Intramural infant burials in the Aegean Bronze Age
Reflections on symbolism and eschatology with particular reference to Crete

Photini J.P. Mc George
INTRAMURAL INFANT BURIALS IN THE AEGEAN BRONZE AGE

Reflections on symbolism and eschatology with particular reference to Crete

P.J.P. Mc George
British School at Athens
tinamcgeorge@gmail.com

Abstract

This paper reviews the cultural practice of intramural burials for infants in Greece, making reference to parallel practices in Anatolia, the Levant and Egypt. This age-old and widespread custom began with the earliest settled communities in the Near East and continued through the Chalcolithic and Bronze Age. Intramural burials in pits, cists and pots are known in Greece throughout the Bronze Age, whereas despite being relatively common on the mainland the practice barely impacted Crete until LMIA, the peak of Minoan trade exchanges with the Levant. In LMIA intramural *pithos* burials of infants occur, sporadically, at sites in East Crete and later in South Central Crete, while pit burials and a cist burial are known from LMIA at Knossos continuing until LMIII. Intramural burial was practiced for many millennia in different cultural and geographical settings, which may or may not suggest an underlying koine of belief, because given the complexity of human nature and the infinite variety of expression of human culture and beliefs there need not necessarily be a single explanation for this phenomenon at all times and in all places. In Crete, however, the context of some *pithos* burials seems to convey a funerary symbolism, which articulates the Minoans’ religious belief in rebirth and hope for an afterlife.

Introduction

Settled communities in the Near East practised intramural burial of both adults and children as early as the Xth millennium BC. In the Neolithic period pots were used as burial receptacles, cooking jars being used for the burial of infants and small children. When burial was removed from living sites to
organized cemeteries, the custom of intramural jar burial for infants continued. This practice had firm roots in North Syria and SE Anatolia, and spread to neighbouring areas including the Aegean and mainland Greece, where intramural burial for infants and children occurs in the Neolithic and Bronze Ages. However, in Crete there are a few Neolithic intramural burials at Knossos and one Early Minoan II intramural burial at Nopigeia, a coastal site in West Crete. Intramural burial for children is only evident on a broad scale in the Late Minoan period at several major urban sites.

**Infant mortality**

Neonatal and infant mortality throughout the prehistoric period was high and probably rose during the Bronze Age owing to greater population densities stimulating an increase in pathogenesis. To illustrate this point one need only look at the figures for the Late Minoan cemetery at Armenoi near Rethymnon, where there were 114 sub-adults in a sample of 364 individuals nearly a quarter of whom had died at or not long after birth (fig. 1). Infant mortality at Armenoi is equivalent to 69 ‰ and comparable with World Health Organisation figures for infant mortality in contemporary West Africa. At another LMIIIA2-LMIIIB1 cemetery in Khania, one teenage mother had a fetus still in her womb, illustrating that childbirth could be a complicated event with a very uncertain outcome for both mother and child. The causes of perinatal mortality are often associated on the one hand with poor maternal health during pregnancy (any bacteria in the mother’s blood stream would penetrate the placenta and attack the embryo’s brain, heart and other vital organs) and on the other hand with genetic or developmental abnormalities and birth traumas.

**Greece**

Intramural infant burials occur on the Greek mainland and islands from the Neolithic period. The earliest examples are seven intramural burials: an embryo, newborns and children in pits below at hut at Knossos, dated to the Aceramic Neolithic. On the mainland, intramural burials in small pots occur in the Early Neolithic at Axos, Sesklo, Argissa; in the Middle Neolithic at Chaeronea and on the islet of Aghios Petros; and during Late Neolithic at Nea Nikomedeia, Rachmani and Lerna, interred below floors.

The use of coarse ware vases for intramural burial is frequent in the Early Bronze Age, but less frequent in the Middle or Late Helladic. New or stillborn babies were placed either in baskets, or wrapped in cloth of which an impression occasionally survives (as at Malthi), or in a wooden box (as at Modi), in small clay jars, or in simple pits, or stone cists below the floors of houses. Burials are sometimes double or even triple.

Intramural burial was practised at a large number of EBA settlement sites: at Poliochni on Limnos (4), Bozcaaada on Tenedos, Thermi I and III on Lesbos (5), Emborio on Chios (1), Akrotiri on Thera (10), Paroikia on Paros (1), Phylakopi on Melos (9), Nopigeia on Crete (1), Kolona on Aigina (several), and at Askario (1 under pithos
Intramural infant burials in the Aegean Bronze Age

P.J.P. Mc George

At some sites the custom of intramural burial for infants and children (occasionally adults too) is carried over from Early Helladic to the Middle Helladic period, or from Middle Helladic to the Late Helladic period. Burials are either the stone cist, earth-cut or pit types; jar burials are less frequent, while large sherds were used to cover inhumations of infants and children at Lefkandi. Three shaft graves were used for the intramural inhumation of infants at Korakou. On the islet of Modi, an inaccessible fortified trade post for the temporary storage of goods in transit, the ivory inlay survived from the wooden box used for the burial of a newborn infant.

At some sites the custom of intramural burial for infants and children (occasionally adults too) is carried over from Early Helladic to the Middle Helladic period, or from Middle Helladic to the Late Helladic period. Burials are either the stone cist, earth-cut or pit types; jar burials are less frequent, while large sherds were used to cover inhumations of infants and children at Lefkandi. Three shaft graves were used for the intramural inhumation of infants at Korakou. On the islet of Modi, an inaccessible fortified trade post for the temporary storage of goods in transit, the ivory inlay survived from the wooden box used for the burial of a newborn infant.

The number of LBA sites with intramural infant and child burials is quite numerous, whereas the number of burials at each site for the most part ranges between one and four. Sites with intramural burials are Ayios Stephanos (2 pithos burials), Asine (8), Tyrins (3), Lerna (1), Korakou (3), Tzoungiza (1) and Peristeria (9), Argos (3), Mycenae, Midea (3), Modi Troizina (1), Chalandrissi (4), Mygdalia (2), Drakotrypa (4), Kataraktes Achaia (2), Makrigianni Athens (1), Aghios Kosmas (9), Thebes (1), Kynos

fragments), Eutresis (1), Kirra (1), Platygiali (4), Pelekita on Ithaca (4), and in the Peloponnese at Tzoungiza, Berbati, Strephi, Epidaurus (12), Tyrins (1), Asine and Lerna (9), at Ayios Stephanos, (22) Koufovouno and Olympia (3) (map 1). The actual number of burials per site (in brackets) is small.

Middle Bronze Age intramural infant burials have been found at Poliochni, Akrotiri, Thebes, Eleusis, Eutresis, Korakou, Argos, Asine, Tyrins, Ayios Stephanos, Peristeria and Malthi. Sites with exceptional numbers of intramural burials are Asine with 57 infant/child burials: 45 in pits, 6 in pithoi, 5 in cists and 1 in a brick enclosure; and Ayios Stephanos with about 22 EH-MH infant/child burials, many in cists.

3 Dor 1960, 43-44, 119, Pls. 23.2 and 24.4.
4 Here the references are given in order for each site, eg. Brea for Poliochni/Dörpfeld for Olympia. Likewise in all the following footnotes where many sites are mentioned the sources are listed in site order. Brea 1976; Massa/Sahoglu 2011; Lamb 1936; Hood 1981; Doumas forthcoming; Rubensohn 1917; Dawkins/Droop 1911; Karantzali 1938; Welter 1936; Theoharis 1955; Goldman 1931; Dor et al. 1960; Delaporta/Spondyles 1988; Heurtley 1934-35; Pullen 1990; Kanz et al. 2010; Forsén 2012; Frodin et al. 2013; Taylor/Janko 2008; Forsén 1992; Dörpfeld 1935.
6 Frodin/Persson 1938.

Map 1: Aegean Bronze Age sites with intramural burials.
Lokrida (several), Dimini (2), Karvounolakkoi Naxos (1), Lefkandi Evoeia (15)11. At Mycenae there are said to be as many as 50 intramural infant burials, mainly unpublished, but some are mentioned in publications. Tsountas reported Late Mycenaean infant burials in four small cist graves in a single room: one accompanied by a bronze pin, another by two clay vases and a bronze pin12. Mylonas reported a LHIIIB child burial with a small painted animal figurine, under the floor of the southwest corner of a large room in House I-213. A child burial in Petsas House, room T, was exceptionally rich with three vases and a necklace of gold papyrus beads14.

Crete

At the southern edge of the Aegean, Crete seems not to have embraced this particular burial practice in the Early Bronze Age, whereas there were a great variety of extramural burial practices. The Early Minoans buried their dead in caves, rock shelters, crevices, tombs: house tombs, tholos tombs, chamber tombs, cists or in cemeteries sometimes using clay coffins (pithoi or larnakes). At present, the only intramural child burial known is an EMII pithos burial at Nopigeia, Kissamos in west Crete (60 miles from Cape Malea in the Peloponnese). A child <3 years old was buried with two obsidian blades, in a pithos (< 0.5 m tall) at the corner of a building in an open area paved with pebbles. The pithos lay on its side in a shallow pit, the mouth of the jar pointing westwards15.

Intramural burials of infants and small children begin to occur from LMIA, centuries later, at several sites on the island. The burials fall into three main categories: inhumations in pots or in pits and one in a stone-lined cist, made under the floors of houses that were occupied.

Intramural burials in vases

At Petras an infant in a small pithos was buried in the north courtyard of House I, close to a wall. The 32-week fetus, the youngest so far found on Crete, was exceptional thanks to the pithos container. The child’s head was near the opening of the jar, which had been placed in an inverted position within a circle of stones (fig. 2) The burial is securely dated to LMIA16.

At Sissi there are two burials in adjacent Rooms 6 and 8 of house BC17. A newborn infant was buried in a pyxis which lay on its side close to an interior wall in room 6, its opening sealed by the wall. The infant’s head pointed downwards. An older child, between 3.5 to 6.5 years old, was buried in a smaller pyxis, which lay on its side in the south corner of Room 8. The child was positioned on its right side with the upper part of its body and head exposed, protruding from the vase. Room 8 had a hearth and was used for the preparation of food. Both burials are dated to LMIA.

At Palaikastro a newborn infant, crouched in a decorated amphoroid krater with a small kalathos on its head was found in a 50 cm dense deposit of pottery below “a cupboard or storage compartment” (1.60 x 0.80 x 1.40m) with a trodden earth floor on which a gourna had been set in the southwest corner18. The almost complete articulated skeleton of the child illustrated in the publication appears to be newborn. The date of the deposit is LMIIIA2/IIIB.

At Phaistos there are two intramural pithos burials: full-term low birth weight or near-term newborn infants19. The infant in Room 5 was buried in a double handled globular cooking jar and covered with the bottom of another coarse ware vessel near the north wall of the room (fig. 3). On the LMIIIC floor, a stone cupboard located directly above the burial contained another cooking jar with burnt seeds. The ‘cupboard’ actually appeared to be constructed around the jar to keep it stable (fig. 3). It is believed that the seeds might have been an offering. A few metres to the east of this burial, was another infant buried in tubular vase below the floor of Room 4. Both burials date to LM IIIB.


12 Tsountas 1891.

13 Mylonas 1959.

14 Shelton forthcoming.

At Knossos Warren has reported that sub-floor infant burials were discovered all over the site behind the Stratigraphical Museum. The majority was provisionally dated to LMIIIC, while two were dated to Sub-Minoan. A few published details mention that one of them was covered by a large lekane found below the floor of a room with a clay bench and a large krater in its fill. Warren has since revised the date of the lekane to LMIIIB.

In conclusion, the majority of the intramural burials on Crete were newborn infants buried without grave gifts. All the vases were coarse ware vessels with the exception of the Palaikastro vase, which was a decorated amphoroid krater. At Sissi the pyxis-type vessels lay flat on their sides, like the EMII pithos burial at Nopigelia. At Phaistos and Palaikastro the vases were upright, the mouth of each vase sealed by a sherd from another vessel, whereas at Petras the vessel was inverted.

Intramural burials in pits or cists

Popham found four sub-floor intramural burials in the Unexplored Mansion (three fetuses: 33, 35 and 38 weeks and a newborn) in Rooms C, M and L. He had some doubts about the date of one in the fill of corridor L, but the other three were securely dated to LM IA: a 38-week fetus had been buried in a shallow pit close to the west wall in Room C, a 35-week fetus was buried under the floor of Room M, and a newborn, which had survived a few days, lay crouched on its side in a stone-lined cist below the west end of Corridor L. There were no finds with these burials.

Hogarth found the grave of a newborn infant under “the flooring of a room” in one of the houses excavated on Gypsadhes Hill. There were no finds with the burial; however, a stemmed cup with a banded adder pattern was found in the room, so the burial may be dated to LM IA or possibly to within the LM IB period. Perhaps these ‘houses’ were no ordinary dwellings, since a large number of inverted conical cups containing vegetal matter were found in a room with pillars, which Evans believed to be

20 Warren 1980-81, 73-92 and 1982-83, 63-87. I recently studied 20 burials from this excavation all newborn or stillborn infants.
22 Popham 1984, 309.
23 Hogarth 1899-1900, 70-84, fig. 23.
baetyls. Also a large number of stone rhytons have been found in a surface survey of the vicinity, leading Warren to suggest that the house may have been a shrine treasury dedicated to a goddess of vegetal matter; thus a precursor of the later shrine to Demeter located nearby.

The Artisan’s Quarter at Mochlos, consisting of two multi-room buildings constructed gradually through the addition of new rooms, produced eight burials: six in jars, two of them outside the building. Seven of them were made in LMIII after the abandonment of the buildings. Burial 8 (age not determined) was discovered after flotation and must have been a sub-floor pit burial contemporary with the occupation of Room 2 in Building A. This room (2.26 x 2.92 m) functioned as a kitchen with equipment for making olive oil, preparing and serving food.

The Stratigraphical museum excavation at Knossos uncovered an infant burial in a pit below an LMII floor in a building named the Gypsum house, owing to the liberal use of gypsum for floors, thresholds, staircases and cupboards. Next to central room adorned with frescoes, was the room with the burial which had a simple earthen floor and was furnished with kitchen ware: a tripod cooking pot, a decorated jug, a plain kylix and a stirrup jar.

At Khania, an intramural burial was found under an LMIII B2 house floor in the Agia Aikaterini Square excavations. A pre-term infant, about 37 weeks’ gestation, had been buried in a shallow pit less than a metre from the hearth in the centre of the sizeable room E (6.5 x 4.5 m). Only two iliac bones survived, in excellent condition. There were no gifts. On the clay floor there were two bowls, found in different corners, a small tripod cooking pot and a cooking dish.

It would be an omission not to mention here the interment of multiple children excavated by Warren in the basement of the LM IB North House at Knossos. Two small rooms were accessed through a corridor leading off the north courtyard. In the first and smaller of the two rooms (1.85 x 1.10 m), were the remains of four children, aged 12, 8 and younger. Many bones bore cut marks, which created an enigma. A collection of drinking vessels and bowls were stored in the adjacent room (2.18 x 1.60 m). In another much larger room accessed from the courtyard, there were similar vessels, tripod cooking pots and a jug inside a large pithos containing nine more human bones, including a vertebra with a cut mark, besides other items characterized as cult equipment. The excavator judged that the cut marks on the bones in the small room in conjunction with the finds in the other rooms were evidence of ritual. These, albeit unusual, inhumations are intramural.

Near East, Anatolia, Cyprus and Egypt

The practice of burying infants and children in a domestic setting has an impressively long lineage in the Near East. The earliest settled communities practised intramural burial of children and adults at Natufian and PPN sites (Körtik Tepe, Ain Mallaha, Nahal Oren, Jericho and ‘Ain Ghazal’ where half the burials were infants). The same custom occurs in Cyprus in the PPN and Aceramic Neolithic at Khirkiotita and Kalavassos-Tenta, and appears in Crete in the Aceramic at Knossos.

In Syria (map 2) from the 10th millennium adults, children and fetuses were buried in shallow pits, sometimes wrapped in matting coated with bitumen, below house floors or outside houses at many sites: Mureybet, Jerf el-Ahmar, Abu Hureyra, Tell Halula and Dja’de al-Mughara, Ain el-Kerkh. Then in the ceramic Neolithic, vessels were used to

---

24 Hogarth 1899-1900, 77.
26 Soles/Walker 2003, 135-147, Pls. 32-36.
27 Infant burials, not in jars and without grave gifts, easily disintegrate and escape detection.
29 Hallager/Hallager 2003, 24-33, 276, 301-303.
30 There were two skulls. A tooth and a skull fragment which could not be attributed to child A or B represented a third individual, whilst leg bones proved that there were four children. 40% of the bones bore cut marks suggesting that they had been de-fleshed. See: Wall et al. 1986, 81, 341, Tab. 2.374, 377. Nine adult bones were found, one outside the corridor and eight in the courtyard, but none of these had cut marks, op. cit., 346.
31 A discussion of the stratigraphic sequence op. cit., 344-5 debated whether or not the bones had fallen from an upper floor, and whether they preceded or were part of the destruction layer. The excavator’s interpretation of the find as evidence of human sacrifice or cannibalism (op. cit., 386-8) is one possible explanation; another is preparation for secondary burial (see Tusmasonis 1983, 306-7; Hughes 1991, 18-26).
33 Dikaios 1953; Peltenberg/Swiny 2001.
34 Evans, 1964, 136.
Intramural infant burials in the Aegean Bronze Age

P. J. P. Mc George

In northern Mesopotamia (map 2), in the late Vth - early IVth millennium BC there are 108 infant pot burials at Tepe Gawra. In the late IVth and IIIrd millennium BC infants are never buried in cemeteries. They are usually buried intramurally, though not always in a cooking pot. At Tells Melebiya, Kutan and Karrana, infants inside cooking pots have been found in Ninevite V levels. At the latter children were put in pots horizontally.

37 Dunham 1993.
Intramural infant burials in the Aegean Bronze Age

sometimes double, or several forms of built tombs. The dead were usually buried under the floors of the reception room or the chapel of the house, identified by niches and altars, but sometimes under a courtyard. Preferred gifts for infants were shells or beads, whereas older children were given toys or necklaces.

In Israel (map 3) during the Chalcolithic period (late 5th millennium BC) intramural burials have been reported at Tel Teo, Tel Dan, Qatif Y-3, Teluliot Batashi (level III) and Nahal Zehora II. At Nahal Zehora two pre-term infants were buried in the settlement: one in a jar and the other close to the wall of a structure in the settlement; while a third child was buried in a stone cist. At Tel Dan in the MBA (ca. 2000 BC) interment was solely intra-mural, under the floors of dwellings or courtyards.

sawn in half. At Tell Mohammed Arab one grave contained a horizontally sectioned urn with the body of an adult man and a child. At Tell Jessary there were some Late Uruk burials (3400-3000 BC), at Mohammed Arab and Kutan the infants were buried without grave goods.

In southern Mesopotamia (map 3), intramural burial for all age groups seems to be normal. The custom is strong in the cities of the Old Babylonian period (20th-16th centuries BC), at Ur, Larsa, Isin, Sippar-Ammanum, Nerebtum, Nippur, Khafajah, Tello, Tell Haddad, Tell Al-Sib and Tell Al-Zawiyah, but also from Haradum and at Tell Halawa in Upper Mesopotamia. At Ur, Woolley excavated 198 graves under houses in areas AH and EM, identifying ten variants of intramural burial from simple inhumations to employing a variety of receptacles, including larnakes (unusual outside Crete), bowls (5), ‘hutches’ (4) and pots, which are sometimes double, or several forms of built tombs. The dead were usually buried under the floors of the reception room or the chapel of the house, identified by niches and altars, but sometimes under a courtyard. Preferred gifts for infants were shells or beads, whereas older children were given toys or necklaces.

In Israel (map 3) during the Chalcolithic period (late 5th millennium BC) intramural burials have been reported at Tel Teo, Tel Dan, Qatif Y-3, Teluliot Batashi (level III) and Nahal Zehora II. At Nahal Zehora two pre-term infants were buried in the settlement: one in a jar and the other close to the wall of a structure in the settlement; while a third child was buried in a stone cist. At Tel Dan in the MBA (ca. 2000 BC) interment was solely intra-mural, under the floors of dwellings or courtyards. Jar burials were used for infants under two years of age and were often broken to insert the corpse. The head was almost always at the jar opening,

---

41 Exact parallels have been found at Boğazköy, see the paragraph below on Anatolia.
42 Roaf 1984.
45 Woolley 1976, pl. 39b.
47 Ilan 1995, 121.
Intramural infant burials in the Aegean Bronze Age

P.J.P. Mc George

Intramural burial of children occurs sporadically at II\textsuperscript{nd} millennium BC sites. At Elephantine there are only two early II\textsuperscript{nd} millennium intramural burials, a newborn in rubbish\textsuperscript{62} and another under the floor of a house buried with a single bead\textsuperscript{63}. At Kahun, the pyramid builders’ town in the Fayyum, there were numerous burials of newborn infants under the floors of the workmen’s houses. They were buried in wooden boxes originally for other purposes, sometimes two or three infants per box. Infants who were some months old had been buried with beads or amulets\textsuperscript{64}. At Deir el-Medina, near Thebes (late 16\textsuperscript{th} century BC), amphorae, baskets, boxes or coffins were all used for the intramural burial of children. Stillborn children were not usually given amulets or jewellery, just food in one or two vessels\textsuperscript{65}. Thirty foreign names identified amongst the 100 or so individuals in the community lend support to the argument that intramural burial was a foreign custom. At Tell el-Dab’a “jar burials of babies have been found in the settlement located next to walls and in corners”\textsuperscript{66}. Rosalie David contends that intramural burial for infants was not an Egyptian custom, but was introduced by immigrant, Asiatic workers employed in Egyptian households\textsuperscript{67}.

Tracing the flow of ideas

In summary, intramural burial was practised over many millennia in different cultural and geographical settings and was not tied to one area. Tracing the exact flow of ideas is difficult. This custom developed strong roots in North Syria, North Mesopotamia and SE Anatolia and may have radiated from this area along the Tigris and Euphrates and their tributaries, filtering into neighbouring areas with the movement of people and ideas, developing variations\textsuperscript{68} and putting down new roots.

---

\textsuperscript{48} Here, as in Northern Mesopotamia, pithos–halves, cut lengthwise (probably for economy) were used for burial.
\textsuperscript{49} Wheeler 1974; Mellaart 1970.
\textsuperscript{50} Blegen 1950.
\textsuperscript{51} Bittel 1935.
\textsuperscript{52} Erkanal/Özkan 2000; www.tayproject.org.
\textsuperscript{53} Wheeler 1974; Blegen 1950; Angel/Bisel 1986, 12; Erkanal/Keskin 2009.
\textsuperscript{55} Lunt 1995, 56.
\textsuperscript{56} Dikaios 1969/70.
\textsuperscript{57} Steel 1995.
\textsuperscript{58} Debono/Moretensen 1990.
\textsuperscript{59} Kem 1968.
\textsuperscript{60} Brunton/Caton-Thompson 1928; Petrie et al. 1896.
\textsuperscript{61} Duchesne 2003; Rizkana/Seeher 1989.

\textsuperscript{63} Grajetzki 2003, 53.
\textsuperscript{64} Petrie 1890, 24.
\textsuperscript{65} At Deir el-Medina most houses had four rooms: an entrance hall with a birthing bed and chapel was adorned with Bes, god of childbirth. Infant burials were made in the second room under a low platform, which functioned as a seating area by day and a bed at night.
\textsuperscript{66} van der Brink 1982, 19-20, 28-9.
\textsuperscript{67} David 1996, 189-90.
\textsuperscript{68} Wheeler 1974, 421 does not consider Mesopotamia the origin of the Western Anatolian custom, except for chronological priority,
In Greece there are examples of this type of burial in Early, Middle and Late Neolithic in Thrace, Rhodope, Macedonia, Thessaly and the Peloponnese, not to mention Crete. As we saw, there are in the Early, Middle and Late Bronze Age, intramural burials at many mainland sites in central Greece and the Peloponnese, and on Aegean islands such as Limnos, Tenedos, Lesbos, Chios, Aigina, Melos, Crete Paros, Thera, Euboea, Naxos, and Crete.

Despite evidence that Crete was part of a vigorous trade network established between the Aegean, Cyprus, Syria and Egypt from the 19th century BC, until LMI it does not seem to have been seriously impacted by the custom of intramural burial practised by other contact cultures, or to have been influenced by the Greek mainland, in spite of proximity and the great variety of intramural burials: simple pit or rectangular earth-cut pits, and cist graves (increasingly favoured in the Middle to Late Bronze Age), a few shaft graves, and burials using pithoi or fragments of pithoi.

The LMIA appearance of intramural burial at several sites in East Crete and at Knossos could be interpreted as the result of more intense/intimate contact and greater intellectual receptivity to new ideas, or the physical presence of people from cultures that practiced intramural burial. Linear B tablets (as 1516) at Knossos record not only Greek names but also Near Eastern and Hittite names. The intramural burials in the Unexplored Mansion and on Gypsadhes predate the Mycenaean administration, though perhaps not the presence of Mycenaeans and people of other ethnicities.

It is arguable that inspiration for the LMIA intramural jar burials could have come from the Levant, where there was a robust tradition of jar burial, which was mythopoeically connected to Near Eastern religions and is alluded to in the Baal Epic and the Tale of Aqhat. The entrance to the netherworld was a mountain whose name, Mt Knkny, is a derivative of the Ugaritic, Akkadian, Aramaic and Canaanite words for storage jar (‘knkn’). The use of storage jars for burial is mentioned in the Tale of Aqhat (fig. 4), unearthed at Ugarit, a city with a multi-ethnic, polytheistic population, and the principal commercial link between Syria and the Aegean.

Fig. 4: The Tale of Aqhat from Ugarit (British Museum).

because pithoi were made especially for funerary use, rather than appropriated from the house.
69 The custom of intramural pot burial filtered up the Struma and Vardar valleys and occurs as far North as Hungary. See Bacvarov 2006.
70 Samos (Heraion), Kos (Sanctuary of Asklepios) should probably be included as well.
71 See Wolf-Dietrich Niemeier 1990, 195-6, 199, argues for the physical presence of Minoan artists and craftsmen in Near Eastern palaces, mentions Kamares Ware was found at Ugarit, Qatna, Hazor and Byblos (p 195-196) and two silver cups from the Royal Tombs of Byblos which are probably Minoan imports.
73 Pritchard 1969, 154; Landy 1981; Wright 2001, 177.
74 Interestingly, M. Astour (1968) argued that Mycenaean Greece was under considerable Semitic influence, both in culture and population, and endeavoured to prove this through a detailed comparative study of myths.
Rites, symbolism, myths and eschatological beliefs

Death

In all cultures, societies and religions, death is a serious matter. There are certain procedures, rules and restrictions that need to be observed. Intramural burial for infants and small children must have been connected with natal customs and ceremonies. The ritual and symbolism involved would have been far more complex than we can ever know. Many societies practise rites of separation for pregnant women who are considered impure and a danger to the rest of society. That impurity is naturally transmitted to infants who are subject to certain taboos and exclusions, until rites of transition and (re-) integration have been performed. Some of these rituals survive even in modern societies: the ‘churching’ of women 40 days after giving birth represents the Greek Orthodox rite of reintegration.

Rites to assist the newborn in entering the transition might last from two to more than forty days. Rites for infants might include cutting the umbilical cord, sprinkling and lustrations, loss of the remainder of the umbilical cord, naming, the first haircut, first teeth, the first meal, the first walk, etc. If a child died before his rite of incorporation into the world, then he would have to return to his place of origin, believed by many modern primitives to be the earth. A child that died at or soon after birth may not have been acknowledged as a member of the social group. Having no social identity, it could not be incorporated in the ‘society of the dead’ and would be excluded from the cemetery. Burial in a community cemetery ratifies membership of the community. Burial at home would acknowledge membership of that family.

Birth

In order to interpret symbolism in these burials we need to try to explore primitive perceptions of the mechanism of human reproduction, fertility. Mythology is one way of exploring the mental universe of ancient people. Some of the earliest myths concerned with death imagined humans emerging from the earth like plants. In Greek mythology, the story of Persephone, illustrates the ancient belief that new life came out of death. The Greek myth incorporates ideas from an even more ancient Sumerian myth: The Descent of the Goddess Inanna to the Underworld, and bears similarities to the Tale of Aqhat. In the Greek myth, with which most of us are familiar, when Demeter is reunited with her mother the earth becomes fruitful again.

A new Mycenaean wall painting from Tiryns portrays a pomegranate tree beside a woman and a girl, tentatively identified as Demeter and Persephone. Furthermore, it has been suggested that a shrine to a goddess of vegetal matter, possibly ancestral to the later shrine of Demeter, existed on Gypsadhes Hill in one of the LMI structures excavated by Hogarth. Thus ideas associated with the myth of Demeter may have been current in LMI Crete.

The association of burials with grain has a symbolic significance illustrated by ancient mythologies. There was a prevalent belief that mechanisms of human reproduction paralleled that of the earth.
of plants, because to the ancient mind it was not obvious how children were conceived. The lengthy gestation of human babies obscures any clear cause and effect\textsuperscript{86}. Aristotle believed that ‘offspring derive their natures from their mothers as plants do from the earth’\textsuperscript{86}. The enduring currency of this concept is illustrated in the 3\textsuperscript{rd} century BC by Aristotle, in the 2\textsuperscript{nd} century AD by Soranus’ lost treatise On the Seed, and by the term ‘seed’ in the Bible preserving this idea in the layman’s consciousness right up to modern times\textsuperscript{88}.

**Rebirth**

Jar burials in the Aegean were sometimes placed in pits or on a paved pebble surface, horizontally or vertically, and sealed with a slab or another pot or potsherd. At Petras the purposeful inversion of the pithos appears unique. Was this just a practical solution for sealing the pot in the absence of a sherd or a slab, or could there be some other eschatological explanation?

The inversion of the pithos suggests fusion with local customs and ideas. Pithos inversion of adult burials is known at a number of earlier cemeteries in east and central Crete\textsuperscript{89}. What was the significance of inverting pithoi? By inverting the pithos, the child’s head was placed in a downward position, which is the correct presentation for a fetus to be born or in this case re-born. The hope that this infant would have another chance of life must have dictated the inversion of the pithos, so that the fetus was in the appropriate position to facilitate its rebirth. To my mind, pithos inversion provides unambiguous evidence of the Minoan’s belief in rebirth and an afterlife.

The seed jar in the cupboard above the Phaistos burial and the gourna in the cupboard at Palaikastro share a conceptual similarity owing to the symbolic association between grain, fertility and rebirth. Seeds are an obvious analogy for rebirth, probably the clearest evidence to preliterate minds that seeds, which appeared to be dead when planted in the earth, would eventually germinate and come back to life. This association could have nurtured the hope that a deceased infant would come back to life like the grain and the protagonists of the myths. Perhaps keeping a dead infant near its mother was believed to exercise a beneficent influence, promoting fertility, helping her to give birth to another child embodying the spirit of the deceased.

**Epilogue**

This research was an attempt to set intramural infant burials within a wider framework. To some extent the spread of intramural infant burial suggests an inter-regional acceptance of this mode of burial as being appropriate for infants. Thus it implies the development of a shared cosmology, which in turn implies a certain scale and intensity of interregional communication.

Despite evidence for overseas trade and the growth of contacts with the world beyond Crete where intramural burial was widely practised, the very diverse burial customs of Early Bronze Age Crete so far include only one case of intramural infant burial. In the Middle Bronze Age, a ‘state’ administrative system was in place and Minoan ceramics, metal artefacts, products, artistic tastes and influence were exported, while new ideas such as seals and writing fundamental to the new social order were imported. New ideas were assimilated as required or desired. In spite of the intensification of contacts with neighbouring cultures, intramural infant burial was not adopted until Late Minoan I\textsuperscript{Pii}.

Human societies everywhere have a tendency to be conservative. They renew their social bonds by maintaining customs and traditions, re-affirming unity through cohesive social behaviour. Myths

---

\textsuperscript{86} Perception of the process of conception and birth is narrated in the 14\textsuperscript{th} century BC Ugaritic text of the Tale of Aqhat. In the story, similar to the patriarchal tales of Genesis, the god Il blesses Dani’il and promises him a son: “by kissing his wife there will be conception/ by embracing her there will be pregnancy/.../let there be a son”. Later on in the text: “Dani’il sat down, he counted her months/one month, a second month passed/a third, a fourth [...] he month arrived”. Unfortunately, there is a break in the text at this point. See commentary by Wright 2001, 70, 84-85; also Landy 1981, 20 line 55 ff and 22 line 60 ff.

\textsuperscript{87} Aristotle Politics 7.18.1335b.

\textsuperscript{88} It was not until the 1820’s that the respective roles of men and women in the process of reproduction were clearly understood.

\textsuperscript{89} Pithos inversion was seen in earlier Minoan tombs and cemeteries, at Vorou and Hagios Myron, at Galana Charakia where 32 jars were inverted, at Sphoungaras and most notably at Pachyammos, where 213 burial pithoi were inverted. See: Alexiou 1964 and 1970; Hall 1912; Marinatos 1930-1931; Platon 1954, 1956 and 1957; Seager 1916.

\textsuperscript{89} There are two burials among those excavated in the Stratigraphical Museum excavations at Knossos, which have been dated MMIIIB-LMI. This material is currently being prepared for publication by Peter Warren, the excavator, and myself.

---

**Intramural infant burials in the Aegean Bronze Age**
were invented to explain the world and had a didactic function to cultivate ethics and acceptable social behaviour. Myths and religion established psychological security, shaped identity and behaviour. Customs and beliefs were transformed or adapted according to need.

In its heyday Minoan Crete founded colonies, exerted its influence abroad and ultimately became a desirable destination for foreigners whose presence is inferred from consumer preferences for new vase shapes (eg. the kylix), or decorative styles, or the manufacture of handmade burnished ware, the introduction of a new script/language, the identification of foreign personal names and new styles of burial such as warrior graves, shaft graves, pit caves and intramural infant burials.

Bibliographie

Alexiou 1954
Alexiou 1970
Alram-Stern 2004
Angel/Bisel 1986
Akkermans/Schwartz 2003
Astour 1968
Astour 1980
Astour, M.C., “The netherworld and its denizens at Ugarit”, in B. Alster (éd.), Death in Mesopotamia [Papers read at the XXVIe Rencontre Assyriologique Internationale, Mesopotamia 8], Copenhagen, 1980, 227-238.
Bacvarov 2006
Battini-Villard 1999
Baumbach 1983
Bittel 1935
Bittel, K., “Vorläufiger Bericht über die Ausgrabungen in Boğazköy 1935”, MDOG 74, 1935, 9-10
Blegen 1921
Blegen, C., Korakou: A prehistoric settlement near Corinth, Boston, 1921.
Blegen 1950
Boyd 1995
Brailsford 1953
Bernabo-Brea 1976
van den Brink 1982
Brunton/Caton-Thompson 1928
Brunton, G. / Caton-Thompson, G., The Badarian civilization and Predynastic remains near Badari [British School of Archaeology in Egypt Publications 46], Londres, 1928.
Intramural infant burials in the Aegean Bronze Age

P. J. P. Mc George

Cadogan 1977-1978

Carter/Parker 1995

Caskey 1956

Caskey 1957

Caskey 1958

Castel 1996

Cauvin 1979

de Contenson1992

Coqueugniot 1999

Cultraro 2010

Daux 1964

David R 1996

Dawkins 1911

Debono/Mortensen 1990

Delaporta/Spondyles 1988

Demakopoulou/Divari-Valachou 2002

Dikaios 1953

Dikaios 1969/70

Dor et al. 1960

Dornemann 1979

Dörpfeld 1935

Duchesne et al. 2003

Dunham 1993

Cadogan 1977-1978

Carter/Parker 1995

Caskey 1956

Caskey 1957

Caskey 1958

Castel 1996

Cauvin 1979

de Contenson1992

Coqueugniot 1999

Cultraro 2010

Daux 1964

David R 1996
Intramural infant burials in the Aegean Bronze Age

P. J. P. Mc George

Gopher/Orrelle 1995b

Grajetzki, 2003

Hall 1912

Hallager/McGeorge 1992
Hallager, B.P. / McGeorge, P.J.P., Late Minoan III Burials at Khania [SIMA XCI], Göteborg, 1992.

Hallager/Hallager 2003

Heurtley 1934-1935

Hodder 1990

Hogarth 1899-1900
Hogarth, D.G., “Knossos: II. Early Town and Cemeteries”, BSA 6, 1899-1900, 70-84.

Hood et al. 1981

Hopwood 2008

Huber/Varalis 1995

Ilan 1995

Johnston 1962

Intramural infant burials in the Aegean Bronze Age
Intramural infant burials in the Aegean Bronze Age

Lamb 1936
Lamb W., Excavations at Thermi in Lesbos, Cambridge, 1936.

Lanaras 2003

Landy 1981
Intramural infant burials in the Aegean Bronze Age

P.J.P. Mc George

Moore/Molleson 2000

Morgan 2010

Munchaev et al. 1993

Musgrave/Popham 1991

Mylonas 1932
Mylonas, G., Προιστορική Ελευσίς, Athènes, 1932.

Mylonas 1953-54
Mylonas, G., “Μυκηναϊκή παιδική ταφή Ελευσίνος”, Αρχαιολογική Εφημερίδα Α, 1953-54, 35-44.

Mylonas 1959

Nikolaou 1999

Niemeier 1990

McGeorge 2003

McGeorge 2008

McGeorge 2012

McMahon et al. 2001

Molist 1999

Mellaart 1970

Moore et al. 2000
Intramural infant burials in the Aegean Bronze Age

Parker Pearson 1999

Peltenburg et al. 1985

Peltenburg et al. 1991

Peltenburg/Swiny 2001

Petrie 1890
Petrie, W.M.F., Kanun, Gurob and Hawara, Londres, 1890.

Petrie et al. 1896

Poteros 1983

Paton 1954

Platon 1956

Platon 1957

Popham 1984

Pritchard 1969

Pullen 1990

Rizio 2011
Rizio, A., Μυκηναϊκοί Οικισμοί Αχαΐας [Φαίδιμος 3], Patras, 2011.

Rizkana/Seeher 1989

Roaf 1984

Rothman 2002

Rubenssohn 1917

Schallin 1993

Scheuer/Black 2000

Schwartz/Curvers 1992

Schwartz et al. 2000

Seager 1916

Shelton forthcoming
Shelton K, “Pottery and Petsas House: Recent research on LH IIIA 2 Mycenae”, in I. Tournavitou (éd.), Mycenaen Up to Date: The Archaeology of the NE Peloponnes – Current Concepts and New Directions, forthcoming.

Steel 1995
Intramural infant burials in the Aegean Bronze Age

P. J. P. Mc George

Valmin 1938

van Loon 1968

van Loon 1979

von Pilgrim 1996

Wall et al. 1986

Warren 1980-81

Warren 1982-83

Woolley 1976

Woolley 1955

Wright 2001

Intramural infant burials in the Aegean Bronze Age