoes (e.g. from Mycenae or Pylos).

<sup>58</sup> Schoep 195.

<sup>59</sup> Schoep 198.

<sup>60</sup> Mersereau 14–19, particularly 15: ‘the success of this cult is due at least in part to the void left by the collapse of the Minoan palace system and its state-run religion’. The connection between the wide distribution and popularity of the MGUA and the fall of palatial administration in LM IIIA<sub>2</sub> had already been argued by St. Alexiou (‘Η Μινωική θεά μεθ’ ὑψωμένων χειρῶν’, *CretChron* IB’ (1958), 275), before its influential theorization by C. Renfrew, which Mersereau adopts. For a more recent discussion on the increase in popularity of the MGUA in LM III, see G. Gesell, ‘From Knossos to Kavousi: The popularizing of the Minoan Palace Goddess’, in A. Chapin (ed.) *XAPIΣ. Essays in Honor of Sara A. Immerwahr* [*Hesperia* Supplement 33], Princeton 2004, 131–150.

<sup>61</sup> Mersereau 25–27, figs. 11–12, nos.3–5, with references.

connection with some total systems collapse. Moreover, unlike Hägg,<sup>62</sup> she downplays the fact that a direct connection between the MGUA and the models in question is *not* apparent *before* the SM period. This late addition of the figurine, observed so far only in the Knossos (Spring Chamber) and the Archanes models,<sup>63</sup> cannot be easily understood as a manifestation of a connection that already existed—but supposedly was not materially expressed—during the LM period. The view followed here is that instead of projecting this connection backwards, it would be far more interesting to examine it as a sign of development within the tradition of the models themselves. The view adopted here concerning the connection between the MGUA-type figures and the cylindrical models can be presented in the following points:

Despite the common feature of having an MGUA figurine placed inside them, the Knossos and Archanes models exhibit certain morphological differences (vertical ‘handles’ in the Knossos example, added figurines on the roof of the Archanes model), which may exemplify a somewhat different semantic content for each example. Although they date to different periods (SM and PG B respectively), the differences between them need not necessarily reflect chronological development, but the different contexts in which they were found (cult object and grave good respectively).

It cannot be ignored that the ‘inclusion’ of the female figurine in such a model emerges as a novel feature at the very end of the Bronze Age, with *no* occurrences during the preceding period, when the majority of the recorded models are dated. When discussing past interpretations of the Archanes model, Mersereau notes the methodological fault of projecting the interpretation of later examples onto earlier ones;<sup>64</sup> however, she does not approach the link between the models and the MGUA with any similar caution.

Mersereau relies heavily on the association of both MGUA figures and cylindrical models with the same range of artefacts, namely triton shells and inverted cups;<sup>65</sup> however, it should be noted that this is the case only with the Amnisos model<sup>66</sup> (FIG. 1.2), a fact raising the immediate question of why such associations are not observed in most cases. More significantly, neither are triton shells consistently associated with MGUA, as they appear without MGUA figures in Kephali Khondrou (Viannos area)<sup>67</sup> and Kommos.<sup>68</sup> Inverted cups

<sup>62</sup> Hägg 102: ‘it may be argued that the housing of a goddess in the hut-model is an *innovation* of the Sub-Minoan period’ [my italics].

<sup>63</sup> See Hägg (n. 62). For the SM Knossos (Spring Chamber) as well as the PG B Archanes model see Mersereau 37–42, figs. 25–29, nos. 18 and 19 (with references).

<sup>64</sup> ‘Beginning with this late model and then casting interpretations onto the earlier models without adequate considerations of their differences is procedurally faulty and has led to misunderstandings about the model type as a whole’ (Mersereau 5). The work thus criticized is J. N. Coldstream, ‘A Protogeometric Nature Goddess from Knossos’, *BICS* 31 (1984), 93–104 (100–101). The same methodology is apparent in Rethemiotakis’ hypothesis that missing MGUA figures from LM III or Early Iron Age examples can be considered as portable finds that had been removed from the interior of the models (G. Rethemiotakis, *Μινωικά Πήλινα Ειδώλια από την Νεοανακτορική έως την Υπομινωική περίοδο*, Athens: The Athens Archaeological Society 2001, 136).

<sup>65</sup> Mersereau 17.

<sup>66</sup> The model was found in Area F of the 1963 excavation. St. Alexiou, *Αμνισός*, *ArchDeltion* 19 B’ 2 Χρονικά (1964), 439, pl. 519c; St. Alexiou, ‘Areale H (Motel Xenia)–G (Öffentliches Strandbad)–F (Öffentliches Strandbad)–E (Bauten am Strand): Bericht über die Ausgrabungen der Jahre 1963 und 1967’, in J. Schäfer (ed.) *Amnisos nach den Archäologischen, Historischen und Epigraphischen Zeugnissen des Altertums und der Neuzeit*, Mainz: von Zabern 1992, 186–192 (188, pl. 46. 1–2, ‘kleiner Naiskos aus Ton’); Mersereau 17, 24–25, cat. no. 2, figs. 9–10.

<sup>67</sup> A first presentation of this LM IIIA1–2 site anticipating its final publication has been published by L. Platon, ‘Caractère, morphologie et datation de la bourgade postpalatiale de Képhali Khondrou Viannou’, in J. Driessen and A. Farnoux (eds.), *La Crète Mycénienne. Actes de la Table Ronde Internationale Organisée par l’École Française d’Athènes 26–28 Mars 1991*, Paris: Boccard 1997, 357–373.

<sup>68</sup> The MGUA associations of triton shells at these two sites are exclusively based on the existence of ‘snake tubes’ by G. C. Gessell, *Town, Palace and House Cult in*

-also reported as found in association with the Amnisos model- are similarly not found in any of the 'certainly' identified MGUA 'shrines'.<sup>69</sup> In sum, evidence for linking cylindrical models with a MGUA *before* the Knossos example is conspicuously lacking.

The significance of the 'upraised arm gesture' and particularly its semantic fluctuations during the LM IIIA–PG period, where MGUA figures and figurines are dated, remains debated. In any case, the diversity in morphological details of the known figurines indicates that this may be a gesture indicating divinity or sanctity in a far more general sense, rather than the identification of all the recorded figurines with a single specific deity. As a result, the images, which are collectively labelled as MGUA figures, may represent an assortment of different female deities or supernatural beings in the period concerned.<sup>70</sup> A later parallel for this can be provided by the 'blessing gesture' in Byzantine and modern Orthodox iconography, which is depicted as being performed by images recognized by the state religion as of sacred or divine status. Apart from a number of utterly conventionalized iconographic standards, it is largely the painted inscriptions that identify the figure depicted, a luxury Aegean art does not provide.

As far as the models of the MGUA type included in the Knossos and the Archanes models, two interpretations are most plausible (though not provable) in accordance with the identification of tholos tombs as the prototypes for the cylindrical models. The first would be that the figurines included in the late models represent a deity (or 'deities') closely associated with death, which would be the only explicit evidence for such a deity in the material record.

*Minoan Crete*, SIMA LXVII, Göteborg: Paul Åströms Förlag 1985, 50–52. Gessell's view seems to be accepted by Mersereau 18. However, even 'snake tubes' are not consistently found with MGUA figures: e.g. the one in Kephali Khondrou found in Corridor Z1 (L. Platon (n. 66), 362, 363, fig. 4).

<sup>69</sup> Inverted cups from a 'shrine *thought* to belong to the MGUA' [my italics] in LM IIIA Hagia Triadha are mentioned by Mersereau 18, n.81. The identification of this 'shrine' as belonging to the MGUA was suggested by Gessell (n. 68), 41–42, on the basis of 'snake tubes' found there. Following the point in n. 68, too much is based on the 'exclusive' association of snake tubes with the cult of a MGUA, which should urgently be reconsidered, in view of the numerous inconsistencies it features.

<sup>70</sup> For an elaborate critical discussion on the validity of the 'great goddess' theory (but primarily with reference to the Neopalatial period) see O. T. P. K. Dickinson, 'Comments on a popular model of Minoan religion', *OJA* 13:2 (1994), 173–184. The most widely accepted view is that this gesture is associated with an ecstatic/orgiastic dance ritual response to divine epiphany and that it could be equally plausibly performed either by the deity or the adorant (F. Matz, *Götterscheinung und Kultbild im minoischen Kreta*, Wiesbaden: F. Steiner 1958; E. Brandt, *Gruss und Gebet. Eine Studie zu Gebärden in der minoisch-mykenischen und frühgriechischen Kunst*, Waldsassen: Stiftland 1965). See also H. Demisch (*Erhobene Hände. Geschichte einer Gebärde in der bildenden Kunst*, Stuttgart: Urachhaus 1984) for the consideration of this gesture as an 'Urgebärde' (archetypal gesture) in chronologically and culturally diverse contexts ranging from the Neolithic to the Middle

Ages. For more theoretically and methodologically concerned approaches see: M. Wedde, 'On hierarchical thinking in Aegean Bronze Age glyptic imagery', in R. Laffineur and W.-D. Niemeier (eds.), *Politeia. Society and State in the Aegean Bronze Age* [AEGAEUM 12], Liège: Université de Liège et UT-PASP 1995, 493–507 (p.496: interpretations offered include 'manifestation gesture' or 'sign of dominance over wild beasts'; the diverse contexts of this gesture's iconography are also noted, including a monkey performing it!) and 'Talking hands: A study of Minoan and Mycenaean ritual gesture: some preliminary notes', in P. P. Betancourt, V. Karageorghis, R. Laffineur and W.-D. Niemeier (eds.) *MELITEMATA. Studies in Aegean Archaeology Presented to Malcolm H. Wiener on the Occasion of his 65th Birthday*, vol. III (AEGAEUM 20: 3), Liège: Université de Liège 1999, 911–919 (where variants of the gesture in question are recognized); H. Whittaker, *Mycenaean Cult Buildings: A Study of their Architecture and Function in the Context of the Aegean and the Eastern Mediterranean* [MONOGRAPHS OF THE NORWEGIAN INSTITUTE AT ATHENS NO.1], Bergen: J. Krieger AS 1997, 50–57 (where the significance of the gesture is seen as having different significance in the Neopalatial and the LM III period); C. Morris 'The language of gesture in Minoan religion' in R. Laffineur and R. Hägg (eds.) *Potnia. Deities and Religion in the Aegean Bronze Age. Proceedings of the 8th International Aegean Conference/8e Rencontre Égéenne Internationale. Göteborg, Göteborg University, 12-15 April 2000* [AEGAEUM 22], Liège: Université de Liège 2001, 245–250, and C. D. Cain, 'Dancing in the dark: Deconstructing a narrative of epiphany on the Isopata ring', *AJA* 105 (2001), 27–49 (p. 44).

Another, less flamboyant, interpretation is that the figures represent mourners, an interpretation consistent with the interpretation of figures with upraised arms as mourners in the Tanagra larnakes, although it must be recognized that the mourning theme has not yet been recognized with certainty in the LM record, with the exception of a representation of mourners (as part of a *prothesis* scene) on a LM IIIA2 larnax from Pigi.<sup>71</sup>

The suggestion made here is that the association of the MGUA type figure with the mortuary practices, as implied by the identification of cylindrical models as model tholoi, fits well with developments in the Early Iron Age, when the connection of the MGUA (or, as it has been argued, *an* MGUA) with death is made more explicit.

Painted MGUA figures already appear (although quite rarely) on LM III clay larnakes. Apart from a figure on the LM IIIB Vatheianos Kampos larnax whose sex is difficult to determine,<sup>72</sup> an MGUA figure appears on a LM IIIA2–B clay larnax from Armenoi chamber tomb 24.<sup>73</sup> It is significant that what appears to be her ‘dress’ is decorated with the same motif as the dress of an MGUA terracotta figurine from Pankalochori (chequered).<sup>74</sup> An MGUA image is depicted on the clay chest-shaped larnax 124 from the North Cemetery at Knossos, for which a LM IIIA1 date is plausible on the basis of stylistic comparisons with fresco painting.<sup>75</sup>

Notwithstanding these earlier occurrences, it may not be coincidental that related terracotta figurines were *not* placed as grave goods before the end of the Bronze Age. N. Platon noted two ‘interesting’ MGUA figures among the grave goods in the PG tholos tomb at Rhotasi.<sup>76</sup> An MGUA figure attached to a ring *kernos* from a pre-excavation plundering of one of the Kourtes tholos tombs, published by Xanthoudhidhes, may also date to the PG period.<sup>77</sup> Pictorial images of the MGUA gesture do not disappear in the Early Iron Age, as the

<sup>71</sup> Baxevasi (n. 26). For Late Bronze Age Aegean mourners in general (with justifiable emphasis on the Tanagra images) see W. Cavanagh and C. Mee, ‘Mourning before and after the Dark Age’, in C. E. Morris (ed.) *Klados. Essays in Honour of J. N. Coldstream* [BICS Supplement 63], London: Institute of Classical Studies 1995, 45–61. One quite significant addition to the mourning corpus has been the *prothesis* scene from a LH IIIC crater from the Haghia Triadha near Elis chamber tomb cemetery, published by C. Schoinas (‘Εικονιστική παράσταση σε όστρακα κρατήρα από την Αγία Τριάδα Ηλείας’ in *Πρακτικά του Α΄ Διεθνούς Διεπιστημονικού Συμποσίου ‘Η Περιφέρεια του Μυκηναϊκού Κόσμου’*, Lamia 1994, Lamia: IΔ΄ Ε.Ρ.Κ.Α. 1999, 257–262) and O. Vikatou (‘Σκηνή πρόθεσης από το Μυκηναϊκό νεκροταφείο της Αγίας Τριάδας’ in V. Mitsopoulos-Leon (ed.) *Forschungen in der Peloponnes. Akten des Symposions anlässlich der Feier ‘100 Jahre Österreichisches Archäologisches Institut Athen’*, 5.3.-7.3.1998 [Österreichisches Archäologisches Institut Sonderschriften Bd. 38] Athen 2001, 273–284.

<sup>72</sup> Alexiou (n. 60), 218, pl. 11. 2. Although Alexiou includes this image in his section on ‘non-plastic’ representations of the MGUA, he mentions other suggested identifications for this figure: Sp. Marinatos identified the figure as wearing a helmet (and therefore male?), whereas N. Platon considered it as a priest wearing a mask with horned appendages. Bielefeld has identified the figure as male (see Alexiou (n. 60), 218,

nn. 132–134). Another often cited figure on a larnax from Milatos is also most probably a male, as Evans had initially observed (Alexiou (n. 60), 217–218, n.128, pl. 11.1; Merousis (n. 26), 122, no. 41). A ‘bald’ (or ‘shaved’) figure from an early LM IIIB larnax from Apodoulou is also most likely male (M. Poliogiorgis, ‘Μορφή με υψωμένα χέρια σε λάρνακα από το Αποδούλου’, *Proceedings of the 6<sup>th</sup> International Cretological Congress*, volume A2, Chania 1990, 207–232, with a list of other larnakes with human figures).

<sup>73</sup> Y. Tzedakis, ‘Λάρνακες Υστερομινωικού νεκροταφείου Αρμένων Ρεθύμνης’, *AAA* IV, 216–221 (at p. 221, fig. 9); Merousis (n. 26), 115, no.23 (RM 1706).

<sup>74</sup> Sp. Marinatos, ‘Παγκαλοχώρι’, *ADeltion* 15 (1933–1935), Appendix, 55, fig.12; Alexiou (n. 60), 187–188, pl. 5. 2. As this is a chance find, its date, although safely within LM IIIA–B, cannot be more closely defined. Alexiou suggests an LM IIIB date based on stylistic comparisons.

<sup>75</sup> L. Morgan, ‘A Minoan larnax from Knossos’, *BSA* 82 (1987), 171–200, interprets the figure with the upraised arms as a priestess (at p. 198); Coldstream and Catling (n. 4), 159, 392–393, figs.114–115.

<sup>76</sup> N. Platon, *CretChron* H<sup>1</sup> (1954), 516: ‘δύο πολύ ενδιαφέροντα είδωλα μορφών με ανυψωμένα χέρια’. Rethemiotakis (n.11), cat. no. 157.

<sup>77</sup> St. Xanthoudhidhes, ‘Cretan *kernos*’, *BSA* 12 (1905–1906), 15–18. Xanthoudhidhes dated it vaguely to

elaborate examples in Knossian vase-painting indicate: The PG B 'Tree Painter's' pithos 114 from Knossos North Cemetery<sup>78</sup> and the well known PG B straight-walled pithos from Fortetsa (Knossos) tomb P are evidence of that.<sup>79</sup>

The large number of LM burials excavated so far clearly suggests that placing MGUA figures or figurines in tombs was not normally practised during the LM III period. Moreover, it is worth-noting that both PG examples of MGUA figurines as grave goods were found in tholos tombs with circular ground-plan from Central Crete with the fact that the inclusion of such figurines inside cylindrical models occurs in the same region in post-LM times.

To summarise the main argument here, it seems that the disconnection of the cylindrical models from the domestic context and their explicit association with the MGUA figure (evident in the attachment of an MGUA figurine in their interior) corresponds well to a change in associations of some of the MGUA figures themselves, namely their placement in (tholos) tombs. This link may be seen as indirectly supporting the identification of these models as '(tholos) tomb models.'

It cannot be excluded that the Early Iron Age mortuary associations of *an* MGUA were already anticipated in LM III (as the figures on the Knossos and Armenoi larnakes may indicate). What appears as an innovation in the post-LM period is the practice of placing terracotta MGUA figurines in tombs. Although evidence is admittedly quantitatively inconclusive, the fact that both cases were attested in tholos tombs may not be coincidental. It is suggested that the Knossos Spring Chamber and the Archanes models reflect precisely this novel practice, which has no apparent LM III antecedents.

### III. B. CYLINDRICAL MODELS AND LM III AND EARLY IRON AGE MORTUARY PRACTICES

The identification of tholos tombs as the prototypes of cylindrical models proposed here indicates their connection with supernatural (and, therefore, religious in a wider sense) beliefs, which, however, is only fragmentarily understood. However, if such an interpretation of these models is accepted, our understanding of LM–PG mortuary practices may increase accordingly. First, insight would be gained into religious interconnections between Minoan tholos tombs and the MGUA (or *a* MGUA) in the SM and PG period (but *not* safely before that period). Second, the occurrence of a tholos tomb model in contexts that may be termed 'residential' is certainly to be understood as connected with the practices specifically connected with this specific tomb type.

the 'LM III' period; however, Alexiou (n. 60), 206, correctly observed that the rest of the vases are PG. It should be added that the Kourtes tombs have not yielded material datable before SM. Cavanagh and Mee (n. 71), 51, interpret the Kourtes figurine as a mourner. For a more recent consideration of the pottery from Kourtes see L. Rocchetti, 'La necropoli di Curtes', *Proceedings of the 6<sup>th</sup> Cretological Congress*, volume A2 (1990), 261–265. This re-evaluation of the Kourtes material by Rocchetti moves towards a PG B date: the Kourtes material shows clear affinities with that from Fortetsa tomb OD, PG B vases form the Giamalakis collection and material from the Knossos Spring Chamber deposit.

<sup>78</sup> That an encounter with the pictorial imagery of the

Knossian larnax inspired the painter of pithos 114, as suggested by Coldstream (n. 4), 393, n.39, is a very thought-provoking idea; however, it cannot account for the association of the MGUA with the cylindrical model, since this appears already in the SM period (Knossos Spring Chamber). It is, however, significant to observe that the distribution pattern of the fragments of larnax 107.124 in tombs 107, 75 (neighbouring to N) and 294 (50 m to NE) removes any reasonable doubt for the deliberate dispersal of the antique artefact, an event that cannot antedate the earlier use of these tombs (Early PG).

<sup>79</sup> J. K. Brock, *Fortetsa. Early Greek Tombs near Knossos*, Cambridge: Cambridge University Press 1957, 125–126, no.1440, pls. 77 and 163.

Why were models produced of tholos tombs with circular ground plan but not of other built tomb types? Asking this leads to a more complex set of questions concerning the symbolic significance of the Mainland-type tholos in LM Crete. It may be important to note that with the notable exceptions of the Maleme tomb (near Chania) and some Knossian examples (Temple Tomb (already constructed in the Neopalatial period); Isopata group), the most elaborate funerary constructions that were in use in post-LM IIIA<sub>1</sub> Crete belong to the type of the round tholos tomb (Knossos *Kephala*, Armenoi *Prinokephalo* tomb 200, Archanes tomb A, Knossos *Khanialle Tekke 2* and Arkades tomb R: see Appendix I), although it must be admitted that most examples of round tholoi do not really meet monumental standards in terms of size and construction quality. An explanation for such a significance of this specific tomb type may be suggested: that such tombs in LM IIIA<sub>2</sub> already bore the status generated by (or reflected in) the monumental LH IIA constructions in the Mainland (e.g. in Mycenae (Argolid), Vapheio (Laconia), Peristeria or Antheia (Southern Triphylia and E. Messenia respectively)). It is highly likely that the symbolic overtones of this Helladic tomb type were transmitted to Crete as soon as the earliest examples in LM II were constructed. The solitude of examples in LM II Knossos and Armenoi may exemplify their exceptionality (and, therefore, exceptional significance?) in the period concerned.<sup>80</sup>

A tholos tomb is a built space intended for multiple burials that could be used over long time periods, through continuous secondary treatment or removal of previous burials and grave goods. It is generally suspected that their construction and use was connected with *groups* of people, but the character of these groups and the nature of the relations that may have brought them together as users of the same tomb can only be speculated. Evidence is not sufficient for the conclusive characterization of such groups as kin-based and only analysis of biodata could settle the issue. However, in the light of the suggested interpretation for the LM III cylindrical models, it can be argued that the presence of a 'tholos tomb model' within residential buildings supports the view that tholos tombs were attached to kin-based units, probably large families of some significance.

In that sense, the definition—even a general one—of the context of these tomb models may be very significant, since it is directly connected with those using the tomb itself: it is hard to avoid the conclusion that the people living in the buildings where these models were found, were those who claimed burial at this tomb type. From a study of the contexts of recorded LM III examples, it may be observed that all recorded contexts belong to *residential* sectors of settlements at Kato Zakros, Amnisos, Chania, Palaikastro *Kastri*, Karphi and Phaistos (FIG. 1.1, 2, 3, 6, 11, 16 and 20 respectively).<sup>81</sup> If it is accepted that LM tholos tombs were the prototypes of the models in question, the observed contextual homogeneity among the LM III examples may support the view that these tombs were indeed used by people living in the

<sup>80</sup> A feature that changed later on, when clusters of such tombs emerged, perhaps influenced by the spatial concentration of chamber tombs: e.g. Apodoulou (LM IIIA–B), Kourtes (PG B), Arkades (G).

<sup>81</sup> See Mersereau, 22, Table 1 for a reference. Any further analysis of the distribution of these models and site types where they were found is bound to be inconclusive at the current state of our knowledge. With the exception of Chania, it is admittedly difficult to speculate on their regional importance of any other site that has yielded in LM III based on archaeological

evidence alone. The relation of Archanes to Knossos in LM III presupposes a reworking of relevant material from the former, although significant preliminary work has been presented by E. Sapouna-Sakellarakis ('Archanès à l'époque mycénienne', *BCH* 114 (1990), 67–102). For Palaikastro *Kastri* and Karphi see the archaeological overview by K. Nowicki, *Defensible Sites in Crete c.1200–800 BC (LM IIIB/ IIIC Through Early Geometric)* [AEGAEUM 21], Liège: Université de Liège et UT-PASP 2000, 50–52, 157–164, figs.88–93.

same residence; therefore, the conclusion that the bonds shared by users of the same tomb were kin-based appears to be very likely.

If such an interpretation is accepted, it may be expected that round tholos tombs would have been detected in the vicinity of those sites that yielded the models. As already noted, it must be admitted that cemetery–settlement associations are not easy to make unless an extensive area has been excavated. However, it may not be insignificant that in three LM III sites where both settlement and contemporary burial contexts have been explored (Knossos, Archanes and Karphi), models co-existed with tholos tombs.

The overall simplicity (or, more frequently, absence) of decoration in all LM III examples suggests that they were not used for any kind of exhibition, at least primarily. Once again, the SM and PG examples from Knossos and Archanes constitute exceptions indicating a later change in the form, and quite probably even in the function, of these models, which may reasonably be placed after the end of the LM IIIC period.

It would be quite reasonable to connect the change in appearance of the Knossos and Archanes models with the non-domestic character of the contexts in which they were found. The deposit at the Knossos Spring Chamber had been, in all probability, a cult deposit. Prent, recently reviewing evidence for cult activities at SM–PG Knossos, referred to the Spring Chamber model as belonging ‘to the realm of domestic cult’.<sup>82</sup> However, in doing so, she projects the contextual associations of the LM III examples onto this later one, without considering the need to account for the change in context.

It is not entirely certain that the pit deposit BG, where the Unexplored Mansion GB 1 model was found, can be accurately described as ‘domestic’.<sup>83</sup> The Archanes and Knossos North Cemetery examples were placed within tombs. However, the only known Geometric example from MG/LG Phaistos (FIG. 1.20) was found in Room R<sub>3</sub>, which has recently been interpreted as housing storage as well as dining activities,<sup>84</sup> which could well belong to the range of household activities.

It may be argued that the increased degree of elaboration in the painted and/or plastic decoration of all Early Iron Age examples was a consequence of their semantic shift towards practices that had a less ‘household-oriented’ and therefore more public character that encouraged display. From this point of view, it is interesting to note that in central and eastern Crete the Early Iron Age use of tholos tombs appears to be even more extensive than in the Late Minoan period (see Appendix I, Table 2).

To stay within LM III (when the majority of examples are dated), the problem of understanding the function and significance of a tomb model placed in the context of a residential space is perhaps the most important. It may be suggested that some inhabitants in

<sup>82</sup> M. Prent, ‘Cult activities at the palace of Knossos from the end of the Bronze Age: Continuity and change’, in Cadogan, G., Hatzaki, E. and Vasilakis, A. (eds.) *Knossos: Palace, City, State. Proceedings of the Conference in Herakleion Organised by the BSA and the 23<sup>rd</sup> EPCA of Herakleion, in November 2000, for the Centenary of Sir Arthur Evans’s Excavations at Knossos* [BSA Studies 12], London: BSA 2004, 411–419 (416, fig.36.7).

<sup>83</sup> Coldstream (n. 3), 80, 472, n.8. By defining it as ‘domestic’, Coldstream links the context of model GB 1 with the LM III examples. However, it remains unclear whether pit 44 had a domestic nature (e.g. refuse

deposit). Perhaps not insignificantly, no LM III model has been found in a pit. For late PG and PG B contexts in the Unexplored Mansion, see Coldstream (n.2), 67–70: Deposits GA (three complete vases on patch of earth floor), GB, GC (lower fill of large robbing Pit 60) and three more fragmentary stratified contexts (at p. 70).

<sup>84</sup> N. Cucuzza, ‘Geometric Phaistos: A Survey’, in W. G. Cavanagh and M. Curtis (eds.) *Post-Minoan Crete. Proceedings of the First Colloquium Organised by the British School at Athens and the University College of London 1995* [BSA Studies 2] London 1997, 62–68 (at p. 65).

a number of significant LM III settlements felt the need to have a substitution of the form of the burial space, within their own context of the living. Evidence may also allow for considering this kind of behaviour as related to ‘ancestor cult’ practices as well, a possibility explored towards the end of section IV of this paper. At this point, however, I suggest what is attractive but still improbable: that the inclusion of these tomb models within residential contexts may have been motivated by the exclusion of adult intramural burial from what seems to be the ‘norm’ in LM III Crete (see relevant discussion in Appendix II). A similar interpretation has recently been suggested for clay architectural models found in houses from the thirteenth century BC settlement of Emar (Middle Euphrates); Appendix III presents a brief attempt to ‘contextualise’ this interpretation and explores the extent of its possible parallelism with the Cretan evidence. It is entirely possible that, as adult intramural burial is excluded from what seems to be the Minoan norm, a more symbolic collective representation of the deceased in the form of the tomb’s image was employed in order to achieve a bond between the domestic and the funerary realms.

This consideration reasonably triggers a further question: as the rarity of intramural burial is not exclusive to LM III, but the norm in all periods of Bronze Age Crete, it is necessary to consider what made LM IIIA<sub>2</sub> to Early Iron Age different in this respect and caused the need for such a substitution to emerge in this particular period. The answer will be sought in the developments in the period concerned, particularly the repercussions of a political change (the LM IIIA<sub>2</sub> weakening of Knossos) on socio-political structures and the ways these may be reflected in the mortuary practices. Despite the fact that further positive evidence for complex LM III funerary ritual in residential contexts is seemingly lacking or undetected in the material record, it will be argued that post-LM IIIA<sub>1</sub> societies may have had reasons to develop explicit associations between the living and the dead buried in tholos tombs.

#### IV. CONCLUDING DISCUSSION: THE EMERGENCE OF THE ‘NEED’ FOR TOMB MODELS

The conclusions reached so far in this study can be summarized in the following points:

*i.* If any degree of reliability is attributed to the basic typological features of the Cretan cylindrical models, then it must be accepted that subterranean (either partly or entirely), corbel-vaulted tholos tombs with circular ground plans constitute their only possible prototypes. This view so far finds confirmation in a number of morphological details and the chronology of both categories. The ‘discordance’ between prototype and context in the LM III examples (which have *not* been found in contemporary tholos tombs) is considered as expected, given the role of a model as a substitute of its prototype.

*ii.* The fact that the connection of these models with *an* MGUA figure appears as a SM–PG B *innovation* (Knossos Spring Chamber and Archanes), is well reflected in the change in contextual associations of MGUA terracotta figurines, which have so far been discovered in two round tholos tombs of Early Iron Age date (Rhotasi and Kourtes).

*iii.* The typological transformation of the models in the Early Iron Age agrees with this change in their contextual associations (they additionally appear as grave goods: Archanes and Knossos North Cemetery), which may in turn reflect a symbolic transformation towards more elaborate rituals, moving even beyond the residential context, but not dissociating from it (Knossos Unexplored Mansion, Phaistos).

*iv.* It has been suggested that the exclusive occurrence of the LM III examples in residential contexts must be placed in the broader question of LM household cult of the dead. Connections with ‘ancestor’ cult should be cautiously but seriously examined, while the possibility that this practice is also triggered by the absence of intramural burials from LM III settlements is put forward.

In this closing section, and as anticipated in the previous section, point (iv) will be further elaborated by explicitly setting a crucial question: Why that particular need for the new artefact in that particular period? It is suggested that the initial motivation behind the construction and use of these models should be seen alongside other major changes, such as the destruction of the Knossian palace at the beginning of LM IIIA2 and its repercussions on the shifting political equilibrium of the island, which had seriously affected the mortuary field. The dramatic increase of tholos tombs in use during the course of LM III and the emergence of an imagery of burial practices, explicitly exemplified in the Haghia Triadha sarcophagus and also reflected in the more general concern for pictorial representations on LM III clay larnakes,<sup>85</sup> may be linked with a tendency towards the material expression of ‘political’ independence. Although the existence of a palatial administration at LM IIIB Chania does not allow the characterization ‘Postpalatial’ for LM IIIA2–B Crete as a whole, it must be expected that post-LM IIIA1 developments, of which the cylindrical terracotta models constitute a part, were severely affected or, more interestingly, triggered by the LM IIIA2 weakening of Knossos.

In her masterful publication of the Knossian larnax with the MGUA image, Morgan considered the Haghia Triadha sarcophagus as contemporary with it (LM IIIA1), and earlier than the Armenoi and Vatheianos Kampos larnakes.<sup>86</sup> However, as evidence now overwhelmingly supports the LM IIIA2 date of the sarcophagus,<sup>87</sup> dating it as immediately following the Knossian larnax may attractively explain its production as a deliberate reproduction of a Knossian idiom; if the observation is added that LM IIIA2 is also the period that sees the demise of Knossian power over a large part of the island, this interest in funerary iconography, further exemplified by a general increase of pictorial painted larnakes in this period,<sup>88</sup> may be seen as a response to the new political environment.

Accepting the LM IIIA2 date for a severe weakening (even if not definitely the ‘final’ destruction of the ‘60s debate) of the Knossos palace engages one to consider that this was the first serious episode of interruption in palatial control in (at least parts of) north central Crete since MM IB.<sup>89</sup> The repercussions that such a situation must have had on nearly every aspect of social life in this region (and therefore the island as a whole) are expected to have

<sup>85</sup> Merousis (n. 26); Merousis (n. 27). It is not coincidental that the Pigi larnax with its explicitly funerary imagery is also dated to ‘the end of LM IIIA’ (Baxevani, n. 26).

<sup>86</sup> Morgan (n. 75), 192.

<sup>87</sup> See the new archaeological evidence on the dating of Tomb 4 and the LM IIIA2 monumentality of Haghia Triadha presented by La Rosa, as well as Militello’s stylistic analysis, all fully cited in n. 24.

<sup>88</sup> Merousis (n. 26), 79. According to Merousis, the iconographic themes employed in clay larnakes become standardized in LM IIIB.

<sup>89</sup> A LM IB destruction episode, although more or less

clear in other Neopalatial complexes, still fails to be conclusively identified in the Knossos palace itself, although it appears in its borders (e.g. Royal Road) and the surrounding settlement. For an attractive treatment see C. F. Macdonald ‘The prelude to Mycenaean Crete’ in J. Driessen and A. Farnoux (eds.), *La Crète Mycénienne. Actes de la Table Ronde Internationale Organisée par l’École Française d’Athènes 26–28 Mars 1991*, Paris: Boccard 1997, 267–273; J. Driessen and C. F. Macdonald, *The Troubled Island. Minoan Crete Before and After the Santorini Eruption* [AEGAEUM 17], Liège: Université de Liège et UT-PASP 1997, 138–170.

been equally severe and to have been reflected in changes in the archaeological record from LM IIIA<sub>2</sub> onwards. In this post-LM IIIA<sub>1</sub> ‘new era,’ when the Knossian administration was much weakened, it would be expected that either previously suppressed or newly emerged identities (whose precise nature is beyond the scope of the present study) found the opportunity to rise and fill the void caused by such a shift in political dynamics. In effect, they were in strong need of propaganda vehicles to stabilise their position in the new political landscape (even if not truly ‘postpalatial’) that was in the making.<sup>90</sup>

The diffusion of built tomb types (eminently including round corbelled tholoi of the Helladic type, see Table 2 and FIG. 2) as well as of terracotta figurines with the MGUA-type gesture in the LM IIIA<sub>2</sub> period can also be seen in this light, as related studies by Preston<sup>91</sup> and Gessell<sup>92</sup> have respectively concluded. The increase of interest, already noted, in the development of funerary iconography fits well with the picture described here. To this picture of new ways of conceiving the placement of the deceased within the living society, one could add what seems to be the ‘revival’ of larnakes – no matter if they bore pictorial decoration or not – in LM IIIA–B Crete. Despite the diversity in patterns of use of various types, which recently enabled Preston to elegantly argue for regional variation (compatible with socio-political fragmentation),<sup>93</sup> their sudden popularity across the island in LM III is particularly indicative of a conceptual shift towards some degree of ‘individualization’ of the deceased that seems to fit the picture of changing mortuary perspectives in LM III. It is particularly important that these developments appear on a broad scale and evidence for them appears from a growing number of sites, so that they are unlikely to be dramatically altered by later discoveries.

As may have been the case with the early Mycenaean regional elites,<sup>94</sup> mortuary practices in post-LM IIIA<sub>1</sub> Crete became once more an arena of intense competition for Aegean societies at times when different groups struggled for domination. It may be suggested that in LM III Crete, alongside the diffusion, already noted of more elaborate type of tombs, which illustrates a major change in Minoan funerary architecture,<sup>95</sup> there might have started a *more*

<sup>90</sup> A new article by B. Burke ‘Materialisation of Mycenaean ideology and the Ayia Triada sarcophagus’, *AJA* 109 (2005), 403–422 appeared after this article had been initially submitted. In it, Burke examines the persistence of earlier Minoan elements in the sarcophagus’ iconography and links them to the propaganda strategies of the Mycenaean elite at Hagia Triadha. However, in exploring the issue Burke does not consider the reasons why a *mortuary* artefact (a limestone larnax) should have been considered a suitable venue to do so. It is this particular choice that distinguishes the sarcophagus from previous Minoan ‘elite strategies’ who do not utilise the mortuary field as explicitly, although L. Platon has recently suggested that the building depicted on the relief stone ‘Sanctuary Rhyton’ from the LM IB Kato Zakros palace may have been the Knossian Temple Tomb (L. Platon, ‘Το ανάγλυφο ρυτό της Ζάκρου κάτω από ένα νέο σημασιολογικό πρίσμα’, in A. G. Vlachopoulos and K. Birtacha (eds.) ΑΡΓΟΝΑΥΤΗΣ. Τιμητικός Τόμος για τον καθηγητή Χρήστο Ντούμα, Athens: I Kathimerini 2003, 331–366).

<sup>91</sup> L. Preston, ‘A mortuary perspective on political

changes in Late Minoan II–IIIB Crete’, *AJA* 108 (2004), 321–348.

<sup>92</sup> Gessell (n. 60).

<sup>93</sup> L. Preston, ‘Contextualising the larnax: Tradition, innovation and regionalism in coffin use on Late Minoan II–IIIB Crete’, *OJA* 23(2) (2004), 177–197.

<sup>94</sup> S. Voutsaki, ‘Social and political processes in the Mycenaean Argolid: The evidence from the mortuary practices’ in R. Laffineur and W. - D. Niemeier (eds.), *Politeia: Society and State in the Aegean Bronze Age. Proceedings of the 5th International Aegean Conference / 5e Rencontre égéenne internationale, University of Heidelberg, Archäologisches Institut, 10–13 April 1994* [AEGAEUM 12], Volume I, Liège: Université de Liège et UT-PASP 1995, 55–66; ‘Mortuary display, prestige and identity in the Shaft Grave Era’, in I. Kilian-Dirlmeier and M. Egg (eds.) *Eliten in der Bronzezeit. Ergebnisse zweier Kolloquien in Mainz und Athen*, Verlag des Römisch - Germanischen Zentralmuseums (Forschungsinstitut für Vor- und Frühgeschichte), Mainz: von Zabern 1999, Teil 1, 103–117.

<sup>95</sup> See also Löwe Table 4. But see the cautionary n. 52 on what she includes under ‘Tholoi’.

*direct* attempt to benefit from the dead, who were able to provide a new kind of prestige for those who could be somehow linked with them.

Of course, it is not argued that funerary rituals were ‘invented’ in this period. However, all earlier possible physical locales of such rituals seemingly *excluded* residential space and apparently took place in *extramural* burial grounds, which, as Hamilakis has influentially argued, involved the consumption of food and drink.<sup>96</sup> One possible exception to this, however, may be the skull from Room 8g in the EM II settlement of Myrtos *Phournou Koryphi*.<sup>97</sup> The view suggested here is that the LM IIIA2 developments signal a transformation of some of these rituals into more explicit socio-political statements and an emerging need for more ‘explicit’ links between *specific* living persons (in the residences where the models were found) and *specific* dead persons (those buried in the tomb implied by the model itself), which, as it will be argued below, could fit even the most critical definition of ‘ancestor worship’. This could have been a need for a more clear (and physically manifested) association of the residential and the funerary realms.

The fact that intramural burial had been extremely rare and mostly confined to specific age groups (foetuses and young infants) in Bronze Age Crete and virtually absent in the LM III period (see Appendix II) indicates that such a practice did not belong to the Minoan norms. This meant that *more indirect* solutions had to be reached for a desirable physical association of the domestic and funerary contexts. The view put forward here is that a long Minoan tradition of making terracotta models of existing architectural forms was utilized in order to produce models of tombs that could be preserved within domestic space as a symbolic bond with the deceased. It is conceivable that the strong symbolic allusions of this tomb type, formed on the basis of the background of its earlier (LH IIA onwards) monumental Mainland versions, as argued above (section III.b), made it an obvious prototype for such models, but one could also add the technical observation that it would have been easier for a potter to reproduce on a wheel the cylindrical lower part of the corbel-vaulted chamber. From this viewpoint it is important to see the emergence of this new artefact type in LM IIIA2 as linked with (a) an apparent interest in the funerary realm otherwise attested in the emergence of funerary iconography and (b) the diffusion of round tholos tombs throughout the island.

The emphasis on monumental tombs (with an impressive concentration of five remarkable examples) had initially been a LM II Knossian feature: apart from the already mentioned tholos tomb at Kephala, the other monumental LM II tombs belong to the Isopata group: the (now demolished) Royal Tomb, Tomb I, Tomb II (the so-called ‘Tomb of the Double Axes’) and Tomb V. LM II–III evidence from the ‘Temple Tomb’ (also at Knossos) may also to be seen in this light.<sup>98</sup> It is very tempting to see the striking increase in the construction of

<sup>96</sup> Y. Hamilakis ‘Eating the dead: Mortuary feasting and the politics of memory in the Aegean Bronze Age’, in K. Branigan (ed.), *Cemetery and Society in the Aegean Bronze Age* [Sheffield Studies in Aegean Archaeology 1], Sheffield: Academic Press 1998, 115–132. For funerary rituals in Prepalatial circular tombs see J. Murphy, ‘Ideologies, rites and rituals: A view of Prepalatial Minoan tholoi’, *ibid.*, 27–40.

<sup>97</sup> P. Warren, *Myrtos. An Early Bronze Age Settlement in Crete* [BSA Supplement 7], London: Thames and Hudson 1972, 83.

<sup>98</sup> For the Kephala tholos and the Isopata Royal Tomb

see *supra* n. 38. For Isopata tombs I, II and V see A. J. Evans, ‘The Tomb of the Double Axes and associated groups’, *Archaeologia* 65 (1914), 1–59. See L. Preston, ‘Mortuary practices and the negotiation of social identities at LM II Knossos’, *BSA* 94 (1999), 131–143, for the most recent and thoughtful discussion of the evidence. The so-called ‘Temple Tomb’ seems to have been misused after early LM III (Hood and Smyth (n.38), 14), one more possible indirect indication of the post-LM IIIA1 weakening of Knossos. Forthcoming work on the Temple Tomb material by Dr E. Hatzaki will certainly illuminate many aspects of this striking building.

elaborate built tombs all over the island, after the LM IIIA2 fall or decrease of the Knossian power, as a deliberate attempt to 'reproduce' or, indeed, imitate features that could be recognisable as belonging to the successful and apparently influential prototype originally set by the LM II Knossian elite. One of the side effects of the disintegration of the Knossian power (whatever its exact scale) appears to have been the abolition of this site's 'monopoly' in monumental funerary architecture that allowed (or caused) similarly aimed attempts to emerge throughout the island. Such a conclusion has also been reached by Preston in her recent contributions on the LM II–IIIB mortuary practices at Knossos.<sup>99</sup>

The presence of the realm of the dead (represented by a tomb model) within the context of the living should be primarily regarded as a very strong indication of a conscious attempt of the latter to associate themselves with the former, whether these were actual or fictitious 'ancestors.' The reproduction (in model scale) of an elite tomb type with a semantic carriage of eminence and status (even in cases where some LM or Early Iron Age examples fail to explicitly give us such a monumental impression) followed and improvised on the certainly recognisable, presumably impressive and, by then, conceptually dominant polity lines of the fallen Knossian supremacy, namely the monumentalization of funerary architecture.

A further question to be considered should be that of the possible connection of these 'tomb models' with ancestor worship. In a recent review of so-called 'ancestor cult' in Crete, J. Soles argued that, although Prepalatial and LM IB evidence for such practice is, in his view, well-documented, clear evidence in LM III is confined to the Archanes *Phourni* cemetery.<sup>100</sup> However, in doing so, Soles accepts the continuous use of the site for funerary purposes as sufficient evidence for continuity of earlier practice, which may be an argument both slippery (since continuity of practice does *not* always follow an observed continuity of use)<sup>101</sup> and circular (as the definition of this earlier practice as related to ancestors is *not* unquestionable, see below on Whitley's criticism). Many of the criteria used by Soles for identifying or, as in the case of the LM III period, rejecting 'ancestors' in the archaeological record may require reconsideration.

M. Fortes has defined ancestor reverence by the *re*-incorporation of the deceased among the community of the living,<sup>102</sup> 'accomplished by ritual and made 'tangible in precise material terms.' The ancestors are 'figuratively re-embodied' in 'material vehicles of their presence'.<sup>103</sup> J. Whitley recently delivered a sharp but carefully conducted critique of the 'employment' of

<sup>99</sup> L. Preston, 'Final Palatial Knossos and Postpalatial Crete: A mortuary perspective in political dynamics', in Cadogan, G., Hatzaki, E. and Vasilakis, A. (eds.) *Knossos: Palace, City, State. Proceedings of the Conference in Herakleion Organised by the BSA and the 23<sup>rd</sup> EPCA of Herakleion, in November 2000, for the Centenary of Sir Arthur Evans's Excavations at Knossos* [BSA Studies 12], London: BSA 2004, 137–145 (at pp. 138, 142–143). For a similar approach to Crete in general see Preston (n. 91). I arrived at a much similar conclusion independently during the preparation of this article. However, I think that the present study offers an additional support (from another, perhaps less direct, viewpoint) to this argument that is central to both articles by Preston.

<sup>100</sup> J. S. Soles, 'Reverence for dead ancestors in prehistoric Crete' in R. Laffineur and R. Hägg (eds.), *Potnia: Deities and Religion in the Aegean Bronze Age. Proceedings of the 8th International Aegean Conference / 8e*

*Rencontre égéenne internationale. Göteborg, Göteborg University, 12–15 April 2000*, Liège: Université de Liège. 229–236 (at p. 233, n.13).

<sup>101</sup> On this methodological issue see S. G. Cole, 'Archaeology and religion', in N. C. Wilkie and W. D. E. Coulson (eds.), *Contributions to Aegean Archaeology: Studies in Honour of William A. McDonald* [Publications in Ancient Studies 1], Minneapolis: Centre for Ancient Studies, University of Minnesota, 49–59.

<sup>102</sup> M. Fortes, 'An introductory commentary', in W. Newell (ed.) *Ancestors*, The Hague: Mouton 1976, 1–16 (at p. 7).

<sup>103</sup> Soles (n. 100), 229 (internal quotations from Fortes (n. 102), 7). Soles (n. 100), 229 mentions 'memorial tablets, totem poles, shrines and altars, or larger monuments like spirit houses, temple tombs and pyramids', as examples of such 'material vehicles'.

ancestors in interpretation schemes of prehistory.<sup>104</sup> Of the many intriguing notes of caution he raises, one is of special interest here, namely his observation that ‘rites of burial and rites of ‘ancestor worship’ are ritually and often *spatially distinct*. Ancestors are frequently revered in places which bear no obvious relation to the place of burial’.<sup>105</sup> In addition, Whitley emphasises that ‘ancestorhood is an *achieved* status (. . .). Ancestors are the elect of the dead, those whom later generations regard as important’.<sup>106</sup>

Both of Whitley’s criteria are satisfied by LM III ‘tholos tomb models’:<sup>107</sup> the latter are found in contexts distinct from *formal* burial grounds and their prototype is a tomb type which has a background of receiving elite burials (see section III.b above), of dead whom the living presumably regarded as important. In conclusion, theoretical discussion presented summarily above supports the interpretation of the LM III ‘tomb models’ as ‘material vehicles’ for ‘ancestor worship.’

A last question for consideration would be whether more precise suggestions could be made with regard to the operation of these models as material vehicles of ‘ancestor reverence.’ It must also be stated that such a consideration is not incompatible with their possible function as conceptual substitutes for the absent intramural interments, as the two answer different questions: ‘ancestor reverence’ has been employed here to explain the placement of the tomb model within residential space, while the absence of adult intramural burial is considered as providing a possible reason for preferring the model of the tomb to the physical remains of the deceased as the material manifestation of this practice.

Although the absence of relevant textual evidence prevents any current analysis from being conclusive, it may be possible to consider two features of the prototype (tholos tomb) as starting points for relevant suggestions: the possible function of the tholoi as family or clan tombs and their plausible status connotations. It is conceivable that models of such tombs operated as evocations of the dead members of an important family/clan in the minds of the living members and thus ensured the strengthening of bonds among the latter, a key feature of ancestor reverence. Such a collective symbolization of the deceased in the image of the tomb alone (in contrast to the individual representation of a particular deceased) is also quite compatible with the dominant LM III (and dominant in LBA Aegean in general) mortuary practice, multiple burial in collective (either cut or built) re-user friendly tomb types. This practice of placing many interments in the same tomb could have allowed for the *common* tomb of many deceased family/clan members to become the single sufficient symbolic image of their now ‘achieved’ (in Whitley’s words) status as reverence-deserving ancestors.

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<sup>104</sup> J. Whitley, ‘Too many ancestors’, *Antiquity* 76 (2002), 119–126. See also the response by M. Pitt ‘Don’t knock the ancestors’, *Antiquity* 77 (2003), 172–178, who stresses the widespread universal interest in ancestors and the subsequent response by Whitley in *Antiquity* 77 (2003), 401. This debate however, does not seriously affect the argument developed here.

<sup>105</sup> Whitley (n. 104), 122 [my italics].

<sup>106</sup> Whitley (n. 104), 122 [my italics].

<sup>107</sup> Another criterion set by Whitley is that ‘being forebears, ancestors have to be linked to present generations through descent, through rituals that emphasise the idea of *continuity*’ (Whitley (n. 104), 122 [my italics]). The detection of such a criterion is not possible in LM III Crete, because of the lack of relevant textual evidence that would have made the ideological content of the material traces of ritual more explicit.

APPENDIX I: LIST OF THOLOS TOMBS WITH CIRCULAR GROUND  
PLAN IN USE IN LATE MINOAN III AND EARLY IRON AGE

All references to pages, catalogue numbers or figures are to Löwe, except where otherwise noted (Abbreviations for dates in parentheses LM = Late Minoan, SM = Sub Minoan, PG = Protogeometric, G = Geometric, O = Orientalizing; the data are also presented in Table 2).

East Crete: Achladia *Platyskinos* (LM IIIA and LG) (109, Cat. No.1), Zenia (Mirambello region) (LM IIIB–IIIC),<sup>108</sup> Vassiliki *Aghios Theodoros* (LM IIIC) (165, Cat. No.327), Vassiliki *Kamaraki* (LM IIIC and PG),<sup>109</sup> Chalasmenos (LM IIIC),<sup>110</sup> Karphi *Ta Mnemata* tombs 13<sup>111</sup> and 14 (130, Cat. No.136) (LM IIIC–PG?), Praesos tomb A (LM III?, LG to Early O),<sup>112</sup> Plati *Ta Skalia* (idiosyncratic shape) (LM III) (159, Cat. No.292), Ziros (LM III) (169, Cat. No. 344), Kavousi *Skouriasmenos* (LM III?–LG–Early O),<sup>113</sup> Anavlochos *Lami* (SM–Late PG) (114, Cat. No. 41), Kavousi *Vronda* tombs A (SM–PG B?) and 1 (SM–Early PG) (133, Cat. Nos.152–153), Vrokastro *Kopranes* tombs V (‘roughly circular’ ground plan) and VI (SM–PG) (167, Cat. Nos. 333–334).<sup>114</sup>

Central Crete: Knossos *Kephala* (LM II–IIIA, IIIC),<sup>115</sup> Archanes *Phourni* tombs A (LM IIIA) and D (LM IIIA<sub>2</sub> and SM) (177–178, Cat. Nos.389, 391), Kamares *Tis Kaimenis Sopotan* tombs 1–5 (‘Mycenaean’/ LM III? / perhaps lasting through SM) (194, Cat. Nos. 463–467), Knossos *Khanialle Tekke* (LM III and PG to Late O) (204, Cat. No.522, fig.24), Erganos tombs 1–3, Erganos *Xenotaphia* 1–2 (‘Mycenaean’/ LM III?) (256, Cat. Nos. 788–792), Kourtes *Tou Frankou i Kathekla* tombs 1–3 (SM–G),<sup>116</sup> Eltyna (PG B),<sup>117</sup> Rhotasi (two tombs: PG and G),<sup>118</sup> Gortys *Aghios Georghios* (PG),<sup>119</sup> Kounavoi (‘elliptical’ ground plan) (PG),<sup>120</sup> Prinias *Sideropilias* tomb AQ (PG–G)<sup>121</sup> and Arkades tombs E, G, R, M and L (G).<sup>122</sup>

<sup>108</sup> Th. Heliopoulos, ‘Zένια Μιραμπέλλου’, *ADeltion* 53 B’3 (1998), 881, pl. 389b.

<sup>109</sup> M. Tsipopoulou, L. Vagnetti and M. Liston, ‘New evidence for the Dark Ages in the Isthmus of Hierapetra. An uplundered tholos tomb at Vasiliki’, *SMEA* 45 (2003), 85–124; M. Tsipopoulou, ‘Mycenaean’ at the Isthmus of Hierapetra: Some (preliminary) thoughts on the foundation of the (Eteo)cretan cultural identity’, in A. L. d’Agata and J. Moody (ed.) *Ariadne’s Threads. Connections Between Crete and the Greek Mainland in Late Minoan III (LM IIIA<sub>2</sub> to LM IIIC). Proceedings of the International Workshop held at Athens SAI, 5-6/04/03* [TRIPODES 3], Athens: SAI 2005, 303–333 (at pp. 328–329). M. Tsipopoulou, *H Ανατολική Κρήτη στην Πρώιμη Εποχή του Σιδήρου*, Herakleion: Ministry of Culture/Archaeologiko Institutou Kritologikon Spoudon 2006, 71, 331.

<sup>110</sup> M. Tsipopoulou and K. Nowicki, ‘Μινωίτες και Μυκηναίοι στο τέλος της Εποχής του Χαλκού στην Ανατολική Κρήτη’, in N. Kyparissi–Apostolika and M. Papakonstantinou (eds.) *The Periphery of the Mycenaean World. Second International Interdisciplinary Colloquium 26–30 September 1999*, Athens: Ministry of Culture, 14<sup>th</sup> EPCA 2003, 561–580 (at p. 563, fig.18).

<sup>111</sup> Tomb 13 appears to be just a stone circle, but it was most likely a tholos with only its lower course of stones preserved. J. Pendlebury, ‘Excavations in the plain of Lasithi’, *BSA* 37 (1937–1938), 106, pl. 11. This tomb is not included in Löwe.

<sup>112</sup> Bosanquet (n. 39) and Tsipopoulou 2006 (n.109), 241, 342.

<sup>113</sup> M. Tsipopoulou, ‘Τάφοι της Πρώιμης Εποχής του Σιδήρου στην Ανατολική Κρήτη’, in ΕΙΛΑΠΙΝΗ. Τιμητικός

τόμος για τον καθηγητή Νικόλαο Πλάτωνα, Herakleion: Vikelaia Vivliothiki 1987, 253–269, (257–258) and Tsipopoulou 2006 (n.109), 326.

<sup>114</sup> The Vrokastro ‘chamber tombs’ noted by Hall are in fact built tombs. Löwe 167 notes dimensions of Vrokastro V as if the chamber is rectangular; however, Hall notes clearly that the ground plan is circular: E. H. Hall, *Excavations in Eastern Crete, Vrokastro*, The Museum Anthropological Publications volume 3, Philadelphia: The University Museum 1914, 149.

<sup>115</sup> Löwe, 211–212, Cat. No. 553, with earlier references. See also *supra* n. 38 for the chronology of the tomb.

<sup>116</sup> F. Hahlber, ‘Three Cretan necropoleis’, *AJA* 5 (1901), 287–293; A. Taramelli, ‘Notes on the necropolis of Courtes’, *AJA* 5 (1901), 294–301. Hahlber notes the ‘omega’ shaped ground plans of the tombs (289). See also Roschetti (n. 77) on the chronology of Kourtes.

<sup>117</sup> Englezou (n. 21), 421–422, fig. 37.1. It must be noted that the construction of the Eltyna tholos had destroyed earlier chamber tombs at the site.

<sup>118</sup> N. Platon, *CretChron H’* (1954), 516; St. Alexiou, ‘Άνασκαφή γεωμετρικού θολωτού τάφου Ροτασίου’, *CretChron IB’* (1958), 468 respectively.

<sup>119</sup> St. Alexiou, *ADeltion* 22 B’2 (1967), 485–486, pl. 358d.

<sup>120</sup> G. Rethemiotakis, ‘Κούναβοι’, *ADeltion* 53 B’3 (1998), 846.

<sup>121</sup> G. Rizza, ‘Prinias’, *ADeltion* 28 B’2 (1973), 579–580, pl.548b–d.

<sup>122</sup> D. Levi, ‘Arkades - La Necropoli: Tombe construite ed edifici diversi’, *Annuario X–XII* (1927–1929),

West Crete: Armenoi *Prinokephalo* tomb 200 (LM II/III A1–III A2),<sup>123</sup> Apodoulou *Aigidomandra* (LM III A–B), Apodoulou *Psila Chomata* tomb 2 (LM III A), Apodoulou *Phrankou To Louri* tombs 3–6 (LM III A, III B, III A2–B and III B respectively), Apodoulou *Sopatakia* (LM III B) (259–260, Abb. 13, Cat. Nos. 801–806),<sup>124</sup> Margharites (Mylopotamos district) (LM III A2–III B),<sup>125</sup> Sata *Lagoudhi* (LM III A2–B) (322, Cat. No. 1169), and Stylos *Sternaki* (LM III B) (323, Cat. No. 1173).

The Geometric tomb at Agies Paraskies and the Early Iron Age Agios Georgios Papoura (Lasithi)<sup>126</sup> tombs have not been included here, as they seem to follow the EM tradition of free, above ground circular structures.<sup>127</sup> However, it is still valid to quote N. Platon in that safe ‘παραδείγματα ἐξ ολοκλήρου ἐλευθέρων θόλων κατὰ τὴν YM ἐποχὴν εἰς τὴν Κρήτην δὲν γνωρίζομεν ἐπὶ τοῦ παρόντος’.<sup>128</sup> It is uncertain whether the continuous use of Prepalatial circular tombs in LM times (as documented in LM III A2 finds from Kamilari and LM III A2–B finds from Haghia Triadha tomb B) would suffice to preserve the tradition of construction (and not just use) of such tombs up to the Early Iron Age. It would be more likely that, for some reason, we have not yet detected LM evidence for this continuity.

#### APPENDIX II: INTRAMURAL BURIALS IN LATE MINOAN–EARLY IRON AGE CRETE

The absence of intramural burials from LM III Crete as noted in the main text calls for some further discussion of the evidence. Since a burial can only be characterized as ‘intramural’ when placed within the limits of a *living* settlement, the cases of Mochlos and Gournia, where LM III interments were made in settlement areas abandoned since LM IB, do not constitute evidence for true intramural burials. In Gournia, fragments from an early LM III B larnax were recovered in an abandoned LM I building in E 58.<sup>129</sup> Graves 1–7 in Buildings A and B at the Artisan’s Quarter at Mochlos are stratigraphically ‘intrusive’ and date in LM III A2–B1.<sup>130</sup> Grave 8, the only burial possibly contemporary with the Neopalatial use of the quarter, probably dates to LM IB.<sup>131</sup>

174–380. Tomb E: 193–195, pl. 4; Tomb G: 198, pl. 4; Tomb R (the largest tholos): 202–304, pls. 4, 5; Tomb M: 304–312, pl. 4 (303, fig. 403); Tomb L: 312–380, pl. 4 (313, fig. 411 a–b).

<sup>123</sup> Löwe 295, Cat. No. 1009; E. Papadopoulou, ‘Une tombe à tholos ‘intra muros’: le cas du cimetière MR d’Arménio’, in J. Driessen and A. Farnoux (eds.), *La Crète Mycénienne. Actes de la Table Ronde Internationale Organisée par l’École Française d’Athènes 26–28 Mars 1991*, Paris: Boccard 1997, 319–340.

<sup>124</sup> For Apodoulou also see A. Kanta, ‘Late Bronze Age tholos tombs, origins and evolution. The missing links’, in J. Driessen and A. Farnoux (eds.), *La Crète Mycénienne. Actes de la Table Ronde Internationale Organisée par l’École Française d’Athènes 26–28 Mars 1991*, Paris: Boccard 1997, 229–247, where it is argued that the Apodoulou tholos tombs may be intermediate types between EM circular tombs and Mycenaean tholoi, a view not shared in the present work.

<sup>125</sup> Papadopoulou (n. 40).

<sup>126</sup> Tsiopoulou (n. 113), 254.

<sup>127</sup> J. D. S. Pendlebury, *The Archaeology of Crete*, London 1939, 319, 324; N. Platon, ‘Γεωμετρικός τάφος Αγίων Παρασκευίων Ηρακλείου’, *ArchEph* 1945–1947, 47–97. N. Platon (ibid., 71–72, n. 4–11) quotes all examples of Post-Minoan circular tholos tombs then known.

<sup>128</sup> N. Platon (n. 127), 72.

<sup>129</sup> Only fragments of a larnax (type not mentioned) with a ‘debased octopus design’ were discovered associated with a double bowl (no. 6 in the original) and an untypical figurine of a pregnant woman (no. 11 in the original). Cypriote parallels suggested to Boyd Hawes that the figurine represented the mourner (‘probably the widow’) rather than the deceased. However, this speculation remains unsupported by the scanty bone material associated with the larnax fragments. Reference: H. Boyd Hawes, *Gournia, Vasiliki and Other Prehistoric Sites on the Isthmus of Hierapetra, Crete*, Philadelphia: The American Exploration Society 1908, 46a, pl. 10, nos. 6, 11). An early LM III B date for the larnax is provided by Kanta, *The Late Minoan III period in Crete. A Survey of Sites, Pottery and their Distribution*, SIMA LVIII, Göteborg: Paul Åströms Förlag 1980, 140. For the figurine see Rethemiotakis (n. 11), 20, no. 10, pl. 23c–d.

<sup>130</sup> J. S. Soles, *Mochlos 1A. Period III, Neopalatial Settlement on the Coast: The Artisan’s Quarter and the Farmhouse at Chalinomouri. The Sites*, Prehistory Monograph 7, Pennsylvania: INSTAP Academic Press 2003, 33–34, 41–42, 64, 67, 135–145 (135), figs. 77–83, pls. 33–36, Table 1.

<sup>131</sup> Soles (n. 130), 145. Its probable LM IB date is mentioned in p. 24. The certainty about its contem-

However, burials of foetuses and infants within living space are only very occasionally attested in LM and Early Iron Age Cretan contexts. Mochlos grave 8, being the burial of an infant, agrees with the occasional character of this practice, also paralleled in three (probably LM I–II) foetuses and one infant burial from the Unexplored Mansion (Rooms C, M and Corridor L (2) respectively)<sup>132</sup> and a foetus burial under the LM IIIB2 floor of Room E at Kastelli (Chania).<sup>133</sup> In the Early Iron Age relevant evidence is confined of infant burials under floors at Vrokastro, which is a *unicum* for Crete in this period.<sup>134</sup> The exceptional character of the intramural practice cannot be disconnected from the age of the deceased. Ethnographic parallels support the suggestion that deceased foetuses and newborn infants were subject to exceptional treatment; a parallel from modern tribal communities in Northern Thailand, mentioned by McGeorge, refers to the belief that ‘infants who die within days of their birth are believed to continue to belong to the spirit world’ and were subsequently buried under floors near indoor hearths, a practice that can be exactly paralleled with the case of the LM IIIB2 Chania foetus.<sup>135</sup>

The pattern observed in the Unexplored Mansion may also be meaningful; of the four intramural burials, the only one that received a more caring arrangement was the 2-week old infant, which was found buried in a cist at the west end of Corridor L.<sup>136</sup> Burials 1 and 2 (foetuses) were simply placed under floors and burial 3 (which, however, may not be of Minoan date) was found along with debris.<sup>137</sup> It could be interesting to suggest that this extra care was only due to the fact that the deceased had already being born and thus considered a family member proper.

#### APPENDIX III: A SYRIAN LBA PARALLEL? ARCHITECTURAL TERRACOTTA MODELS AND FUNERARY RITUALS IN EMAR (MIDDLE EUPHRATES)

The investigation of the LBA settlement at Tell Meskene (Emar) has yielded a significant group of terracotta artefacts,<sup>138</sup> unanimously interpreted as ‘architectural models’, which were found in residential spaces. As the relatively short-lived LBA town, these models date to the 13th or early 12th century BC (LM IIIB in rough Minoan terms). In his publication and discussion of the prototype of these models, Margueron focuses his discussion in the ‘temple or residence’ dilemma and concludes that it is more likely that they represent residential space.<sup>139</sup> However, it must be made clear that most of the models are in a fragmentary state with no clear contextual associations, although a number of examples may be connected

poraneity with the settlement is due to the fact that the burial ‘was sealed under wall and roof-collapse without clearly identifiable LM III pottery’ and therefore ‘was not intrusive like Graves 1 to 7’ (p. 145).

<sup>132</sup> J. H. Musgrave, ‘Appendix 3: The human skeletons’ in M. R. Popham (ed.) *The Minoan Unexplored Mansion at Knossos*, BSA Supplementary volume 17, London: Thames and Hudson 1984, 309–310, Table 1. Only Burial 4 was 2 weeks old; burials 1–3 were foetuses between 32 and 38 weeks of intrauterine life.

<sup>133</sup> O. Persson and E. Persson ‘A note on the foetus’, in E. and B. Hallager (eds.), *The Greek–Swedish Excavations at the Agia Aikaterini Square Kastelli, Chania 1970–1987 and 2001*, III:1 *The Late Minoan IIIB:2 Settlement*, Skrifter Utgivna an Svenska Institutet i Athen (4°) XLVII:III:1, Stockholm 2003, 276, fig. 52.

<sup>134</sup> Hall (n.114), 123: ‘burials of *children* beneath the floors’ [my italics]; Tsipopoulou (n.113), 254.

<sup>135</sup> P. J. McGeorge, ‘Appendix 3: Intramural infant burials in the Aegean’, in E. and B. Hallager (eds.), *The Greek–Swedish Excavations at the Agia Aikaterini Square Kastelli, Chania 1970–1987 and 2001*, III:1 *The Late Minoan IIIB:2 Settlement*, Skrifter Utgivna an Svenska Institutet i Athen (4°) XLVII:III:1, Stockholm 2003, 301–303 (302).

<sup>136</sup> Musgrave (n. 132), 309, Table 1, pl. 33b.

<sup>137</sup> Musgrave (n. 132), 309, Table 1.

<sup>138</sup> J. Margueron, ‘Maquettes architecturales’ de Meskene–Emar’, *Syria* 53 (1976), 193–232; B. Muller, ‘Deux nouvelles ‘maquettes architecturales’ en terre cuite du moyen-Euphrate syrien’, *Syria* 83 (1995), 357–380.

<sup>139</sup> Margueron (n.138), 229–232.

with residence's foundation deposits. Excavations at Emar have not yet brought to light the LBA cemetery, so that it is not possible to judge whether funerary architecture could have been the prototype.

van der Toorn has put forward the attractive interpretation of the house model as a three-dimensional picturing of the abandoned ancestral home.<sup>140</sup> However, the assumption that ancestors were deified at LBA Emar, also supported by van der Toorn, is solely based on ambiguous interpretations of the textual evidence. Schmidt has recently criticized the connection between the 'family dead' and the 'family gods' in the Emar texts (represented by the terms *mētū* and *ilānu*) on the basis of the reasonable observation that, although both terms figure in the same texts, *different* terms are used for them.<sup>141</sup> In Schmidt's view, textual evidence supports the view that the gods and the dead were *not* identical, yet *closely* linked in these ritual actions. Notwithstanding this critique on deified ancestors, the undeniable existence of funerary rituals in domestic contexts is sufficient to make van der Toorn's interpretation worth mentioning.

A recent reconsideration of comparable cylindrical models from the Syrian LBA urban centre of Ugarit (Ras Shamra) by Caubet and Yon<sup>142</sup> proposed an inverse relationship between the presence of *intra muros* burials in Ugarit and the presence of similar models in household contexts from LBA urban centre of Tell Meskene (Emar). Caubet and Yon link the rarity of such models in Ugarit (only two have been so far detected) with the presence of collective built tombs, including the most elaborate ones, *under* the floors of contemporary residences in Ugarit.<sup>143</sup> It must be considered as certain that the Emar LBA burial ground laid outside the borders of the settlement; the only LBA intramural burial found in the entire Emar excavation belonged to an infant,<sup>144</sup> a pattern reminiscent of the LM III and Early Iron Age Cretan situation (see Appendix II). Caubet and Yon contrast the rarity of models from Ugarit with the abundance of the Emar material and connect it with the vice versa pattern in the presence of intramural interments.

Textual evidence from Emar allows reconstruction of complex funerary rituals that have been interpreted as cult of the dead accompanied with lamentations and the 'utilization' of the power of the deceased for the benefit of the living community.<sup>145</sup> Although it is difficult

<sup>140</sup> K. van der Toorn, 'Gods and ancestors in Emar and Nuzi', *Zeitschrift für Assyriologie und vorderasiatische Archäologie* 34 (1994), 30–48 (at p. 37).

<sup>141</sup> B. B. Schmidt, 'The gods and the dead of the domestic cult at Emar: A re-assessment', in M. W. Chavalas (ed.), *Emar: The History, Religion and Culture of a Syrian Town in the Late Bronze Age*, Bethesda, Maryland 1996, 141–163 (esp. pp. 151–152, n. 33 for criticism on van der Toorn). Also critical of the idea of deified ancestors in Emar is W. T. Pitard, 'Care of the dead at Emar', *ibid.*, 123–140.

<sup>142</sup> A. Caubet, A. and M. Yon, 'Ougarit et les maquettes architecturales', in *Maquettes Colloque*, 463–471. Despite the morphological similarities, the analogy between Syrian and Cretan examples is not convincing, since Syrian sites have not yielded tomb types that could have served as prototypes for such 'models'. There are some admittedly interesting similarities between the Cretan models and the earlier (15<sup>th</sup> cent. BC) models from Ugarit, which are also cylindrical and have a conical 'roof'. However, as already noted, Ugarit lacks entirely

actual architectural prototypes for these models, which are also very limited in number (just two) and do not have a safe context. Alexiou, in the first publication of the Archanes model ('Πρωτογεωμετρικός ναύσκος της Συλλογής Γιαμαλάκη', *CretChron* 4 (1959), 441–462), has, among others, examined the possibility that the Ugarit models were the prototypes of the Cretan examples, a view that is not shared here (in accordance with Mersereau 3), predominantly because there is no comprehensive background for such a cultural transmission, which could have created such a long-lived tradition in Crete long after the kingdom of Ugarit had ceased to exist.

<sup>143</sup> Caubet and Yon (n. 142), 469, report the impressive ratio 'd'une tombe par maison' in Ugarit.

<sup>144</sup> Pitard (n. 141), 139. The burial has been published by M. Goffinet, 'Les tombes', in E. Beyer (ed.) *Meskene-Emar: Dix Ans des Travaux 1972–1982*, Paris: Éditions Recherche sur les Civilisations 1982, 137–139.

<sup>145</sup> Schmidt (n. 141); Pitard (n. 141); Caubet and Yon (n. 142), 468.

to be more precise about the character of these rituals, it is certain that the 'living felt a significant obligation to care for their dead in a way similar to their concern for maintaining a cultic relationship with their family gods'.<sup>146</sup> Schmidt attempts to interpret the interest towards such rituals as reflecting 'a concern to establish and maintain family property' that led to the contextual link between 'two otherwise distinct cults dedicated to the family gods and [...] sustaining the *memory* of the family dead'.<sup>147</sup>

Caubet and Yon have put forward the thought-provoking interpretation that the abundance of models in the Emar residences were a part of the cult equipment used for such complex funerary rituals that emphasized 'l'association des morts à la famille, à la vie quotidienne, dans la maison'.<sup>148</sup> It is indeed attractive to suggest that the Emar terracotta models in a way *substituted* for the absence of intramural tombs.

Although any aspect of such an interpretation should not be applied uncritically to the Cretan evidence, its correspondence with the Cretan situation as deriving from the interpretation of the cylindrical models as model tholoi justifies its reference here. Of course, it is not possible to suggest that the Cretan cylindrical models emerged as a result of direct Syrian influence on Cretan mortuary practice (or even *vice versa*), especially as the Emar models do not show any morphological affinity with the Cretan material. As a parallel, the Emar evidence may provide some idea of a genre of funerary ritual that was capable of existing in a (partly) contemporary Eastern Mediterranean society. However, its effective use in this approach to the Cretan material can only be justified if documented as emerging from broadly similar circumstances.

At this point, it may be important to take a brief look at the political environment in which the Emar terracotta models were produced and utilized. Evidence for some degree of Hittite control over thirteenth-century BC Emar (as with northern Syria in general) is supported by both textual sources and material (primarily architectural) evidence.<sup>149</sup> Fleming has discussed the role of religious activity at Emar in preserving the Syrian identity of the population under Hittite hegemony.<sup>150</sup> Fleming wisely confined his analysis to the more elaborate public festivals that engaged the participation of the local elite and for which sufficiently explicit textual evidence is available. However, could one suggest that the emergence of less flamboyant forms of rituals that were *reserved* for the domestic realm implicated a more purposeful preservation of a distinct connection with 'ancestral' figures who, having lived prior to Hittite dominance, symbolised a link with an un-suppressed and, therefore, 'un-Hittite' past? However, the Cretan picture is more likely to be one of decentralization and developing regionalism, rather than political suppression. However, if the suggestions about the Cretan models offered in the main text are accepted, a plausible linkage of the Emar models with the political landscape of northern Syria may hint at the potential role of the Cretan tomb models as material exemplifications of socio-political statements (though quite different from the Syrian ones) in post-LM IIIA1 Crete.

<sup>146</sup> Pitard (n. 141), 140.

<sup>147</sup> Schmidt (n. 141), 163 [original italics].

<sup>148</sup> Caubet and Yon (n. 142), 469.

<sup>149</sup> G. Beckman, 'Emar and its archives' and W. T. Pitard, 'The archaeology of Emar', in M. W. Chavalas (ed.), *Emar: The History, Religion and Culture of a Syrian Town in the Late Bronze Age*, Bethesda, Maryland 1996, 1–12 (6), 13–23 (16–17) respectively. Relevant evidence from Hittite documents is discussed by E. Laroche, 'Emar,

étape entre Babylone et le Hatti', in J. Margueron (ed.), *Le Moyen Euphrate: Zone des Contacts et d'Echanges. Acts du Colloque du Strasbourg 10-12 mars 1977*, Strasbourg: Université des Sciences Humaines 1980, 235–244.

<sup>150</sup> D. Fleming, 'The Emar festivals: City unity and Syrian identity under Hittite hegemony', in M. W. Chavalas (ed.), *Emar: The History, Religion and Culture of a Syrian Town in the Late Bronze Age*, Bethesda, Maryland 1996, 81–121.