From Birth to Burial: Connections to Fertility and Maternity in the Intramural Infant Burial Containers of Late Bronze Age Crete

Master’s Thesis

Presented to
The Faculty of the Graduate School of Arts and Sciences
Brandeis University
Graduate Program in Ancient Greek and Roman Studies
Andrew Koh, Advisor

In Partial Fulfillment
of the Requirements for the Degree

Master of Arts

by
Sarah Schofield

May 2014
Acknowledgements

First and foremost, I would like to offer my thanks to the perpetually supportive, engaging, and knowledgable community of scholars who comprise the Graduate Program in Ancient Greek and Roman Studies. Especial gratitude goes to Professor Andrew Koh, who has been an unendingly supportive, patient, helpful, and encouraging advisor, and who has greatly furthered my understanding of Classical archaeology. He has provided me with innumerable opportunities that have improved the quality of my work, and I could not have pursued this project without his guidance. My thanks also go to Professor Ann Olga Koloski-Ostrow, whose readership and suggestions produced the very best version of this thesis, and who has always been a warm and welcoming leader of our department. Prof. Koh and Prof. Koloski-Ostrow have supported me unfailingly in my educational goals, and helped me to grow both as a person and as a scholar. I am very grateful to have had them as mentors, and I am greatly looking forward to continually working with them as I pursue further education at Brandeis.

My peers have been incredibly reassuring and ever-helpful, and special thanks must go out to all of them. Their friendship and encouragement made this process all the easier.

Lastly, my family has always provided me with endless amounts of motivation and support. Without them, my attendance of graduate school would not have been possible. Thanks to all of them, and especially to Nic, for always listening, and for never even suggesting that my fascination with infant burials is terribly creepy.
ABSTRACT

From Birth to Burial: Connections to Fertility and Maternity in the Intramural Infant Container Burials of Late Bronze Age Crete

A thesis presented to the Graduate Program in Ancient Greek and Roman Studies
Brandeis University
Waltham, MA

By Sarah Schofield

The topic of intramural infant container burials of Late Bronze Age Crete has been largely neglected in recent scholarship. Despite the near-ubiquity of the practice in various ancient European cultures from the Neolithic era onward, the relatively few examples found in LBA Cretan contexts have not been comprehensively explored. While some scholars have offered theories regarding intramural infant container burials holding some greater significance as representational of birth, rebirth, and fertility, this thesis sets out to better and more thoroughly demonstrate that the specific instances of these burials in LBA Crete were deliberately used to create connections to maternity and fertility, through a holistic examination of archaeological evidence surrounding each example. Instances of intramural infant container burials have been found at the sites of Petras, Sissi, Palaikastro, Phaistos, and Knossos. The evidence from each site is carefully presented and analyzed, with particular attention given to the contextual location of each burial within the domestic setting, and associated vessels and other objects of material culture. Ultimately, I conclude that the deliberate choice to bury these infants in spaces that were primarily dominated by the presence of female domestic work, in vessels often associated with feminine ownership and household industry, at times with objects representing commemoration, birth, and rebirth.
represents an intentional attempt to forge connections between the death and burial of the infant to the idea of maternity and household fertility.
# Table of Contents

List of Tables ........................................................................................................... vii

Introduction ............................................................................................................. Page 1

Chapter 1: Introduction to Infant Intramural Burials.............................................. Page 5

Chapter 2: Summary of Intramural Infant Container Burial Practices on Crete... Page 10

Chapter 3: Case Studies — Petras, Sissi, Palaikastro, Phaistos, and Knossos.. Page 16

3.1: Petras Burial........................................................................................................ Page 16

3.2: Sissi Burials....................................................................................................... Page 21

3.3: Palaikastro Burial............................................................................................. Page 27

3.4: Phaistos Burials................................................................................................. Page 32

3.5: Knossos Burials................................................................................................. Page 35

Chapter 4: Conclusions, Trends, and Observations............................................. Page 37

Chapter 5: Future Scholarship................................................................................. Page 44

Bibliography............................................................................................................ Page 48
List of Tables

Table 1: Known Intramural Infant Container Burials of Late Bronze Age Crete… Page 46
Introduction

The practice of intramural infant container burial is omnipresent in the ancient European world, with the earliest surviving archaeological examples dating to Neolithic settlements in present day Turkey (Bacvarov 2008: 61). This practice is likely Near Eastern in origin, and began at the onset of the Neolithic Revolution, which saw a considerable increase in sedentary populations with defined, permanent domiciles, allowing burial within a stable dwelling space to be possible (Kuijt 2001: 80-99). High infant and maternal mortality rates in the prehistoric era made the death of infants and mothers a nearly inescapable part of daily life. Infant death, and consequent disposal of the resulting corpses, would have been an ever-present issue in the ancient world. Despite this, the analysis of infant burials remains a niche market of sorts, restrained to a relatively small arena of scholarship covered by few individuals beyond inclusion of preliminary findings found in site reports.

The study of intramural infant burials on Crete, in particular, has suffered from a lack of scholarly attention. Archaeological assessment of the infant container burial practice is often complicated by the delicate taphonomic processes of infant remains, which are far more likely to degrade severely or disappear entirely after long periods of interment than their adult counterparts. This lack of remains can result in archaeologists’ reluctance to identify positively jars that bear strong circumstantial evidence of being infant burial repositories, but which lack extant remains, as infant
burials. Furthermore, within the corpus of published works that do consider these burials, much of the material hinges upon a biological examination of the skeletal remains themselves in order to determine age and the status of the infant’s health, most often electing to offer up a precursory summary of typology of burial vessels as funerary objects, with little or no further study of said vessels, and no attempts made to extrapolate social attitudes toward infant death and how they may have shaped infant funerary procedure. Infant remains, due to their fragile nature and small size, often are not well-suited to this type of biological analysis. Not to say that a biological perspective is incorrect or somehow unimportant, but rather, a crucial element of a more appropriate, inclusive approach to infant intramural burial examination that incorporates multiple techniques in order to gain broader insight into the traditions of intramural infant container burial. Additionally, discussion of infant container burials are often omitted from the larger conversation regarding container burials, as a general topic.

Thankfully, the archaeological community mostly seems to have moved past the ever-popular debate regarding the idea that intramural infant burials may be the end result of child sacrifice. The literary dialogue concerning this potential phenomenon constitute the most attention that infant jar burials received in earlier parts of the twentieth century (eg: W.H. Wood 1910: 166-175). At the date of this writing, the only scholar who has published secondary material analyzing infant intramural container burial practices in Late Bronze Age Crete is Dr. P.J.P. McGeorge, a physical anthropologist and archaeologist working on the island of Crete, who has published two lengthy and extremely informative articles on the subject, and has more publications on the subject forthcoming. McGeorge has worked most extensively on the site of Petras,
in eastern Crete, and the single intramural infant burial container recovered from the site; as a logical result, the Petras burial has been the most thoroughly analyzed of its ilk in published literature.

In her work, McGeorge proposes some potential explanation for the practice and significance of intramural infant container burials in Late Bronze Age Crete, but stops short of collating additional evidence and delving further into surrounding circumstances of the burials that would better serve to demonstrate convincingly the validity of her theories. I hope that this paper further augments and reinforces theories such as those presented in McGeorge’s work. Through the use of an approach which more broadly encompasses all available evidence, I intend persuasively to argue that the practice of intramural infant container burials in Crete during the Late Bronze Age as seen through evidence from the archaeological record was an intentional, meaningful process, full of thought-out choices made by individuals, and that the practice was perhaps employed by the living in order to maintain both connections between the infant and female members of the household, and to represent and/or ensure the continued fertility of the household.

In the introduction of this paper, I set out my research aims, and begin to familiarize the reader with the concepts presented herein. This section introduces the reader to the topic of infant intramural container burials, and help explicate precisely why this thesis has been pursued. It also offers the reader the parameters of this paper in terms of geography, chronology, and selected terminology.

Chapter 2 gives a summarized background of infant intramural container burials in the ancient world, and covers the appearance of the practice on Crete early in the
Late Bronze Age. This section, in addition, briefly presents traditional Minoan customs of burial of the dead as a comparative practice to intramural container burials. Chapter 2 also contains some generalized information regarding past scholarship on intramural infant container burials, and outlines the more practical aspects of the tradition.

Chapter 3 includes case studies of the four sites from Late Bronze Age Crete where infant intramural container burials have been found, ordered chronologically: Petras, Sissi, Palaikastro, Phaistos, and Knossos. Archaeological evidence collated from site reports and secondary publications will be combined with supporting scholarship in order to present the potential connection between infant intramural container burials and fertility ritual.

Chapter 4 presents the conclusions that I have been able to draw from the combination of available evidence, and suggests overall trends. Chapter 5 presents my thoughts regarding the potential for future scholarship on the subject.
Chapter 1: Introduction to Intramural Infant Burials

In this thesis, I have endeavored to demonstrate the connections to fertility and maternity forged by those who practiced infant intramural container burials by inclusively considering a manner of things, including the burial containers, position of burial within the home, location of burial relative to the overall room or space, the activities that took place within the room or space in which the infant was buried (where possible to extrapolate via site reports), and any grave goods or accessories in burial. Ultimately, I feel that this methodology constitutes a more appropriate, inclusive, and focused manner of looking at infant burials that helps to elucidate social attitudes toward infant death, burial, and commemoration in the Late Bronze Age on Crete.

I believe that the current lack of such a comprehensive approach to intramural infant burials is due to an oft-pervasive assumption of the archaeological community that infants and children who died at young ages were not considered to be “full,” complete individuals by their communities, who could not and therefore did not actively participate in the social aspects of society. Indeed, the frequent grouping together of infants, children, and older adolescents into a single, too-general “sub-adult” category, without differentiation between each group is a fairly common practice that I have encountered throughout the research process; this approach is representative of the oft-disparaging or dismissive attitude toward the study of infant burials, which I feel is to be expected in light of the relatively sparse scholarship on the topic.
As stated prior, an additional contributing factor to scholarship shying away from the study of infant burials is the fragile nature of infant bones, which do not have the tendency to survive well under most conditions; even where they do survive in a fairly intact state, there exists a limit to the type of information that can be gathered from the bones. Typically, scholars find it possible to credibly establish a potential age range for the individual at the time of death, extraordinarily difficult to assess the relative health of the individual, and impossible to discern the gender of the fetus, infant, or young child from a biologically-oriented perspective. To compound these drawbacks, the skeletal remains of children and infants are notoriously difficult to identify in the first place, and disarticulated and incomplete sets of bones are at times mistaken by archaeologists for the bones of animals (Baker 2005: 3).

All of this taken together may develop a lack of incentive for biological anthropologists and archaeologists to study infant remains, as relatively little can be gleaned from them (Baker 2005: 3). These issues are somewhat mitigated in the specific situation of infant and child container burials, which have a tendency to preserve skeletal material better, due to the layer of protection from the elements offered by the interment vessel. Even under the best of circumstances, the relatively little data that can be accrued from the examination of infant remains may seem to yield small reward. In this paper, I accept the biological assessment of infant remains provided in previous scholarship, as I have neither the appropriate training nor the opportunity to examine physically the remains myself.

To begin, the specific terminology employed in this paper must be defined. The phrase “intramural infant container burial” must be unpacked in order for the reader to
understand the constraints of this research. “Intramural” is used to denote a burial within the confines of domestic space; other publications at times use the words domestic or residential in order to express the same thought. Most typically, these burials are found in sub-floor contexts within interior living quarters, but rare instances of interments within courtyards and other such exterior architectural features that are a part of domestic structures fall within pertinent parameters, and have been included.

The term “infant” is used to refer to juvenile individuals between one month and one year of age. Fetus is used as a general term for the stage of intra-uterine development of eight weeks through birth; I hesitate in using this word, as in archaeological contexts, it can be difficult to differentiate between a stillbirth (an infant born dead after twenty-eight weeks of gestation) in late stages of development and a child born before the full term of pregnancy, presently defined as birth prior to the outset of the thirty-ninth week of gestation, according to the American College of Obstetricians and Gynecologists (2013).

A neonate is defined as a newborn child of less than one month of age, while a perinate is broadly used to refer to fetuses in the last month of intrauterine development, or a baby of up to one week of age (Lewis 2009: 2). These terms are both more forgiving and more specific than “fetus,” and I have chosen to use them when possible in order to avoid the implication of a stillborn child where the evidence cannot give us that information for certain. When the word “fetus” is indeed used to label the age of an interred corpse, it refers to a baby who was born at a stage in development where one can reasonably assume that the child could not have survived at all, and was therefore
very likely a premature stillbirth. Feasibly, though, such a child could have died at some point following a successful live birth.

In referring specifically to intramural infant *container* vessels, this paper discusses only the burials of children up to one year of age that take place within domestic space, and incorporate the use of some vessel that serves a coffin-like function of containing the corpse. An exception has been made in the case of the burial of an older child of approximately 3.5-6.5 years of age found at Sissi, as his or her burial closely emulates that of an infant on the same site, and is therefore makes a contribution to the study of infant burials. This study has excluded all infants interred in intramural subfloor pits buried without vessels. An evaluation and interpretation of these burial vessels and of the intentionality regarding the function they serve when utilized as funerary objects comprises an important part of my concluding arguments. Indeed, my realization that the information on infant burial containers was elusive due to a lack of publication and examination originally inspired this project.

Chronologically and geographically, this paper focuses on Late Bronze Age Crete. Intramural infant container burials have not been found on Crete in any critical mass until the early LBA, so to study the practice prior to that time period is fruitless. One must note, however, that because the Late Bronze Age Mediterranean world was so characterized by a spirit of cultural interconnectivity through trade and trends in migration, it is essentially impossible to discuss the significance of infant intramural burials from LBA Crete in a geographic or chronological vacuum. Crete, in particular, owing to its location close to mainland Greece, the island chains of the Dodecanese and the Cyclades, the western coast of Anatolia, the Levant, and coastal North Africa was a
center of trade and cultural diversity. Operating as cultural products within a complex societal sphere, the infant container burials of LBA Crete should be considered very valuable potential indicators of social and cultural characteristics of the complex civilization from which they originated. The next chapter briefly addresses the likelihood that, due to the relatively few instances of intramural infant container burial from LBA Crete, the practice was not native to Minoan culture (McGeorge 2011: 9). Rather, the theory that the practice was introduced via foreign populations working and living on Crete, interacting with and possibly intermarrying with native Minoans is much more plausible.
Chapter 2: Summary of Intramural Infant Container Burial Practices on Crete

The earliest known examples of infants buried in earthenware cooking jars in sub-floor domestic spaces come from the Neolithic era in southeast Europe and Eurasia, demonstrating that this practice likely originated in Anatolia before spreading to the ancient Near East, Europe, and North Africa (Bacvarov 2008: 61-2). The basics elements of the practice remained largely unchanged between the initial appearance of intramural infant container burial in the archaeological record of Neolithic Anatolia, and its more widespread dissemination up through the time it took to reach Crete in the Late Bronze Age: the deceased fetus or infant was placed within a ceramic vessel that has already served in a primary function as a cooking pot, storage vessel, or as some other household purpose, and the container was then interred beneath the floor of a room or outdoor space within domestic confines.

The practice of intramural infant container burials was not adopted early on by Minoans on Crete. As a society, Minoans preferred to bury their dead extramurally, in cemeteries apart from the community’s living space (McGeorge 2012: 293). The concept of dead bodies polluting space still inhabited by the living thats seems to be reinforced by typical Minoan burial procedures taking place outside of living space is violated by these intramural infant burials. Often, Minoan burial practices involved the process of skeletonization and secondary burial, the practice of laying out the corpse of
the deceased until the flesh had rotted away and nothing but skeletal material existed, at which point the bones would be disposed of in some other manner. Skeletonization and secondary burial is custom widely practiced in modern Greece, where land needed for long-term inhumation-style graves is highly limited. Cremation is considered taboo due to the heavy influence of the Orthodox Church, so most corpses are deposited in a rented or family-owned grave to decompose for several years before their bones are removed, completely de-fleshed, and placed in a small ossuary used as a permanent resting place (Blagojević 2013: 44-45).

While the practice of infant intramural container burials does not adhere to either of these customs in any way, as it involved a primary burial within living space, other methods of disposing of the dead were indeed practiced. Adult container burials appear in the archaeological record, with adults and older children buried in large pithoi storage jars, or in larnakes, terracotta tub-like coffins which became the standard burial container by the 14th century BCE (Watrous 1991: 285). The convention of skeletonization of corpses and subsequent reburial or disposal of skeletal remains was practiced in caves, in tholoi, and in group chamber tombs. House tombs, such as those seen at the Middle Minoan cemetery of Petras and at Gournia, were built for inhumations, and resembled the everyday dwellings for which they are named, with mud brick roofs. The Minoans do not seem to have practiced cremation. Grave goods are common objects, and have been found in situ mostly in cases of individual inhumation burials, rather than secondary skeletonized burial deposits or other group burials.
No known examples of intramural infant container burials in the Early Bronze Age exist, though a single EM II *pithos* burial of a young child three years of age has been recovered from Nopigeia, in western Crete (McGeorge 2011: 4). No evidence of the practice has been found in Middle Minoan contexts whatsoever (McGeorge 2011: 4). The appearance of intramural infant container burials begins in earnest in Late Minoan IA, almost exclusively in eastern Crete (McGeorge 2011: 4). The emergence of the practice may have been due to an incorporation of foreign people or practices, perhaps from the Near East, or from the Mycenaean Greek mainland, where the method was much more common (McGeorge 2011: 2). The phenomenon of intramural infant container burials are nearly restricted to the region of eastern Crete, where settlements tended to be larger, denser, and had a more sophisticated flavor. The higher degree of developed urbanity at these sites — Petras, Sissi, and Palaikastro — indicates that their populations may have enjoyed greater interaction with Near Eastern foreign populations through trade and population migration, potentially explaining why LBA intramural infant burials appear there first and more prevalently. The practice of intramural container burials may have arrived on Crete in the LBA due to the influence of new populations immigrating to the island, or the exchange of ideas and customs alongside the prolific trading of commodities that was pursued with neighboring cultures. No indication of the practice in any large scale prior to the advent of the LBA suggests that it did not develop organically on Crete from some other variety of native burial tradition.

In the Late Bronze Age — indeed throughout much of history, and even in certain parts of the modern world— babies died suddenly, and they died often; an inspection of
the burials at the Late Minoan cemetery at Armenoi, near Rethymon, yields an infant mortality rate of 69%, roughly a quarter of those infants apparently having died at or very soon after birth; shockingly, this rate is approximately the same as the statistics given by the World Health Organization as the modern infant mortality rate in west Africa (McGeorge 2011: 3). Assuming that the infant mortality rate at Armenoi is close to the norm for all of LBA Crete, it could be expected that roughly seven out of every ten babies born at this time would have died within their first year of life.

Although prolonged illness was certainly a possible cause of infant death, between the likelihood of stillbirths and infants’ fragile and untested immune system, coupled with a relatively minimal ability medically to treat illness and infection, the majority of babies probably passed away quickly and without much warning. The time-consuming production of *larnakes* would have been difficult without some degree of anticipation of the infant’s death, and the repeated purchase and production of *larnakes* or other such vessels created specifically for burial purposes may have also been prohibitively expensive or resource-intensive in lieu of such a high infant mortality rate. Logically, then, an already on-hand vessel would be considered a more appropriate and convenient choice of burial container.

Not all infant burials necessarily involved repurposed burial containers; many LBA infant interments on Crete involved the absence of a burial vessel entirely, or featured the use of a small, child-sized *larnax*. In instances where such reused pottery vessels were actually employed as accessories of infant interment, past scholarship has almost entirely failed to discuss the vessels beyond a brief typological categorization (ie: the container simply labelled as a *pithos*, a *pyxis*, etc.), and, in many but not all
instances, an approximate date of manufacture. Emphasis is frequently placed upon the high degree of convenience to be had in the utilization of pre-fabricated vessels presumably already in possession of the dead infant’s household. Secondary literature altogether fails to address the concept of personal choices made by individuals that I argue is essential to understanding the topic of intramural infant container burial in LBA Crete, and, likely other chronological and geographical areas that are not be addressed in this paper.

The following are all the known sites with examples of intramural infant container burials from the Late Bronze Age that have been yielded during archaeological excavations, and on which at least some amount of material has been published: Petras (1 burial), Sissi (2), Palaikastro (1), Phaistos (2), and Knossos (unknown multiple). While the first four sites will be discussed at length in the upcoming section of this paper, the material from Knossos has been omitted due to the lack of publication regarding the burials. A combination of evidence from primary site report publications, secondary scholarship directly covering the topic (primarily, the work of McGeorge), and supporting scholarship has been used in order to generate the most complete, holistic consideration of infant intramural container burial practices at each individual site.

The scarcity of these types of burials as indicated by this small quantity of examples indicates that they are clearly do not accurately reflect the expected infant mortality rate of the time, such that intramural container burial is certainly not the de facto choice for the disposal of infant remains. If not commonly practiced, there must be some greater significance attached to interring an infant in this way. The evidence collated from these sites suggests that intramural infant container burial may have been
practiced in an effort to maintain maternal connections to the deceased child, and to ensure future fertility in the household.
Chapter 3: Case Studies — Petras, Sissi, Palaikastro, Phaistos, and Knossos

3.1: Petras Burial

The site of Petras in east Crete has provided the best-documented intramural infant container burial to have been found thus far on Crete, owing to the scholarship of P.J.P McGeorge. McGeorge has studied the burial in great detail, and written two highly informative articles on the topic. Her approach and theorizations most closely approach the methodology that I have attempted to pursue in this paper and the conclusions that I have reached, and for that reason, her publications have been absolutely indispensable to my own research.

Petras is located along the northern coast of eastern Crete, very close to the present-day city of Siteia. The site’s excavations have yielded substantial layers of occupation, the earliest Bronze Age settlement dating back to EM I, with evidence for inhabitants from the Final Neolithic period, as well (Tsipopoulou 2012: 56). The site includes a traditional Minoan palace that enjoyed two primary periods of significance and large-scale construction: the first from MM IIA- MM IIB, and the second from LM IA - LM IB. The palace was initially erected in MM IIA, and destroyed by fire in MM IIB. Finally, the palace was re-built in LM IA, destroyed again, and reconstructed yet another time in LM IB before being demolished for a final time during the LM IB period of destruction that occurred throughout Crete (Tsipopoulou 2012: 54). Recent excavations
have also focused on the MM cemetery, in use until MM IB/IIA, and a much later Byzantine cemetery (Tsipopoulou 2012: 56-8).

The structure of real relevance to this paper is one of the houses dating from the LM IA period, labeled as House I.1 in publications. Little information has been published regarding the architecture of House I.1, but it is known that the structure was substantially large and well-appointed, that it was built with two stories, and, uniquely, that it was home to a considerably-sized installation for the production of wine (Alberti 2012: 236).

The Petras burial was found in LM IA context of the north courtyard of House I.1, in a corner close to the interior wall. Biological analysis of the unusually well-preserved remains indicate that the child was a fetus at about thirty-two weeks of gestational development, the youngest human remains found to date on Crete (McGeorge 2011: 4 & 2012: 292). The fetus was interred within an LM pithos, a type of vessel most typically used for the transport and storage of various commodities. The pithos was then buried in an inverted position, the fetus having been positioned with its head at the mouth of the vessel, such that both the body and the pithos were buried upside down (McGeorge 2011: 4 & 2012: 291). The buried, inverted pithos was then encircled in a ring of stones before being fully inhumed underneath the floor of the house’s primary courtyard (McGeorge 2011: 4 & 2012: 2).

A pithos seems a sensible choice of vessel to serve as a burial container due to its large size, which can easily accommodate the small corpses of fetuses and infants. Although no work has been done to examine the fabric of the pithos, a coarse ware
piece of local manufacture from the LM I period, perhaps from Petras, or more likely from nearby Palaikastro, which was a common source of pottery in the region.

The inversion of the *pithos* as part of the burial procedure is thoroughly addressed by McGeorge: she draws parallels between the inversion of the Petras fetus and the practice of upside-down adult *pithos* burials at other Bronze Age sites on Crete (McGeorge 2011: 12). She asserts that the inversion of the Petras fetus, in particular, demonstrates the potential for documenting a Minoan religious belief in rebirth after death, as the upside down positioning of the fetus's burial emulates the typical, “correct” downward position that a fetus assumes during the birthing process (McGeorge 2011: 12 & 2012: 300).

I find this argument to be convincing, as the inversion of the *pithos* seems to serve no functional purpose, such as sealing the mouth of the jar, which could have been accomplished with large pot sherds, as seen with infant jar burials at other sites (eg: Sissi). McGeorge also tentatively posits that the interment of the fetus within domestic space in this inverted position may represent some type of fertility ritual connected to the inversion of the *pithos* and fetus, possibly an attempt to ensure that the mother who suffered the stillbirth be fruitful and luckier in future pregnancies by maintaining a close physical proximity (McGeorge 2012: 301).

This theory represents the closest parallel to the work of this thesis—a attempt to give credence and assign a deeper meaning to the practice of infant intramural container burial in LBA Crete. The more inclusive methodology and narrow, defined focus employed by this paper, I hope, pushes this thinking further along, and gives more substantial evidence in order to better prove this proposition.
While McGeorge briefly addresses the ring of stones used to encircle the inverted *pithos* before it was buried, she does not seek to assign any type of ritualistic or broader social significance to the practice. Rather, she finds comparison for the practice in Middle Bronze Age infant intramural container burials from the Canaanite site of Tel Dan, in the southern Levant (McGeorge 2012: 300). The rings of stones surrounding infant container burials at Tel Dan and at Petras do not appear to have served a practical purpose; more likely, the employment of the ring of stones or small pot sherds to surround infant jar burials is ritualistic in nature (Ilan 1995: 126). This practice is not native Minoan in origin, and does not appear in any other known LBA infant intramural container burial on Crete (McGeorge 2011: 300). In addition to the myriad examples from Tel Dan, a tradition of this practice used for infant intramural container burials was found in the early Iron Age period at Ashkelon, one of the five cities of the Philistine pentapolis. One specific, unique burial includes a ring of stones around the burial, as seen at Petras and Tel Dan.

Of the multiple Ashkelon intramural infant container burials, one in particular has drawn much attention, owing to its strong Egyptian influence— the infant is buried in an *pithos* of Egyptian manufacture, which was retrofitted for burial by inscribing Egyptian iconography associated with death and burial onto the exterior of the container (Doak and Birney 2011: 38-47). Like the Petras fetus, the Ashkelon infant burial was demarcated by a ring of stones and small pot sherds set around the jar before it was fully buried; Doak and Birney assert that this practice has no Canaanite antecedent, and that instead is derivative of LBA and early Iron Age Mycenaean infant burial practices, which employ this ring of stones and pot sherds frequently (Doak and Birney 2011: 19).
48-49). Potentially, the Petras infant burial was in some way influenced by Mycenaean customs due to immigration from the mainland to Crete.

Regardless of the origins of the practice of encircling the burial with pot sherds or stones, one must consider what the intentionality behind the practice represents. That the stones are not placed such that they were visible eliminates the possibility that this was a visual mechanism of commemoration. The circle-shape surrounding the vessel strongly connotes the concept of differentiation and separation of space, much like a temenos wall functions within a temple setting, in order to separate mundane space from sanctified space. Here, rather than setting aside special, sacred space for the worship of the gods, the ring of stones may be isolating the space used to bury the fetus from the surrounding domestic space of the courtyard, and marking it out as special, serving a different function from other space.

That the fetus was buried in a strategic location very close to a wall, like every other example of LBA infant intramural container burial that will be discussed, suggests that an effort was made to keep the burial out of areas with heavy foot traffic. In conjunction with the ring of stones, these two characteristics of the Petras fetus burial appear to be intentionally facilitating the removal of the infant burial from the ordinary, everyday usage of the courtyard as an extension of the home, and devising specific space designated for the burial of this fetus. That the *pithos* was inverted in burial, seemingly paralleling the position the fetus would have taken at birth, is also an obviously deliberate choice, one that hearkens back to concept of birth, rebirth, and fertility.
3.2: Sissi Burials

Two intramural container burials of young children have been found at the site of Sissi, a Minoan hill settlement on the north coast of eastern Crete, located a few short miles from the palatial site of Malia. The earliest archaeological evidence for settlement at Sissi dates to 2600 BCE, with continuous occupation through c. 1250 BCE (Driessen et al. 2011: 20). Since 2007, a team from the Belgian School of Athens led by Jan Driessen has been systematically excavating the site, which had been greatly threatened from tourists and local residents exploring, grazing, pasturing sheep, and, curiously, hunting for *chorta* greens (Driessen 2009: 10). Under Driessen, large portions of the Minoan settlement and associated necropolis have been systematically excavated.

While the Sissi excavations uncovered two intramural “infant” container burials, in reality, the bodies of a single infant as defined in this paper and of one young child of 3.5-6.5 years were found. The terminology employed in site publications labels this older child as an “infant”, and as such the burial has been included in secondary publications concerning infant burials in LBA Crete (McGeorge 2011 & 2012). Although the young child’s age marks the burial as outside of the scope of this paper, the highly similar nature of the two burials in comparison with one another has led me to consider the interments together.

The second burial contained the remains of what the Sissi publications have labelled as a “perinate,” but which is according to the language of this paper, is an infant of three (+/- three) months of age (Crevecoeur et al. 2011: 80). While the Sissi team studied the two burials, they opted to take more of a biological anthropological point of
view of the kind mentioned in this paper’s introductory remarks: the physical remains of
the infant and of the young child were studied quite thoroughly in order to determine age
and position of the body at the time of burial, but the reports lack a thorough, holistic
discussion of the burial practices and physical accoutrements. The sub-section of the
excavation report that addresses the infant and child’s remains acknowledges that the
burials took place within *pyxides*, and this recognition constitutes the most attention paid
to the burial containers within works that have been published regarding these
interments (Crevecoeur et al. 2011: 79-80).

The two corpses were interred within adjacent rooms of House BC— the infant in
Room 6, and the older child in Room 8 (Crevecoeur et al. 2011: 79 & 80; Fig. 3:
supplemental visuals). House BC was “a Neopalatial domestic structure,” and both
Rooms 6 and 8 served normal domestic functions (Carpentier 2011: 69-73). The young
child was buried in the south corner of Room 8, while the infant was interred along an
interior wall of Room 6 (Crevecoeur et al. 2011: 79-80). Like the burial of the Petras
fetus, that these children were interred next to a wall and in the corner of a room may
indicate an attempt to keep the burials out of spaces that were frequent trodden upon by
residents.

Room 6 my have been an outdoor space lacking a roof, rather than an interior
room, and the presence of incomplete “utilitarian” vessel sherds, animal bones, shell,
charcoal, pumice, mudbrick, and obsidian has resulted in a suggestion that this space
could have functioned as a refuse dump of sorts for the home at some time during the
early LM IA period (Carpentier 2011: 69). Other items found within Room 6, however,
strongly suggest the presence of activity apart from disposal of household waste.
Complete conical cups, miniature vase fragments, nine loom weights (three of stone and six of terracotta), a bronze hook or bent needle, a piece of obsidian with a hole pierced through, and a pierced stone (Carpentier 2011: 71). These objects point to the presence of traditionally female domestic activity, such as weaving, spinning and sewing. While the preliminary site reports are loath to comment much further regarding what this space may have been used for, clearly, it did not function either as only a waste repository or only a space for household industry. Rather, the room's function seems to have been in flux. The doorways of Room 6 may have been blocked up at some point, effectively cutting the room off from the rest of the house; this event could have possibly been the causal event of the space being used to dispose of waste (Carpentier 2011: 71). The last event to have taken place within the room appears to be the interment of the infant in LM IA, which may have taken place after the doorways of the room had already been blocked up (Carpentier 2011: 71-72).

Room 8 was also put in use as a rubbish disposal area at some point in LM I (Carpentier 2011: 72). The room was filled with debris at some unknown date, and the burial of the child either preceded this filling process, or took place at some undetermined time afterwards (Carpentier 2011: 72). In the later stages, Room 8 was used as a food preparation and cooking space, and featured a hearth in addition to tripod cooking vessels and storage vases (McGeorge 2011: 4, Carpentier 2011: 73).

Both the infant and the young child were interred within typical LM I undecorated, ceramic cylindrical pyxides, a type of box-shaped vessel, often accompanied by a lid, manufactured to hold jewelry, cosmetics, and other small objects frequently associated with conventionally “feminine” activities (Crevecoeur et al. 2011: 79-80, Betancourt
Both *pyxides* were deliberately set on their sides for burial (Crevecoeur et al. 2011: 79-80). The infant from Room 6 was placed within the *pyxis* such that its head was facing downwards, toward the vessel wall it had been placed upon; its legs had been drawn up underneath the torso, and the left arm had been raised and placed parallel to the *pyxis'* base (Crevecoeur et al. 2011: 79). The opening of the *pyxis* was covered over by large potsherds, which created a barrier between the infant inside the container, the rubbish that had been disposed of in the space, likely preceding the burial, and the fill that was deposited on top of the *pyxis* during the burial process (Crevecoeur et al. 2011: 79).

The *pyxis* containing the buried older child in Room 8 was crushed in situ by field stones that may have come from an intentional infilling of the space at a later date, or from the gradual collapse of the south wall over time (Carpentier 2011: 73). The body was laid out on its side, and placed into a crouched position, with the lower limbs drawn up into a kneeling pose (Crevecoeur et al. 2011: 80). The body of this older child, naturally, is far larger than that of the infant, and the corpse could not fit entirely within the *pyxis* that served as its burial container (Crevecoeur et al. 2011: 80-81). From the waist-region and up, the child's body protrudes from the *pyxis*. Crevecoeur et al. have argued that, due to the “lack of significant movement of the osseous remains beyond the initial volume taken in by the corpse,” the child may have first been placed in a cloth bag, or wrapped in some kind of textile shroud, before partial insertion into the *pyxis* (Crevecoeur et al. 2011: 80-81). As is to be expected, no signs of such a cloth bag or shroud have survived (Crevecoeur et al. 2011: 81).
Further analysis of these two burials yields much information regarding the nature of the burial traditions employed by inhabitants of this household. The indisputable similarity between the burials of the infant and the young child strongly suggests that some type of formulaic burial traditions may have been in place at Sissi, at least between the family or families who buried these specific children. The repeated use of pyxides as burial containers, and the similarity in the orientation of the vessels turned on their sides expresses the probability of a defined, ritualistic practice that was employed in the case of the death of infants or young children at this settlement, at least in LM IA.

Furthermore, that a pyxis was utilized as a burial vessel for the older child, when the child clearly did not fit within the vessel, implies that the selection of this vessel was probably an important, deliberate choice with a sense of import greater than than mere convenience of utilizing an already on-hand vessel for the burial. This pyxis appears to have been very unsuitable for the purpose of burying the comparatively large corpse, owing to its too-small size. Additional vessels found on the site from the LM I period, such as the large cooking pots and storage jars in Room 8 itself, would have been far more appropriate for the task. Other, more fitting, vessels were surely on hand and could have been used in the pyxis’s stead to greater effect indicates that the use of this particular container, or perhaps simply a pyxis in general, was significant, and meaningful. If the child’s corpse was indeed swathed in some sort of cloth wrapping, this would insinuate that there was a perceived need to somehow cover the child’s corpse entirely; that we do not see evidence of such a wrapping used in the infant burial at Sissi, or indeed at other burials in different sites, almost certainly reflects an attempt
to rectify the unusual circumstances in which the body simply did not fit within the desired burial vessel.

Rooms 6 and 8 each contained artifacts associated with conventionally feminine domestic activity. Room 6 held nine loom weights, a critical mass of objects associated with the weaving aspect of textile production, and a bent needle (possibly a hook) which can be comfortably associated with sewing cloth (Carpentier 2011: 71, Burke 1996: 414-415). Room 8 displayed material culture and architectural features that correlate with food preparation, including an array of cooking ware and a large hearth (Carpentier 2011: 79-80).

These two spaces each have a decidedly feminine atmosphere, owing to their probable function. *Pyxides*, too, are typically linked to femininity, given their function of holding characteristically feminine objects, such as jewelry, cosmetics, and perfume. In addition, in later Geometric and Classical era Greece, *pyxides* were explicitly associated with femininity: they are most often decorated with scenes of women in the Classical Period, and are found as grave goods in adult and adolescent Geometric era female burials throughout Attica (Alexandridou 2010: 31). Miniature *pyxides* have been often found as funerary offerings in the graves of Geometric era children, whose sexes are more difficult to determine forensically (Alexandridou 2010: 32, Tarlow & Stutz 2013: 548).

Although this is not enough to establish an unquestionable connection between the practices at Sissi in LM IA Crete and later Greek funerary traditions, the later usage of *pyxides* as funerary objects demonstrates that there is definitively a later convention connecting the use of *pyxides* as feminine objects to female- and child-
associated grave goods. Perhaps the Sissi burials could be different expressions of an earlier, but similar, tradition, given that *pyxides* as vessels functioned in much the same way in both LBA Crete and Classical and Geometric Attica.

I would argue, then, that the choice of burial vessel and of burial space reflect an attempt at maintaining a maternal connection with a dead child. Though, as noted in the introduction, scholars often argue that infants were buried intramurally because they were not yet old enough to be considered a distinct member of the community with a unique identity, an older child of 3.5-6.5 years would have fulfilled such requirements, and would therefore reasonably have been eligible for burial in a more communal, public cemetery space. That both an infant and a child were buried in the same home, at roughly the same time, in the same type of vessel, and in similar spaces indicates that these are not burials of mere convenience and necessity, but thought-out, ritualistic, codified practices, and the product of distinct choices. Though no overt expressions of fertility can be extrapolated from the Sissi burials, the choice to bury both children in *pyxides* and in female-dominated domestic space may constitute an attempt to connect the deceased children to a living mother or other female relatives who inhabited the rooms in which they were buried.

3.3: *Palaikastro Burial*

Palaikastro, a sizable Bronze Age Minoan settlement in eastern Crete, north of the palace at Zakros, has so far yielded a single intramural infant container burial. No palatial structure has been found to date, but a recent geophysical study suggests that there may be such a building to the south of the area focused upon by past excavations
The same geophysical study has demonstrated that the site as a whole occupies thirty-six hectares of land, making it the second largest area of Bronze Age urban development on Crete, after Knossos (MacGillivray and Sackett 2010: 576). Much of the pottery analyzed from Petras’s House I.1 has been proven to originate from Palaikastro, implying that it was a major center for pottery production in the region of eastern Crete (Alberti 2012).

The intramural infant burial found at Palaikastro was recovered from Area 26 of Building 3, and dates from LM IIIA2/IIIB based on contextual pottery deposits (MacGillivray et al. 1988: 274). The LM IIIA2/IIIB time period has been categorized by new construction projects enacted on a massive scale throughout the town, perhaps connected to an influx of re-occupation after the LM IB period of destruction seen at Palaikastro, and throughout much of Crete (Driessen 1990: 404). This burial is of a newborn perinate, who was interred in a “crouching position” within an upright amphoroid krater, the opening of which was capped by a small kalathos (MacGillivray et al. 1988: 274).

The primary excavation reports are rather scanty in regards to information on precisely where and in what context the infant burial was found. The perinate was buried in the southwest corner of Area 26, Building 3, and was buried underneath a 50cm deep deposit of pottery below a potential storage unit (McGeorge 2011: 4, MacGillivray et al. 1988: 274). Area 26 has been interpreted by the excavation team as a possible storage cupboard due to its unusual rhomboid shape and small size (1.6 x 0.8 x 1.4 m), and the dense layer of broken pottery that appears to have accumulated on top of the floor (MacGillivray et al. 1988: 274). This layer of broken potsherds
supports the notion that Area 26, functioning as a small storage cupboard for pottery, would likely have housed some type of shelving unit, which eventually broke down and released its contents onto the floor. Where possible, diagnostic sherds from Area 26 have been used in order to ascertain the types of pottery present: the most common vessel shapes from this storage cupboard are kalathoi painted in the dribble and dot pattern style, footed kalathoi, squat open jars, amphorae, and amphoroid kraters (MacGillivray et al. 1988: 274-276).

The amphoroid krater is a vessel shape primarily used for the dilutive mixing of water and wine (Betancourt 1985). The particular vessel in which the Palaikastro perinate was buried bears crudely-applied painted decoration (Fig. 6: supplemental visuals). Horizontal bands encircle the body of the vessel, with groups of three, shorter, vertical lines clustered along the lip of the pot, all unevenly spaced and of varying widths, suggesting that this krater was presumably for use within the home, and not a highly valuable commodity that was intended for trade. As Palaikastro was a prolific center of pottery production within the region, this vessel was could have plausibly been produced by a craftsman from the town. The excavation team offers no posited date of manufacture for this amphoroid krater, but the other pieces of pottery found within Area 26 have all been securely dated to the LM IIIA2/B period, and it is likely that the burial krater dates from roughly the same time, as well (MacGillivray et al. 1988: 276). Due to a destruction by fire in early LM IIIA2, the site was rebuilt extensively in later LM IIIA2 and early- LM IIIB, before an earthquake devastated the town yet again (MacGillivray and Sackett 2010: 574). This strongly implies that the krater dates from the later LM IIIA2/early LM IIIB time of reconstruction.
A *kalathos* was found at the mouth of the *krater*, capping the vessel’s opening (MacGillivray et al. 1988: 274, McGeorge 2011: 4). *Kalathoi* are pottery storage vases made to emulate the shapes of baskets used to hold quantities of wool, grain, or other household items (Betancourt 1985). *Kalathoi* are thus closely connected to wool-weaving, spinning, and cloth production, in addition to food preparation and storage, all domestic activities typically undertaken by women in Minoan culture.

The practice of sealing the mouth of a burial vessel with a *kalathos* is quite common in Geometric era burials of women on mainland Greece, with many examples having been found in the Kerameikos cemetery at Athens (Whitley 1991). In Classical and Hellenistic Athens, *kalathoi* were often depicted on grave stelae dedicated to deceased females who had reached a mature age (Burton 2003: 27). While Classical references to *kalathoi* in grave monuments function as attestations to feminine domestic virtue and industry, they also represented allusions to fertility (Burton 2003: 27-28). As actual *kalathoi*, in both Bronze Age and Classical contexts, were created to hold wool, grain, and other items necessary to the successful maintenance of a household, they carried with them the notion of fertility—a full *kalathos* was representational of a successful harvest of wool, or grain, thereby connecting to the fertility of a household.

Related to this, goddesses of the later, established Greek pantheon related to fertility, such as Demeter, Persephone/Kore, and Aphrodite are often depicted in votive statuettes and other pictorial representations with *kalathoi*. Archaic era Cypriote figurines of Aphrodite almost always show the goddess wearing a *kalathos* as a polos-crown headdress (Marantidou 2009: 179). Classical figurines of Demeter and her daughter, Persephone/Kore, typically include *kalathoi* as headdresses holding wool or
food, or as held objects (Merker 2000: 43). A LBA Mycenaean wall painting from Tiryns has recently been identified as depicting a goddess associated with “vegetal matter,” a proto-Demeter type goddess, found in a location close to the site of a later, Classical shrine to Demeter; McGeorge suggests that such a proto-Demeter goddess may have then been present in LBA society on Crete, particularly after the influx of Mycenaean individuals in LM II (McGeorge 2011: 11).

These examples express a relationship between deities associated with feminine fertility and *kalathoi*; such a iconographic connection between a Minoan fertility goddess and *kalathoi* may have also existed in Late Bronze Age Crete. Supporting this notion is the presence of six *kalathoi*, alongside other items, found in an LBA domestic context at Sissi (Driessen 2011: 92). The presence of these items has given scholars reason to label the area of the find as a household shrine to the Minoan goddess depicted with upright arms (Driessen 2011: 92). Perhaps the *kalathos* used in the Palaikastro intramural perinatal burial, then, was a symbol designed to supplicate for or symbolize future fertility for the mother of the dead child, who had clearly not fared well in this particular instance of childrearing.

Moreover, the location of the perinate’s interment in a small storage space full of pottery employed in domestic labor, including several decorated *kalathoi*, implies that the perinate was intentionally buried in a female-dominated space, as at Sissi and Petras. The removal of the burial from space that would have regularly been trodden upon during the process of everyday activities, instead choosing to inter the infant in a small, closet-like space, seems to echo the choice of placing infant burials in corners and close to walls, also similar to the burials at Sissi and Petras.
The careful placement of the infant burials further demonstrates the nature of the practice of intramural infant burial in LBA Crete to be a system of deliberate choices, selected in order to bury children in a specific, desired way, and not out of sheer necessity. Once again, this child appears to have been buried in such a way as to maintain connections to its mother and other adult female members of the household by keeping it within a domestic space primarily inhabited and used by women. Being buried in a storage space with a *kalathos* implies that the child may have been interred not only in order to keep in close physical proximity to the family, but also as a way of supplicating for or representing the ensured fertility of its mother and of other women dwelling within the home.

### 3.4: Phaistos Burials

Two infant intramural burials have been found at the palatial site of Phaistos, both dating to LM III B, both at-term stillbirths or newborn infants, and both buried in courseware pithoi-type jars (McGeorge 2011: 4 & 2012: 294). Phaistos was a large and powerful palatial settlement in south central Crete, near the coastline, on the Messara Plain. The two burials were recovered from Room 4 and Room 5 of the New Palace, constructed beginning in LM IA and completed in LM IB, in response to the destruction of the earlier Old Palace, destroyed by an earthquake.

Once again, the scholarship of P.J.P. McGeorge has been indispensable to my studying of these particular infant burials. The majority of publications from Phaistos are written in Italian, as the site has been excavated by an Italian team, and little deeper
examination of the two infant intramural container burials had been done until P.J.P. McGeorge had the opportunity to do so.

A publication including McGeorge’s work with these infant burials at Phaistos is forthcoming, and while that is not yet available, she has written with a great amount of detail on the two burials in her other most recent publications regarding intramural infant container burials in the Aegean Bronze Age (McGeorge 2011: 4, 5, 12 and 2012: 294-296). Her published and fantastically cogent work has allowed me to include a case study of these two burials in this thesis. Evidence is a bit more modest when compared to the information available from the burials Petras, Sissi, and Palaikastro, where I have been able to work with site reports and other related publications from team members. The information available from McGeorge’s work demonstrates evidence enough to support the thesis of this paper, and for that reason I feel that it merits inclusion. Additionally, so few LBA infant intramural container burials on Crete are known, and eliminating these two from Phaistos creates legitimate issues with diminishing an already small sample size. For now, all available information has been included as part of my analysis, with the hope that more data will be available in the future.

The first burial is that of an infant buried in a “double handled globular cooking jar,” the mouth of which was covered with the bottom of another coarse ware vessel, and which was buried alongside to the north wall of Room 5, close to the northwestern corner, in the New Palace (McGeorge 2011: 4 & 2012: 294). “A few metres to the east of this burial” lies the second infant, buried in a tubular-shaped pithos beneath an unspecified area of the floor in the adjacent Room 4 (McGeorge 2011: 4). More
information than this is not provided. That these particular burials take place within the palace indicates that they were likely born into elite families. The two infants having been buried with similar practices in adjacent rooms, out of the entire, large palatial complex, might demonstrate that they were members of the same family; only two intramural infant container vessels have been found throughout the entire, considerably sized site of Phaistos, and that these two are buried so closely to one another is surely no coincidence.

A stone “cupboard” was found on the ground level directly above the burial in Room 5, containing a coarse ware cooking jar that in turn held a number of burnt seeds (McGeorge 2011: 4 & 2012: 294). McGeorge posits that this cupboard may have been deliberately built over and around the cooking jar in order to keep it stable and in position above the infant’s grave, and that the seeds might then be considered a burial offering (McGeorge 2011: 4 & 2012: 294). The analogous presence of a cupboard exists at Palaikastro, where the infant was interred beneath the floor of a closet that stored pottery, which in turn likely held grain and other commodities (McGeorge 2012: 296). The built-in cupboard at Phaistos lacks a covering, such that the unstoppered mouth of the cooking jar was left open and accessible from above. Perhaps the lack of covering implies that the jar was in a continuous state of active use. The small, oddly-shaped cupboard space formed by the stone blocks does appear as though it was built specifically around this individual vessel, as McGeorge believes, and not as though it would function well as a multi-purpose space meant to contain diverse, interchangeable items.
The purpose of this cupboard and the pot it contains, then, is almost certainly to demarcate and provide a space for commemoration of the infant buried beneath it. McGeorge sees the dried seeds found within the cooking jar in the cupboard as a burial offering to the infant (McGeorge 2011:4 & 2012: 294). I feel that the seeds may not be an offering to the infant, but rather may be representational of the role the living wished on the child, potentially as a representation of rebirth into an afterlife, and of new life in the guise of fertility for the living left behind. The use of seeds as offerings echoes the theme of connections to maternity and fertility seen at Petras, Sissi, and Palaikastro. As seeds are the base material needed for plant life — they have potential to be plants, but are not yet grown — they are a fitting echo to the status of a newborn infant or stillborn fetus, on the cusp of life but not yet living. Seeds are also renewable: they grow plants that, when mature, yield more seeds, which make it possible to propagate another generation of plants. Similar to the utilization of the kalathos as part of the infant burial at Palaikastro, in the act of offering seeds at the site of the infant’s burial, the supplicant may have been appealing for continuing fertility, and for successful vitality of future offspring.

3.5: Knossos Burials

In his site reports, Peter Warren has stated that intramural infant container burials were found in great quantity “all over” the archaeological site located behind the present-day Stratigraphical Museum during excavation in the late 1970s and early 1980s (Warren 1982-83: 63-87). Most were tentatively dated to LM IIIB/C based on the vessels in which they were found, and several others were dated to the later Sub-
Minoan era (Warren 1982-1983: 74, 80). Very little information has been published related to these burials; the few available details mark this site as a potential wealth of information regarding later-period LBA Cretan intramural infant container burials, but the evidence is not very useful at present, as it is quite scant (Warren 1982-1983: 74, 80).

Due to this, I am hesitant to utilize evidence from Knossos in this study, and will refrain from doing so. Without reliable information regarding burial vessels, location of the burials relative to the domestic confines within which they were interred, and other, well-documented evidence, the Knossos data is of little use. McGeorge has recently been afforded the chance to study twenty of these intramural infant burials from Knossos, and has identified them all as either newborn infants or full- or near-term stillbirths (McGeorge 2012: 294). Preliminary information regarding many of these subfloor infant burials suggests that not all are container burials, but were buried in stone-lined cists or plain pits, with no grave goods (McGeorge 2012: 294). Her work is an indicator that these infant burials will be the subject of further examination in the near future. Ideally, the publication of McGeorge’s work will allow the production of more comprehensive and informative material regarding the infant intramural container interments at Knossos, which will undoubtedly have much to contribute to the study of such burials.
Chapter 4: Conclusions, Trends, and Observations

The evidence found in and associated with infant intramural container burials from LBA Crete suggests that this practice was intentional, reflective of personal or group choices, and orchestrated to commemorate deliberately the passing of a child, and not, as some have suggested, the inhumation of an infant relegated to within the home due to a lack of social standing within the community that would prevent a public burial. While likely true that infants did not participate fully in society the way that an adult or older child would, the notion that infants were buried within the home because they were more a part of a familial structure than a societal one and that this somehow negates the importance of a child to its family, is not valid. To minimize the role of the family in an infant death is folly, and a gross underestimation of the constancy of human nature; after all, as McGeorge quite eloquently states: “I doubt whether the fact that infant deaths were more frequent in ancient societies made the experience any less painful for the living” (McGeorge 2012: 300). By judging intramural infant burials to be simply convenient and socially-sanctioned ways of disposing of tiny corpses, one ignores all the evidence that is available, and which I hope has been presented cogently in the previous chapter’s case studies.

First, recall the relatively small sample size of intramural infant jar burials from the Late Bronze Age on Crete with which this paper has concerned itself. The unknown “multiple” Knossos burials excluded, the graves of a total of five infants (and one small
child) are known to exist. Of course, the obvious assumption is that almost certainly more burials of this type exist and have yet to be discovered, though the sites from which these burials have been recovered have been quite thoroughly excavated. The possibility that multitudes of undisturbed intramural infant container burials could be found at a palatial site that has been excavated for many years seems unlikely. Regardless, unless we are to assume that there are hidden caches of infant container burials throughout known and unknown sites on Crete, asserting that this treatment of infant’s bodies is not the norm is logical. The infants known to have been buried in intramural containers do not even begin to approach an accurate reflection of the infant mortality rate in the Late Bronze Age; clearly, not every child is being singled out for this treatment. The practice, save for a single earlier EM example involving a toddler in Nopigeia, appears rather suddenly in the LM IA period, so intramural infant container burial does not appear to be a native practice. The origins of intramural infant container burial is beyond the scope of this research at the moment, but the relative rarity of this practice suggests that the selection of a child to be buried in this manner carries some greater significance.

That not all infant burials took place within the home seems to contradict a suggestion popularly asserted by scholars— that is, that infants had to be buried within the home because, in the succinct words of McGeorge, babies possessed “absolutely no social identity” (McGeorge 2012: 303). This simply cannot be true within the context of LBA Crete, based on the number of intramural vs. extramural infant burials. Even considering all intramural non-container burials, too few fetuses and infants were buried in residential space, making it difficult to argue comfortably and persuasively that there
was a perceived necessity or social pressure to bury deceased small children within the home. Rather, the practice appears to have been a distinct choice made by the living. Certain unknown factors were likely considered when making the decision to bury intramurally or extramurally. Perhaps the first experience with losing a child inspired the family to keep the infant’s body near, and consequently elect to bury the child within the home. Of course, this postulation is impossible to prove, but contemplating the psychological reasons individuals may have had for wanting to bury their child within living space is very thought-provoking. Whatever the reason, electing for intramural burial seems to have been very much a choice, not necessarily a societal requirement. Additionally, the use of a container as a burial vessel was not a requirement to bury a body intramurally, and sometimes the child would be laid to rest in a simple dug-out pit or stone-lined cist grave. The presence of a burial vessel represents the decision to use one.

The diversity in burial vessels that were used further illustrates the role of individual choices that were made at each different site, and that no singular set way to arrange necessarily an infant intramural container burial was present. A codified set of rules was not in place for what type of vessel ought to be used, as little consistency is evident from site-to-site. Based on the small sample size from LBA Crete, young infants and fetuses seem to have been more likely candidates for intramural container burial, although the young child at Sissi and the EM toddler from Nopigeia represent exceptions to this.

Within individual sites with multiple burials some strong trends do seem to emerge. At Sissi, the infant and the young child were both buried in pyxides, and not
the storage vessels or cookware which are more traditionally associated with infant container burials. These feminine jewelry boxes were of the right size and shape to hold the corpse of an infant, but the older child fit only to his or her waist, even with the legs having been drawn up and under the torso in a compact kneeling position. Nonetheless, the choice was made to use a *pyxis*, signifying the importance of using such a vessel, whereas another type of pot was certainly available for use and would have done a superior job in containing the entire corpse. The two *pyxides* containing the infant and child were laid in the same position, on their side. All of this information taken together indicates that a unified tradition local to Sissi, or perhaps to a specific group at Sissi, may have existed.

The two infants at Phaistos, the only other site with multiple infant burials covered within this paper, were buried in different vessel types, lacking that aspect of cohesion evident at Sissi. Both Sissi burials date from LM IA, and both Phaistos burials from LM IIIB, so we lack a diachronic progression of evidence that could potentially demonstrate if these practices at individual sites held true over time, or how and if they evolved.

Still, no observable trends in the selection of burial vessel typology can be found between different sites. Furthermore, no trends in burial accompaniments are apparent: the ring of stones surrounding the burial at Petras is unique, and the presence of a *kalathos* capping the vessel at Palaikastro is singular. The Petras infant is the only example to have been inverted, and the Sissi burials are the only to have been deliberately buried balanced on the side of the vessel. This indicates an apparent lack of unifying tradition regarding vessel, grave goods, and burial orientation — highly
crucial elements — even though many of the sites where intramural infant burial was practiced were quite geographically close to one another.

Conversely, many elements of the various instances of intramural infant container burials display some degree of homogeneity in various ways. Each individual instance of intramural infant jar burial discussed was interred either in the corner of a courtyard or of a room, or very close to a wall. This implies that living chose to inter the dead infants in liminal places where the majority of foot traffic would not cross over the burial; within the walls of the room, but not quite a part of the functional space that defines the room. The Petras infant had a ring of small stones surrounding the pot within which it was interred, which appears as though it is a purposeful delineation of separated space intended to differentiate between normal, domestic space and the area of the grave.

A stone *gourna* was set on top of the Palaikastro infant’s grave, potentially marking the spot of the burial; at Phaistos, a stone cupboard was built directly over one of the infants, possibly functioning as a grave maker, as well. The use of these markers supports the idea that infant intramural graves were buried in locations selected specifically for their out-of-the-way qualities, implying the potential existence of a widely-accepted need for the separation of burial space from normal space, as is reinforced in traditional Minoan cemeteries, established outside of inhabited areas. No consistent position relative to the room or space seems to have been preferred for burial, however, once again indicating the unlikelihood of a systematic organization of the practice.

What we have, then, is a custom that is practiced by many, though each specific instance is made different and is defined by choices made by the living individuals who buried the infants. The most major unifying factor in each of these burials appears to be
the attempt to express or connect with the concept of female fertility. The Petras fetus was buried in a *pithos* that was turned upside-down, such that the child’s head was close to the mouth of the vessel, emulating the correct position assumed during childbirth. The Sissi infant and older child were interred in *pyxides*, “jewelry box” vessels with explicit feminine connotations most often used by women to hold small objects. Both of the examples from Sissi were buried in rooms that had a strong presence of artifacts traditionally associated with feminine household industry. The Palaikastro child’s burial pot was capped with a *kalathos*, a pottery shape associated in later periods with fertility goddesses and female burials, and created to emulate the shape of baskets that held wool, grain, and other crops—representational of fertility, too, in the form of agricultural bounty. At Phaistos, one of two infants was buried directly beneath a built-in storage area that held a single jar, containing dried seeds. Perhaps a funerary offering, perhaps a grave marker, and perhaps some combination of the two, the symbolism of dried seeds can be easily interpreted as expressive of the potential for fertility, and as being analogous to the child who was born full of the potential for life, but whose time on earth was cut drastically short.

I would posit, then, that one of the primary goals of the practice of interring a child within residential confines may have been to ensure continued or renewed fertility of the household, due to the relationship between the burials and feminized space, objects, and the overt associations with birth, rebirth, and fertility. The ubiquitous presence of this practice seems to indicate the potential for an overriding cultural or religious belief that accompanied the practice, regardless of the specific elements of each individual burial, pervasive throughout the LBA on Crete.
Burial procedure gives much more information about the living than it does of the dead, and this concept is particularly true in the case of infants. Ilan (1995: 35), McGeorge (2011: 12 & 2012: 301-302), and Budin (2011: 195) have argued that this type of burial can be interpreted as an effort to manifest physically a belief in rebirth into the afterlife, specifically because of burials such as the Petras example, in which the infant remains have been arranged into a birthing position. Budin additionally asserts that the arrangement of female reproductive organs is simulated through the use of a burial jar in conjunction with a tholos or chamber tomb: “burial chamber/jar = womb; entry = cervix; corridor, shaft, or dromos = birth canal” (Budin 2011: 195).

This position of burial is nearly ubiquitous through the ancient Near East — which stirs up curious notions regarding the origins of the practice at Petras— but it is certainly not the norm in LBA Crete. While I am not in the appropriate situation to discount that the Petras burial, in particular, attests to a Minoan belief that the child would be reborn in some way in their concept of a hereafter, the remainder of the evidence from other sites in conjunction with the material from Petras suggests that at least one of the goals in burying an infant within the home may have been to promote fertility within a home that had suffered the premature loss of a child, which could have possibility manifested as a perceived lack of fecundity. In keeping the deceased child in close proximity to its mother, which presumably occurred when burial took place within a residence populated by living people, the wish may have been that the child would somehow serve to ensure that the household benefitted from better luck and continued fertility in the future.
Chapter 5: Future Scholarship

Much additional work can and will be done in order to supplement the work presented in this thesis, flesh out this topic, and perhaps be able to demonstrate more conclusively the theory that intramural infant container burial was practiced in order to promote fertility. This topic could easily be expanded in order to encompass parallels from other Late Bronze Age cultures, and information from other time periods and geographic areas, as well. For this particular project, I chose to restrict my study to Late Bronze Age Crete, in order to maintain a narrow focus on an era and culture with which I have the most experience and the most interest. In the future, I hope to be able to extend my focus and produce a more comprehensive corpus of material relating to intramural infant container burial procedure in Bronze Age Greece. It would also be of great value to compare container vs. non-container intramural infant burials, and intramural vs. extramural container/non-container infant burials, to see if any further trends can be identified that may lead to greater knowledge of the subject.

Perhaps most immediately important to the study of these burials from LBA Crete is that McGeorge’s work with the Knossos and Phaistos infant intramural container burials be published, such that the sample size of these burials expands rapidly and significantly. New examples of intramural infant pot burials from LBA contexts on Crete will surely be found at some point in the future. The conclusions that I have presented in this paper can and will be modified in future work as new discoveries are made.
In addition, new techniques could be utilized in order to supplement archaeological evidence from the instances of intramural infant container burial that have already been excavated and presented here. In particular, the use of gas chromatography-mass spectrometry could assist in assessing the burial vessels themselves. GCMS can be used to great effect to detect ancient residues of the commodities once held in ceramic vessels. I am fortunate enough to be taking part in the ongoing excavations at Petras this upcoming summer of 2014. With appropriate permissions from the excavation directors, I will have the opportunity to work potentially with a team in order to extract organic residue from the Petras infant burial *pithos*, and begin compiling a library of residue samples taken from infant burial vessels. If successful, this method information will be useful in determining the primary function of burial vessels, and could be of assistance in identifying any potential patterns.

Ultimately, I elected to study these intramural infant container burials not only because they occupy a sadly neglected niche market of scholarship, although an analysis of my source list demonstrates a cheerfully rapid upswing in related publications within the past five years. More importantly, intramural infant container burials are most significant because of what these burials tell us about the people who practiced this behavior. I hope make the study of intramural infant container burials a focus in my future scholastic endeavors.
<table>
<thead>
<tr>
<th>Location/Time Period</th>
<th>Number of burials</th>
<th>Vessel Type/Material</th>
<th>Original Vessel Function</th>
<th>Applied Vessel Decoraton</th>
<th>Est. Age of Infant Remains</th>
<th>Accompanying Grave Goods</th>
<th>Approx. Provenience</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petras; LMIA</td>
<td>1</td>
<td>pithos, courseware</td>
<td>storage jar</td>
<td>32 week fetus</td>
<td></td>
<td></td>
<td>North courtyard of House I, close to wall</td>
<td>Vessel inverted for burial; surrounded by ring of stones</td>
</tr>
<tr>
<td>Sissi; LMIA</td>
<td>2 (one infant, one child)</td>
<td>pyxides, courseware</td>
<td>jewelry boxes, holding small personal items</td>
<td>infant of 3 (+/- 3) months; child 3.5-6.5 years</td>
<td>along interior wall of Room 6; south corner of Room 8</td>
<td>mouth of infant burial pysis shielded by broken pot sherds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Palaikastro; LMIII A2/IIIB</td>
<td>1</td>
<td>amphoroi d krater</td>
<td>dilutive mixing of water and wine</td>
<td>yes-somewhat crude and uneven: vertical stripes along vessel lip; horizontal bands on body</td>
<td>newborn perinate</td>
<td>Area 26 — small storage cupboard for pottery</td>
<td>small kalathos sealing mouth of the vessel</td>
<td></td>
</tr>
<tr>
<td>Location/Time Period</td>
<td>Number of burials</td>
<td>Vessel Type/Material</td>
<td>Original Vessel Function</td>
<td>Applied Vessel Decoration</td>
<td>Est. Age of Infant Remains</td>
<td>Accompanying Grave Goods</td>
<td>Approx. Provenience</td>
<td>Notes</td>
</tr>
<tr>
<td>----------------------</td>
<td>-------------------</td>
<td>----------------------</td>
<td>--------------------------</td>
<td>--------------------------</td>
<td>---------------------------</td>
<td>--------------------------</td>
<td>---------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Phaistos, LMIIIB</td>
<td>2</td>
<td>pithoi, courseware</td>
<td>storage jars</td>
<td></td>
<td></td>
<td>north wall of Room 4; north wall of Room 5</td>
<td>stone cupboard built around cook pot with dried seeds over Room 5 burial</td>
<td></td>
</tr>
<tr>
<td>Knossos, LMIIIB/C (?)</td>
<td>multiple, exact number unknown</td>
<td>courseware</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Bibliography


Budin, Stephanie Lynn. 2011 Images of Woman and Child From the Bronze Age: Reconsidering Fertility, Maternity, and Gender in the Ancient World. Cambridge: Cambridge University Press.


Lewis, Mary E. 2009 The Bioarchaeology of Children: Perspectives from Biological and Forensic Anthropology. Cambridge, UK: Cambridge University Press.


McGeorge, P.J.P.  

Marantidou, Panayiota.  

Merker, Gloria.  

Tarlow, Sarah and Liv Nilsson Stutz, eds.  

Tsipopoulou, Metaxia.  

Warren, Peter M.  

Watrous, L. Vance.  

Whitley, James.  
1991 Style and Society in Dark Age Greece: the changing face of a pre-literate society c. 1100-700 BC. Cambridge, UK: Cambridge University Press.

Wood, W.H.  