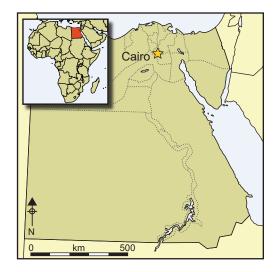
From refuse to rebirth: repositioning the pot burial in the Egyptian archaeological record

Ronika K. Power^{1,2,*} & Yann Tristant²



The interment of bodies in ceramic vessels, or 'pot burial', was a widespread practice across the ancient world. Commonly associated with poverty, and with child and infant burials, the reuse of domestic vessels for burial has been taken to indicate that low value was assigned to the containers and their contents. New analysis urges a more holistic and culturally situated understanding. Contradictory evidence reveals that this burial practice was also used for adults and is represented in high-status tombs. Far from being recycled 'rubbish', the ceramic containers may have reflected symbolic associations between pots, wombs and eggs, facilitating rebirth and transition into the afterlife.

Keywords: Egypt, pot burial, funerary practice

Introduction

Despite their ubiquity in the archaeological record, pot burials have not received detailed attention in the scholarship of Egyptian mortuary behaviour within the Pharaonic period (c. 3000–332 BC; Shaw 2000). While several works encompass them within broad analyses (Masali & Chiarelli 1972; Hendrickx 1998; Tristant 2012), burials in ceramic vessels are yet to be studied in their own right. In their seminal treatment of Egyptian funerary containers, Ikram and Dodson (1998: 195) do not consider pot burials as "proper coffins", but rather as

© Antiquity Publications Ltd, 2016 ANTIQUITY 90 354 (2016): 1474–1488

doi:10.15184/aqy.2016.176

Department of Archaeology and Anthropology, University of Cambridge, Downing Street, Cambridge CB2 3ER, UK (Email: rkp30@cam.ac.uk)

Department of Ancient History, Macquarie University, North Ryde, NSW 2109, Australia (Email: yann.tristant@mq.edu.au)

^{*} Author for correspondence (Email: rkp30@cam.ac.uk)

an incipient phase along an evolutionary trajectory towards the idealised wooden rectangular type. It is often suggested that pot burials were the preserve of the poor, who 'made do' with this type of receptacle while they "aspired to elaborately decorated wooden coffins" (Ikram & Dodson 1998: 233; cf. Donadoni Roveri 1969; Hendrickx 1998; Zillhardt 2009). Only a few scholars of Egyptian archaeology acknowledge the extensive cross-cultural attestations of this mode of burial, and there are discontinuities in opinions regarding their geographic, chronological and demographic incidence. Some scholars restrict the use of pot burials to certain regions and time frames, while most agree that, apart from direct interment into the earth, pot burials were the most common form of interment for children, infants and foetuses in ancient Egypt (Donadoni Roveri 1969; Masali & Chiarelli 1972; Hendrickx 1998). The prior domestic use of the burial vessel is often noted (Donadoni Roveri 1969; Kroeper 1994; Hendrickx 1998; Kilroe 2015), with respective interpretations invariably attributing this as an act of rubbish disposal (Brunton 1927), thereby reducing the value of both the containers and their human occupants to cultural refuse. The present study briefly explores each of the above claims with a view to accessing a more holistic, culturally situated understanding of the incidence, meaning and significance of this ubiquitous aspect of ancient Egyptian mortuary behaviour.

For the purposes of this study, a 'pot burial' is defined as a primary inhumation of a human body in or under any ceramic vessel(s). The material and ontological relationships between this mode of burial and the secondary interments of cremated, burnt or unburnt human remains within ceramic vessels described for some cultures in South America (Silverman & Isbell 2008), the Indian subcontinent (Allchin & Allchin 1982), Southeast Asia (Lloyd-Smith & Cole 2010), Britain and Europe (Lucy 2000), Africa (Allsworth-Jones 2012) and South Africa (Boeyens *et al.* 2009) are certainly worthy of additional exploration, yet they fall beyond the scope of this investigation. Furthermore, it may be argued that there are practical and conceptual differences between the primary inhumation of an individual 'in' a pot and 'under' a pot. It should be noted that the following discussion generally refers to primary inhumations *within* ceramic vessels.

The practice of burying deceased human bodies in ceramic pots is one of the most widespread funerary practices across the cultures and geographies of the ancient world. Such interments are variably described as 'pot burials', 'jar burials' or 'urn burials' according to localised ceramic nomenclature. To date, the earliest incidences of pot burial are attributed to the Neolithic Northern Levant in the sixth millennium BP (Bacvarov 2008). William Matthew Flinders Petrie was among the first archaeologists of this region to view pot burials as evidence of intercultural contact following early experimentation with ceramic production and use (Petrie 1896; Bacvarov 2008). Pot burials are attested across the Northern Levant, central Balkans, south-east Europe and Anatolia, the Southern Levant, Mesopotamia, Syria, Bahrain and Africa, and the Caucasus (Bacvarov 2008; cf. Shepherd 2007; Orrelle 2008; Littleton 2011). Pot burials have also been observed in archaeological contexts in Central and South America (DeMarrais 2004), sub-Saharan Africa (Holl 1995; Insoll 2015), South Africa (Boeyens et al. 2009), Southeast Asia (Harris & Tayles 2012), Japan (Mizoguchi 2005), and Oceania (Bedford & Spriggs 2007); and are also described in ethnographic contexts including but not limited to Zimbabwe (Aschwanden 1982; Barley 1994), Botswana (Orrelle 2008), Sudan (Sadig 2014) and southern Europe (Mishina 2008).

Incidence

Egypt was, comparatively, quite late to introduce this mode of interment into its funerary repertoire. Midant-Reynes (2000) cites the first incidences of pot burial as occurring during the Gerzean/Nagada II Period (c. 3500 BC), some 2500 years after their appearance in the Near East. Midant-Reynes (2000) also states that burials in ceramic vessels and those in other forms of funerary containers (including baskets, reeds and, eventually, wooden coffins) appeared roughly simultaneously, thereby suggesting that the objective for these practices was the same: to provide containment of the body and to separate and protect it from the surrounding earth into which it was interred (cf. Minault-Gout 1992; Patch 2007; Spieser 2008; Tristant 2012; Insoll 2015). Donadoni Roveri (1969) argues that all forms of coffin may have evolved from the earlier practice of lining tomb walls with clay as a means to protect the body and separate it from the surrounding earth, in much the same way that storage ditches were lined to preserve cereals and foods. While there is general agreement regarding the broad geographic attestation of this mode of burial in ancient Egypt (the present study has identified pot burials at 46 sites; see Figure 1), scholars are divided regarding its chronological continuity. Some limit the practice to the Predynastic to Old Kingdom periods (Garstang 1904; Brunton 1927), whereas others identify its persistence throughout the entire Pharaonic period and beyond (Tristant 2012; Kilroe 2015). The practice was still observed among Coptic communities at the beginning of the twentieth century (Blackman 1968), and is reported to endure in Egyptian rural Christian communities today (El-Shohoumi 2004). In agreement with Garstang (1904: 56), the present study argues that pot burials actually represent one of the most "unvarying and persevering" modes of burial in Egypt, with their use before, during and after the Pharaonic era spinning "but a single thread in the bond of continuity" that is "yet unbroken and without a flaw".

Despite the widely held belief that pot burials were mainly used for child, infant and foetal interments (Zillhardt 2009), many sites feature pot burials of both children and adults (see Figure 1). Although Spieser (2008) agrees regarding the longevity of pot burial, she stipulates that only infants were interred in this manner after the New Kingdom (1550–1069 BC). Published excavation data for the sites of Kom el-Hisn (Hamada & Farid 1948, 1950; Orel 2000), el-Gerzeh (Petrie *et al.* 1912; Hendrickx 1998; Stevenson 2006), Tell el-Fara in (Buto) (Petrie 1905) and San el-Hagar (Tanis) (Weinstein 1973) refute this proposition, with each site variably featuring adult pot burials throughout the Third Intermediate and Graeco-Roman periods. In fact, it is worth noting that, at the time of writing, for some sites such as Reqaqna (Garstang 1902, 1904; Peet 1914; Engelbach 1923), Kawamil (de Morgan 1897; Forrer 1901; Garstang 1904; Hendrickx 1998), Nag el-Madamud (Roda) (Hendrickx 1998), Beni Hasan (Garstang 1904, 1907) and Gebel el-Silsila (de Morgan 1897), *only* adult pot burials have been published thus far.

Interpretations

It has been argued that the repetition of this form of burial over large geographic and temporal frames indicates spheres of cultural interaction with a common or similar belief system (Orrelle 2008). In the archaeology of Southeast Asia, a metaphorical link between

From refuse to rebirth

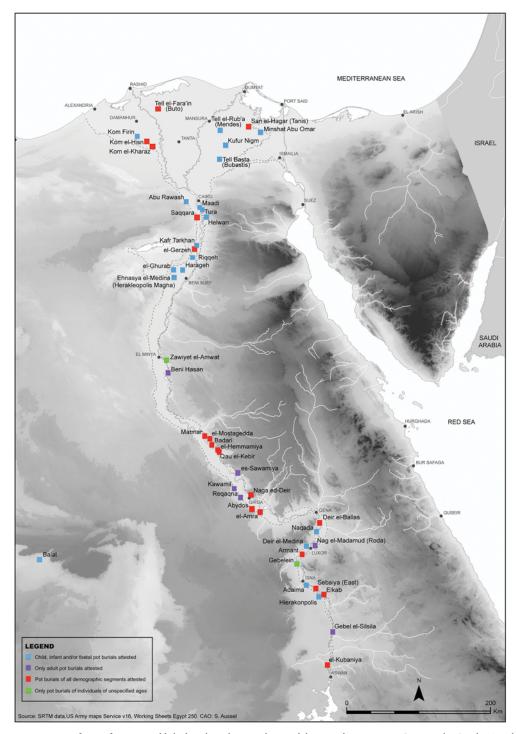


Figure 1. Map of Egypt featuring published pot burial sites and attested demographic categories. Cartography: Sandra Aussel.

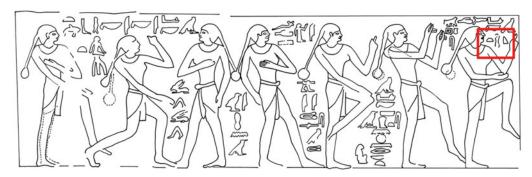


Figure 2. Dancers represented within the tomb chapel of Waatetkhethor, Saqqara, with the relevant text highlighted. Drawing: Mary Hartley.

burial jars and the body is acknowledged (Källén & Vinterhav 2003). In European, African and Near Eastern contexts, it is proposed that the pot is analogous to the uterus, implying that a return to the womb in death will promote metaphorical rebirth in the afterlife (Aschwanden 1982; Mishina 2008; Orrelle 2008), or assure ancestralisation through the processes of "germination, gestation and possibly fermentation" (David 1995: 89). In the Egyptian context, Willems (1988) and Meskell (1999, 2001) have also noted associations between coffins and afterlife 'rebirth' beliefs, and Assmann (1972: 115; 1989: 139-40) describes placement in the coffin as "regressus ad uterum", in alignment with beliefs concerning posthumous transitions to the afterlife through the body of the sky-goddess. Such interpretations are bolstered by Tarlow's (1999) discussions of the role of metaphor in the construction, reproduction and transformation of meaning in archaeological funerary contexts; whereas specific theoretical impetus may be derived from the writing of Hertz (1960), Bloch and Parry (1982) and Conkey (1997), who argue that womb metaphors link with sentimental burial associations or rebirth following death. The present study suggests that such symbolism may also have been applicable in the Egyptian context (cf. Donadoni Roveri 1969; Zillhardt 2009). An early attestation of the association between pots and the gravid uterus has been identified in the Sixth Dynasty tomb chapel of Waatetkhethor at Saqqara (see Figure 2), where dancers appear to be engaged in a ritual performance aiming to remove impediments to birth (Roth 1992: 141). They say:

But see, the secret of birth! Oh pull! See the pot, remove what is in it! See, the secret of the hnrt, Oh Four! Come! Pull! It is today! Hurry! Hurry! See [...] it is the abomination of birth (Kanawati 2008: 26, pl. 60).

Although Kilroe (2015: 222) argues that the Egyptian archaeological evidence does not support any association between pots and wombs, and that attempts to do so are "over interpretative", the use of the noun hit, 'pot/vessel' (Erman & Grapow 1926–1931: Old Kingdom: I, 1339; Middle Kingdom: V, 2528) in this situation indicates that it was a well-known cultural metaphor, easily understood in the audience's context. In other circumstances, when a purely anatomical approach was appropriate, for example, in the Kahun medical papyri (UC 32057; Collier & Quirke 2004: 58), the designated terminology for womb or uterus was idt, usually expressed by the ideogram for a well or container of

[©] Antiquity Publications Ltd, 2016

water (Gardiner 1994: 492, N41), often using the determinative of the bicornuate uterus of a cow (Gardiner 1994: 466, F45).

It is also possible that further layers of symbolism may have been applicable, particularly considering literal and metaphorical understandings of the egg. The ancient Egyptians had an accurate understanding that the origins of human life sprang forth from the egg after being fertilised by sperm (Meskell 2002). Here, the emphasis is placed on the individual within the egg, into whom the god Amun breathes the breath of life (pCairo, no. 87, l.15; Assmann 2001: 205). The word swht ('egg') was used to define the ova of birds and fish, and to describe the ovoid form (Erman & Grapow 1926-1931: IV, 73, I-III), but from as early as the Old Kingdom, it was also used to designate the place where human life gestates in the female body (Erman & Grapow 1926-1931: IV, 73, IV; cf. Meskell 2002: 68). In the Middle Kingdom text The dispute between a man and his ba (pBerlin 3024), the egg is used as a metaphor for young life, where a man "grieve[s] for her children, broken in the egg, who have seen the face of the Crocodile before they have lived" (Lichtheim 1975: 165). Moreover, Late Egyptian attestations of *swht* using the egg determinative are designations for the term "inner coffin" (Erman & Grapow 1926–1931: IV, 74). Thus, it is plausible that such textual references which analogise between coffins and eggs as places of metaphorical or literal gestation and (re)birth may demonstrate a well-known connection that had been established in Egyptian social consciousness for some time, only appearing in textual form at a later date. It is also possible that earlier textual associations may have been made but are not extant.

Arguments that endorse interpretations of the pot as a womb may be equally applied to eggs, including the ability to serve as containers, to incubate, to be modified by temperature, to contain and protect, and to be non-porous and watertight (Donadoni Roveri 1969; Orrelle 2008). All regions featuring this mode of burial, including Egypt, are noted on some occasions to have intentionally damaged the vessel mouth and/or pierced the base. Apart from the pragmatic functions of admitting the body to the vessel in the context of burial, or to provide a means to drain decomposition fluids, such acts of breakage have been interpreted as symbolic means to facilitate ease of rebirth in the afterlife (Bacvarov 2008; Orrelle 2008), an argument that could equally apply to eggs and wombs. Furthermore, in the manifold cases of Egyptian pot burials of adults and children, it is hard to dismiss the visual similarities between pots laden with human bodies with limbs contracted into the so-called 'foetal' or 'sleeping' position (Figure 3) and gravid uteri or eggs. It is clear that further study is required to untangle the symbolic meaning of this particular mode of burial, which has clear associations with gestation and (re)birth. As highlighted by Conkey (1997), it is possible that these burials may have different levels of meaning, nuanced according to the multiscalar components of their particular cultural, temporal and geographic contexts (Orrelle 2008). In fact, such multiplicities of meaning may be described as characteristic of the "elusive entity" that is Egyptian religion (Frankfort 1975: 21; cf. Assmann 1989).

(Mis)understandings

In light of the apparent symbolism of these burials, it is worthwhile to consider why so many Egyptians chose to bury their deceased family or community members in pots, as it is clear



Figure 3. A selection of child and infant pot burials from the Pre- to Early Dynastic cemetery of Adaïma, Egypt (reproduced with permission of Béatrix Midant-Reynes, Institut Français d'Archéologie Orientale).

that they had many options at their disposal, including wrapping in linen, animal skins or reed matting; or placement in receptacles constructed from basketry, mud, ceramics, wood or stone. Many individuals also appear to have been buried without any form of funerary container, their bodies being placed directly into the sand or earth. It is apparent that the final mode of interment was a product of choice (Kroeper 1994).

As mentioned, several scholars have stated that apart from direct interment in the sand or earth, pot burials were by far the most common mode of interment for deceased children, infants and foetuses in ancient Egypt. The results of the present research, however, question this hypothesis. Of 1809 child, infant and foetal burials identified within published data of the Early Dynastic to Middle Kingdom Periods (c. 3300–1650 BC), a minimum of 746 individuals were reportedly buried within a funerary container of some description (Power 2012; see Figure 4). Of these, 338 were wooden coffins, followed by 329 pot burials (see Figure 5). The prevalence of wooden coffins over ceramic vessels for child, infant and foetal burials is noteworthy, considering both the relative scarcity and high cost of wood as a construction material during these early periods of Egyptian history and the propensity of

[©] Antiquity Publications Ltd, 2016

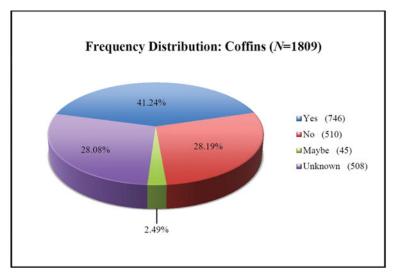


Figure 4. Frequency distribution of coffins in child, infant and foetal burials (Egyptian Early Dynastic to Middle Kingdom periods); after Power 2012: fig. 6.2.

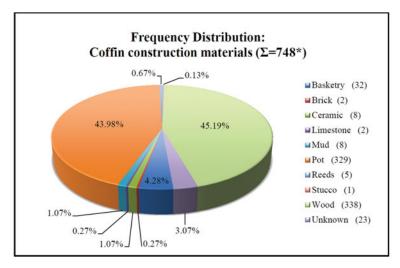


Figure 5. Frequency distribution of child, infant and foetal coffin construction materials (Egyptian Early Dynastic to Middle Kingdom periods). Note: the total number of coffins exceeds the number of individuals with coffins because two individuals received two coffins each; after Power 2012: fig. 6.23.

wood to be less well preserved than ceramics in archaeological contexts. Overall, the fact that just over 40 per cent of the known cases of juvenile burials were provided with some form of container is of interest, and may provide further insights into social differentiation in both living and funereal spheres. For the periods canvassed by this research, it is clear that our understanding of the mortuary treatment of ancient Egyptian children, infants and foetuses may require some recalibrations.

Table 1. Sites with pot burials furnished with grave goods.

Site	References
A1 1	D : 1002 D 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Abydos	Petrie 1902; Randall-MacIver & Mace 1902; Peet & Loat 1913; Peet 1914; Habachi 1939; Frankfort 1930; Hendrickx 1998
Adaïma	Hendrickx 1998; Crubézy et al. 2002
Armant	Myers & Fairman 1931; Mond & Myers 1937; Hendrickx 1998
Badari	Brunton 1927; Hendrickx 1998
Balat	Minault-Gout 1992
Deir el-Ballas	Petrie 1896; Quibell 1896; Garstang 1904; Hendrickx 1998
el-Ghurab	Loat & Murray 1905; Brunton & Engelbach 1927; Petrie 2000
Kom el-Hisn	Hamada & Farid 1948, 1950; Orel 2000
el-Kubaniya	Junker 1919; Hendrickx 1998
Matmar	Brunton 1948; Hendrickx 1998
el-Mostagedda	Brunton 1937; Hendrickx 1998
Naga ed-Deir	Reisner 1908; Mace 1909; Reisner 1932; Hendrickx 1998
Qau el-Kebir	Brunton 1927, 1928; Brunton & Caton-Thompson 1928
Riqqeh	Engelbach 1915
Sebaiya (East)	Lortet & Galliard 1909; Hendrickx 1998

Precisely what it was that motivated the choice of pots as funerary containers divides opinion. As mentioned, most commentary on the subject states that pot burials were the preserve of the poorest members of the community, and the procurement of pre-used vessels from domestic contexts is often cited as a marker of destitution. Castillos (1982), for example, excluded pot burials from his statistical analyses of the large Protodynastic cemeteries at Qau, Badari and Hemmamiya due to the supposed poverty of this mode of interment. In light of the preceding evidence regarding the preponderance of moreexpensive wooden coffins among the dataset, the present study is not favourably disposed to this interpretation and tends to agree with Garstang, who states that this mode of burial is "no proof of poverty" (1904: 56; 1907: 27; cf. Kilroe 2015). Garstang cites examples of pot burials from Elkab and Regagna that are "more elaborately furnished than those of other kinds, which are more plentiful" (1904: 51). One may also cite the pot burial of an infant, interred in a contemporary context alongside the body of Governor Ima-Pepi in the burial chamber of his expansive late Old Kingdom/early First Intermediate Period mastaba tomb at Balat in Dakhla Oasis (Minault-Gout 1992). Accompanying this baby was a quantity of beads, seven of which were covered in gold foil. Those responsible for the multiple burial of Ima-Pepi and this tiny individual in such an opulent manner clearly had vast resources and political power at their disposal. Table 1 provides details of other sites that also feature one or more pot burials furnished with an array of grave goods.

(Re)use

Some cite the reuse of domestic ceramic vessels as funerary containers as further signifiers of poverty (Zillhardt 2009), or the diminished value of their occupants, particularly children, infants and foetuses (Menghin & Amer 1936). Such interpretations do not, however,

[©] Antiquity Publications Ltd, 2016

acknowledge the cultural biographies of objects, a well-recognised approach that provides the capacity for transitions in the function and symbolism of objects across their uselives (Gosden & Marshall 1999; Stevenson 2009). Theories of cultural biography stem from economic models that allow for significant changes in the way an object is used or conceptualised by humans within specific cultural contexts (Appadurai 1986; Kopytoff 1986; Meskell 2004). These changes both modify and are modified by humans, as such transformations form inextricable links between humans and the components of their material world (Gosden & Marshall 1999). Such an approach endorses the role of literal and metaphorical 'recycling' of objects within cultures, in a manner that does not necessitate 'devaluing' as the object moves along its use-life, changing in function or meaning until its eventual accidental or deliberate entry into the archaeological record (Gosden & Marshall 1999). Certainly, studies of reuse and recycling as normative practice are emerging in Egyptian archaeological discourse: encompassing coffins and sarcophagi (Baines & Lacovara 2002; Manley & Dodson 2010), tombs and construction materials (Meskell 2001, 2002; Baines & Lacovara 2002; Ockinga 2007), domestic space (Hope et al. 2010), royal sculpture (Wildung 2003), objects (Stevenson 2009) and stolen goods (Savage 1997). It appears, however, that aspersions are only cast towards reuse and recycling behaviour when the instigators or recipients are children or the 'poor'.

The present study argues that pots were deliberately selected and reused as funerary containers for what may have been a variety of pragmatic and symbolic reasons mediated within a framework of socio-cultural intersubjectivity (Lloyd-Smith & Cole 2010). Firstly, ancient societies were not 'throw-away' societies (Rathje & Murphy 2001). With the possible exception of some single or low-use object categories such as bread moulds, if an object was no longer viable for its initial function, it was not immediately disposed of, but rather repaired, functionally or symbolically transformed, stored for future reuse, or broken down to be integrated into another object (Rathje & Murphy 2001). Indeed, the very idea of 'rubbish' is culturally situated. To view recycled objects as "zero-signifiers" (Lucas 2002: 16) in archaeological narratives is anachronistic and ethnocentric, especially considering that the practice of recycling appears to be a "fundamental characteristic of the human species" (Rathje & Murphy 2001: 191–92). Even the removal of an object from circulation among living communities to be placed within a burial assemblage represents an act of functional and symbolic transformation or recycling. Such objects are not excluded from cultural engagement; they are simply engaged in a different way. As long as objects continue to participate in a cultural system, they remain constituted within that system (Lucas 2002). Re-constitution does not equate to dis-constitution. Recycling was an essential component of ancient economic and technological sustainability, and does not necessarily represent a diminishment of 'value'.

Secondly, the durability and impermeability of pots made them excellent coffins. Scholars have noted that bodies buried in pots are often the best preserved among entire cemeteries (Donadoni Roveri 1969; Kroeper 1994), a fact some may find ironic considering that these were supposedly the community's poorest constituents. Thirdly, there may have been a notion that the (re)use of domestic objects within the mortuary landscape facilitated 'continuing bonds' between the dead and those burying them (Klass & Walter 2001; Renfrew 2004). Here, the accompaniment of familiar objects with the deceased may have

provided means to assuage the grief of family and community members by facilitating enduring material and corporeal connections (Stevenson 2009; cf. Insoll 2015). Fourthly, as mentioned, there may have been some symbolic associations between pots, wombs and eggs in ancient Egypt. As the symbols of life *par excellence*, it is hard to recommend a more fitting means to facilitate the transition into the afterlife.

Conclusion

Regardless of the myriad potential motivations (either in isolation or combination) behind the transformation of pots into funerary containers, it is clear that their prior functions and sometimes incomplete state did not impede their cultural capacity for biographical transformation into perfect "ritual machines" (Willems 1988: 239) that in themselves would 're-cycle' (Willems 1988; Meskell 1999, 2001) the deceased into an 3h: a transfigured and effective spirit in the afterlife (Meskell 2002: 179). Indeed, such multiplicity in object manifestations and meanings harmonises well with Egyptian religious beliefs, where different correlations of phenomena were commonplace, and such differences did not compromise phenomenal coexistence (Frankfort 1975). Theories that expand our understanding of the infinitely variable shifts and transformations within the functional and symbolic cultural biographies of objects stand to greatly enhance and expand engagements with all aspects of material culture in Egyptian archaeology. In the particular case of pot burials, this calls for a reversal of understanding: from refuse to rebirth. The present study therefore calls for the legitimation of pots as authentic, culturally situated, enduring funerary containers and, as such, for their rightful integration into Egyptian coffin typologies.

Acknowledgements

We are grateful to Susanne Binder and Boyo Ockinga of Macquarie University for their comments on this work, especially pertaining to epigraphic and linguistic attestations and nuances. We thank Mary Hartley for her artistic skills and Sandra Aussel for her cartography. Photographs from Adaïma appear courtesy of Béatrix Midant-Reynes for the Institut Français d'Archéologie Orientale. Thanks to Franca Cole of UCL Qatar for providing several articles and unpublished works; and to Tiago Hermenegildo and Shawn O'Donnell of the University of Cambridge for supplying several references. Finally, we thank Stan Hendrickx and an anonymous reviewer for their helpful comments that have improved this manuscript. This research was carried out under the auspices of a Commonwealth of Australia Postgraduate Award.

References

- ALLCHIN, B. & R. ALLCHIN. 1982. The rise of civilisation in India and Pakistan. Cambridge: Cambridge University Press.
- ALLSWORTH-JONES, P. 2012. Kariya Wuro, a Late Stone Age rock shelter in northern Nigeria. Paper presented at the African Archaeology Research Days Conference 2012, University of Southampton, 3–4 November 2012.
- APPADURAI, A. 1986. Introduction: commodities and the politics of value, in A. Appadurai (ed.) *The social life of things: commodities in cultural perspective*: 3–63. Cambridge: Cambridge University Press.

- ASCHWANDEN, H. 1982. Symbols of life: an analysis of the consciousness of the Karanga. Gweru: Mambo.
- ASSMANN, J. 1972. Neith spricht als Mutter und Sarg. Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo 28: 115–39.
- 1989. Death and initiation in the funerary religion of ancient Egypt, in J.P. Allen (ed.) Religion and philosophy in ancient Egypt: 135–59. New Haven: Yale Egyptological Seminar, Department of Near Eastern Languages and Civilizations, Yale University.
- 2001. The search for God in ancient Egypt (trans. D. Lorton). Ithaca (NY): Cornell University Press.

- BACVAROV, K. 2008. A long way to the West: earliest jar burials in southeast Europe and the Near East, in K. Bacvarov (ed.) *Babies reborn: infant/child burials* in pre- and protohistory: 61–70. Oxford: Archaeopress.
- BAINES, J. & P. LACOVARA. 2002. Burial and the dead in ancient Egyptian society. *Journal of Social Archaeology* 2: 5–36. http://dx.doi.org/10.1177/1469605302002001595
- BARLEY, N. 1994. Smashing pots: works of clay from Africa. Washington, D.C.: Smithsonian Institution Press.
- BEDFORD, S. & M. SPRIGGS. 2007. Birds on the rim: a unique Lapita carinated vessel in its wider context. *Archaeology in Oceania* 42: 12–21. http://dx.doi.org/10.1002/j.1834-4453.2007.tb00010.x
- BLACKMAN, W.S. 1968. The Fellāhīn of Upper Egypt: their religious, social and industrial life with special reference to survivals from ancient times. London: G.G. Harrap & Co.
- Bloch, M. & J. Parry. 1982. *Death and the regeneration of life*. Cambridge: Cambridge University Press. http://dx.doi.org/10.1017/CBO9780511607646
- Boeyens, J., M. Van der Ryst, F. Coetzee, M. Steyn & M. Loots. 2009. From uterus to jar: the significance of an infant pot burial from Melora Saddle, an early nineteenth-century African farmer site on the Waterberg Plateau. *Southern African Humanities* 21: 213–38.
- Brunton, G. 1927. *Qau and Badari I.* London: British School of Archaeology in Egypt.
- 1928. Qau and Badari II. London: British School of Archaeology in Egypt.
- 1937. Mostagedda and the Tasian Culture. London: B. Quaritch.
- 1948. Matmar. London: B. Quaritch.
- Brunton, G. & G. Caton-Thompson. 1928. *The Badarian civilisation and predynastic remains near Badari*. London: B. Quaritch.
- Brunton, G. & R. Engelbach. 1927. *Gurob*. London: British School of Archaeology in Egypt.
- CASTILLOS, J.J. 1982. A reappraisal of the published evidence on Egyptian Predynastic and Early Dynastic cemeteries. Toronto: Benben.
- COLLIER, M. & S. QUIRKE (ed.). 2004. The UCL Lahun Papyri: religious, literary, legal, mathematical and medical. Oxford: Archaeopress.
- CONKEY, M.W. 1997. Beyond art and between the caves: thinking about context in the interpretative process, in M.W. Conkey, O. Soffer, D. Stratmann & N.G. Jablonski (ed.) *Beyond art. Pleistocene image and symbol*: 343–67. San Francisco: California Academy of Sciences.

- CRUBÉZY, É., T. JANIN & B. MIDANT-REYNES. 2002. Adaïma 2. la nécropole prédynastique. Cairo: Institut français d'archéologie orientale.
- DAVID, N. 1995. Mortuary practices, ideology and society in the central Mandara highlands, north Cameroon, in C. Baroin, D. Barreteau & C. Graffenreid (ed.) Mort et rites funéraires dans le Bassin du Lac Tchad: 75–101. Paris: ORSTOM.
- DEMARRAIS, E. 2004. The materialization of culture, in E. DeMarrais, C. Gosden & C. Renfrew (ed.) Rethinking materiality: the engagement of mind with the material world: 11–22. Cambridge: McDonald Institute for Archaeological Research.
- DE MORGAN, J. 1897. Recherches sur les origins de l'Égypte II: ethnographie préhistorique et tombeau royal de Negadah. Paris: Ernest Leroux.
- DONADONI ROVERI, A.-M. 1969. *I sarcofagi Egizi dalle Origini alla fine dell'Antico Regno*. Roma: Università di Roma, Istituto di studi del Vicino Oriente.
- EL-SHOHOUMI, N. 2004. Der Tod im Leben—Eine vergleichende Analyse altägyptischer und rezenter ägyptischer Totenbräuche. Wien: Österreichischen Akademie der Wissenschaften.
- ENGELBACH, R. 1915. *Riqqeh and Memphis*. London: British School of Archaeology in Egypt.
- 1923. Harageh. London: British School of Archaeology in Egypt.
- Erman, A. & H. Grapow. 1926–1931. Wörterbuch der aegyptischen Sprache (6 volumes). Berlin: Akademie-Verlag.
- FORRER, R. 1901. Über Steinzeit-Hockergräber zu Achmim, Naqada etc, in Ober-Ägypten und über europäische Parallelfunde. Strassburg: Trübner.
- Frankfort, H. 1930. The cemeteries of Abydos: work of the season 1925–1926. II. Description of tombs. *Journal of Egyptian Archaeology* 16: 213–19. http://dx.doi.org/10.2307/3854209
- 1975. Ancient Egyptian religion: an interpretation.
 New York: Harper.
- GARDINER, A.H. 1994. Egyptian grammar. Being an introduction to the study of hieroglyphs. Oxford: Oxford University Press.
- GARSTANG, J. 1902. Excavations at Reqaqnah in Upper Egypt. *Man* 2: 65–66. http://dx.doi.org/10.2307/2839559
- 1904. Tombs of the Third Egyptian Dynasty at Regâqnah and Bêt Khallâf. Westminster: Constable.
- 1907. The burial customs of ancient Egypt: as illustrated by tombs of the Middle Kingdom, being a report of excavations made in the necropolis of Beni Hassan during 1902–3–4. London: Kegan Paul.
- Gosden, C. & Y. Marshall. 1999. The cultural biography of objects. World Archaeology 31: 169–78. http://dx.doi.org/10.1080/ 00438243.1999.9980439
 - © Antiquity Publications Ltd, 2016

- Habachi, L. 1939. A First Dynasty cemetery at Abydos. *Annales du Service des Antiquités de l'Égypte* 39: 767–81.
- HAMADA, A. & S. FARID. 1948. Excavations at Kôm el-Ḥisn, third season 1946. Annales du Service des Antiquités de l'Égypte 48: 299–308.
- 1950. Excavations at Kôm el-Ḥisn, fourth season
 1947. Annales du Service des Antiquités de l'Égypte
 50: 367–79.
- HARRIS, N.J. & N. TAYLES. 2012. Burial containers—a hidden aspect of mortuary practice: archaeothanatology at Ban Non Wat, Thailand. *Journal of Anthropological Archaeology* 31: 227–39. http://dx.doi.org/10.1016/j.jaa.2012.01.001
- HENDRICKX, S. 1998. La nécropole de l'est à Adaïma. Position chronologique et parallèls. Archéo-Nil 8: 105–28.
- HERTZ, R. 1960. *Death and the right hand* (trans. R. & C. Needham). Aberdeen: Cohen & West.
- HOLL, A. 1995. Apprivoiser la mort, s'approprier
 l'espace: les cimetières comme enjeu, in C. Baroin,
 D. Barreteau & C. Graffenreid (ed.) Mort et rites funéraires dans le Bassin du Lac Tchad: 31–46. Paris: ORSTOM.
- HOPE, C.A., D. JONES, L. FALVEY, J. PETKOV, H. WHITEHOUSE & K. WORP. 2010. Report on the 2010 season of excavations at Ismant el-Kharab, Dakhleh Oasis. *Bulletin of the Australian Centre for Egyptology* 21: 21–54.
- IKRAM, S. & A. DODSON. 1998. The mummy in ancient Egypt. Equipping the dead for eternity. London: Thames & Hudson.
- INSOLL, T. 2015. *Material explorations in African archaeology*. Oxford: Oxford University Press.
- JUNKER, H. 1919. Bericht über die Grabungen der Akademie der Wissenschaften in Wien auf den Friedhöfen von El-Kubanieh-Süd, Winter 1910–1911. Wien: A. Hölder.
- KÄLLÉN, A. & C. VINTERHAV. 2003. Embodied pots: a wider concept of jar burial applied to the Lao Pako site, central Laos, in A. Karlstrom & A. Källén (ed.) Fishbones and glittering emblems: Southeast Asian archaeology 2002: 167–80. Stockholm: Museum of Far Eastern Antiquities.
- KANAWATI, N. 2008. Mereruka and his family. Part II: the tomb of Waatetkhethor. Oxford: Aris & Phillips.
- KILROE, L. 2015. Precious deposits: new interpretations of infant jar burials in ancient Egypt and Sudan, in M.S. Pinarello, J. Yoo, J. Lundock & C. Walsh (ed.) Current research in Egyptology 2014. Proceedings of the Fifteenth Annual Symposium. University College London and Kings College London, April 9–12, 2014: 217–28. Oxford: Oxbow.

- KLASS, D. & T. WALTER. 2001. Processes of grieving: how bonds are continued, in M. Stroebe, R. Hansson, W. Stroebe & H. Schut (ed.) Handbook of bereavement research: consequences, coping and care: 431–48. Washington, D.C.: American Psychological Association. http://dx.doi.org/10.1037/10436-018
- KOPYTOFF, I. 1986. The cultural biography of things: commoditization as a process, in A. Appadurai (ed.) *The social life of things: commodities in cultural perspective*: 64–91. Cambridge: Cambridge University Press.
- KROEPER, K. 1994. Minshat Abu Omar. Pot burials occurring in the Dynastic cemetery. *Bulletin de la céramique égyptienne* 18: 19–32.
- LICHTHEIM, M. 1975. Ancient Egyptian literature. Volume I: the Old and Middle Kingdoms. Berkeley: University of California Press.
- LITTLETON, J. 2011. Moving from the canary in the coalmine. Modeling childhood in Bahrain, in S.C. Agarwal & B.A. Glencross (ed.) *Social bioarchaeology*: 361–89. Chichester: Wiley-Blackwell. http://dx.doi.org/10.1002/9781444390537.ch13
- LLOYD-SMITH, L. & F. COLE. 2010. The jar-burial tradition in the West Mouth of Niah Cave, Sarawak: burial histories, social identities, and changing perceptions of pottery and death, in B. Bellina, E. Bacus, T.O. Pryce & J. Wisseman Christie (ed.) 50 years of archaeology in Southeast Asia: essays in honour of Ian Glover: 114–27. Bangkok: River.
- LOAT, L. & M.A. MURRAY. 1905. Saggara Mastabas and Gurob. London: B. Quaritch.
- LORTET, L.C. & C. GAILLARD. 1909. La faune momifiée de l'ancienne Égypte et recherches anthropologiques. Volume 2. Lyon: Henri Georg.
- LUCAS, G. 2002. Disposability and dispossession in the twentieth century. *Journal of Material Culture* 7(1): 5–22.
 - http://dx.doi.org/10.1177/1359183502007001303
- LUCY, S. 2000. The Anglo-Saxon way of death. Stroud: Sutton.
- MACE, A.C. 1909. The Early Dynastic cemeteries of Naga-ed-Dêr. Part II. Leipzig: J.C. Hinrichs.
- MANLEY, B. & A. DODSON. 2010. Life everlasting. National Museums Scotland collection of ancient Egyptian coffins. Edinburgh: National Museums Scotland.
- MASALI, M. & B. CHIARELLI. 1972. Demographic data on the remains of ancient Egyptians. *Journal of Human Evolution* 1: 161–69. http://dx.doi.org/10.1016/0047-2484(72)90017-6

- MENGHIN, O. & M. AMER. 1936. Excavations of the Egyptian University in the Neolithic site at Maadi. Second preliminary report (season of 1932). Cairo: Government Press.
- MESKELL, L. 1999. Archaeologies of social life: age, class, et cetera in ancient Egypt. Oxford & Malden (MA): Blackwell.
- 2001. The Egyptian ways of death, in M.S. Chesson (ed.) Social memory, identity and death: anthropological perspectives on mortuary rituals: 27–40. Arlington (VA): American Anthropological Association.
- 2002. Private life in New Kingdom Egypt. Princeton (NJ) & Oxford: Princeton University Press.
- 2004. Object worlds in ancient Egypt. Material biographies past and present. Oxford: Berg.
- MIDANT-REYNES, B. 2000. The prehistory of Egypt. From the first Egyptians to the first pharaohs (trans. I. Shaw). Malden (MA): Blackwell.
- MINAULT-GOUT, A. 1992. *Le Mastaba d'Ima-Pepi* (*Mastaba II*). *Fin de l'ancien empire*. Caire: Institut français d'archéologie orientale.
- MISHINA, T. 2008. A social aspect of intramural infant burials' analysis: the case of EBA Tell Yunatsite, Bulgaria, in K. Bacvarov (ed.) *Babies reborn:* infant/child burials in pre- and protohistory: 137–46. Oxford: Archaeopress.
- MIZOGUCHI, K. 2005. Genealogy in the ground: observations of jar burials of the Yayoi period, northern Kyushu, Japan. *Antiquity* 79: 316–26.
- MOND, R. & O.H. MYERS. 1937. *Cemeteries of Armant I.* London: Egypt Exploration Society.
- MYERS, O.H. & H.W. FAIRMAN. 1931. Excavations at Armant, 1929–31. *Journal of Egyptian Archaeology* 17: 223–32. http://dx.doi.org/10.2307/3854765
- OCKINGA, B. 2007. Use, reuse, and abuse of 'sacred space': observations from Dra Abu al-Naga, in P.F. Dorman & B.M. Bryan (ed.) Sacred space and sacred function in ancient Thebes: 139–63. Chicago (IL): Oriental Institute of the University of Chicago.
- OREL, S.E. 2000. A re-examination of the 1943–1952 excavations at Kôm el-Ḥisn, Egypt. Göttinger Miszellen 179: 39–49.
- Orrelle, E. 2008. Infant jar burials—a ritual associated with early agriculture?, in K. Bacvarov (ed.) *Babies reborn: infant/child burials in pre- and protohistory*: 71–78. Oxford: Archaeopress.
- PATCH, D.C. 2007. Third Intermediate period burials of young children at Abydos, in Z.A. Hawass & J. Richards (ed.) *The archaeology and art of ancient Egypt. Essays in honour of David B. O'Connor. Volume II*: 237–55. Cairo: Supreme Council of Antiquities of Egypt.

- PEET, T.E. 1914. The year's work at Abydos. *Journal of Egyptian Archaeology* 1: 37–39.
- PEET, T.E. & W.L.S. LOAT. 1913. The cemeteries of Abydos, part III—1912–1913. London: Egypt Exploration Fund. http://dx.doi.org/10.2307/3853669
- PETRIE, W.M.F. 1896. *Naqada and Ballas*. Warminster: B. Quaritch.
- 1902. Abydos, Part I, 1902. London: Kegan Paul, Trench, Trübner.
- 1905. Ehnasya. London: Egypt Exploration Fund.
- 2000. The Petrie Museum archives: Sir William Matthew Flinders Petrie; notebooks, tomb cards, distribution list, distribution list index, ancient Egyptian glazing, ancient Egyptian glass. CD-ROM. London: University College, London.
- PETRIE, W.M.F., G.A. WAINWRIGHT & E. MACKAY. 1912. *The Labyrinth, Gerzeh and Mazghuneh*. London: School of Archaeology in Egypt.
- POWER, R.K. 2012. From the cradle to the grave: child, infant and foetal burials in the Egyptian archaeological record from the Early Dynastic Period to the Middle Kingdom (ca. 3300–1650 BC). Unpublished PhD dissertation, Macquarie University.
- QUIBELL, J.E. 1896. Ballas. London: B. Quaritch.
- RANDALL-MACIVER, D. & A.C. MACE. 1902. *El Amrah and Abydos 1899–1901*. London: Egypt Exploration Fund.
- RATHJE, W. & C. MURPHY (ed.). 2001. *Rubbish! The* archaeology of garbage. Tucson (AZ): HarperPerennial.
- REISNER, G.A. 1908. The Early Dynastic cemeteries of Naga-ed-Dêr, Part I. Leipzig; J.C. Hinrichs.
- 1932. A provincial cemetery of the pyramid age. Naga-ed-Dêr, Part III. Berkeley: University of California Press.
- RENFREW, C. 2004. Towards a theory of material engagement, in E. DeMarrais, C. Gosden & C. Renfrew (ed.) *Rethinking materiality: the engagement of mind with the material world:* 23–31. Cambridge: McDonald Institute for Archaeological Research.
- ROTH, A.M. 1992. The pss-kf and the 'Opening of the Mouth' ceremony: a ritual of birth and rebirth. Journal of Egyptian Archaeology 78: 113–47. http://dx.doi.org/10.2307/3822068
- SADIG, A.M. 2014. Child-burials; a funerary practice in the Middle Nile region. Evidence from the late Neolithic site of es-Sour: Sudan, in J. Anderson & D. Welsby (ed.) The Fourth Cataract and beyond. Proceedings of the 12th International Conference for Nubian Studies: 285–92. Leuven: Peeters.

Ronika K. Power and Yann Tristant

- SAVAGE, S.H. 1997. Descent group competition and economic strategies in predynastic Egypt. *Journal of Anthropological Archaeology* 16: 226–68. http://dx.doi.org/10.1006/jaar.1997.0312
- SHAW, I. 2000. *The Oxford history of ancient Egypt.* Oxford: Oxford University Press.
- SHEPHERD, G. 2007. Poor little rich kids? Status and selection in archaic western Greece, in S. Crawford & G. Shepherd (ed.) *Children, childhood and society*: 93–106. Oxford: Archaeopress.
- SILVERMAN, H. & W.H. ISBELL (ed.). 2008. The handbook of South American archaeology. New York: Springer. http://dx.doi.org/10.1007/978-0-387-74907-5
- SPIESER, C. 2008. Cercueils d'enfants dans l'Égypte ancienne et tardive, in F.G. Jener, S. Muriel & C. Olària (ed.) Nasciturus, infans, puerulus vobis mater terra: la muerte en la infancia: 501–38. Castelló: Servei d'Investigacions Arqueològiques i Prehistòriques.
- STEVENSON, A. 2006. Gerzeh, an Egyptian cemetery shortly before history. London: Golden House.
- 2009. Social relationships in predynastic burials.
 Journal of Egyptian Archaeology 95: 175–92.

- Tarlow, S. 1999. Bereavement and commemoration: an archaeology of mortality. Oxford: Blackwell.
- Tristant, Y. 2012. Les enterrements d'enfants dans l'Égypte prédynastique et pharaonique, in M.-D. Nenna (ed.) L'Enfant et la mort dans l'Antiquité II. Types de tombes et traitement du corps des enfants dans l'antiquité gréco-romaine (Études Alexandrines 26): 15–59. Alexandria: Centre d'etudes alexandrines.
- WEINSTEIN, J.M. 1973. Foundation deposits in ancient Egypt. Unpublished PhD dissertation, University of Pennsylvania.
- WILDUNG, D. 2003. Looking back into the future: the Middle Kingdom as a bridge to the past (trans. F. Handley), in J. Tait (ed.) 'Never had the like occurred'. Egypt's view of its past: 61–78. London: UCL Press.
- WILLEMS, H. 1988. Chests of life: a study of the typology and conceptual development of Middle Kingdom standard class coffins. Leiden: Ex Oriente Lux.
- ZILLHARDT, R. 2009. Kinderbestattungen und die soziale Stellung des Kindes im Alten Ägypten—unter besonderer Berücksichtigung des Ostfriedhofes von Deir el-Medine (Göttinger Miszellen: Beihefte 6). Göttingen: Seminar für Ägyptologie und Koptologie.

Received: 23 April 2014; Accepted: 23 June 2014; Revised: 10 May 2016