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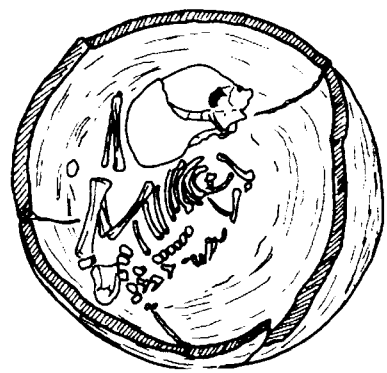
# From the Cradle to the Grave

## Child, Infant and Foetal Burials in the Egyptian Archaeological Record from the Early Dynastic Period to the Middle Kingdom (*ca.* 3300–1650 BC)

## Volume I



A thesis submitted in fulfilment of the requirements
for the degree of Doctor of Philosophy

by

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2011

# DECLARATION

I, Ronika Kathleen Power, hereby declare that the material in this thesis entitled *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)* has not been previously submitted as part of the requirements for a higher degree at this or any other institution.

I declare that this is an original piece of research wholly written by me. Any assistance I have received in my research and in the preparation of this thesis have been duly acknowledged. All literature and information sources used within the thesis are cited in the text.

Dated this 11th day of November 2011.

Ronika Kathleen Power.

# ABSTRACT

This research investigates how current disciplinary perceptions of ancient Egyptian child, infant and foetal mortuary culture correspond with its actual nature and scope. It engages the fields of history, archaeology, physical anthropology and philosophy to present an interdisciplinary investigation of child, infant and foetal burials in the Egyptian archaeological record. The research is based on a sample of 1,809 children, infants and foetuses derived from a survey of all available published archaeological data from the Egyptian Early Dynastic to Middle Kingdom Periods (ca. 3300–1650 BC), supplemented by unpublished Early Dynastic cemetery data from the Australian Centre for Egyptology's Helwan Project. This thesis addresses the absence of child, infant and foetal mortuary culture in Egyptian archaeological research. To date, scholars have surmised that published cemetery data rarely include significant numbers of child, infant and foetal burials, thereby rendering them unavailable for study. This apparent absence is attributed to differential burial practices for these individuals, based on an assumption that at this young age, they were not considered embodied members of the community. However, these hypotheses have been formed without consultation of available historical, archaeological, and skeletal evidence. As a result, children are marginalised within Egyptian archaeological narratives. While many studies consider the position, value and agency of Egyptian children via their artistic and epigraphic representations, such methodologies confine children's lived experiences within the conceptual boundaries of socialisation and familism. In this frame, they are denied the same ontological status as adults. Quantitative and qualitative data analyses delivered in this thesis recalibrate these perspectives of child, infant and foetal mortuary culture and revise their lived experiences and cultural capacities in Egyptian society. The identification of so many children in the archaeological record confirms their suitability as subjects of research. The observation of the majority of child, infant and foetal burials in communal cemetery contexts refute hypotheses of supposed differential mortuary treatment. Consistent observations of profound similarities between child and adult mortuary culture are found to be indicative of their ontological equity during the timeframes canvassed by this research. In contrast to current reconstructions of children as passive familial appendages, this research demonstrates that ancient Egyptian children, infants and foetuses were considered individual social entities with complete cultural capacities, and were actively engaged in extensive social networks between and amongst communities of both the living and the dead.

*To*

*Morgan, Ethan, Harrison, Sebastian, Ameila,*
*Anneka, Caris and Alistair Power*

*Pandora Humphreys-Power*

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This thesis is lovingly dedicated to all the little ones
Including those who didn't quite make it and those still to come
You are among the greatest teachers in my journey through life and learning
Thank you for your patience while Tante finished her 'book'
Now, let's go swimming!

# TABLE OF CONTENTS

## VOLUME 1: TEXT

## VOLUME 2: FIGURES AND TABLES

# ABBREVIATIONS

Abbreviations used within the text and figures:

| | |
|---|---|
| ACE | Australian Centre for Egyptology |
| BARC | Biological Anthropology Research Centre, University of Bradford, West Yorkshire, UK. |
| CIF | child, infant and foetal |
| CIFs | children, infants and foetuses |
| CIFB/s | child, infant and foetal burial/s |
| DRN/s | Database Record Number/s |
| EBLE | East Bank Lower Egypt |
| EBUE | East Bank Upper Egypt |
| EDP | Early Dynastic Period |
| END | Eastern Nile Delta |
| FARAH | Facility for Archaeological Research At Helwan |
| FIP | First Intermediate Period |
| GGRN/s | Grave Good Record Number/s |
| GRP | Greco-Roman Period |
| LP | Late Period |
| MK | Middle Kingdom |
| MMA | Museum of Modern Art, New York |
| MNI | minimum number of individuals |
| *N* | total number of sample (number indicated within brackets) |
| ND | no data |
| NEO | Neolithic |
| NK | New Kingdom |
| OK | Old Kingdom |
| PBs | pot burials |
| PDP | Predynastic Period |
| RMN | Roman Period |
| SIP | Second Intermediate Period |
| TACBs | total age category burials |
| TAFs | total associated features |
| TBG | total bedding |
| TBs | total burials |
| TC | total category |
| TCBs | total cemetery burials |
| TCNs | total coffins |
| TIP | Third Intermediate Period |
| TKABs | total known-age burials |
| TKOBs | total known-orientation burials |
| TKPBs | total known-position burials |
| TKSABs | total known-sex and –age burials |
| TKSBs | total known-sex burials |
| TPBs | total period burials |
| TPs | total pathologies |
| TRBs | total regional burials |
| TSBs | total settlement burials |

| | |
|---|---|
| TSSBs | total site synchronic burials |
| TSTBs | total site type burials |
| TSUBs | total substructures |
| TSUPs | total superstructures |
| TT | Theban Tomb |
| TW | total wrapping |
| WBLE | West Bank Lower Egypt |
| WBME | West Bank Middle Egypt |
| WBUE | West Bank Upper Egypt |
| WND | Western Nile Delta |
| $\bar{x}$ #/FB | mean (average) number of objects per furnished burial |
| $\Sigma$ | sum |

Abbreviations used within the bibliography:

| | |
|---|---|
| *AA* | *American Antiquity,* Washington, D.C. |
| *AAR* | *African Archaeological Review,* Cambridge. |
| *AEMT* | P. T. Nicholson & I. Shaw (eds.) (2000) *Ancient Egyptian Materials and Technology*, Cambridge. |
| *AfO* | *Archiv für Orientforschung,* Berlin/Graz/Vienna. |
| *AJA* | *American Journal of Archaeology,* New York. |
| *AJPA* | *American Journal of Physical Anthropology,* New York. |
| *ARA* | *Annual Review of Anthropology,* Palo Alto. |
| *ARC* | *Archaeological Review from Cambridge,* Cambridge. |
| *ASAE* | *Annales du Service des Antiquités de l'Égypte,* Cairo. |
| *BACE* | *Bulletin of the Australian Centre for Egyptology,* Sydney. |
| *BCE* | *Bulletin de la céramique égyptienne,* Cairo. |
| *BIE* | *Bulletin de l'Institut d'Égypte,* Cairo. |
| *BIFAO* | *Bulletin de l'Institut Français d'Archéologie Orientale,* Cairo. |
| *CA* | *Current Anthropology,* Chicago. |
| *CCE* | *Cahiers Caribéens d'Egyptologie,* Martinique. |
| *CdE* | *Chronique d'Égypte,* Brussels. |
| *DE* | *Discussions in Egyptology,* Oxford. |
| *EA* | *Egyptian Archaeology,* London. |
| *ES* | *Ethology and Sociobiology,* New York. |
| *ET* | *Études et Travaux,* Warsaw. |
| *EU* | *Environment and Urbanization,* London. |
| *FSI* | *Forensic Science International,* Lausanne. |
| *GM* | *Göttinger Miszellen,* Göttingen. |
| *IJO* | *International Journal of Osteoarchaeology,* Chichester. |
| *JAMT* | *Journal of Archaeological Method and Theory,* New York. |
| *JAR* | *Journal of Anthropological Research,* Albuquerque. |
| *JARCE* | *Journal of the American Research Center in Egypt,* Boston/Princeton/ New York/Cairo. |
| *JAS* | *Journal of Archaeological Science,* London. |
| *JEA* | *Journal of Egyptian Archaeology,* London. |
| *JFS* | *Journal of Forensic Sciences,* Chicago. |
| *JIH* | *Journal of Interdisciplinary History,* Cambridge, Mass. |
| *JSSEA* | *Journal of the Society for the Study of Egyptian Antiquities,* Toronto. |

| | |
|---|---|
| *LÄ* | W. Helck & E. Otto (eds.) (1975–1986) *Lexikon der Ägyptologie*, 7 vols., Wiesbaden. |
| *MDAIK* | *Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo,* Mainz/ Cairo/Berlin/Wiesbaden. |
| *NAR* | *Norwegian Archaeological Review*, Oslo. |
| *NARCE* | *Newsletter of the American Research Center in Egypt,* New York/Cairo. |
| *NSSEA* | *Newsletter of the Society for the Study of Egyptian Antiquities,* Toronto. |
| *OEAE* | D. Redford (ed.) (2001) *Oxford Encyclopedia of Ancient Egypt*, 3 vols., Oxford. |
| *OMRO* | *Oudheidkundige Mededelingen uit het Rijksmuseum van Oudheden te Leiden,* Leiden. |
| *PDR* | *Population and Development Review,* New York. |
| *PS* | *Population Studies,* New York. |
| *RdE* | *Revue d'Égyptologie,* Paris. |
| *SAK* | *Studien zur Altägyptischen Kultur*, Hamburg. |
| *WA* | *World Archaeology*, London. |
| *WB* | A. Erman & H. Grapow (1926–1931, repr. 1971) *Wörterbuch der Ägyptischen Sprache*, 6 vols., 2nd Edn., Berlin & Leipzig. |
| *YPA* | *Yearbook of Physical Anthropology,* New York. |
| *ZÄS* | *Zeitschrift für Ägyptische Sprache und Altertumskunde,* Berlin/Leipzig. |

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"It takes a village to raise a child."

– Traditional African proverb.

I can not think of a more appropriate way to open these acknowledgements than this pithy piece of African wisdom. Not only does it befit the theme of the research, it also allows me to recognise the veritable village of people that have helped to raise this thesis. Despite the length of the following testimony, it only represents a fraction of the community of scholars, mentors, family and friends who have helped bring this project to fruition.

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"Do not say 'I am too young to be taken away', for you do not know your death.
When death comes he steals the infant from the arms of his mother,
Just like him who has reached old age."

—*Instruction of Any*, 18th Dynasty.

# CHAPTER 1: INTRODUCTION TO RESEARCH

## 1.1 Research Context

Egyptian archaeology deals with matters of life and death. After all, the majority of evidence used to reconstruct ancient Egyptian life-ways is derived from mortuary contexts.[1] This somewhat paradoxical configuration is based largely on the outcomes of cultural practices motivated by afterlife beliefs, whereby deceased community members were interred with artefacts and ecofacts in environments which, in the fullness of time, proved generally conducive to diachronic preservation and eventual archaeological retrieval.[2] By contrast, several factors conspire to impede archaeological access to settlement contexts, namely, perpetual habitation over millennia,[3] the shifting course of the Nile,[4] and the logistic and financial implications of stratified townsite excavation,[5] all coalescing to result in a paucity of evidence for Egyptian domestic life.[6] Funerary archaeology has therefore become the framework upon which the lived experience of ancient Egyptian populations is veneered,[7] in much the same way as anthropological analyses seek to enflesh the skeletons – the individuals – at the very centre of these cultural practices.[8]

With a view to accessing social life,[9] the discourse is replete with studies of every material and performative aspect of ancient Egyptian mortuary behaviour. From tomb structure, size, construction, decoration and inscription, to analyses of the body and its treatment, to registers of seemingly infinite artefact and ecofact types, through to descriptions and speculations of funerary rituals. All elements are endlessly positioned, repositioned and juxtapositioned in scholars' attempts to resuscitate the socio-economic, religious, political and personal lives of the dead.

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1 Kemp (1977: 185); Bard (1997: 60); Stevenson (2009a: 175); *cf.* Tarlow (1999: 9); Pettitt (2006: 292); Fahlander & Oestigaard (2008: 5).

2 Baines (1991: 144); Richards (1992: 60); Meskell (1994: 36).

3 Smith (1972: 705); Bietak (1979: 101, 112, 114, 115, 134); Mortensen (1991: 19).

4 Mortensen (1991: 19); Baines & Lacovara (2002: 13); Hillier *et al.* (2007); Ghilardi & Boraik (2011); Ghilardi *et al.* (*forthcoming*).

5 Smith (1972: 705); Bietak (1979: 134).

6 Mortensen (1991: 18); Adams (1997: 90); O'Connor (1997a: 15); Meskell (1999c: 129; 2002a: 195); Castillos (2000: 253); van Wetering & Tassie (2003: 133, 142).

7 Rowland (2004: 1003ff.) acknowledges the problematic issue of using grave goods as representative entities for utilitarian objects; Pettitt (2006: 292) discusses this issue from a cross-cultural perspective.

8 Baxter (2006a: 3).

9 Garwood (2007: 63).

However, the dead do not bury themselves.[10] It must be acknowledged that the study of graves and their contents provide opportunities to witness acts of suspended cultural animation[11] that reveal as much, if not more, about those performing the burial and their perception of the deceased's social persona, than it does about the deceased themselves.[12] This is especially pertinent in the case of child, infant and foetal burials. Here, we do not encounter the world of children directly, rather the expressions of adults who ascribe meaning to children's short lives and untimely deaths via the conduit of burial.[13] Moreover, the dead do not speak for themselves, either.[14] Therefore, it must be contended that archaeological narratives may reveal more about the cultural context and personal experiences of their authors than those of their subjects.[15]

With these factors in mind, current reconstructions of ancient Egyptian society based on funerary evidence may require reassessment. Certain demographic categories appear to have been largely overlooked in funerary analyses, namely, children, infants and foetuses. Despite palaeodemographic assertions that high mortality rates in pre-industrial societies lead to children, infants and foetuses comprising the greatest proportion of funerary populations,[16] to date, studies of Egyptian funerary culture have been focused on adults. Only a handful of studies exist which bear any reference to children's burials, in contrast to detailed investigations of their representations within the realm of Egyptian art. The implications of overlooking children, infants and foetuses in archaeological analyses are at least threefold. Firstly, we deny them their identities and cultural capacities in both life and death. Secondly, we also deny those orchestrating their burials *their* expressions of *their* perceptions of children's identities and cultural capacities.[17] Finally, we deny entire communities *their* opportunity to express the implications of removing children, infants and foetuses from the lived sphere, and to articulate how fleeting investments and engagements from the cradle to the grave call for renegotiations and recalibrations of individual and community identity networks.[18] Current archaeological narratives which exclude the testimonies of children, infants and foetuses from the funerary record and

10 Griswold (1992: 45); Mizoguchi (1993: 224); Parker Pearson (1993: 203; 2003: 3); Lucy (1994: 24); Baxter (2005: 94).
11 Seidlmayer (2001: 247).
12 Chapman (2000: 188, 189); Rowland (2004: 1004); Laneri (2007: 4); Lillie (2008: 41); Stevenson (2009b: 160).
13 Parker Pearson (2003: 103).
14 Mizoguchi (1993: 224).
15 Parker Pearson (2003: 104).
16 Hewlett (1991: 8); Chamberlain (2000: 208).
17 Lillehammer (2010: 25).
18 Mizoguchi (2000: 141-142); Garwood (2007: 66).

perpetuate adult-centric reconstructions of ancient Egyptian societies cannot be considered accurate reflections of the reality/ies of living and dying in these communities.[19]

## 1.2 Research Aims and Purpose

This thesis aims to compare how current perceptions of ancient Egyptian child, infant and foetal mortuary culture correspond with its *actual* nature and scope in published literature. In so doing, the thesis aims to examine the historiographical underpinnings of Egyptian funerary archaeology and determine the potential impact of authorial bias on researchers' abilities to generate accurate qualitative and quantitative analyses of child, infant and foetal burials and indeed, of ancient Egyptian mortuary culture at large. The thesis aims to demonstrate that engagements with archaeological, mortuary, ethnographic and social theories serve to enable and enhance interpretations of child, infant and foetal funerary data, especially in mitigating cases of absent, exceptional or problematic evidence. By examining what the funerary nexus reveals about their lived experiences and cultural capacities, including their position, value and agency in ancient Egyptian society, this thesis aims to offer a recalibrated perspective of children, infants and foetuses in the Egyptian archaeological record.

The purpose of this research is to advocate more equitable approaches to funerary archaeology in all phases of disciplinary activity. From excavation to interpretation and publication – if we are to offer more accurate and ethical reconstructions of ancient Egyptian social life through the funerary nexus, *all* demographic and socio-economic segments of the population and *all* depositional contexts must receive equitable representations which adequately reflect the complete spectrum of funerary data across the Egyptian mortuary landscape.

## 1.3 Research Objectives

The research aims are achieved via the following objectives:

1. To ascertain by way of literature review the current perceptions of ancient Egyptian child, infant and foetal mortuary culture, as well as current reconstructions of children's lived experiences and cultural capacities, including their social position, value and agency;

[19] Meskell (2002b: 280, 293-294).

2. To undertake a comprehensive archaeological survey of published child, infant and foetal mortuary culture;
3. To test the outcomes of the archaeological survey against current perceptions of ancient Egyptian child, infant and foetal mortuary culture, as established via the literature review;
4. To test the outcomes of the archaeological survey against current reconstructions of children's lived experiences and cultural capacities in ancient Egyptian society, as established via the literature review; and
5. To appraise the outcomes of the archaeological survey via consultation of archaeological, mortuary, ethnographic and social theories and offer a recalibrated perspective of children's lived experiences and cultural capacities, including their position, value and agency in ancient Egyptian society.

## 1.4 Materials and Methods

The archaeological survey of published child, infant and foetal mortuary culture formed the experimental basis of this research. The survey was carried out according to strict methodological parameters which restricted the study's chronological, geographical and biological range. Survey parameters are expounded below.

### 1.4.1 Chronological Parameters

To investigate synchronic and diachronic patterns of mortuary behaviour, and to apportion appropriate rigour to the research, it was necessary to extend the survey across as many chronological periods as possible. However, research parameters were restricted to reflect the project's administrative constraints. Therefore, the survey included all available published archaeological evidence from the Egyptian Early Dynastic Period (beginning Dynasty 0; *ca.* 3300 BCE)[20] through the Old Kingdom[21] and First Intermediate Period,[22] until the end of the Middle Kingdom (ending Dynasty 13; *ca.* 1650 BCE),[23] encompassing approximately 1,650 years of cultural activity. These periods were selected to facilitate engagement with a substantial, continuous sample of pharaonic funerary data. Further, these parameters seek to address the imbalance observed within current literature on Egyptian children and childhood

[20] Hendrickx (1999: 25; 2006: 92).
[21] Seidlmayer (2006a); Verner (2006); Baud (2006).
[22] Seidlmayer (2006b).
[23] Schneider (2006).

which focuses almost exclusively on the New Kingdom and later periods.[24] Chronological designations of burials follow those offered in publications, subject to review by this author upon availability of published primary evidence.

### 1.4.2 Geographical Parameters

The archaeological survey encompassed all sites within the geographical borders of Egypt (**Figure 1.1:** general map,[25] located in Volume 2 of this thesis).[26] In accordance with project aims, it was imperative to survey all site types (including cemeteries, settlements, military establishments, temples, quarries and mines) in order to establish the actual nature and scope of published child, infant and foetal mortuary culture. The locations of Early Dynastic archaeological sites were determined according to Kessler's *LÄ* entry on "Nekropolen. Frühzeit und AR",[27] supplemented by Mortensen's article on Early Dynastic settlement patterns[28] and Hendrickx and van den Brink's site inventory.[29] Kessler's *LÄ* entry also formed the basis of Old Kingdom site locations. The locations of First Intermediate and Middle Kingdom Period sites followed Gomaà's *LÄ* entry on "Nekropolen des MR".[30] Site lists were extended as the research process revealed additional data described subsequent to the publication of these inventories.

Based on this methodology, 240 sites were identified for inclusion in the survey (**Figures 1.2–1.5:** regional maps; **Table 1.1**). Due to the broad geographical range of this project, it was necessary to divide these sites into 11 specific geographical regions in order to expedite data entry and analyses. These include: the Western Nile Delta, the Eastern Nile Delta, the West Bank of Lower Egypt, the East Bank of Lower Egypt, the West Bank of Middle Egypt, the East Bank of Middle Egypt, the Faiyum, Dakhla Oasis, the Eastern Desert, the West Bank of Upper Egypt, and the East Bank of Upper Egypt.[31] It is stressed

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24 Janssen (1997: 229). Meskell (1999a: 199) also states that the greater part of our knowledge of Egyptian mortuary behaviour is constituted from Ramesside to Late Period data.

25 I am grateful to Ms. Sandra Aussel for the creation and provision of all the maps contained within this thesis.

26 This author acknowledges the abundance of Egyptian Middle Kingdom cultural remains in Nubia, however this material falls beyond the geographical scope of the current investigation: Leprohon (1999).

27 Kessler (1982: 396-414).

28 Mortensen (1991).

29 Hendrickx & van den Brink (2002).

30 Gomaà (1982: 415-427).

31 For the purposes of this study, data for the Nile island of Elephantine is included with that of the East Bank of Upper Egypt. The reasons for this are twofold. Firstly, in the interests of data integrity, it was deemed unfeasible to treat Elephantine as a region unto itself. Secondly, Müller & De Dapper (*forthcoming*) have recently demonstrated a close topographical relationship between Elephantine and the settlement/cemetery site of Syene on the East Bank of Upper Egypt. Syene was separated from Elephantine by a narrow 90-metre channel at its Southern bank. At this stage, Müller & De Dapper have

that these specific regional divisions reflect geographical territories following Baines and Malek[32] and Hendrickx and van den Brink[33] and are not specifically aligned with areas of ancient cultural significance.

To facilitate further analyses and provide scope for readers' varying interests, data derived from the archaeological survey was also scrutinised according to 2 further regional distributions: 'general' (that is, traditional divisions of 'Upper Egypt', 'Middle Egypt', 'Dakhla Oasis', 'Lower Egypt' and the 'Nile Delta'); and 'Nilotic' (that is, divided according to the Nile River, including 'West Bank', East Bank',[34] 'Faiyum', 'Dakhla Oasis' and the 'Nile Delta').[35]

### 1.4.3 Biological Parameters

Age categories included in the survey accord with protocols established by the Biological Anthropology Research Centre (henceforth, BARC).[36] Here, a Foetus is considered any individual ≤40 weeks, an Infant is any individual of 40 weeks to 1 year *post partum*, a Young Child is any individual of 1–6 years, and an Older Child is any individual of 7–12 years of age. Children with published age range-estimates of 12 years as a basis (for example, 12–15 years) will also be included in the survey. In the absence of specialised physical anthropological reports, only those individuals specifically referred to by published data as a 'child', 'infant', 'baby', 'foetus', 'girl' or 'boy' were included in the survey. Those referred to only as 'young' were excluded, due to the ambiguity of that categorisation. In keeping with the historiographical aims of this thesis, it is essential to acknowledge that what culturally constitutes a 'child' differs between societies, across time and space.[37] Therefore, it is conceded that on many occasions excavators' identifications of 'children' were based purely on physical skeletal size and/or development, rather than an estimation of a culturally-situated phase of the life course.

identified traces of human activity in Syene during the Predynastic Period, Old Kingdom, Middle Kingdom, Late Period and Greco-Roman Period.

32 Baines & Malek (2002).

33 Hendrickx & van den Brink (2002).

34 Regarding Elephantine, see fn. 31, above.

35 In order to comply with this project's administrative constraints, data analyses in Chapter 9 (Grave Goods) are only presented for specific geographical regions.

36 University of Bradford, West Yorkshire, United Kingdom.

37 These issues are explored further in Chapter 2 of this thesis.

### 1.4.4 Archaeological Survey Parameters

In accordance with the chronological, geographical and biological parameters listed above, the archaeological survey examined all available published literature for any references to child, infant and foetal mortuary culture. Publication lists were compiled for each of the 240 sites included in this study. Eligible publications were derived from exhaustive consultations of site inventory bibliographical lists detailed in §1.4.2, above. Additionally, exhaustive searches were performed of the *LÄ*,[38] Porter and Moss's *Topographical Bibliography*,[39] Hendrickx's *Analytical Bibliography*,[40] the University of Oxford's *Online Egyptological Bibliography*,[41] and the Universities of Munich and Heidelberg's *Aigyptos Literaturdatenbank*.[42] Eligible publications included authored monographs, edited volumes, book chapters, journal articles, magazine articles, newsletters, online databases, and diaries, note books and tomb cards published in Dutch, English, French, German, Italian and Spanish.[43] While all efforts were made to include every extant archaeological publication in this survey it is acknowledged that some references are not included in the aforementioned bibliographical repositories, especially those of a more recent date.[44] It is hoped that future extensions of this project will enable the identification and inclusion of these resources.

The archaeological survey also included unpublished Early Dynastic Period data from the Australian Centre for Egyptology's Helwan Project, accessed with the kind permission of the site director, Prof. E. C. Köhler (now Vienna).

### 1.4.5 Data Storage and Presentation

Data extracted from the archaeological survey were entered into a *FileMaker Pro 9 Advanced* database for storage and analysis. Descriptive statistical data analyses are expounded in the text and accompanied by graphical and/or tabular representations, presented in a separate volume for the reader's convenience. Data points with a 'zero' value are not labelled in graphs. All numerical percentage and ratio figures presented in the text are correct to 2 decimal places. Many of the interments and grave goods referred to in

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38 Helck & Otto (1975, 1977, 1980, 1982, 1984, 1986, 1992).
39 Porter & Moss (1934, 1937, 1939, 1960, 1964, 1972, 1974, 1981).
40 Hendrickx (1995), plus annual addenda published in *Archéo-Nil*.
41 http://oeb.griffith.ox.ac.uk ; accessed 2008-2011.
42 http://www.aigyptos.uni-muenchen.de ; accessed 2008-2011.
43 Every effort was made to obtain an English translation of Takamiya (2000) but it was not able to be procured in time for inclusion in this study.
44 For example, the current *Online Egyptological Bibliography* publication *terminus* date is 2009.

the text have accompanying images which are presented within their relevant database entries. The photographs presented in the text and database are the best available reproductions of facsimiles remotely provided by various institutions. The finalised database is included on a CD-ROM for the reader's consultation and attached as an Appendix to the inside back cover of this volume.

## 1.5 Definitions

It should be noted that the term 'juvenile/s' will be used to refer to the subjects of this investigation in preference to 'immature', 'non-adult' and 'sub-adult' terminology.[45] The term 'child/children' will also be used on occasion to refer to the combined age categories of children, infants and foetuses. The term 'sex' refers to biological identity, whereas 'gender' describes an aspect of an individual's social identity.[46] 'Mortality' is defined as the relative frequency of deaths in a specific population, while 'morbidity' refers to the relative frequency of disease.[47] For the purposes of this study, 'pre-industrial' societies are those demonstrating little or no evidence of the so-called 'demographic transition'.[48] Also note that the terms 'pre-industrial' and 'traditional' will be used interchangeably to refer to these societies. 'Tomb condition' describes the extent to which a tomb's primary context has been subject to cultural transformation processes (henceforth, C-Transforms) prior to excavation, such as: 'Archaeologically Intact' (no C-Transforms), 'Partially Disturbed' (some C-Transforms), 'Questionable' (suspected C-Transforms), 'Disturbed' (C-Transforms obfuscate original context), and 'Reused' (C-Transforms obfuscate original context and create subsequent context/s). When discussing individual age-at-death categories, the terms 'Foetus', 'Infant', 'Young Child', 'Older Child' and 'Unspecified Age' will appear in capitalised typeset. The term 'cultural capacity' is introduced to encompass the measure of rights, entitlements, abilities, responsibilities and identification/s, in isolation or combination, selectively or automatically apportioned to an individual within a specific cultural context across the social and biological life course. 'Biocultural archaeology' is an integrated approach which views data derived from the analysis of human remains in context with all other forms of archaeological evidence to

[45] The latter terms are considered pejorative as they imply hierarchical inferiority to adults; Sofaer (2006a: 121); Lewis (2007: 2); Halcrow & Tayles (2011: 335).
[46] Walker & Collins-Cook (1998: 255).
[47] Goodman & Armelagos (1989).
[48] 'Demographic transition' is a term which describes the shift from high to low fertility and mortality rates as a society moves from pre-industrial to industrial systems and regimes; Kirk (1996: 361).

reconstruct the lived experiences of individuals and groups from past populations.[49] 'Socio-ecology' is the study of how social structures and organisation are influenced by an organism's environment.[50] The term 'stress' is used here to refer to a series of non-specific responses by the human body to endogenous and/or exogenous demands.[51]

## 1.6 Structure

The thesis is structured to achieve the objectives outlined within this introductory chapter. Chapter 2 reviews the current perceptions of ancient Egyptian child, infant and foetal mortuary culture, as well as current scholarly reconstructions of children's lived experiences, including their position, value and agency in society. These objectives are achieved via comprehensive examination of available scholarship on ancient Egyptian children and 'childhood', as well as any studies that claim to be all-inclusive in their treatments of ancient Egyptian funerary culture, or attempt to reconstruct Egyptian society through the funerary nexus.

The literature review confirms that child, infant and foetal burials have not received due attention within Egyptian archaeology. Evidently, a series of long-held disciplinary assumptions and biases regarding this segment of the archaeological population have rendered them practically invisible within the discourse. These assumptions revolve around the central notion that children and infants cannot be easily located in the archaeological record, primarily due to hypotheses of differential burial practices for these members of society.[52] Chapter 2 examines the historiographical underpinnings of these assumptions in order to quarantine and address the reasons behind the *status quo*.

The results of the archaeological survey are expounded in Chapters 3 through 9. Each of these chapters report quantitative survey data regarding the nature and scope of an aspect of child, infant and foetal funerary culture, including primary results (Chapter 3), palaeodemography (Chapter 4), position and orientation (Chapter 5), bodily treatment (Chapter 6), tomb architecture (Chapter 7), associated features (Chapter 8), and grave goods (Chapter 9). Pragmatic and theoretical obstacles to data collection and analysis are addressed

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49 Pettitt (2006: 292); Schutkowski (2008: 10); Fuentes (2010: 9); Sofaer (2011: 286); Zuckerman & Armelagos (2011).

50 Kappeler (2003).

51 Selye (1973).

52 I am grateful to Prof. Dr. E. C. Köhler, Vorständin und Professorin des Instituts für Ägyptologie, Vienna, for bringing these assumptions to my attention in 2004. It was this conversation that inspired the topic of this thesis.

within each chapter as appropriate. The development of novel theoretical approaches is required in Chapters 8 and 9 to deal with the unique challenges of processing published child, infant and foetal mortuary data. In alignment with the *Guidelines to the Standards for Recording Human Remains*,[53] all burial quantifications are offered as a *minimum* number of individuals (henceforth, MNI) in order to acknowledge the following variables: some members of archaeological populations may have been disposed of in ways that do not leave archaeological signatures; some individuals may have been buried in areas outside concession parameters; some bodies may have been removed from their primary depositional contexts due to cultural and natural transformation processes; some bodies may have been subject to diagenetic factors that eradicate their physical remains; and, especially in this research context, some individuals will not be accounted for due to many excavators' propensities not to publish definitive records of exhumed populations. The implications of this final variable may be extrapolated to all aspects of ancient Egyptian child, infant and foetal mortuary culture. For this reason, all quantifications reported in this thesis should be considered as minimum representations of burial phenomena.

Chapter 10 discusses the archaeological survey results. Here, quantitative child, infant and foetal mortuary data are interpreted in consultation with archaeological, mortuary, ethnographic and social theories. This approach facilitates the production of qualitative analyses which explore the capability of the funerary nexus to reflect children's lived experiences and cultural capacities, including their position, value and agency in ancient Egyptian society. Through this process, the chapter addresses the prevailing disciplinary assumptions regarding child, infant and foetal mortuary culture, established in the literature review of Chapter 2. Chapter 10 also undertakes reflexive analyses which investigate one's ability to make comprehensive statements about this study's dataset, considering the circumstances under which its great majority was originally recorded and published. In this way, Chapter 10 considers this study's practical and theoretical limitations, primarily focusing on the issue of representativeness, including differential preservation, incomplete excavation, the 'osteological paradox', intra- and inter-observer error, poor reporting and authorial bias. With a view to exploring the dataset's representativeness, especially pertaining to authorial bias, the chapter presents four historiographical case studies of some of the most frequently stereotyped and misconstrued aspects of child, infant and foetal mortuary culture within Egyptological discourse, including 'toys', coffins, differential burial practices, and status. Via further engagement with archaeological, mortuary, ethnographic

[53] Institute of Field Archaeologists (2004: 6, 10, 14).

and social theories, these case studies serve to demonstrate that even problematic datasets can produce detailed, nuanced, ethically-balanced reconstructions of the cultural experiences of *all* members of ancient societies, including children, infants and foetuses.

Chapter 11 concludes by reviewing the extent to which the thesis fulfils the research aims and purpose outlined within this introduction. The chapter summarises the study's findings and proposes opportunities for further research to expand, enrich and elucidate our interpretations of child, infant and foetal funerary culture, as well as that of all members of ancient Egyptian communities.

# CHAPTER 2: LITERATURE REVIEW

This chapter aims to ascertain the current scholarly perceptions of ancient Egyptian child, infant and foetal mortuary culture. Further, it seeks to examine current reconstructions of children's lived experiences and cultural capacities within Egyptological discourse, including their position, value and agency in ancient Egyptian society. These aims will be achieved via a review of available scholarship on ancient Egyptian children and 'childhood', as well as any studies that claim to be all-inclusive in their treatments of ancient Egyptian funerary culture, or attempt to reconstruct Egyptian society through the funerary nexus. In alignment with the research aims established in §1.3, this chapter will also examine the historiographical underpinnings of the scholarship of ancient Egyptian child, infant and foetal mortuary culture to determine which factors may have contributed to the current position of this segment of the ancient population within Egyptology.

Due to the nascent level of juvenile mortuary culture studies in Egyptian archaeology,[54] appropriate bodies of theory or practice which facilitate engagement with this particular category of evidence are yet to be developed. As such, this chapter must adopt an inter-disciplinary approach and consult the fields of physical anthropology and palaeodemography, as well as ethnographic and social theory for apposite means to approach the particular challenges of studying child death in past populations.[55] Such a strategy will establish firm foundations for this thesis' ensuing appraisal of the lived experiences and cultural capacities of ancient Egyptian children, infants and foetuses through the material testimonies encapsulated within their mortuary remains.

## 2.1 Current Perceptions of Child, Infant and Foetal Mortuary Culture

Ethnographic studies have determined that high mortality risks in pre-industrial populations such as ancient Egypt should result in children representing approximately 50 percent of total deaths.[56] Accordingly, children are expected to be proportionately over-represented amongst Egyptian mortuary data,[57] logically leading to expectations of

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54 Meskell (2002a: 5).

55 Baxter (2006a: 5); Lillehammer (2010: 21).

56 Chamberlain (2000: 208); Harrington (2007: 60); Stevenson (2009b: 168). Hewlett (1991: 8) has demonstrated that childhood mortality in pre-industrial societies varies from 20 to 56 percent.

57 Kemp (1968: 26); Roth (1995: 39).

frequent encounters with child, infant and foetal mortuary culture amongst published literature. In reality, however, the reverse is true: archaeological representations of children are disproportionately low within Egyptological discourse. This contrasts sharply against the archaeologies of other disciplines, where studies of juvenile mortuary culture have proliferated since the 1970s, providing substrate for some of the most exciting and paradigm-altering research produced within these fields.[58]

It would be incorrect to claim that children are absent from Egyptology. Scholars such as Duchesne *et al.*,[59] Feucht,[60] Filer,[61] Fluck and Finneiser, [62] Harrington,[63] Hassanein *et al.*,[64] Janot,[65] Janssen and Janssen,[66] Marlow,[67] Meskell,[68] Patch,[69] Robins,[70] Stoof,[71] Wheeler[72] and Zillhardt[73] have devoted entire books, articles or museum exhibitions to the subject of 'the child in ancient Egypt'. Furthermore, other scholars have discussed children (or, at least mentioned them) when they became relevant to the primary focus of their work.[74] However, upon closer examination of this material, it is apparent that the predominant focus of the majority of these works is on extant artistic and epigraphic material – not on archaeological evidence.[75] Even animal mortuary culture appears to have received more attention in Egyptology than that of children.[76]

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58 Reviews of this corpus are beyond the scope of this thesis and have been ably achieved elsewhere; see Scott (1999); Derevenski (2000); Baxter (2005); Schwartzman (2006); Bacvarov (2008a); Lillehammer (2010).

59 Duchesne *et al.* (2003).

60 Feucht (1980a; 1980b; 1995; 2001a).

61 Filer (1998). This article concerns Nubian evidence, thus is not within the geographical parameters of the archaeological survey conducted by this research.

62 Fluck & Finneiser (2009).

63 Harrington (2007).

64 Hassanein *et al.* (1984-1985).

65 Janot (2002; 2004).

66 Janssen & Janssen (1990).

67 Marlow (2001).

68 Meskell (1994).

69 Patch (2007).

70 Robins (1994-1995).

71 Stoof (1978).

72 Wheeler (2009).

73 Zillhardt (2009).

74 See Garstang (1907a); Kemp (1968); Donadoni Roveri (1969); Miosi (1970-1971); Hall (1977); Castillos (1977-1978; 1982a; 1982b); Baines (1985); Cole (1986; 1989); Desroches-Noblecourt (1986); Bard (1988); Whale (1989); Tooley (1991); Watterson (1991); Anderson (1992); Strouhal (1992); Loose (1993); Robins (1993; 2001); Tyldesley (1994); Nicholson & Shaw (1995); Richards (1997); Quirke (1998); Meskell (1999a; 1999b; 2002b); Feucht (2001b; 2001c); Filer (2001); Fischer-Elfert (2001); Kendall (2001); Ritner (2001); Taylor (2001); Wilfgong (2001); Baines & Lacovara (2002); Bowen (2003).

75 Meskell (1999b: 2; 2002a: 85); *cf.* Redford (2008: 25). *Contra* Janssen & Janssen's (1990: 163) comment that "The child in Egyptian art is hardly to be viewed as an interesting subject within the field of art history, and it is not surprising that such a study has never been written".

76 For attestations of this phenomenon, see Petrie (1898: 20); Brunton & Caton-Thompson (1928: 91ff.). This situation mirrors archaeological practices across the globe; see Moore (1997: 255). For information

Only Baines and Lacovara,[77] Bowen,[78] David,[79] Duchesne *et al.*,[80] Feucht,[81] Filer,[82] Harrington,[83] Hassanein *et al.*,[84] Janot,[85] Janssen and Janssen,[86] Kemp,[87] Marlow,[88] Meskell,[89] Nicholson and Shaw,[90] Patch,[91] Spieser,[92] Stevenson,[93] Szpakowska,[94] Wheeler[95] and Zillhardt[96] feature explicit discussions of juvenile mortuary culture beyond the well-known example of two mummified foetuses from the tomb of Tutankhamun.[97] Of these, only Bowen, Duchesne *et al.*, Hassanein *et al.*, Janot, Kemp, Marlow, Meskell, Patch, Stevenson, Wheeler and Zillhardt present research directly engaged with Egyptian primary data; the remaining references provide overarching comments on various aspects of Egyptian mortuary behaviour, or are concerned with material from outside Egypt.[98] Of the former group, only Duchesne *et al.*, Hassanein *et al.*, Janot, Kemp, Meskell, Patch, Stevenson and Zillhardt present data derived from the Predynastic and pharaonic periods; and of these references, only Zillhardt engages with evidence from more than one site and cultural phase. Produced in the parameters of her Lizentiatsarbeit, Zillhardt's discussion of child burials from Adaima, Elephantine and Deir el-Medina represents an admirable entry into this topic. However, the temporal and cultural disparities between Zillhardt's selected sites, as well as the small sample size, permits only cursory observations.

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on animal burials in Egypt, see Ikram & Dodson (1998: 131-136); Taylor (2001: Chapter 8); Aufderheide (2003: Chapter 7); Rose (2004: 30-35); Friedman *et al.* (2011).

77 Baines & Lacovara (2002: 11, 14).

78 Bowen (2003: 79, 81-82, 84-86).

79 David (2002: 62, 273-274).

80 Duchesne *et al.* (2003).

81 Feucht (1995: 124ff.; 2001a: 262).

82 Filer (1998).

83 Harrington (2007: 60-61).

84 Hassanein *et al.* (1984-1985).

85 Janot (2002; 2004).

86 Janssen & Janssen (1990: 21).

87 Kemp (1968).

88 Marlow (2001).

89 Meskell (1994; 1999b: 110ff.; 2002a: 81).

90 Nicholson & Shaw (1995: 64).

91 Patch (2007).

92 Spieser (2008).

93 Stevenson (2009b).

94 Szpakowska (2008: 33-35).

95 Wheeler (2009).

96 Zillhardt (2009).

97 Robins (1994-1995: 27); Tyldesley (1994: 75); Feucht (1995: 130); Filer (1995: 62). While Filer (1998) and Marlow (2001) have considered elements of child and infant burials, they have not conducted comprehensive studies into their overall mortuary data. Quirke (1998: 150), Meskell (1994: 37, 42; 1999b: 130, 155) and Grajetzki (2003: 53) have made this observation and highlighted the necessity for the present research.

98 Filer (1998).

According to the aforementioned secondary sources, it may be argued that current scholarly perceptions of child, infant and foetal mortuary culture are characterised within Egyptological discourse by reoccurring assumptions, including:

1. It is assumed that published cemetery data rarely includes significant numbers of child, infant and foetal burials,[99] thereby rendering them unavailable for study.[100]
2. This apparent absence is attributed to differential burial practices for these individuals,[101] based on an assumption that at this young age, they were not considered embodied members of the community.[102]
3. This same assumption immediately extends to questions of infanticide.[103]
4. There is a lack of awareness regarding a) the preservation potential of child, infant and foetal skeletal remains;[104] and b) the specialised excavation and analysis procedures required to deal with this material.[105]
5. Even if exhumed, it is assumed that we are unable to make meaningful demographic conclusions from juvenile remains, as it is thought that they cannot be aged, sexed or analysed from a bioanthropological perspective.

The scholarly community's tacit subscription to these assumptions may partially account for the paucity of representations of child, infant and foetal mortuary culture in Egyptian archaeological narratives. In alignment with the research aims established in §1.3, the present study will investigate the accuracy and historiographical underpinnings of each of these assumptions.

## 2.2 Children, Infants and Foetuses in Published Cemetery Data

The primary assumption regarding Egyptian juvenile mortuary culture is that "published cemetery data record very few infant and juvenile burials",[106] thereby rendering them

[99] Masali & Chiarelli (1972: 166); Richards (1992: 64, 80); Baines & Lacovara (2002: 14); Grajetzki (2003: 53); Patch (2007: 248); *cf.* Hendrickx (1984: 227); van Haarlem (2001; 2003: 538; 2005: 197; 2006: 390); Rose *et al.* (2008: 84).

[100] Strouhal (1992: 21); Tyldesley (1994: 75); Baines & Lacovara (2002: 14).

[101] Baines & Lacovara (2002: 14); *cf.* Ucko (1969: 270); Masali & Chiarelli (1972: 166, 167); Bard (1994: 77); van Haarlem (2001; 2003: 538; 2005: 197); Grajetzki (2003: 53); van Haarlem & Hikade (2006: 390).

[102] Ucko (1969: 271); Richards (1992; 65, fn. 4, 283; 2005: 66); Strouhal (1992: 21); Tyldesley (1994: 75).

[103] Ucko (1969:271); Janssen & Janssen (1990: 12); Tyldesley (1994: 69); Filer (1998: 392); Feucht (2001a: 261).

[104] Masali & Chiarelli (1972: 166); Baines & Lacovara (2002:14).

[105] Masali & Chiarelli (1972: 166).

[106] Richards (2005: 66); *cf.* Masali & Chiarelli (1972: 166); O'Connor (1972: 80); Baines & Lacovara (2002: 14); Grajetzki (2003: 53); Patch (2007: 248).

unavailable for integration into archaeological narratives.[107] However, the present study's archaeological survey reveals that substantial numbers of individuals from these age groups *are* represented amongst published archaeological data from cemeteries *and* settlements – a discovery which will be presented and expanded upon in the following chapters.[108] As was the case for many other branches of archaeology, it appears that the children, infants and foetuses of ancient Egypt have been rendered invisible simply because most scholars have not yet consciously looked for them.[109]

## 2.3 Differential Burial Practices

One of the most frequently discussed elements of child, infant and foetal mortuary culture in Egyptology is that they have been found buried under the floors of houses or in the foundations of buildings.[110] Well-known examples of Egyptian settlement burials are derived from the towns of Kahun, Elephantine, Abydos and Naqada,[111] and the practice is also well-reported across the ancient cultures of the Mediterranean, Europe, Africa, Mesoamerica and the Near East.[112] Petrie's early assessments of these burials were highly unfavourable, stating: "I fear these discoveries do not reflect much on the manners and customs"[113] of the village occupants. In the absence of comparative Egyptian data, Petrie was influenced by their apparent similarity to the Near Eastern and Mediterranean examples, stating: "These were similar to the burials of foreigners, afterwards found in

[107] Baines & Lacovara (2002: 14).

[108] Some scholars have noted the large numbers of child and infant burials in sites such as Deir Tasa, Gurob, Maadi, Matmar, Merimde Beni Salame, Mostgedda and Deir el Medina; Robins (1994-1995: 28); Feucht (1995: 125); Meskell (2002a: 69).

[109] Chamberlain (1997: 249).

[110] Kemp (1968); Ucko (1969: 274); Masali & Chiarelli (1972: 166, 167); Hoffman (1979: 94); Janssen & Janssen (1990: 21); Watterson (1991: 92); Richards (1992: 65, 80, 284); Strouhal (1992: 21); Feucht (1995: 126; 2001a: 262); Bard (1997: 67, 72); Baines & Lacovara (2002:14); Patch (2007: 249); Szpakowska (2008: 33).

[111] See §§3.4, 3.4.2.

[112] Szpakowska (2008: 33). For example, in chronological order, Upper to Middle Upper Palaeolithic Austria: Einwögerer *et al.* (2006); Einwögerer (2008: 17). African Final Palaeolithic to Epipalaeolithic Palestine (Natufian): Midant-Reynes (2000: 84). Mesolithic to Neolithic to Chalcolithic Balkans, including Hungary, Macedonia, Bulgaria, Serbia, Croatia, Bosnia, Romania: Chapman (2000: 174ff., 178); Boric & Stefanovic (2004); Naumov (2007: 257). Pre-Pottery Neolithic A Jericho; Pre-Pottery Neolithic Cyprus: Le Mort (2008: 23, 28). Neolithic Near East and Europe, particularly Anatolia, Greece and Italy: Hodder (2000: 19); Moses (2008: 46). African Neolithic Sudan: Midant-Reynes (2000: 71, 96, 131, 134). Neolithic and Chalcolithic Romania: Kogălniceanu (2008). Late Neolithic to Early Bronze Age Turkey: Hopwood (2008: 113). Neolithic to Bronze Age Bulgarian Thrace: Mishina (2008: 137). Middle Bronze Age Palestine and Jericho: Weinstein (1973: 400). Final Bronze Age Italy: van Rossenberg (2008: 166). Iron Age Britain: Tibbetts (2008). Roman Period Sallèles d'Aude, France: Andrews & Bello (2006: 15). Anglo-Saxon Britain: Crawford (2008). Establishment Period Grasshopper Pueblo, Arizona: Longacre (1975: 72). Middle to Terminal Formative Period K'axob, Belize: Storey & McAnany (2006: 61). Cholulteca II-III Cholula, Mexico: McCafferty & McCafferty (2006: 35). Regional Development Period Chalchaquí, Argentina: DeMarrais (2004: 19ff.).

[113] Petrie's journal entry, 8-15 April 1889; cited in David (1986: 112); Meskell (1999b: 159); *cf.* van Haarlem (2005: 197).

large numbers."[114] In conjunction with other evidence in the form of ceramic and stone vessels, weights and measures and pot marks,[115] Petrie interpreted infant settlement burials as evidence that people from neighbouring "Asiatic" regions had populated these towns and influenced their burial customs.[116] Considering his excavations at Kahun, Abydos and Naqada were among the first engagements with ancient Egyptian settlement data,[117] it is perhaps understandable that Petrie drew these conclusions in the absence of more extensive archaeological evidence from domestic contexts. However, his authoritative voice and derisive opinion regarding these interments may have been the seed which germinated current disciplinary sensibilities regarding the aetiology of child, infant and foetal settlement burials and the supposedly 'differential treatment' of this segment of the ancient population.[118]

In the shadow of Petrie's interpretations, no research has been undertaken to determine the extent of settlement burial practices in ancient Egypt; nor have any efforts been made to compare the relative incidence of juvenile settlement *versus* cemetery interments. In the absence of such research, Gardiner attributed the presence of infant settlement burials at Tanis and Tell er-Ratabeh to a "well authenticated Palestinian practice",[119] and Uphill classifies the so-called settlement burials at Merimde Beni Salame as a "Mesopotamian practice rather than Nilotic".[120] David further perpetuates the theory of foreign influence, stating that these burials were a "non-Egyptian religious practice"[121] that "do not fit into the pattern of Egyptian funerary customs ... they are known from other Near Eastern sites".[122] Baines and Lacovara highlight the phenomenon of juvenile settlement burial as a "special practice", "suggesting that [for ancient Egypt], as in many cultures, they [children, infants and foetuses] were not necessarily interred in the same place or manner as older

[114] Petrie (1896: 2).
[115] Petrie (1890: 40-45); David (1986: 175-194, esp. 188-189).
[116] David (1986: 137).
[117] *Cf.* Brunton & Caton-Thompson (1928: 80-82). Petrie (1905: 3) also excavated settlement burials at Ehnasya el-Medina (Herakleopolis Magna). His increasingly frequent encounters with this phenomenon caused him to say: "It is remarkable how, both at Abydos and here [Ehnasya el-Medina] the Egyptians seem to have had no objection to mixing cemetery and town together. At Abydos the desert was close at hand, and yet pit graves were dug, lined and vaulted, amid the deserted houses of the outskirts of the town, much as they seem to have been here. All this shows very different ideals of burial to what we usually associate with Egypt."
[118] For further comments on the phenomenon of authoritarianism in Egyptology, see Redford (2008: 26). Crawford (2008: 199) argues for a similar historiographical understanding of current sensibilities towards infant settlement burials in Anglo-Saxon Britain as a result of E. T. Leeds' (1947: 86) early assessment of the practice as "abnormal...disorderly interment[s]".
[119] Gardiner (1933: 127).
[120] Uphill (2001: 11).
[121] David (1986: 255).
[122] David (2002: 273); *cf.* David (1986: 137).

individuals".[123] Here, Baines and Lacovara infer that children were somehow perceived differently than adult members of the community, and were therefore not included in normative communal burial customs including funeral ceremonies and interment within public burial grounds.[124] Richards is in agreement, stating that "the issue may relate to differential modes of disposal ... the seeming exclusion of subadults from formal burial in cemeteries related to conceptions of full personhood and the age at which one attained that status in ancient Egypt. It may not have been necessary to formally inter 'nonpersons'."[125] Strouhal goes so far as suggesting that appropriate means of disposing children's bodies may have taken place in other extramural areas, where they may be "exposed at the edge of the desert to be scavenged by wild animals and birds of prey, or cast into the Nile, or a canal, where crocodiles disposed of them".[126]

The present study seeks to determine the veracity of these enduring assumptions regarding the purported differential burial treatment of children, infants and foetuses in ancient Egypt. Of particular interest is the nature and scope of settlement burial practices as well as the relative incidence of juvenile settlement *versus* cemetery interments. These issues will be explored via the survey of all available published archaeological data, as described in §1.4.4. Results of this survey will be presented in the following chapters.

## 2.4 Infanticide and Pedicide

The preceding hypotheses of Strouhal, Richards and Baines and Lacovara regarding differential juvenile burial treatment implies that communities with suspected high levels

[123] Baines & Lacovara (2002: 14); *cf.* O'Connor (1972: 80); Bard (1994: 77); van Haarlem (2001; 2003: 538; 2005: 197); van Haarlem & Hikade (2006: 390).

[124] Patch (2007: 249-250).

[125] Richards (2005: 66). Janssen & Janssen (1990: 154, 163) also state that Egyptians perceived that "an infant was an incomplete adult, still in a state of imperfection." *Cf.* Ariès (1962: 38-39); Heer (1968: 454); Hoffman (1979: 94); Harrington (2007: 63); Gobeil (2009: 169); Zillhardt (2009: 76); *contra* Meskell (2000: 429).

[126] Strouhal (1992: 21). Delrue (2001: 27) extends this mode of burial to "the common class", whom he states "would have been left behind in the fields or the desert, or would have been thrown into the river"; *cf.* Murray (1956: 86); Savage (1995: 198-199); Baines & Lacovara (2002: 13). However, the present study suggests that disposal in the river would not have been a culturally-sanctioned practice for such a substantial proportion of the population, owing to the deep-seated and enduring fear of drowning in ancient Egypt, and concomitant fears for loss of deceased bodies into the water. Probably due to the destructive corporeal changes caused by prolonged immersion in water, as well as the tendency of moving water to remove a body far from home and family, death or disposal in the river was perceived as a complete destruction of identity, resulting in denial of access to the afterlife. For these reasons, it was used as the severest form of criminal punishment until the beginning of the New Kingdom, when prevailing Osirian afterlife beliefs precipitated a cognitive shift in the Egyptian psyche. From this point, individuals who drowned were identified with Osiris and were believed to enter into his cyclical rebirth; Strauss (1977); Binder (1995: 23). I am grateful to Dr. Susanne Binder, Macquarie University, for bringing this matter to my attention.

of child, infant and foetal mortality, such as ancient Egypt,[127] might be expected to display a certain attitude of indifference towards children due to the improbability of their survival. Strouhal speculates that the small amount of time spent before their death did not allow Egyptian parents to "form an attachment"[128] to their offspring.[129] Extending this logic, one would also expect to observe a reduced level of care and attention on behalf of parents and adult kin towards newborn infants. Such neglect would increase the possibility of premature death,[130] causing ethnographers, anthropologists and archaeologists to raise questions regarding culturally-sanctioned/tolerated practices of infanticide and pedicide.

Infanticide may be defined as "any behaviour that makes a direct and significant contribution to the immediate death of an embryo or newly hatched or born member of the perpetrator's own species",[131] usually occurring at birth or shortly thereafter.[132] However, human parental investment continues well after weaning, and decisions to terminate medical, nutritional, physical and/or emotional investment may take place much later in the overall reproductive process, potentially leading to 'passive'[133] or 'deferred' infanticide, or 'pedicide' – the killing of a child.[134] Infanticide and pedicide have been practiced in many different cultures over a wide span of time, with the earliest suspected example dating to the Upper Palaeolithic.[135] The motives for infanticide are extremely varied both within and between cultures. A range of social, political and religious factors have been linked with its practice in both ancient and modern contexts.[136] In attempts to account for the under-representation of child, infant and foetal remains in cemetery populations across cultures, the practice of infanticide is always among the first options offered in historical explanations, especially the type which sees neonates exposed in areas close to or within the settlement, without subsequent burial in the community cemetery.

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127 Wainwright, in Petrie *et al.* (1912: 5); Baines (1985: 471); Whale (1989: 254); Janssen & Janssen (1990: 21); Strouhal (1992: 9, 256); Robins (1993: 85; 1994-1995: 27; 2001: 512); Tyldesley (1994: 51, 57, 79); Feucht (1995: 124; 2001b: 192); Nicholson & Shaw (1995: 64); Filer (1998: 391; 2001: 135); Meskell (1999b: 169; 2002a: 69); Baines & Lacovara (2002: 14).

128 Strouhal (1992: 21).

129 *cf.* Hertz (1960: 76); Stone (1979: 70); Baines (1991: 133).

130 Ariès (1962: 38-39); Heer (1968: 454).

131 Hrdy & Hausfater (1984: xiv); *cf.* Langer (1974); Daly & Wilson (1984); Hrdy (1992).

132 Williamson (1978: 64); Scrimshaw (1984: 448); Mays (1993: 883).

133 Via fatal neglect; Chamberlain (2000: 209).

134 Johansson (1984: 463). Scott (1999: 12) questions this assumption, considering that "the main causes of high mortality rates have always been illness and accidents."

135 Carr-Saunders (1922: 113); Schwartz & Isser (2000: 23).

136 Scrimshaw (1984: 445).

Despite a lack of evidence for infanticide and pedicide in the Egyptian archaeological record,[137] it is a subject frequently addressed within Egyptological literature.[138] Here, the question of infanticide is most often associated with women's studies,[139] as it was an act historians believe to have been perpetrated most often by women.[140] Contrary to Strouhal's aforementioned speculations regarding the value of children,[141] most scholars agree that infanticide appears *not* to have been a culturally-sanctioned/tolerated practice in ancient Egypt.[142] Nevertheless, it was not out of the ordinary for early archaeologists such as Brunton to interpret the appearance of child burials in 'unusual' places as a form of ritual or religious infanticide, also referred to as "sacrifice".[143] Tacit adherence to such hypotheses over ensuing decades has also contributed to current perceptions of child, infant and foetal mortuary culture in Egyptological discourse.

Such hypotheses are contextualised when one considers the cultural lenses through which excavators such as Brunton were interpreting archaeological data during the 19th and 20th Centuries.[144] Many of the early Egyptian archaeologists were born, raised and educated in middle-to-upper class Britain and America. During the mid to late Victorian period in England there were higher rates of infanticide than seen in previous eras.[145] In the anonymity of burgeoning industrial towns, tiny bodies could be disposed of in canals or abandoned in parks or alleyways. Reports of 150 dead infants being found in London streets during 1862 led *The Times* to lament that "infancy in London has to creep into life in the midst of foes".[146] In the same year, a Middlesex coroner stated that the police

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137 It is acknowledged that many of the mechanisms of infanticide, including smothering, strangling and exposure leave no skeletal traces; Moses (2008: 45).

138 Janssen & Janssen (1990: 12); Filer (1998: 392).

139 Tyldesley (1994: 69); Feucht (2001a: 261).

140 Scott (1999: 30); Mays (2000: 180).

141 See also §2.4.1, below.

142 Weinstein (1973: 415); Harrington (2007: 61). The present study acknowledges that infanticide/pedicide may have occasionally occurred in ancient Egypt. We have textual evidence of the willful neglect of children: for example, the Demotic letter featuring some children's lamentations to the gods after being abandoned by their father: "Miserable by night, unhappy by day through a cruel father, a godless one, he feels no guilt", see Brunner-Traut (1974: 12). There is evidence for formal enquiries into the incidence of child death: for example, *O.Letellier*, 19th Dynasty, Deir el Medina: "Qenhirkhopshef addresses the woman Inerwau: What means your failing to go to the diviner on account of the two infants who died while in your charge? Inquire of the woman diviner about the death of the two infants, whether it be their fate or destiny", cited in Meskell (2000: 431); Harrington (2007: 61). Also extant are details of the punishment for infanticide: for example, Diodorus states that the punishment for pedicide was for the guilty parent/s to hold the dead child/ren in their arms for three days and nights under the supervision of a government guard, see Feucht (1995: 371); Scott (2001: 144).

143 Brunton, in Petrie *et al.* (1923: 4); see Database Record Number 50; *cf.* Petrie *et al.* (1912: 11); Moses (2008: 45). *Contra* Zillhardt (2009: 77).

144 Meskell (1999b: 1); Thomas (2006: 42).

145 Mays (2000: 187-188); *cf.* Rose (1986); Kelly (1992).

146 Cited in Higginbotham (1989: 319).

thought no more of finding a dead infant than a dead dog or cat.[147] Indeed, legal recognition of infanticide as a crime distinct from murder did not take place in England until the Infanticide Bill was passed in 1922.[148]

Furthermore, in Victorian-Edwardian times illegitimacy and infant mortality were closely linked.[149] Illegitimate birth rates were significant during these periods, and constituted a high percentage of infants who died during their first year of life.[150] Women who had conceived a child out of wedlock were often left destitute as markers of their transgression of moral and social order.[151] Furthermore, children produced from such liaisons inherited similar social judgments and ostracism.

One cannot underestimate the impact that Christian beliefs may have had on early excavator's interpretative frameworks.[152] As discussed, infanticide was associated with lascivious behaviour and female promiscuity[153] – concepts most offensive to Victorian-Edwardian Christian middle-to-upper class sensibilities. One occasionally sees direct evidence of such culturally-relative anachronistic judgement regarding Egyptian sexual behaviour within the discourse. For example, when Brunton passes comment on the burial of a "young girl, epiphyses not joined, but pregnant"[154] in the 9th–10th Dynasty Southern cemetery of Qau el-Kebir, his comments thinly veil his displeasure regarding her enceinte state at a young age. Moreover, encounters with child, infant and foetal interments outside of community cemetery contexts, such as settlement burials, would have challenged early excavators' Christian beliefs regarding the parameters of 'hallowed ground', leading them to view these interments as indicators of clandestine, liminal or deviant precipitants of cultural and religious ostracism.[155] Perhaps such burials also challenged adult-centric archaeological power relations, and the appearance of children's bodies outside of cemetery boundaries mobilised authoritative notions of children's obedience and disobedience, leading to punitive assumptions of inclusion and exclusion.[156] Compounding these issues, one must not forget that at this time 'uniformitarianism'[157] was

[147] Langer (1974: 353-365).
[148] Mays (2000: 187).
[149] Scott (2001: 143).
[150] Featherstone (2003: 279-280).
[151] Featherstone (2003: 280).
[152] Milde (1994: 25).
[153] Scott (1999: 38).
[154] Brunton (1927a: 39).
[155] Crawford (2008: 202).
[156] Connolly & Ennew (1996); Derevenski (2000: 5).
[157] Lyell, cited in Renfrew & Bahn (2000: 24); Trigger (2007: 43).

still a legitimate interpretative tool. From this perspective, Filer notes that early excavators' awareness of the highly-publicised practice of infanticide in both Greek and Roman ancient cultures may also have influenced their interpretations.[158]

This was the milieu under which early Egyptian archaeologists were excavating and interpreting child, infant and foetal burials, forming the foundations of disciplinary sensibilities regarding the lived experiences and cultural capacities of this demographic group.[159] The present study does not claim that Western societies of the Victorian-Edwardian eras did not cherish their children, even in death; the renowned phenomenon of child and infant mortuary photography burgeoned during these periods, demonstrating mourning parents' desire to cling to fleeting encounters with their eternally 'sleeping' offspring.[160] Despite this fact, at this time there was no social recognition of the infant as a discreet entity,[161] and the practice of infanticide was well-known, exceedingly controversial and would have been at the forefront of these conservative middle-to-upper class gentlemen excavators' minds when they encountered children's bodies outside of 'normative' burial contexts.

### 2.4.1 The Value of the Child in Ancient Egypt

Even preceding the results of the present study's survey of child, infant and foetal mortuary culture, it is apparent that Strouhal, Richards and Baines and Lacovara's hypotheses regarding the purported value and identity of children in ancient Egypt are unsubstantiated. It is clear that the desire to produce children was an incredibly strong aspect of Egyptian personal and cultural ideology.[162] An abundance of evidence from domestic, mortuary and religious contexts across the breadth of the pharaonic period indicates that men and women alike had an overwhelming desire to produce offspring, this being a core function of Egyptian 'marriage'.[163] According to *The Instructions of Prince Harjedef*:

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158 Filer (1998: 393, 399). For example, see Haydn (1898: 151), who states that "many ancient nations exposed their infants, - the Egyptians on the banks of rivers, and the Greeks on highways, - when they could not support or educate them".

159 Meskell (1999c: 128) notes the propensity within Egyptology to "construct a normative Egypt, one that mirrors our own society".

160 Robb (2007: 289).

161 Armstrong (1986: 212).

162 Stoof (1978: 115); Meskell (2002a: 65); Harrington (2007: 55).

163 Janssen & Janssen (1990: 159); Bourriau (1991: 3); Strouhal (1992: Chapter 1); Robins (1994-1995: 24, 26; 2001: 511-512); Meskell (1999b: 213; 2002a: 65); Wilfgong (2001: 341-342).

> "When you prosper, found your household, take a hearty wife, a son will be born to you. It is for the son you build a house, when you make a place for yourself."[164]

Further, *The Instruction of Any* advises:

> "Take a wife while you are young, that she make a son for you; She should bear for you while you are youthful. It is proper to make people. Happy is the man whose people are many, he is saluted on account of his progeny."[165]

Egyptian medical papyri feature magical spells and herbal remedies for the prevention of miscarriage and the promotion/testing of fecundity,[166] while votive fertility figurines recovered from temples and domestic shrines also feature texts and prayers beseeching the gods or a deceased relative to assist the supplicant to conceive.[167] Even in their grief, some prospective parents seized the opportunity to appeal to recently-deceased relatives to intercede on their behalf as they transitioned between worlds, placing letters in their graves beseeching them to "Cause that there be born to me a healthy male child."[168] Such evidence implies that Egyptian couples were not merely biological drones, but actively and in many cases, passionately, wanted children to come into their lives.[169]

Moreover, there is a great deal of evidence to suggest that once children survived the challenges of gestation and birth, there was much concern regarding their continued survival.[170] Spells and chants were aggressively recited in attempts to ward off the spectre of death, such as:

> "Come on out, visitor from the darkness, who crawls along with your nose and face on the back of your head, not knowing why you are here! Have you come to kiss this child? I forbid you to do so! Have you come to cosset this child? I forbid you to! Have you come to do it harm? I forbid this! I have made ready

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164 4th/5th Dynasty; Lichtheim (1975: 58). It should be noted that wherever ancient texts are cited, the reference is to published translations.

165 18th Dynasty; Lichtheim (1976: 136).

166 Middle Kingdom: *pKahun* and *pEbers*; New Kingdom: *pCarlsberg VIII* and *pBerlin*; *cf.* Griffith (1898); Ebbell (1937); Barnes (1956); Stevens (1975); Feucht (1980c; 1995: 116); Sandison (1980); Cole (1986); Janssen & Janssen (1990: 159-160); Nunn (1996); Collier & Quirke (2004: 53-64).

167 Baines (1991: 181); Watterson (1991: 86); Robins (1994-1995: 26; 2001: 512); Feucht (1980c; 2001b: 192); Meskell (2002a: 91). Similar figurines have also been discovered without texts. These may simply have been imbued with reproductive intent.

168 For example, First Intermediate Period letter written on a pot, unprovenanced, Chicago; cited in Janssen & Janssen (1990: 160); *Cf.* Feucht (1980c: 440).

169 Lillehamer (2010: 25).

170 Janssen & Janssen (1990: 22ff.); Feucht (2001a: 262).

> for its protection a potion from the poisonous afat herb, from garlic which is bad for you, from honey which is sweet for the living but bitter for the dead, from the droppings and entrails of fish and beast and from the spine of the perch";[171]

and

> "Spell for a knot for a baby: 'Are you warm in the nest? Are you hot in the bush? Is your mother with you? Is there no sister to fan you? Is there no nurse to afford protection? Let there be brought to me pellets of gold, balls of garnet, a seal with a crocodile(-figure) and a hand to slay and dispel the Demon of Desire, to warm the body, and to slay his male or female enemies of the West. You will break out! This is a protection! (Make this spell) into an amulet and put to the throat of the child. Good!"[172]

Archaeological evidence recovered from burials, such as amulets,[173] cylinder amulets,[174] knotted cords[175] and apotropaic wands[176] suggests that the practices advised in certain spells were actually carried out to protect and preserve the lives of children and infants.[177] This evidence corroborates with ethnographic studies of societies which experience high levels of infant mortality comparable to those purported for ancient Egypt. These studies have established that adult carers demonstrate "indulgent"[178] parental and kin investment towards children and infants as a mechanism to mitigate perceived mortality risks.[179] These studies contrast Strouhal and Richards' theories of parental emotional

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171 Middle Kingdom: Borghouts (1978: no. 65).

172 Middle Kingdom: Parkinson (1991a: 129-130); *cf.* Loose (1993: 285); Robins (1993: 85); Strouhal (2001: 24); Meskell (2002a: 76). Peust (2008: 324-330) describes similar protective spells for children and infants in the Third Intermediate to Late Period oracular amuletic decrees.

173 Feucht (1995: 127; 2001a: 262; 2001b: 192); Janssen & Janssen (1990: 9); Meskell (2002a: 76); Robins (1993: 87-88; 1994-1995: 29); Taylor (2001: 209); Tyldesley (1994: 72). The present study found a minimum of 566 amulets amongst child, infant and foetal burial assemblages; see §§9.3, 9.3.3.

174 The present study's archaeological survey identified 2 examples of cylinder amulets amongst published Early Dynastic to Middle Kingdom mortuary data, both in Middle Kingdom cemetery burials of children of unspecified age at Harageh; see Grave Good Record Numbers (henceforth, *GGRNs*) 178 and 184.

175 The present study's archaeological survey identified an example of a knotted cord amongst published Early Dynastic to Middle Kingdom mortuary data in the Middle Kingdom settlement burial of a 15–16 months old child in Elephantine; see GGRN 305.

176 See Parkinson (1991a: 130, BM 18175, 12th Dynasty apotropaic wand); Arnold (1992: 69-70, cat. 135, MMA 08.200.19, pls. 82-84a; 13th Dynasty apotropaic wand).

177 Janssen & Janssen (1990: 23-24); David (2002: 285); Meskell (2002a: 76).

178 Le Vine (1974; 1977; 1980; 1983); Hewlett (1991: 13-17).

179 The Agta Foragers of the Philippines: see Peterson (1978). The Gusii agro-pastoralists of South-West Kenya: see Le Vine *et al.* (1994). The Ache hunter-gatherers of Paraguay: see Hill & Hurtado (1996). Hewlett (1991: 8, Table 3) reports that this pattern is equally observed among societies characterised by their 'peacefulness' (such as the Mbuti, !Kung and Semai) as it is amongst those known for their 'fierceness' (such as the Yanomamo and Tsembaga). *Cf.* Chamberlain (2000: 208); Halcrow & Tayles (2011: 347); *contra* Ucko (1969: 271).

detachment/disinvestment – such approaches are described by Coale as a "lethal mutation",[180] as they would defy evolutionary objectives, increase child and infant mortality even further and possibly even lead to a society's demise.

The position and value of children in traditional societies often also extends to their capacity to contribute to their family or community socio-economic profile.[181] In this way, child mortality rates would have had significant implications for group viability and longevity.[182] Thus, to the parents of ancient Egypt, the 'value' of children may also have been associated with their potential as future 'investments'.[183] In socio-economic terms, surviving children can provide political and economic support from a young age,[184] as well as providing 'insurance' as carers for their ageing parents,[185] becoming what the Egyptians termed "the staff of old age", *mdw iꜣwy*.[186] In genetic terms, they embody their parents' share in the future collective gene pool.[187] In communal terms, children bolster the labour force[188] and provide future communal marriage partners.[189]

While pertinent to the present discussion and certainly applicable to the ancient Egyptian context, such ethnographically-determined hypotheses do not consider the religious imperative that permeated every facet of Egyptian life: the quest for immortality. Countless texts reveal that children were responsible for the provision of their parents' tombs, their

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180 Coale (1984: 542).

181 See Draper (1975); Friedel (1975); Nag *et al.* (1978: 293); Okore (1986: 54); Zeller (1987); Claassen (1992); Lillie (2008: 41); Littleton (2011: 381).

182 Reher (1995: 520); Chamberlain (2000: 208ff.).

183 Kaplan (1996); Chamberlain (2000: 209); Montgomery (2009: 67-70).

184 Ethnographic research from agricultural areas of Egypt indicates that children begin to positively contribute to their household economies at 5 years of age; Mueller (1976); Littleton (2011: 381). This research is bolstered by analyses of dermatoglyphs (preserved fingerprints) on ceramic lamps from Kom el-Dikka dating to the 7th to 8th Centuries. Dzierżykray-Rogalski & Promińska (1992: 92) report that the majority of the lamps had been produced by children aged 8-14 years. Stoof (1978: 118), Feucht (1980b: 438-440) and Meskell (2002a: 83) note the artistic representations of children at work in ancient Egypt. Meskell (2002a: 83) also cites preserved children's footprints in the mud plaster surrounding the Early Dynastic mortuary complex of Khasekhemwy at Abydos as evidence that they may have worked alongside adults during construction. Quibell (1896: 4) believes that children were utilised in tomb robbery, and Caton-Thompson & Gardner (1934: 115, 118) suspect they were employed in mining, their diminutive size enabling them to fit in small spaces.

185 Robins (1994-1995: 26); McDowell (1998); Feucht (2001a: 263); Meskell (2002a: 194); Harrington (2007: 55); *cf.* Cain (1978; 1981; 1982: fn. 7, 166-168; 1983; 1986: fn. 9; 1991: 519-528); Nugent (1985); Vlassoff (1990: 5-20); *contra* Mueller (1976: 133); Robinson (1986: 291).

186 *WB* II, 178.11: this phrase is attested from the Middle Kingdom (for example, the *Maxims of Ptahhotep*, *pPrisse*), and the 18th Dynasty (for example, the *Autobiography of the High Priest Amenemhat*, 18th Dynasty, TT 97; Janssen & Janssen (1990: 151-152, 158); *cf.* Fischer (1977: 158-160); Brunner (1984: 1224); Blumenthal (1987); el-Din (1997); McDowell (1998: 201-203); Karenburg & Leitz (2002).

187 Darwin (1859); Barkow & Burley (1980: 163); Turke (1989: 62); Cronk (1991: 30); Hill & Kaplan (1999: 416).

188 Robins (2001: 514); Meskell (2002a: 83).

189 Mizoguchi (2000: 148).

'house of eternity'; and for performing offerings and prayers for their parents' posthumous vivification and sustenance.[190] Even those parents who could not naturally conceive were encouraged to adopt children to ensure their own wellbeing in this life and the next:

> "He who has no children should get for himself some orphan, to bring him up. Then he will be the one who pours water upon his hands as a genuine oldest son."[191]

As such, it may be argued that children's lives – therefore, living children – were inextricably intertwined with those of their parents in a positive feedback mechanism coexisting across physical and metaphysical planes. It was in Egyptian parents' best interests to keep their children alive and thriving: they were the conduits through which their parents could access immortality. From a religious perspective, ancient Egyptian children were invaluable: they "caused [their parents] to live", *s'nḫ*.[192] Within such a configuration, current theories of parental detachment and designations of children as 'nonpersons' can only be considered maladaptive.[193]

With these factors in mind, one can see that the survival and well-being of foetuses, infants and children were linked to individual and communal longevity in this world and the next. Therefore, these issues would have held significant symbolic meaning and been of considerable personal and societal concern. According to the evidence cited thus far, it appears that ancient Egyptian carers recognised the value and significance of children and exercised every aspect of their physical and spiritual powers to sustain the lives of the youngest members of their families and communities. Chapters 3 to 9 of this thesis further investigate the personal, social and cultural value of children in Early Dynastic to Middle Kingdom Egypt. This is achieved by examining what published child, infant and foetal mortuary data reveals about how parents and carers responded when death did come and "steal the infant".[194]

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190 Robins (1994-1995: 26).

191 Deir el-Medina ostraca (Berlin), 19th Dynasty, cited in Janssen & Janssen (1990: 159). For discussions of the practice of adoption in Egypt, see Robins (1993: 77; 1994-1995: 27); Tyldesley (1994: 71); McDowell (1998: 217-220); Feucht (2001a: 261; 2001b: 192; 2001c: 503); Meskell (2002a: 98); Harrington (2007: 55).

192 *WB* IV, 46-47a VI (figurative, funerary sense): this phrase is attested from the Old Kingdom (Pyramid Texts, Spells 341, 364, 571), through to the Coptic Period. Janssen & Janssen (1990: 72, 156, 158) cite text from the block statue of Bakenkhons, High Priest of Amun at Karnak, 19th Dynasty, now located in Munich, Gl. W.A.F. 38. Willems (2001a: 369, 370-372) discusses this concept in Coffin Text Spells 30-41 and 312. *Cf.* Baines (1991: 144); Feucht (1995: 86ff.); Harrington (2007: 55).

193 Cronk (1991: 46); Hewlett (1991); Voland *et al.* (1991).

194 See epigram, page xxi of this thesis; *Instruction of Any*, 18th Dynasty, Lichtheim (1976: 138).

## 2.5 Preservation Potential of Juvenile Remains

Apart from the impact of cultural practices, it has recently been considered that child, infant and foetal skeletons may have lower preservation potential than those of adults,[195] thus potentially affecting their representation in mortuary contexts. Certainly, their bones are smaller and more delicate and their graves are often shallower than those of adults, increasing the possibility that they may be damaged or lost through taphonomic processes following surface disruption, including natural soil erosion, or human activities such as ploughing, drainage or building.[196] These reflections point towards a hypothesis of differential destruction.[197] This theory could account for the generality of the phenomenon of juvenile under-representation in mortuary contexts across time and space, as well as the amplitude of differentiation between sites, and even between individual burials.

The mineral content of bone characteristically develops as a function of age. Density and mineral content levels initially decrease after birth. They are maintained at a minimum value during the first year *post-partum*, then rise to reattain birth levels at the end of the second year and increase until adult age.[198] Internal compressive strength increases with the density of the bone. Hardness depends on density and on the size and orientation of the mineral crystals within the bone.[199] Therefore, resistance to abrasion and tensile strength logically increase with age.

Subsequent to a child's death and burial, osseous responses during and after the processes of soft tissue decomposition depend on many taphonomic factors, some of which are thermodynamic, while others are kinetic, in particular porosity.[200] To begin with, the principle for any given volume of mineral matter states that the smaller the crystal size the larger the surface area available for contact with demineralising agents. To compound the issue, crystals in juvenile bone do not contain much substituted fluoride in their lattice, thereby also making the minerals more soluble.[201] Therefore, young children's bones are quite easily breached by demineralising agents, because their small crystals present a large

[195] Gordon & Buikstra (1981); Boddington (1987: 181); Jackes (1992: 206); Nawrocki (1995); Walker (1995: 41); Guy *et al.* (1997); Paine & Boldsen (2002:169); Stojanowski *et al.* (2002); Bello & Andrews (2006: 10); Perry (2006: 90-91); Gilchrist (2007: 143); Djurić *et al.* (2011); Halcrow & Tayles (2011: 345); *contra* Lewis (2007: 37).

[196] Richards (1992: 62); Chamberlain (2000: 210); Lillehammer (2010: 30); Jackes (2011: 124).

[197] Perry (2006: 90).

[198] Chatterji *et al.* (1972); Galloway *et al.* (1997).

[199] Hardness is a scientific term which refers to a material's ability to resist indentation and scratching. 'Mohs' is the acknowledged scale for hardness.

[200] Gill-King (1997); Lyman & Fox (1997).

[201] Baud *et al.* (1977); Schultz (1997).

surface area for attack per unit volume and their poor mineralisation renders them porous and soluble.

The relationship between young age, mineral characteristics and mechanical properties explains why the skeletons of foetuses, infants and young children are so fragile. Their low tensile strength, and their extremely low compressive strength and hardness make them extremely vulnerable to breakage.[202] Their small skeletons poorly resist crushing by the pressure of overlying sediments.[203] The fragmented bones are then subject to attack by the acid products of organic matter decomposition or by acid and saline soils.[204]

However, despite such compelling scientific explanations, we still cannot state with certainty that the apparent under-representation of very young children in almost all cemeteries across the world, including those of Egypt, can be explained purely by taphonomy, diagenesis[205] and differential destruction processes.[206] In this situation, where experiments are rarely possible, it is difficult to provide complete proof for this argument, especially when presented with great variability between sites; for example, the poor preservation reported for Kom el-Khilgan (**Figure 2.1**), *versus* the excellent preservation observed at Adaima (**Figure 2.2**).[207] Nevertheless, as evidenced by the oldest 'anatomically modern human' burial in Egypt being that of a child at the Transitional/Upper Palaeolithic Taramsa Hill site (**Figure 2.3**),[208] and the second-oldest being a Late Palaeolithic multiple burial including a foetus at Boulder Hill,[209] it is clear that in certain areas, the desert surrounding Egypt's Nile Valley presents excellent dry-preservation conditions, providing archaeologists the best possible circumstances for encounters with the physical remains of children, infants and foetuses.[210]

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202 Vinz (1970) observed that, below 1.9 years, hardness was so low that he was not able to measure it.

203 Lyman & Fox (1997).

204 White & Hannus (1983); Garland & Janaway (1989); Gill-King (1997); Schultz (1997).

205 Jackes (2011: 126).

206 Some paleodemographers, such as Acsádi & Nemeskéri (1970: 239), refuse to admit the possibility that there may be any difference between the preservation rates of the bones of adults to those of children and infants.

207 I am grateful to Prof. Beatrix Midant-Reynes and Dr. Yann Tristant for providing these examples, and to the *Institut Français d'Archéologie Orientale* for the use of these images.

208 *ca.* 50,000 BP: Midant-Reynes (2000: 37); *ca.* 55,000 BP: Hendrickx & Vermeersch (2000: 21, 25). This finding is mirrored elsewhere, with the earliest anatomically modern human found in the Lapedo Valley, Portugal, being that of a early Gravettian Palaeolithic child, *ca.* 26,000 BP; Harrington (1999).

209 *ca.* 20,000 BP: Midant-Reynes (2000: 43).

210 Meskell (2002a: 79). It is acknowledged that such ultra-dry preservation environments are not encountered in the Nile Delta. It is also acknowledged that the rising water table subsequent to the creation of the Aswan High Dam has led to increasingly high moisture and salinity levels in the Nile Valley, resulting in a highly destructive impact on the archaeological records of these contexts.

## 2.6 Identification and Excavation of Juvenile Remains

A further argument can be added to the aforementioned sociological, taphonomic and diagenetic hypotheses of juvenile under-representation in cemeteries: that of the highly-specialised training required to identify, recover and analyse young human bones from archaeological contexts. Such efforts are fraught with difficulties, particularly due to the under-development of fieldwork practices which address the specific challenges of exhuming child, infant and foetal remains.[211] Even when they are preserved, child and infant skeletons are less likely to be recovered: they are smaller and less recognisable than those of adults,[212] their graves may be smaller or less structured,[213] or they may be commingled with adult or animal remains.[214]

Of the juvenile demographic group, the skeletons of foetuses and neonates are perhaps most susceptible to the vagaries of recognition. The foetal skeleton is comprised of hundreds of separate bones, with many epiphyses and bone segments presenting shapes and forms that could prove almost unrecognizable to an excavator trained using only adult skeletal material. Moreover, even experienced excavators have confused human foetal and infant bones with those of animals, such as the long bones of turtles, pigs, puppies, other mammals and birds.[215] Considering this, it is understandable that in times prior to the specialist professions of osteoarchaeology and physical anthropology, some excavators may have missed this delicate, amorphous material. However, even today, limited funding and other factors prevent the inclusion of specialists in every excavation team. In the absence of such experts, one can only speculate as to whether excavation manuals dedicated to the processes of exhuming and analysing children's skeletal remains are actually employed in the field.[216] As such, due to inconsistent identification and excavation practices, the risks of juvenile under-representation in Egyptian archaeology should be considered ongoing.

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[211] Weaver (1998:188); Perry (2006: 91).
[212] Djurić *et al.* (2011: 260).
[213] Crawford (1991: 21); Lee (1994: 67); Lucy (1994: 26).
[214] Chamberlain (2006: 89).
[215] For example, see de Morgan (1912: 29); Rhine (1995: 4-5); Weaver (1998: 188); Lewis (2007: 26-27); Shepherd (2007: 94).
[216] See Baker *et al.* (2005). Rhine's (1995) unpublished article also provides an excellent discussion of the recovery and analysis processes required for foetal remains. Scheuer & Black's (2000b) tome is unparalleled in terms of juvenile skeletal identification and analysis. These pieces should be seen as essential resources for archaeologists and anthropologists.

## 2.7 Child, Infant and Foetal Palaeodemography

Despite the abundance of scientific literature devoted to the study of child, infant and foetal skeletal remains, this segment of the population is often absent from anthropological analyses in Egyptology.[217] One of the most enduring assumptions regarding juvenile mortuary culture is that the physical remains of individuals from these age groups cannot be assessed in terms of age, sex and health statuses; therefore they cannot make meaningful contributions to population data-sets.[218] However, forensic and physical anthropological literature firmly establishes that the reverse is true, with this material having far greater promise than anticipated.

### 2.7.1 Sex Assessment and Age Estimation

Scientifically, it is well known that human sexual differentiation begins at least as early as the eighth to tenth foetal week, with the onset of appreciable levels of testosterone in the male.[219] These developments of the endocrine system have led scientists to observe physical sex differences among foetal, neonatal and infant skeletons since the late 19th Century.[220] As a logical consequence of growth, these differences become more marked with increasing age in children. Aging criteria for child, infant and foetal remains are even better developed than are those for sex assessment. Standards of skeletal ossification, long bone diaphyseal development and dental ontogeny at both macroscopic and histological levels have been well-researched.[221] In the context of palaeodemographic analyses of the data derived from the archaeological survey detailed in §1.4.4, ageing and sexing methodologies will be further discussed in §§4.1–4.3.

### 2.7.2 Palaeopathology

Recent decades have seen substantial increases in child, infant and foetal growth, health and trauma[222] research in forensic anthropology and palaeopathology.[223] It is now widely

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217 St. Hoyme & İşcan (1989: 62).

218 The ongoing debate over the validity, utility and relevance of archaeological and anthropological attempts to infer biological affinity (usually couched as "race") using skeletal remains is not within the scope of this investigation.

219 Weaver (1998: 187).

220 Thomson (1899).

221 See Scheuer & Black (2000b).

222 Skeletal injuries, whether accidental or intentional, should be rare in foetal and neonatal skeletal material, but may be of particular relevance to that of children; see Kerley (1978: 163). Unfortunately, the usual challenges experienced by archaeologists and physical anthropologists in distinguishing premortem, perimortem or postmortem fractures are likely to be amplified for such small and fragile bones: see Maples (1988). Of course, if any fracture healing had begun by the time of death, or if previously healed

recognized that juveniles provide the most sensitive barometer of the health statuses of entire past populations,[224] as these early growth processes are the logical pathways by which morphological variations among the adult population arise. Ethnographic studies have specified a wide variety of complex socio-ecological factors that, in isolation or combination, may influence child, infant and foetal health, morbidity and mortality.[225] These factors will be further discussed in §4.5 in the context of palaeopathological analyses of the data derived from the archaeological survey.

## 2.8 Children's Lived Experiences and Cultural Capacities

Having explored the current perceptions and historiographical underpinnings of child, infant and foetal mortuary culture in Egyptological literature, the present study now seeks to examine how these perceptions impact on current reconstructions of children's lived experiences and cultural capacities within Egyptological discourse. Current precepts regarding children's position, value and agency in society will be critiqued according to historiographical associations and relativity to ethnographic and social theory. Such an approach ensures that the empirical findings delivered by the present study's archaeological survey will be situated within an ethical, balanced interpretative framework.

## 2.9 Artistic and Epigraphic Representations of Children

As highlighted in §2.1, current reconstructions of the lived experiences and cultural capacities of children, infants and foetuses in ancient Egypt are primarily based on artistic and epigraphic representations. Considering the diverse range of data available to Egyptologists, it is pertinent to critique the bias towards these categories of evidence apparent in many scholars' approaches.[226] Further to this, it is worthwhile to consider the implications that exclusive use of these evidence categories may have on our reconstructions of the lived experiences of the actors contained therein.

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fractures are found, it might be possible to reconstruct the timing and pattern of skeletal trauma in much the same ways as proposed for adult material (Lewis 2007: 163-183).

223 See Lewis (2007).

224 Hart (1998: 215); Humphrey (2000: 193); Halcrow & Tayles (2011: 336).

225 It is acknowledged that many common acute illnesses which can lead to death in young children and infants, such as gastroenteritis, are rapid-onset and therefore difficult, if not impossible, to detect in the skeleton. However, it is certain that many aspects of poor nutrition and disease do effect the skeletal and dental development of foetuses, infants and children, and therefore have a tangible presence in the archaeological record.

226 Kemp (1977: 185); Andrén (1998: 41).

Artistic and epigraphic evidence may be critiqued in both quantitative and qualitative measures. It may be argued that Egyptology's preoccupation with artistic and epigraphic evidence is testimony not only to the surfeit of such material at our disposal;[227] but it also reflects the umbilical ties to the intellectual milieu present at the foundation of our discipline,[228] where our path was plotted along the lines of Classical studies.[229] For many years following the establishment of Egyptology, items of textual and artistic evidence were viewed as worthy of study as ends in themselves, most likely due to the rigorous training of scholars in the fields of philology and political, military and art history in accordance with Classical conventions. Such practices have entrenched disciplinary bias towards historical evidence and led to the perception of archaeology as primarily the study of *pre*history, only to be employed as history's "handmaiden"[230] in a "zero-sum"[231] equation, whereby its value is considered inversely proportional to the presence or absence of textual or artistic evidence.

However, scholars including Meskell[232] and Robins[233] have recognized the propensity of such approaches to misrepresent the true lived experiences of individuals in ancient Egyptian communities, and have made measurable efforts to rectify the imbalance. They acknowledge that the only voices heard under the exclusive framework of artistic and literary evidence are those of its patrons.[234] Generally speaking, these are the voices of elite adult males.[235] We are yet to uncover either textual or artistic narrative created by children.[236] Therefore, in reconstructions of ancient Egyptian society based on artistic and epigraphic evidence, children are *seen* but they are not *heard.*

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227 Redford (2008: 25).
228 Strouhal (1992: 6).
229 Sherratt (1993: 119-120); Meskell (1999c: 129).
230 Knapp (1998: 8-9).
231 Halsall (1997: 821).
232 Meskell (1994: 37; 1999b: 2).
233 Robins (1993: 13-14; 2001: 510).
234 See also Stoof (1978: 115); Baines (1991: 124, 139); Kamp (2001: 24); Richards (2005: 49-58); Sowada (2010: 220).
235 Stoof (1978: 115); Robins (1993: 13); Meskell (1994: 37; 1999a: 37; 1999b: 5); Fischer-Elfert (2001: 438); Harrington (2007: 63). For a typically androcentric History, consider Gardiner (1935). Milde (1994) does not recognize the elite male bias in his article.
236 To this author's knowledge, the closest we have to extant textual narrative created by a child is the embedded direct speech of the boy-king Pepi II, in the Old Kingdom biography of Harkhuf: Lichtheim (1975: 23-27). The scribal exercises attested in New Kingdom 'schoolboy' manuscripts are not original narrative text; for example, *pAnastasi, pBologna, pSallier, pKoller, pRainer* and various ostraca, cited in Erman (1966: 188-218). In the second year of his reign, Pepi dictated a letter to be sent to the (eventual) Governor of Upper Egypt, Harkhuf, expressing his delight upon hearing news of Harkhuf's procurement of a 'dancing pygmy' from Yam, as well as his concern for all care to be taken so the pygmy would arrive safely at the palace. This was such an important event in Harkhuf's career that he included the contents of the letter in his autobiography, carved on his tomb façade in Aswan; see Lichtheim (1975: 23, 26-27). It should be noted, however, that this is an exceptional piece of evidence from a royal context

Such methodologies have reconstructed the lived experiences and cultural capacities of ancient Egyptian children and childhood within the conceptual boundaries of socialisation and familism.[237] Egyptian children are essentially seen as the recipients of social influences, passive in social processes and the objects of parenting. In this frame, children are denied the same ontological status as adults. They are not perceived as social actors and are not ascribed any capacity for social agency. They play no part in the construction of their own social world.[238]

The impact of artistic and epigraphic bias in Egyptology has been problematised by Meskell.[239] Meskell has responded to post-processualism's call for attention to areas of individual action and widening approaches to archaeology, rather than merely focusing on the 'big issues' which consumed processual archaeology during the 1960s and 1970s. A key component of post-processualist approaches such as Meskell's continues to be feminist studies: in the forms of critique, remedial research (or historical revision) and theory building.[240] As a by-product of the feminist movement, feminist critique is now incorporated within the knowledge production and mainstream discourse of theoretical and practical archaeologies,[241] including that of Egyptology.

However, the same post-processual philosophy has not yet been extended to include wide-ranging studies on children in the Egyptian archaeological record. Indeed, it may be argued that many of the studies of children that *do* exist did not arrive as avenues of enquiry in their own right, but as a subset of the feminist trend.[242] Therefore, to this point in Egyptological literature, the majority of scholars have reconstructed the lived experiences and cultural capacities of children, infants and foetuses in the tertiary space conventionally occupied by children in Western history: as passive appendages to their mothers,[243] who themselves are identified by and restricted to their relationship with their husbands.[244] Within this configuration, the child remains in a semiotic lacuna, existing merely as a

and cannot be extrapolated beyond this frame. Moreover, it is clear that the contents are not *verbatim*, having been clearly subject to scribal mediation in accordance with royal protocol.

237 Scott (1997: 6).

238 Chandler (1991: 135).

239 See Meskell (1999b).

240 See Ovrevik (1991); Wylie (1991).

241 See Sørenson (1988); Engelstad (1991); Meskell (1999b).

242 See Meskell (1999b). It is interesting to note that the feminist-inspired reaction against the 'woman as mother' paradigm did not precipitate interest in the socio-economic roles or gender development of children – the very individuals who are axiomatic to the perpetuation of parenting paradigms within culture.

243 Scott (1997: 7); Lillehammer (2000: 17); Zillhardt (2009: 2).

244 Meskell (1999b: 159); Olson (2001: 217).

relative term which belongs to the imperfect categories of 'not-adult' and 'not-male'.[245] As a result, many Egyptological works may be argued to feature the phenomenon of "pseudo-inclusion"[246], a form of tokenism, where children are included briefly for form's sake, but are then marginalized or dismissed without forming an integral or independent part of overall analyses.

From a historiographical perspective, such compartmentalisation and marginalisation of Egyptian children is discontinuous with the nature and scope of available artistic and epigraphic evidence. Children abound in artistic representations from the Old Kingdom onwards, engaging in all manner of activities in both sacred and secular spheres, across all socio-economic motifs.[247] Children are clearly not marginalised in Egyptian art; rather, they are fully integrated into family and community life.[248] Moreover, words for 'child' and 'children' are prolific in Egyptian language. Feucht's detailed lexicographical study of the major designations of *inpw*,[249] *id(w)*,[250] *ꜣdd*,[251] *wḏḥ*,[252] *mnḥ*,[253] *ms(w)*,[254] *nfr(w)/ nfr(w)t*,[255] *nḥn(t)*,[256] *ḥwn(t)*,[257] *ḫ(t) / ḫy*,[258] *ḥrd*,[259] *sfi / sif*,[260]

[245] See Janssen & Janssen (1990: 163). In awareness of this categorisation, the present study chooses not to refer to children and infants as 'sub-adults': see §1.5, fn. 45 of this thesis; *cf.* Baker (1997).

[246] Scott (1997: 3).

[247] Stoof (1978: 118, 120-121). For further discussion on the use of codified motifs to represent social events and constructs in Egyptian art, see Weeks (1979); Swinton (2010); Marshall (*forthcoming*).

[248] Stoof (1978: 118, 121). Stoof also acknowledges that the children of slaves/prisoners, traders and foreigners are also represented with the same characteristic insignia of each of these groups, thus indicating that Egyptians also thought that the children of 'others' were completely integrated into their respective cultures.

[249] *WB* I, 96.6, "young king; heir", attested from the Middle to New Kingdom: Feucht (1995: 503-512).

[250] *WB* I, 151.8-11, "child; young ones", attested from the Old Kingdom to Greek Period; also *idyt: WB* I, 151.12, "young girls", possibly attested in the Old Kingdom: Feucht (1995: 513-515).

[251] *WB* I, 242.11-13, "youth", attested in the New Kingdom; also *ꜣddiw ꜣ*: *WB* I, 242.17; *ꜣddt*: *WB* I, 242.18, "young girls; young women", attested in the New Kingdom; *ꜣddw šriw* and *ꜣddiw šrjw*: *WB* I, 242.14-16, "child" attested in the New Kingdom: Feucht (1995: 515-518).

[252] *WB* I, 410.1-3, "weanling", attested from the Middle Kingdom to Greco-Roman Period: Feucht (1995: 518-520).

[253] *WB* II, 83, "youth, not yet a man", attested in the New Kingdom: Feucht (1995: 520-521).

[254] *WB* II, 139, "child of every age group; seldom singular, usually a collective noun", attested from the Old Kingdom onwards: Feucht (1995: 522-524).

[255] *WB* II, 258, "post-pubescent boy or girl", attested from the Old Kingdom onwards: Feucht (1995: 524-527).

[256] *WB* II, 311, "newborn child; youth", attested from the Old Kingdom onwards: Feucht (1995: 527-530).

[257] *WB* III, 52ff., "infant; man", attested from the Middle Kingdom onwards; also *ḥwnt* "girl; mature young woman": Feucht (1995: 531-534).

[258] *WB* III, 217, "small child; person recovered from an illness", attested from the New Kingdom onwards: Feucht (1995: 534-537).

[259] *WB* III, 386ff., "child of every age group", attested from the Old Kingdom onwards: Feucht (1995: 537-539).

 *šri(t)*,[261]  *kti / kt.t*,[262] and  *tꜣi* [263] represent only a portion of the words in the vocabulary that pertain to children.[264] Feucht's study found that although these words were used to designate certain phases of juvenility, they had the same broad meaning, were often used interchangeably, and remained in the lexica for millennia.[265] Moreover, these words could equally be used to designate certain adult phases of life, especially as pertains to learning, youthfulness, recuperation, innocence, cyclical processes and professional development.[266] Children are clearly not marginalised within Egyptian language; rather, they are completely integrated in the linguistic fabric of society. As such, one may argue that the relegation of children to Egypt's historical margins is a by-product of scholarly subjectivity, rather than an apposite reflection of evidence.

Considering the instabilities and biases identified in historical, feminist and androcentric approaches, it appears that our current reconstructions of the lived experiences and cultural capacities of ancient Egyptian children, infants and foetuses may be far from accurate. While these approaches certainly acknowledge that children were present in the past, the tacit assumption is that they were merely 'there'; only made relevant by their relationship to an elite male patron/parent, or through their mother, rather than as individual, active and dynamic participants with social positions, value and agency.

## 2.10 The Historiography of 'Childhood'

The present study acknowledges that all historical and archaeological narratives about the past are cultural constructions, and will therefore be unavoidably incomplete. Such constructions not only reflect the contextual and archaeological priorities and contingencies of interpretation, but also the temporal frameworks and concerns around which those interpretations are constructed.[267] In light of this acknowledgment, it is essential to explore the historiography of 'childhood' and consider how cultural constructions of this life-course phase may have impacted on the encounters of both early and recent excavators with the remains of juveniles in the Egyptian archaeological

260 *WB* IV, 114, "young king or god", attested from the New Kingdom to Greco-Roman Period: Feucht (1995: 539-541).
261 *WB* IV, 526ff., "small child; man", attested in the Middle and New Kingdoms: Feucht (1995: 541-545).
262 *WB* V, 147, "small – seldom used for a child or youth", attested in the Middle Kingdom and Ptolemaic Periods: Feucht (1995: 546).
263 *WB* V, 344, "male child – from the womb to young child", attested from the Middle Kingdom onwards: Feucht (1995: 547).
264 See Hannig & Vomberg (1999: 404-414).
265 Feucht (1995: 551, 555, 556).
266 Feucht (1995: 551).
267 Meskell (1999b: 1).

record.[268] Furthermore, if we are to enhance the accuracy of future archaeological narratives, it is essential to consider how social theory may assist our navigation of the complex cultural phenomena of child, infant and foetal burials.

The 'child' has occupied modern historians as a focus of study for decades. Phillip Ariès[269] was one of the first historians to critically examine 'childhood' as an independent subject of investigation.[270] His observations regarding both the radically contingent nature of what constitutes a 'child' in any society, as well as whether or not the concepts of 'child' and 'childhood' actually existed in history are fundamental to any discussion on this subject.

Ariès has stated that prior to the 17th Century in Western Europe, there was no such thing as a 'child'. Children were considered biologically immature humans who, when born into the world, were not fully and socially human.[271] They only entered the human world – that is, the *adult* world – several years later, occupying adult spaces, using adult artefacts, wearing adult clothing and engaging in adult labour to the best of their abilities. As a result of changes in theological understanding effected by religious orders in the later stages of the Middle Ages, there was a slow shift away from seeing young individuals as 'unformed humans', towards what we today would understand as 'children'.[272]

Perhaps the most valuable aspect of Ariès' work is his acknowledgement that the concept of 'childhood' and what constitutes a 'child' is a social phenomenon that is completely culturally constructed. In 19th and 20th Century Western society, the child was defined by its generalised position in the human life cycle, standing in opposition to adults due to its diminutive age and physical size.[273] The child was perceived as dependent, innocent and in need of socialisation before it could fully participate in 'adult' culture. Retrospective inference from this culturally-specific concept of childhood led to an assumption that it was the adults of the past who had complete social and political control over social ideologies and the production and use of material culture.[274] From an archaeological perspective, one can see the ontological congruencies between how children were *recognised* in the 'present' of 19th and 20th Century excavators, and how they were

[268] Meskell (1999b: 4, 130, 213). Scholars who hypothesise for ancient Egyptian 'childhood' include Janssen & Janssen (1990: Chapter IV) and Feucht (2001a).
[269] Ariès (1962).
[270] See also De Mause (1974).
[271] Ariès (1962: 15ff.).
[272] Ariès (1962: 33ff.)
[273] Ariès (1962: 365-404).
[274] Lillehammer (2000).

*constructed* in the 'past'. It is possible that the application and perpetuation of this anachronistic framework has resulted in the marginalisation of children, infants and foetuses[275] in Egyptological interpretations and rendered them practically invisible.

## 2.11 Children, 'Childhood' and Social Theory

Modern Western concepts of childhood tend to revolve around the living child as a subject, either of love or vilification. Children and infants are romanticised and intrinsically valued as the epitome of innocence and good[276] and are recognized as distinct identities upon birth, if not already in the womb, especially following the advent of ultrasound technology. Thus, contemporary preoccupations are *with* and *about* children *themselves*. However, 'archaeological' children are rarely a focus of attention in their own right, rather, they are used in a fairly narrow way in efforts to understand, by contrast, constructions of what are implicitly regarded as 'adult' societies. This is despite the fact that textual evidence belies the Egyptian belief that children were embodied individuals from the time of conception;[277] refuting Richards' aforementioned assessments that children were considered 'nonpersons' until they were more advanced in age. They also named the child immediately following birth,[278] according to their belief that without a name, an individual did not exist.[279] Therefore, although it may be said that scholars have attempted to view ancient Egyptian society *through* the child, they are yet to conduct child-centred research which promotes investigations of children's social position, value and agency as worthy pursuits in and of themselves.

### 2.11.1 Children's Bodies and Social Theory

There are significant contrasts in the way that the way that children from the past and the present are identified in socio-cultural narratives. The identities of living children are usually perceived as variable and culturally constructed.[280] Such identification is based in social relations, therefore discounting the construction of a 'universal' modern child.[281] 'Archaeological' children, however, are primarily identified via the location of their

[275] Hockey & James (1993: 60).
[276] Zelizer (1985); Ardren (2006: 3).
[277] Feucht (1995: 94, 128; 2001a: 261) states that the execution of a condemned pregnant woman could be postponed until she had delivered the baby. *Cf.* Meskell (1999b: 135, 172; 2002a: 69).
[278] Janssen & Janssen (1990: 14); Hornung (1992: 178); Meskell (1994: 41; 1999b: 173; 2000: 425; 2002: 69); Feucht (2001a: 262; 2001b: 192); Strouhal (2001: 22); Zillhardt (2009: 72).
[279] Meskell (2000: 425).
[280] See Jenks (1982); James & Prout (1990); Qvortrup *et al.* (1994).
[281] See James *et al.* (1998).

physical bodies in mortuary contexts. Within this framework, children are categorised according to anthropological parameters and identified according to their bodily conformity with scientifically-determined developmental age groups, often based on sample populations temporally and geographically disparate from their own. Contrary to the identification of modern children, 'archaeological' children's identities are reduced to a universal biological category, rather than as individual social beings whose identities are explored via negotiated considerations of the material expressions and cultural contexts of their experience.[282]

When considered in a purely developmental sense, the age categories commonly utilised by physical anthropologists are problematic. While biologically accurate, such assessments of skeletal ontogeny form prescribed divisions in terms of social and mental development.[283] They make no allowances for how 'biological' and 'chronological' ages may have been conceptualised and negotiated to form contextualised 'social' ages across the life course in different in ancient cultures.[284] Recent trends in psychological research move away from biological determinism and suggest that chronological age is becoming an increasingly inaccurate determinant of social engagement.[285] However, biological identification of children continues to be employed as a predictive device in archaeology – transforming *age* into *experience* – thereby imposing a series of ethnocentric assumptions about links between biological development and socialisation.

By equating and restricting identity to biological status, the cultural capacities and experiences of 'archaeological' children remain unchartered and enigmatic. Biological identification prioritises the adult as 'complete' while demoting the child to an 'incomplete' status of 'sub-adult'.[286] Failure to explore the dead child's skeleton as a culturally contextualised *lived* social persona undermines the epistemological basis of post-processual archaeology, the mandate of which is to make identity inferences from material remains.[287] Excluding children's identities from archaeological narratives also prevents further insights into the role their bodies played in facilitating and determining their social relations, and in turn, how their bodies responded to these engagements.[288] Until

[282] Derevenski (2000: 8).
[283] See Morss (1990); Derevenski (1994); Baxter (2006a: 3); Perry (2006: 90, 92).
[284] Gowland (2006: 143); Halcrow & Tayles (2011: 335); Sofaer (2011: 286-287).
[285] Neugarten (1981: 809-825); Gowland (2006: 143, 152); Stevenson (2009b: 171); Halcrow & Tayles (2011: 334, 349); Sofaer (2011: 286).
[286] See fn. 45; *cf.* James *et al.* (1998).
[287] Meskell (1999b: 51); Derevenski (2000: 9).
[288] See James *et al.* (1998); *cf.* James (1993).

'archaeological' children are viewed as more than reductionist, naturalised, universal biological phenomena, their identities will remain socially and culturally undifferentiated.[289]

To address this imbalance, however, we must not then substitute reductionisms by turning to complete social constructionism as a mechanism to access children's identities.[290] Instead, the child's skeleton may be viewed as a site of articulation between body and culture.[291] Considering the body's capacity to reflect and project symbolic elements of culture, it is often implicated in the communication and reception of social transition at key points in the life course.[292] Here, similarities, differences and transitions between bodies become signifiers of identity[293] and are themselves mobilised as vehicles of cultural transmission. Due to the high volume of such physiological changes and the speed at which they take place in children, their bodies may be viewed as significant opportunities to examine the making, breaking and reshaping of identity in archaeological cultures.[294]

To access social life and social meaning through the body,[295] we must understand the child's body in relation to material culture rather than privileging either as a focus of analysis.[296] Social life is constructed from diverse cultural elements, including bodies, technology, material culture and cognition, each of which enrols (and is mutually enrolled by) the other elements in dynamic and variable configurations.[297] In this way, it becomes difficult to delineate boundaries between bodies and material culture; it may even be argued that these elements coalesce to form a single, reconfigured identity.[298] Such understandings of the interactions between bodies and material culture may be applicable to all individuals, but they are perhaps most pertinent when considering the unique cultural and biological interplay required to access the lived experiences of children from archaeological contexts.[299]

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289 Derevenski (2000: 8).
290 James *et al.* (1998).
291 Derevenski (2000: 9); Meskell (1999b: 35); Garwood (2007: 65).
292 James *et al.* (1998: 162); Humphrey (2000: 193-205); Sofaer (2011: 285).
293 Derevenski (2000: 9).
294 James *et al.* (1998: 156); Garwood (2007: 65).
295 Armstrong (1987); *cf.* Laqueur (1990); Foucault (1974).
296 James *et al.* (1998: 166).
297 Latour (1993); Derevenski (2000: 9); Malafouris (2004).
298 Shilling (1993); Sørenson (1988; 1997); Gosden & Marshall (1999: 173); Malafouris (2004); Sofaer (2006a: 129); Garwood (2007: 66).
299 Derevenski (2000: 9).

In order to navigate these engagements between the body and the material world, Place[300] distinguishes between 'child data' (the experience of the corporeal body, including the biological information obtained from the study of the child's skeleton as an artefact), and 'data child' (the manifestation of corporeality through connections with cultural artefacts; including bodily treatments, grave architecture, grave goods, *et cetera*). Such an approach allows children's cultural capacities to manifest via analysis of all aspects of the construction, provision and interaction of the grave with their physical bodies. Interpretations are then negotiated through the mutual illumination of 'data child' and 'child data', as the symbolic elements of biological and material culture are framed according to cultural, chronological and geographical context.[301]

### 2.11.2 'Childhood' and Social Theory

The distinction between 'data child' and 'child data' becomes even more important when more than one child is available as a subject of study. In the presence of many children (as the following chapters reveal), tacit subscriptions to constructs of past 'childhood' are also problematised as they are incongruent with a homogenous 'ideal' or universal child. It is therefore important to further deconstruct the study of children by deliberately distinguishing between constructs of 'the child' from those of 'childhood'.

'Childhood' is often perceived as a structural category similar to other structural forms or life course phases, including 'youth', 'adulthood' and 'old age'.[302] Contrasting with the concept of 'a child', which locates a physical entity in social discourse and archaeological practice, 'childhood' is an intangible 'experience'. Such ambiguity engenders relativism in many studies of 'childhood', particularly within archaeological contexts.[303] Accounting for childhood in a particular cultural and chronological context requires analyses of broad, interactive social processes.[304] Archaeological children lived their lives under diverse social, environmental, economic, religious and cultural conditions, engaging with equally diverse elements of material culture. Such diversity amongst archaeological contexts will produce many competing versions of 'childhood'.[305] While some societies may have

[300] Cited in Derevenski (2000: 10); *cf.* James *et al.* (1998: 168); Perry (2006: 89); Halcrow & Tayles (2011: 334).
[301] Derevenski (2000: 10); Wengrow & Baines (2004: 1088); Halcrow & Tayles (2011: 334).
[302] Qvortrup *et al.* (1994).
[303] Derevenski (2000: 11).
[304] Alanen (1988: 64).
[305] James *et al.* (1998: 168).

material cultures of 'the child', this does not necessarily predicate either separate or homogenous material cultures of 'childhood'.[306]

Modern Western perceptions of childhood as a period of prolonged social dependency without social or personal autonomy has led archaeologists to favour adults in the reconstruction of past power relations and diminish children's agency to that of passive, immobile cultural 'automatons'.[307] Yet, children construct their own lives and, from a very early age, do not act only instinctively, but initiate action by choice. Furthermore, especially in traditional societies, children are known to be active participants in both social and economic facets of their communities and are situated within the same cultural milieu as adults.[308] From this perspective, one cannot ascribe different ontological statuses to adulthood and childhood.[309] Arguments regarding the extent of children's capacities to engage with, create and manipulate the material world do not constitute ontological differences between themselves and adults; rather, these are only matters of scale.[310] From an archaeological perspective, if there are no ontological differences between childhood and adulthood, artefacts found in children's graves cannot be ascribed with different statuses to those found with adults. Rather than reverting to culturally-relativist anachronistic definitions of ancient Egyptian children, the following chapters turn to the archaeological record to explore what their burials reveal about their lived experiences and cultural capacities in their own communities.[311]

## 2.12 Conclusion

It has been the purpose of this chapter to investigate current scholarly perceptions of ancient Egyptian child, infant and foetal mortuary culture, and to examine the scholarly reconstructions of children's lived experiences and cultural capacities within Egyptological discourse. The chapter also sought to scrutinise the historiographical underpinnings of current scholarship in order to determine which factors may have contributed to the present positioning of children, infants and foetuses in Egyptology.

It appears that the current perceptions of child, infant and foetal mortuary culture have been heavily influenced by widespread and enduring assumptions regarding the purported

306 Derevenski (2000: 11).
307 Qvortrup *et al.* (1994); James *et al.* (1998); Derevenski (2000: 11).
308 Nag *et al.* (1978).
309 See Qvortrup *et al.* (1994).
310 Derevenski (2000: 11).
311 Bonnichsen (1973); Hammond & Hammond (1981: 634-636).

absence of juveniles amongst published cemetery data. Such assumptions have engendered a disciplinary *fait accompli* regarding the futility of research in this area. In conjunction with suppositions regarding the preservation potential of their bodies within archaeological contexts, the purported absence of children is invariably attributed to differential burial practices. Such assumptions have precipitated unfavourable reconstructions of the lived experiences and cultural capacities of children, infants and foetuses in ancient Egypt, with scholars inferring that they were perceived differently than adult members of the community – as 'nonpersons' without social position, value and agency – and were therefore excluded from 'normative' communal burial customs including funeral ceremonies and interment within public burial grounds.

These hypotheses have been tacitly accepted and perpetuated within Egyptology without comprehensive testing of archaeological evidence. With a few notable exceptions, child-centred analyses of Egyptian mortuary culture have been neglected in favour of artistic and epigraphic research. However, the inherent biases of these categories of evidence limit reconstructions of ancient Egyptian children's lived experiences within the mechanisms of socialisation and familism. Such approaches have denied Egyptian children the same ontological status as adults, thereby reinforcing the aforementioned assumptions regarding their differential treatment in death. Within these reconstructions, ancient Egyptian children have no cultural capacity. Their social personae are limited to passive adult appendages. They are devoid of social agency and exist only as shadows within elite, male-oriented adult-centric constructions of the world.

From a historiographical perspective, the present study has identified that contemporary conceptualisations of children during the nascent stages of Egyptological enquiry in the late 19$^{th}$ and early 20$^{th}$ Centuries may have had significant bearing on early excavators' interpretations of archaeological data. Children appear to have been mobilised as conduits to view adult society, not engaged as subjects worthy of study in themselves. As a result, children, infants and foetuses have been marginalised in Egyptological research and rendered practically invisible, inconsequential and of little social worth. Such a position stands in stark contrast to literary evidence which espouses the immeasurable value, cultural embodiment and ontological equity of children within their families and communities. As we have seen, children were desired for many reasons in ancient Egypt, perhaps not the least of which was their fundamental metaphysical capacity to 'cause their parents to live'. For precisely this reason, social and ethnographic theorists have

recognised the value in studying the ways in which past societies constitute their offspring: in life and in death. As biological and cultural imperatives, children represent the 'collective future' of a society.[312] They are inextricably engaged in social reproduction. Their treatments within living and mortuary spheres are therefore among the most important structuring elements of culture. From this perspective, it may be argued that current adult-centric constructions of Egypt's past simply do not reflect reality.

As a step towards tempering this imbalance, the following chapters report the results of a comprehensive survey of published child, infant and foetal mortuary culture from the Early Dynastic to Middle Kingdom Periods, supplemented by unpublished data from the Australian Centre for Egyptology's excavations at the Early Dynastic cemetery of Helwan. From an empirical perspective, the survey tests the veracity of the assumptions regarding the mortuary culture of ancient Egyptian children, infants and foetuses which have led to their marginalisation within the discourse. To facilitate ethical and nuanced interpretations of the survey results, the present study engages methodologies endorsed within social theory, whereby symbolic elements of children's biological and material culture are framed and integrated according to specific cultural, chronological and geographical contexts. Such an approach provides an apposite framework to observe how individuals and communities in ancient Egypt may have mobilised the burial ritual to make, break and reshape perceptions of their deceased children, infants and foetuses' lived experiences and cultural capacities.

[312] Barkow & Burley (1980: 178); Okore (1986: 54); Voland (1989: 391, 399-400); Hewlett (1991: 18).

# CHAPTER 3: PRIMARY RESULTS

In accordance with the research objectives outlined in §1.3, an archaeological survey of child, infant and foetal mortuary culture was performed on all available published literature pertaining to the Egyptian Early Dynastic to Middle Kingdom Periods (*ca.* 3300-1650 BCE),[313] supplemented by unpublished Early Dynastic data from the Australian Centre for Egyptology's Helwan Project.[314] In adherence with the project structure outlined in §1.6, primary results of this research are presented below. Raw data is collated in the Appendix, attached as a CD-ROM to the inside back cover of this volume.[315] All figures and tables are presented in a separate volume for the reader's convenience. Further results pertaining to individual aspects of juvenile funerary culture are expounded in the following chapters. Qualitative analyses will be proffered in Chapter 10.

## 3.1 Overview

The archaeological survey revealed that child, infant and foetal burials (henceforth, *CIFBs*) are published in 68 (28.33%) of the 240 sites eligible for this study, while 172 sites (71.67%) featured no published accounts of CIFBs whatsoever. The 68 productive sites, in addition to unpublished excavation data from Helwan, delivered a sample accounting for a minimum number of 1,809 children, infants and foetuses from the Early Dynastic to Middle Kingdom Egyptian archaeological record.[316] These primary results are presented below in greater detail according to distributions by geographical regions, relative chronology and site types.

## 3.2 Distributions by Geographical Regions

### 3.2.1 Specific Geographical Regions

According to the methodology outlined in §1.4.2, the sample was sub-divided into 11 specific geographical regions. Of these, the Eastern Desert region featured no published

[313] Every effort was made to obtain and review every published reference for these time periods, however time and library resources dictated the final extent of enquiry. It is hoped that future extensions of this project will provide the opportunity to address gaps in the literature.

[314] This data was generously provided by Prof. E. C. Köhler, now at the Institut für Ägyptologie, Vienna. It should be noted that this data is preliminary and will be subject to further analysis by Prof. Köhler.

[315] Appendix, *The Nursery*, a *FileMaker Pro 9 Advanced* database. Bibliographical references for the productive sites are contained within the database.

[316] See §1.6 regarding the need to express burial data as a Minimum Number of Individuals (MNI).

incidences of CIFBs. Data from the remaining 10 productive regions is tabulated and graphically represented in **Tables 3.1–3.10** and **Figure 3.1**.[317] The East Bank of Upper Egypt featured the most numerous accounts of CIFBs amongst the sample, accounting for a minimum number of 587 individuals (32.45% total burials, henceforth, *TBs*; **Table 3.10**). The next most frequent occurrences are substantially less, being the West Bank of Upper Egypt with 422 burials (23.33% TBs; **Table 3.9**) and the West Bank of Lower Egypt with 186 burials (10.28% TBs; **Table 3.3**). Almost equal results were observed for the East Bank of Lower Egypt and Western and Eastern regions of the Nile Delta, with these regions presenting minimum numbers of 139 (7.68% TBs; **Table 3.4**), 137 (7.57% TBs; **Table 3.1**), and 132 (7.30% TBs; **Table 3.2**) individuals, respectively. This was followed by 120 published interments for the West Bank of Middle Egypt (6.63% TBs; **Table 3.5**) and 78 for Dakhla Oasis (4.31% TBs; **Table 3.8**). Two regions appear to be substantially under-represented, including the Faiyum (MNI 5; 0.28% TBs; **Table 3.7**) and the East Bank of Middle Egypt (MNI 3; 0.17% TBs; **Table 3.6**).[318]

When the above data is appraised in terms of publication rates, it is apparent that rough parallels can be drawn between levels of published excavation activity and the amount of data derived from each region. As seen in **Table 3.11**, the rankings of each specific geographical region's publication quantities roughly equal its ranking in terms of child, infant and foetal burial (henceforth, *CIFB*) quantities. In most cases, there is a difference of only 1 rank (higher or lower) between observed publication rates and CIFB quantities, while parity is observed for the Eastern Desert region. The only exceptions to this trend are the East Bank of Upper Egypt (ranked third by publication, first by CIFBs), the Eastern Nile Delta (ranked fourth by publication, sixth by CIFBs), the West Bank of Middle Egypt (ranked fifth by publication, seventh by CIFBs), and the East Bank of Lower Egypt (ranked eighth by publication, fourth by CIFBs). This finding may have subtle yet significant implications for the epistemological foundations of Egyptology. It is suggestive of the extent to which our knowledge of ancient civilisations may be spatially determined according to scholarly activities within favoured or prioritised regions of the landscape.[319] While more detailed considerations of this issue fall beyond the scope of this thesis, it is clearly worthy of further research. For the purposes of the present study, it is important to note that results may not represent the 'true' geographical character of the archaeological

[317] It should be noted that the geographical region 'East Bank of Middle Egypt' is represented in this sample by a single productive site, Beni Hasan; Table 3.6.
[318] Concerning the East Bank of Middle Egypt, see fn. 317, above.
[319] This has also been noted by Rowland (2004: 999); *cf.* Hassan (1978).

record, rather the extent to which the featured regions have been prioritised in excavation and expedited in publication.

In terms of individual sites, CIFB distribution patterns do not necessarily adhere to those previously described for their respective geographical regions, especially at the higher end of the scale. Accounts of CIFBs >100 MNI were observed among the publications of Qubbet el-Hawa on the West Bank of Upper Egypt (MNI 144; 7.96% TBs; **Table 3.9**), Kom el-Hisn in the Western Nile Delta (MNI 132; 7.30% TBs; **Table 3.1**), Matmar (MNI 120; 6.63% TBs) and el-Mostagedda (MNI 110; 6.08% TBs) on the East Bank of Upper Egypt (**Table 3.10**), Adaima on the West Bank of Upper Egypt (MNI 119; 6.58% TBs; **Table 3.9**), and Helwan on the East Bank of Lower Egypt (MNI 101; 5.58% TBs; **Table 3.4**).

All regions featured sites that presented a MNI of ≤5, including: Kom Firin (MNI 2; 0.11% TBs), Kom Abu Billo (MNI 1; 0.05% TBs), and Abu Ghalib (MNI 2; 0.11% TBs) in the Western Nile Delta (**Table 3.1**); Ezbet Hassan Dawud (MNI 1; 0.05% TBs) and Tell el-Farkha (MNI 4; 0.22% TBs) in the Eastern Nile Delta (**Table 3.2**); Dahshur (MNI 2; 0.11% TBs) and Zawiyet el-Aryan (MNI 2; 0.11% TBs) on the West Bank of Lower Egypt (**Table 3.3**); Maadi on the East Bank of Lower Egypt (MNI 2; 0.11% TBs; **Table 3.4**); Asyut (MNI 1; 0.05% TBs), Ehnasya el-Medina (Herakleopolis Magna) (MNI 3; 0.17% TBs), and Riqqeh (MNI 4; 0.22% TBs) on the West Bank of Middle Egypt (**Table 3.5**); Beni Hasan on the East Bank of Middle Egypt (MNI 3; 0.17% TBs; **Table 3.6**);[320] Hawara (MNI 3; 0.17% TBs) and Qasr es-Sagha (MNI 2; 0.11% TBs) in the Faiyum region (**Table 3.7**); Ayn Asil in the Dakhla Oasis region (MNI 4; 0.22% TBs, **Table 3.8**); Abadiya (MNI 1; 0.05% TBs), el-Amra (MNI 2; 0.11% TBs), el-Arabah (MNI 5; 0.28% TBs), Deir el-Ballas (MNI 4; 0.22% TBs), Deir Rifa (MNI 1; 0.05% TBs), Dendara (MNI 2; 0.11% TBs), Gebelein (MNI 1; 0.05% TBs), el-Hagarsa (MNI 2; 0.11% TBs); Naqada – North Town (MNI 1; 0.05% TBs), Gebel el-Tarif (MNI 4; 0.22% TBs), the Ramesseum (MNI 1; 0.05% TBs), Sheikh 'Abd el-Qurna (MNI 2; 0.11% TBs), and Thebes (MNI 2; 0.11% TBs) on the West Bank of Upper Egypt (**Table 3.9**); and Nag el-Hai on the East Bank of Upper Egypt (MNI 1; 0.05% TBs; **Table 3.10**). Despite these small numbers, it must still be acknowledged that burials of children, infants and foetuses are present amongst the published archaeological records of these sites – they are absent from the majority of sites surveyed by this study (Σ=171; 71.25% total sites).

[320] Concerning Beni Hasan, see fn. 317, above.

### 3.2.2 General Geographical Regions

When viewed from a general geographical perspective, the data appears to be concentrated in the Southern regions of the country (**Figure 3.2**), with Upper Egypt containing more than half of the published CIFBs in this sample (MNI 1009; 55.78% TBs; **Tables 3.9–10**). Lower Egypt features the next most numerous account of CIFBs (MNI 325; 17.97% TBs; **Tables 3.3–4**), followed by the Nile Delta (MNI 269; 14.87% TBs; **Tables 3.1–2**) and Middle Egypt (MNI 128; 7.08% TBs; **Tables 3.5–7**). The Dakhla Oasis region is the most poorly-represented in this distribution, accounting for only 4.31% of the total burial sample (MNI 78; **Table 3.8**).

### 3.2.3 Nilotic Geographical Regions

The data may also be assessed according to Nilotic geographical regions (**Figure 3.3**). When viewed as such, 2 regions account for the greatest, almost equal distributions: the East Bank presents a minimum number of 729 burials or 40.30% of the total sample (**Tables 3.4, 3.6, 3.10**), while the West Bank features 728 burials or 40.24% of total published CIFB data (**Tables 3.3, 3.5, 3.9**). With a minimum number of 269 individuals, the Nile Delta is the third best-published Nilotic region for child, infant and foetal (henceforth, *CIF*) interments (14.87% TBs; **Tables 3.1–2**), followed by Dakhla Oasis, which accounts for 4.31% (MNI 79; **Table 3.8**) of total burials. In this case, the Faiyum has the smallest frequency of published CIFBs, possessing 0.28% of the total sample (MNI 5; **Table 3.7**).

## 3.3 Distributions by Relative Chronology

In terms of chronological distribution, the Old Kingdom accounts for the largest portion of CIFBs in this study, featuring 601 interments or 33.22% of all published data (**Figure 3.4**).[321] This figure is closely followed by the Early Dynastic Period, with 593 published burials representing 32.78% of the sample.[322] Somewhat further behind are the 376 CIFBs of the Middle Kingdom (20.78% TBs),[323] whilst the smallest portion of the sample may be attributed to the First Intermediate Period (MNI 239; 13.21% TBs).[324]

[321] Figure includes 5 individuals from the transitional Early Dynastic Period to Old Kingdom phase: see Database Record Numbers (henceforth, *DRNs*) 164, 165, 533, 1136, 1137.

[322] Figure includes 5 individuals from the transitional Predynastic to Early Dynastic Period phase: see DRNs 281, 1306, 1308, 1309, 1405.

[323] Figure includes 11 individuals from the transitional First Intermediate Period to Middle Kingdom phase: see DRNs 70; 875-878; 1247-1248; 1423-1426. Figure also includes 16 individuals for whom only a

### 3.3.1 Specific Geographical Regions

The data may also be considered in terms of chronological incidence across specific geographical regions. From this perspective, the only region to follow the overall chronological distribution pattern described above is the West Bank of Upper Egypt, with its published data ordered in descending frequency from the Old Kingdom (MNI 158; 8.73% TBs) through to the Early Dynastic Period (MNI 149; 8.24% TBs), Middle Kingdom (MNI 104; 5.75% TBs) and First Intermediate Period (MNI 11; 0.61% TBs; **Figure 3.5**).

Child, infant and foetal burial data from the remaining regions do not follow any uniform distribution patterns. Regions featuring the aforementioned predominance of Old Kingdom burial data include: the East Bank of Upper Egypt (MNI 313; 17.30% TBs) and the West Bank of Middle Egypt (MNI 55; 3.04% TBs). The Early Dynastic Period predominates amongst the published records of the East Bank of Lower Egypt (MNI 135; 7.46% TBs), the West Bank of Lower Egypt (MNI 126; 6.97% TBs), and the Eastern Nile Delta (MNI 108; 5.97% TBs). The Dakhla Oasis region presents the only instance where First Intermediate Period data dominates (MNI 38; 2.10% TBs), whilst Middle Kingdom CIFBs were most frequent in the Western Nile Delta (MNI 132; 7.30% TBs), Faiyum (MNI 4; 0.22% TBs), and East Bank of Middle Egypt (MNI 3; 0.17% TBs).

Only 4 regions feature CIFBs across the complete relative chronological spectrum canvassed by this study: the Eastern and Western Banks of Upper Egypt, the West Bank of Middle Egypt, and the Eastern Nile Delta. The only other regions to demonstrate some degree of chronological continuity are the Dakhla Oasis region (Old to Middle Kingdom Periods), and the Eastern and Western Banks of Lower Egypt (Early Dynastic to Old Kingdom Periods). The published CIFB data for the remaining regions is either isolated (East Bank of Middle Egypt) or discontinuous (Western Nile Delta; Faiyum).

### 3.3.2 General Geographical Regions

When distributed according to relative chronological frequencies across general geographical regions, it is clear that Upper Egypt demonstrates the most numerous and continuous representation of CIFBs across the timeframes included in this study (**Figure**

chronological range of Old to Middle Kingdoms was provided: see DRNs: 138; 891-897; 900; 1184-1187; 1236-1237; 1397.

[324] Figure includes 44 individuals from the transitional Old Kingdom to First Intermediate Period phase: see DRNs 139-144; 146-154; 283; 865-890; 913; 954; 1027; 1125-1126; 1181-1183; 1243.

**3.6**). This region holds the greatest portion of burials in every chronological category with the exception of the Early Dynastic Period, conceding to Lower Egypt by a margin of forty-three. Although distributions across remaining regions are again observed as irregular, what becomes clear is that the majority of published Old Kingdom data pertains to Upper Egypt. The predominant chronological period across more Northern regions is the Early Dynastic Period, representing a maximum of 261 burials in Lower Egypt (80.31% total regional burials, henceforth, *TRBs*), and a minimum of 108 burials in the Nile Delta (40.15% TRBs). The Old and Middle Kingdoms are almost equally represented in Middle Egypt (MNI 56 and 55; 43.73% and 42.97% TRBs respectively), while the First Intermediate Period continues to dominate published data in the Dakhla Oasis region (MNI 38; 48.72% TRBs).

### 3.3.3 Nilotic Geographical Regions

Upon arranging the data according to relative chronological frequencies across Nilotic geographical regions, the Eastern and Western Banks present the most numerous and continuous representations of CIFBs (**Figure 3.7**). On the East Bank, the Old Kingdom dominates (MNI 313; 43.23% TRBs), followed by the Early Dynastic (MNI 204; 28.18% TRBs), First Intermediate (MNI 167; 23.07% TRBs) and Middle Kingdom periods (MNI 40; 5.52% TRBs). On the West Bank, Early Dynastic burials are most frequently observed (MNI 281; 38.34% TRBs), followed by a diminution of data from the Old Kingdom (MNI 260; 35.47% TRBs) to the Middle Kingdom (MNI 170; 23.19% TRBs) and First Intermediate Period (MNI 22; 3.00% TRBs).

The Early Dynastic Period also represents the greatest portion of published burials in the Nile Delta (MNI 108; 40.15% TRBs), where a complete chronological profile is observed through the Old Kingdom (MNI 10; 3.72% TRBs), First Intermediate Period (MNI 12; 4.46% TRBs) and Middle Kingdom (MNI 139; 51.67% TRBs). Again, the majority of published CIFBs in the Dakhla Oasis region is attributed to the First Intermediate Period (MNI 38; 48.72% TRBs), while the Middle Kingdom is most frequently represented in the Faiyum (MNI 4; 80.00% TRBs).

## 3.4 Distribution by Site Types

Of the 1,809 CIFBs identified amongst the published archaeological records of 68 Early Dynastic to Middle Kingdom sites, a minimum of 54 individuals (2.99% TBs) were buried

in settlements,[325] >1 (<18) individual/s (≥0.05% TBs) were buried under a temple, ≥1 individual was buried in a funerary enclosure (0.05% TBs), and the remaining 1,753 individuals (96.90% TBs) were buried in communal cemeteries across every known socio-economic stratum (**Tables 3.1–3.10**; **Figure 3.8**).[326] These findings contrast current disciplinary sensibilities regarding the supposed absence of children, infants and foetuses (henceforth, *CIFs*) from published cemetery data, as well as the alleged differential burial practices which presuppose settlement interments for the juvenile demographic, particularly its youngest constituents. Expressed proportionately, the ratio of Cemetery:Settlement burials in this dataset is 32.46:1.00. These findings suggest that current understandings of CIF mortuary culture require recalibration. Incidences of burials across site types are described further, below.

### 3.4.1 Cemetery Burials

#### 3.4.1.1 Specific Geographical Regions

As aforementioned, 96.90% (MNI 1,753) of the burials in this sample occurred in cemetery contexts. Of the 68 Early Dynastic to Middle Kingdom sites found to feature CIFBs, 65 included cemeteries amongst their published (and, in the case of Helwan, unpublished) data. As seen in **Tables 3.12** and **3.13**, cemetery burials of CIFs were published for every period included in this study, in every region except the Eastern Desert. The East Bank of Upper Egypt provided the most numerous published cemetery interments (MNI 573; **Figure 3.9**), with the West Bank of Upper Egypt (MNI 407) and the West Bank of Lower Egypt (MNI 184) displaying the second and third most substantial proportions of cemetery data. These results were followed by a data cluster in the East Bank of Lower Egypt (MNI 139), Western Nile Delta (MNI 132), Eastern Nile Delta (MNI 127) and West Bank of Middle Egypt (MNI 109). The remaining regions had substantially fewer published juvenile cemetery burials, including Dakhla Oasis (MNI 74), the Faiyum (MNI 5) and the East Bank of Middle Egypt (MNI 3).

#### 3.4.1.2 General Geographical Regions

When distributed according to general geographical regions, it may be seen that the majority of published cemetery CIFBs are located in Upper Egypt (MNI 980; **Figure 3.10;**

[325] The burials of 7 infants in the Old Kingdom to First Intermediate Period settlement of Ayn Asil were identified after finalization of the database and are therefore not included in this figure and all subsequent analyses; Gobeil (2009). Future extensions of this project will include these individuals.

[326] Zillhardt (2009: 87). *Cf.* Hodder & Cessford (2004); Kogălniceanu (2008: 107); Moses (2008: 46, 47).

**Table 3.13**). This singular region accounts for more cemetery CIFBs than all other regions combined, and more than 3 times the number of burials attributed to the next most numerous region, Lower Egypt (MNI 323). The Nile Delta follows with 259 published CIFBs, while Middle Egypt (MNI 117) and the Dakhla Oasis region (MNI 74) account for substantially smaller portions of the sample.

#### 3.4.1.3 Nilotic Geographical Regions

When the data is assembled according to Nilotic geography, the East Bank emerges as the predominant region for cemetery CIFBs, accounting for a minimum of 710 individuals (**Figure 3.11; Table 3.13**). The West Bank features only slightly fewer published juvenile burials (MNI 705). The Nile Delta (MNI 259), Dakhla Oasis (MNI 74) and Faiyum regions (MNI 5) fall incrementally further behind.

#### 3.4.1.4 Individual Sites

The cemeteries with the highest frequencies of CIFBs amongst the sample are Qubbet el-Hawa (MNI 144; 8.21% total cemetery burials, henceforth, *TCBs*; 7.96% TBs), Kom el-Hisn (MNI 128; 7.30% TCBs; 7.08% TBs), Matmar (MNI 120; 6.85% TCBs; 6.63% TBs), Adaima (MNI 119; 6.79% TCBs; 6.58% TBs), and el-Mostagedda (MNI 110; 6.27% TCBs; 6.08% TBs). When combined, these 5 sites account for 621 of the CIFBs in this sample, expressed proportionately as 35.42% of all cemetery burials or 34.33% of all burials.

#### 3.4.1.5 Relative Chronology by Site Type

According to frequency distributions by relative chronology, the number of CIFBs in the two best-represented periods differ by only 2 interments. Here, the Early Dynastic Period features a MNI of 592 (**Figure 3.12; Table 3.13**), while the Old Kingdom almost equals that number with a minimum of 590 cemetery CIFBs amongst its published record. The Middle Kingdom presents a lesser figure of 342 cemetery burials, while the First Intermediate Period occupies the smallest portion of published CIFB cemetery data (MNI 229).

Whilst undertaking this research, portions of certain cemeteries were anecdotally observed to be exclusively (or almost exclusively) reserved for CIFBs at varying times during the pre-pharaonic, pharaonic, and post-pharaonic periods, including Adaima (Predynastic to

Early Dynastic Periods),[327] Nag el-Hai (Predynastic to Early Dynastic Periods),[328] Elkab (Early Dynastic to Old Kingdom Periods),[329] Sebaiya (East) (Early Dynastic Period),[330] Ain el-Labakha (Greco-Roman Period),[331] Douch (Greco-Roman Period),[332] Naga ed-Deir (Greco-Roman Period),[333] and el-Ghurab and Deir el-Medina (New Kingdom).[334]

#### 3.4.1.6 Relative Chronology in Specific Geographical Regions

When the data is organised according to the frequency of cemetery CIFBs by relative chronology across specific geographical regions, a somewhat different picture emerges to that described above (§3.4.1.5). While Early Dynastic and Old Kingdom data may be the most numerous overall, the Middle Kingdom has the broadest geographical representation, with cemetery CIFBs from this period observed in every productive region of this study (**Figure 3.13**). The Old Kingdom has the next-best coverage, appearing among the published data of 9 out of 10 specific geographical regions. This is followed by the Early Dynastic Period, presenting burials in 7 regions, and the First Intermediate Period, for which 5 out 10 regions bear cemetery interments.

### 3.4.2 Settlement Burials

#### 3.4.2.1 Specific Geographical Regions

As aforementioned, 2.99% (MNI 54) of the burials in this sample occurred in settlement contexts. Of the 68 Early Dynastic to Middle Kingdom sites found to feature CIFBs, 11 of these included settlements amongst their published data. As seen in **Tables 3.14** and **3.15**, settlement burials of children, infants and foetuses were observed in 7 Egyptian regions during the timeframe canvassed by this study. Of these, the regions of the West Bank of Upper Egypt (MNI 14), East Bank of Upper Egypt (MNI 13), and West Bank of Middle Egypt (MNI 12) presented the most numerous accounts of settlement burial (**Figure 3.14**). In the case of the West Bank of Middle Egypt, settlement burials represent just under 10.00% of total burials in the region. The regions of the Western Nile Delta (MNI 5), Eastern Nile Delta (MNI 4), Dakhla Oasis (MNI 4), and West Bank of Lower Egypt (MNI

[327] Crubézy *et al.* (2002a).
[328] Freed (1974: 28).
[329] Hendrickx *et al.* (2003).
[330] Lortet & Gaillard (1909: 214-218); *cf.* Needler (1984); Mortensen (1991).
[331] Szpakowska (2008: 42, fn. 71).
[332] Szpakowska (2008: 42, fn. 71).
[333] Szpakowska (2008: 42, fn. 71).
[334] Loat & Murray (1905: 2); Meskell (1994: 38ff.).

2) presented small numbers of settlement CIFBs. The regions of the East Bank of Lower Egypt, the East Bank of Middle Egypt, and the Faiyum featured no published settlement CIFBs.

#### 3.4.2.2 General Geographical Regions

When considered from a general geographical perspective, settlement CIFBs are most heavily concentrated in one area: Upper Egypt. This region represents exactly 50.00% of all published data during the timeframe covered by this study (MNI 27; **Figure 3.15**; **Table 3.15**). The next most numerous region is Middle Egypt, featuring 22.22% of all settlement burials (MNI 12), followed by the Nile Delta (MNI 9) and Dakhla Oasis (MNI 4). Lower Egypt represents the smallest proportion of settlement CIFBs, with a minimum of 2 individuals attested amongst its published record.

#### 3.4.2.3 Nilotic Geographical Regions

A similar picture emerges when the data is distributed according to Nilotic geographical regions (**Figure 3.16**; **Table 3.15**). In this case, published settlement CIFB frequencies peak on the West Bank (MNI 28); through to almost equal representations on the East Bank (MNI 13) and the Nile Delta (MNI 9). Dakhla Oasis features 4 published settlement burials, while no settlement burials were observed in the Faiyum.

#### 3.4.2.4 Individual Sites

Of the 240 sites examined by this study, only 11 (4.60% total sites) were found to have published settlement CIFBs within the relevant chronological periods.[335] These sites include: Abu Ghalib, Abydos, Ayn Asil, Elephantine, Giza, Kahun, Kom el-Hisn, el-Lisht, Naqada – North Town, Tell Basta (Bubastis), and Tell el-Rubʿa (Mendes).[336] As seen in **Table 3.14** and **Figure 3.17**, the settlements of Abydos (MNI 13; 24.07% total settlement burials, henceforth, *TSBs*), Elephantine (MNI 13; 24.07% TSBs) and Kahun (MNI 7; 12.96% TSBs) feature the highest frequencies CIFBs amongst their published excavation

[335] It is acknowledged that settlement burials also occurred in certain sites outside the chronological parameters of this research, including Predynastic Adaima: Midant-Reynes & Buchez (2002); el-Badari: Hendrickx & Vermeersch (2000: 40); Midant-Reynes (2000: 152-153); Hierakonpolis: Fairservis *et al.* (1971-1972: 18); Maadi: Menghin (1932; 1934); Menghin & Amer (1936); Klug & Beck (1985); Leclant & Clerc (1985); Rizkana & Seeher (1989); Matmar: Brunton (1948: 5); New Kingdom el-ʿAmarna: Peet & Woolley (1923: 17); Deir el-Medina: Meskell (1994a); Hermopolis: Roeder (1959: 209); Tell Basta: Farid (1964: 95ff.); and Christian Kellis: Marlow (2001: 108).

[336] Early Dynastic settlement burials were also observed in Maadi: van den Brink (1989); Tell el-Iswid: van den Brink (1989); and Tell el-Mashala: Rampersad (2003), but excavators did not explicitly state the age or sex of these interments. As such, they could not be included here.

data, collectively holding 61.00% of the burials for this site type. None of the remaining 8 sites exceed single figures in either actual or proportional representations of published data.

It should also be noted that many published settlement contexts feature no CIFBs to date. Settlement sites with no published evidence of juvenile interments include:

- **Eastern Nile Delta:** Ezbet Rushdi, Gezira el-Faras, Kom el-Khilgan, Kom Om Sir, Minshat Abu Omar, Tell Abu Dawud, Tell el-Ain, Tell el-Dabaʿa, Tell el-Farkha, Tell el-Zragy, Tell Gandiya, Tell Ibrahim Awad, Umm el-Zaiyat.
- **West Bank, Lower Egypt:** Dahshur, Kom Ausim (Letopolis), Kom el-Fakhry, Memphis, Saqqara.
- **Faiyum:** Faiyum, Qasr es-Sagha.
- **Eastern Desert:** Gebel Zeit, Wadi Abu Had, Wadi Hammamat.
- **West Bank, Upper Egypt:** Hu, en-Nawahid, et-Tarif, Semaina.
- **East Bank of Upper Egypt:** Wadi el-Hudi.

Two of the settlement sites which feature CIFBs are worthy of further comment. Firstly, the burial of 2 children of unspecified age, DRN 1391, in the Old Kingdom pyramid workers' settlement at Giza, on the West Bank of Lower Egypt, is of social significance. As noted by Bußmann, "two child burials in this area suggest that families lived there".[337] The presence of families within this workers' settlement expands our understanding of life-ways within such 'occupational' habitation zones. They are imbued with a more 'domestic' ambience and we are forced to shift our perspectives of the local economy, socio-ecology, infrastructure and utilisation of space.

Secondly, the presence of >1 child burial, DRN 1420,[338] under the floor of the Middle Kingdom palace at Tell Basta (Bubastis) in the Eastern Nile Delta is also significant. This finding suggests that settlement burials were not the preserve of the poor. Even those of highest socio-economic status, including royalty, may also choose to inter their deceased offspring in such environs. That the children were royal is suggested by their accompanying grave goods, which included a necklace featuring beads and amulets which were variably engraved with the names of King Senwosret and King Amenemhat III, a steatite cartouche-shaped amulet engraved with the prenomen of Amenemhat III ( *Ny-*

[337] Bußmann (2004a: 29; 2004b: 171); *cf.* Lehner (2001).
[338] el-Sawi (1979: 178); Bakr (1992: 20).

*Ma'at Re'* ), and a feldspar crown of Upper Egypt amulet.[339] It thus appears that the choice between intra- or extra-mural interment extended to all members of society, regardless of socio-economic status.

Whilst undertaking this research, adult interments were anecdotally observed in settlement contexts in all phases of Egyptian history,[340] including Abu Ghalib,[341] Ashmunein,[342] E29-G1 (between Qasr es-Sagha and Kom Ausim),[343] Elephantine,[344] el-Hemmamiya,[345] Kahun,[346] Kom el-Hisn,[347] Tell el-Rub'a (Mendes),[348] Merimde Beni Salame,[349] el-Mostagedda,[350] el-Omari,[351] Tell el-Fara'in (Buto),[352] and Tell el-Mashala.[353] This practice is also well-reported across the ancient cultures of Africa, Europe and Near East.[354]

### 3.4.2.5 Relative Chronology

The chronological distribution of published settlement CIFBs is presented in **Table 3.15** and **Figure 3.18**. Here, it can be seen that the majority of data pertains to the Middle Kingdom Period, accounting for 61.11% (MNI 33) of settlement burials within the sample. The Middle Kingdom features more published CIF settlement burials than all other periods combined, including the almost equal representations of the Old Kingdom (MNI 11; 20.37%) and First Intermediate Period (MNI 9), in addition to the smallest portion of data from the Early Dynastic Period (MNI 1).

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339 See GGRNs 2861-2862.
340 Szpakowska (2008: 34); *contra* Baines & Lacovara (2002: 14).
341 Junker (1928); Bagh (2002: 34).
342 Spencer (1993: 66).
343 Hendrickx & Vermeersch (2000: 36); Midant-Reynes (2000: 82).
344 von Pilgim (1996: 81).
345 Brunton & Caton-Thompson (1928: 44).
346 Petrie (1890: 44); Quirke (2005: 114-115).
347 Wenke (1985); Cagle (2003a; 2003b).
348 Allen & Wilson (1982).
349 There is debate as to whether interments were made in inhabited or abandoned zones of the settlement; Hendrickx & Vermeersch (2000: 38-39); Midant-Reynes (2000: 116-117).
350 Amongst other areas, Brunton (1937: 8, *cf.* 11, 13, 14, 15, 16, 18, 19, 20, 22, 23, 24, 75, 79, 80) states that the lower part of the spur in areas 2900/3000 had been used as both a settlement and cemetery in Tasian times.
351 It is suggested that graves were in an abandoned zone of the settlement; Debono & Mortensen (1990: pl. 28.1); Midant-Reynes (2000: 121).
352 Hartung *et al.* (2003).
353 Rampersad (2006).
354 For example, African Final Palaeolithic to Epipalaeolithic Palestine (Natufian): Midant-Reynes (2000: 84). Neolithic to Chalcolithic Balkans, including Hungary: Chapman (2000: 174ff., 178), and Macedonia, Bulgaria, Serbia, Croatia, Bosnia: Naumov (2007: 257). African Neolithic Sudan: Hendrickx & Vermeersch (2000: 36); Midant-Reynes (2000: 71, 82, 95, 96, 131, 134). Chalcolithic Byblos, Lebanon: Artin (2008: 85). Chalcolithic to Early Iron Age Tell Yunatsite, Bulgaria: Mishina (2008: 137). Iron Age to Anglo Saxon Britain: Tibbetts (2008: 191); Crawford (2008: 198-200).

#### 3.4.2.6 Relative Chronology in Specific Geographical Regions

The above findings are consolidated when the data is examined according to occurrences by relative chronology in specific geographical regions (**Figure 3.19**). Here, not only does the Middle Kingdom Period contain the most examples of published settlement CIFBs *per se*, but it also has the widest geographical coverage, being represented in 4 of the 7 specific regions with CIFB settlement data. A pattern of gentle diminution follows, with the Old Kingdom represented in 3 of 7 regions, the First Intermediate Period represented in 2 of 7 regions, and the Early Dynastic Period only featuring a settlement burial among the published data of 1 region: the West Bank of Upper Egypt.

While no singular region demonstrates complete chronological continuity of published settlement CIFBs from the Early Dynastic Period to the Middle Kingdom, the region with the most continuous diachronic settlement burial record is the West Bank of Upper Egypt, with data attested in all periods canvassed by this study except the Old Kingdom (**Figure 3.19**). The Eastern Nile Delta also demonstrates a degree of cultural continuity, with its settlement CIFB data spanning across the Old Kingdom and First Intermediate Periods. Apart from the Western Nile Delta, which features published settlement CIFBs in the Old and Middle Kingdoms, all other regions in which CIF settlement burials are observed are represented by single chronological periods only.

### 3.4.3 Temple Burials

A minimum of 1 child or infant was found to be buried in the temple precinct of the ram-god Banebjed at Tell el-Rub'a (Mendes) in the Eastern Nile Delta, in a mass-grave context pertaining to the Old Kingdom/First Intermediate Period.[355] Here, the excavator did not provide a specific demographic profile, stating only that it was the mass burial of "18 human individuals" and that "both sexes are represented in the group, and ages range from infants to the aged". [356]

[355] Redford (2000: 20) suspects that this was a mass-grave associated with a violent event ("massacre"): "That they had suffered trauma at the moment of death is strongly supported by evidence of hands raised over their faces in a futile gesture of defence". Petrie (1905: 4) states that "there is no ground for supposing that Egyptians ever buried in or under a temple".

[356] See DRN 283; Redford (2000: 18-19).

### 3.4.4 Funerary Enclosure Burials

One child was found to be buried in a Middle Kingdom context in an Early Dynastic funerary enclosure: specifically, the North-Western corner of the Second Dynasty tomb of Khasekhemwy, the so-called 'Shunet el-Zebib' at Abydos on the West Bank of Upper Egypt.[357] Another individual was interred in the vicinity, however the excavator did not provide any demographic details for the second burial.[358] For the purposes of this study, it was deemed appropriate to establish this burial as a separate site-type. This interment did not take place within an independent, contemporary cemetery context, rather within the archaising framework of the Middle Kingdom ritualistic veneration of the Early Dynastic Abydene funerary landscape, which includes Khasekhemwy's enclosure on the Kom es-Sultan.[359]

### 3.4.5 Mixed-Type Sites

#### 3.4.5.1 Specific Geographical Regions

Six of the 10 regions included in this study can be seen to demonstrate 'mixed-type' sites. These are sites where published CIFBs feature in 2 or more contexts, including cemeteries, settlements, temples and/or funerary enclosures. Regions featuring mixed-type sites include the Western Nile Delta, Eastern Nile Delta, West Bank of Lower Egypt, West Bank of Middle Egypt, West Bank of Upper Egypt and East Bank of Upper Egypt (**Table 3.16**; **Figure 3.20**). For every region where mixed-type sites occur, it is clear that cemeteries are the dominant context. The only region where this dominance is challenged is the West Bank of Middle Egypt, where parity is narrowly missed between published cemetery (MNI 14; 11.67% TRBs) and settlement (MNI 12; 10.00% TRBs) contexts.

#### 3.4.5.2 Relative Chronology

Of all the published mixed-type sites, Giza (Old Kingdom), Tell el-Rub'a (Mendes) (First Intermediate Period), Tell Basta (Bubastis), Lahun/Kahun, el-Lisht and Abydos (Middle Kingdom), are the only locations with synchronic contexts (**Figure 3.21**). Within this framework, cemeteries emerge as the context of choice for CIFBs in the Egyptian mortuary landscape. With the possible exception of Lahun/Kahun, published cemetery burials

[357] See DRN 764; Ayrton *et al.* (1904: 4).
[358] The excavators merely state that another "burial of the same date was found in an almost similar position in the rubbish North of the trench"; Ayrton *et al.* (1904: 4).
[359] O'Connor (1991: 17); Baines & Lacovara (2002: 20); Wildung (2003: 74).

outnumber those in contemporary settlements. While the difference is slim in the Middle Kingdom mixed context at el-Lisht, the balance still tips in favour of the cemetery (MNI 6; 54.55% total site synchronic burials, henceforth, *TSSBs*) over the settlement context (MNI 5; 45.45% TSSBs). The only synchronic mixed-type site to deviate from this pattern is Tell Rub'a (Mendes), where First Intermediate Period contexts do not include a cemetery, rather a settlement (MNI 3; 75.00% TSSBs) and a temple (MNI 1; 25.00% TSSBs).

## 3.5 Summary

This chapter has presented quantitative primary results of the archaeological survey of child, infant and foetal mortuary data from available published literature pertaining to the Early Dynastic to Middle Kingdom Periods (*ca.* 3300–1650 BCE), supplemented by unpublished Early Dynastic data from the Australian Centre for Egyptology's Helwan Project. The survey determined that CIFBs are present in slightly less than one-third of the sites eligible for inclusion in the study, with 1,809 individuals identified amongst the published archaeological record during the timeframe canvassed by the research.

Of the 11 specific geographical regions included in the study, only the Eastern Desert failed to produce published CIFB data. The most productive regions in the sample were the Eastern and Western Banks of Upper Egypt and the West Bank of Lower Egypt. The least productive regions were Dakhla Oasis, the Faiyum and the East Bank of Middle Egypt. When each specific geographical region was ranked according to eligible publication rates, rough parallels were observed in terms of regional CIFB quantity rankings, suggesting that there may be a correlation between higher levels of (published) regional excavation activity and possibilities for the publication of CIFBs. This finding alludes to the extent that knowledge may be spatially determined in Egyptology according to the regional prioritisation of scholarly activities within the landscape.

In terms of distribution across general geographical regions, Upper Egypt was observed to hold more than half the sample. Dakhla Oasis, on the other hand, held the least number of burials. According to Nilotic geographical distributions, the majority of data is almost equally divided between the East and West Banks, while the Faiyum presented the fewest published burials in this configuration.

Overall, the greatest number of published CIFBs were attributed to the Old Kingdom, with only slightly fewer burials observed in the Early Dynastic Period. What is also apparent,

however, is the consistent under-representation of First Intermediate Period material amongst published data.

In terms of site types, the overwhelming majority of CIFBs were observed in published cemetery contexts across every productive region included in this study. This result has upturned expectations regarding the supposed differential burial treatment of juveniles. In contrast to prevailing disciplinary sensibilities, far fewer CIFBs were identified in published settlement *versus* cemetery contexts. Moreover, the observation of child burials in a workers' settlement and palace indicates that this aspect of Egyptian mortuary behaviour was integrated across a range of domestic contexts and socio-economic strata. While the reporting of burial numbers in temples and funerary enclosures was not entirely clear, it is nonetheless apparent that a variety of interment fora were engaged during the timeframe explored by this research. These findings, combined with the identification of synchronic interments across site types, allude to a variety of culturally-situated interment options within the spectrum of Egyptian mortuary behaviour. It appears that the Egyptian mortuary landscape may have more complexity and diversity than is currently accepted. This issue, along with the broader results presented here, will be subject to qualitative discussion in Chapter 10 of this thesis.

# CHAPTER 4: PALAEODEMOGRAPHY

Distributions of mortality and morbidity during gestation, infancy and childhood provide meaningful proxies of ambient living conditions and local socio-ecologies of past societies. As a means to explore such aspects of the lived experiences of ancient Egyptian children, infants and foetuses, a palaeodemographic profile was constructed based on data derived from the survey of Early Dynastic to Middle Kingdom archaeological publications, as detailed in §1.4.4. This profile is dependent on published age, sex and palaeopathological assessments, with the exception of the skeletal material derived from the Australian Centre for Egyptology's Helwan Project.[360] Age-at-death estimates for the Helwan skeletal material were determined by this author and Ms. C. Marshall using standards of development for the deciduous and permanent dentition.[361] In the absence of dentition, age was assigned using indices of diaphyseal lengths and skeletal maturation.[362] In alignment with biological parameters established in §1.4.3, data is presented according to BARC standardised skeletal age categories (**Table 4.1**).[363] When age was not specified within a publication, individuals were relegated to the 'Children (Unspecified)' age category. Sex assessment was determined using Schutkowki's[364] criteria of greater sciatic notch angle and depth, arcuate line, iliac crest curvature and dental arcade shape. In adherence with the project structure outlined in §1.6, results of this research are presented below. Qualitative analyses will be presented in Chapter 10.

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360 Here, this author was given permission to physically examine and assess the skeletons associated with the following burials: Ops.4/12, 4/14, 4/16, 4/14, 4/20, 4/31, 4/37, 4/40, 4/41, 4/44/2, 4/44/3, 4/54, 4/56, 4/74, 4/82, 4/89, 4/93 and 4/103. Skeletal analysis was carried out between 16th December 2006 and 3rd January 2007 at the Facility for Archaeological Research at Helwan. Also included among the Helwan assemblage is data derived from the physical examination of the following burials, kindly carried out by Ms. Chris Marshall (Institute for Bio-Archaeology, San Francisco) and used here with her permission as well as that of the project Director, Prof. E. C. Köhler: Ops.4/112, 4/133, 4/136, 4/137, 4/139, 4/141, 4/143, 4/146, 4/147a, 4/155, 4/156 and 4/166.

361 Moorrees *et al.* (1963a; 1963b); Smith (1991).

362 Scheuer & Black (2000b).

363 Merging the "Neonate" and "Infant" BARC categories to form a single "Infant" category was necessary for this study due to the lack of detail provided in the majority of published material.

364 Schutkowski (1993).

## 4.1 Age-at-Death: Overview

### 4.1.1 Specific Age Categories

Results for the age-at-death distribution of the sample may be viewed from two perspectives. The first distribution includes only those individuals for which a specific age category was provided (Σ=698; **Table 4.2; Figure 4.1**). Here, it can be seen that the greatest proportion of the sample is attributed to the 'Young Child/ren' category (1–6 years of age; MNI 269), followed by 'Older Children' (6–12 years; MNI 218), 'Infants' (*ca.* 40 weeks to 1 year *post partum*; MNI 154) and 'Foetuses' (≤40 weeks; MNI 57). When combined, Young and Older Children account for 69.77% (MNI 487) of the known-age component of the sample. Such a high proportion of child mortality suggests that exogenous factors, such as poor nutrition, hygiene and exposure to childhood diseases,[365] especially following weaning,[366] had strong bearing on child and infant mortality and morbidity in ancient Egypt during the periods canvassed by this study.[367]

"Striking(ly) disproportionate"[368] mortality during early-to-late childhood (1-12 years of age) is well-known to bio-anthropological studies and has parallels across temporally and regionally disparate populations: from prehistoric Sudan, Nubia, Lake Woodland, Middle Mississippi and Arizona;[369] to Late Anglo-Saxon Raunds Furnells and Barton-Upon-Humber;[370] to later medieval York, Wharram Percy, St. Helen-on-the-Walls, Jewbury and Fishergate.[371] This result contrasts with high levels of infant mortality (death from 40 weeks to 1 year *post partum*) usually expected within pre-industrial societies, where both exogenous and endogenous (maternal nutrition and health) factors[372] have bearing on populations. When faced with a mortality profile such as that observed by this study, one must question whether or not other factors, such as differential burial practices, recording or preservation bias may have affected the representativeness of the youngest members of the population. These factors are addressed in Chapter 10 of this thesis.

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365 Saunders & Barrans (1999: 186); Lewis (2002: 38; 2007: 84); Lewis & Gowland (2007: 118-119).
366 Wood (1983).
367 A similar mortality pattern was observed for the First Intermediate Period-Middle Kingdom cemetery at Tell Ibrahim Awad in the Eastern Nile Delta: Rose *et al.* (2008: 983-985); as well as the Late-Ptolemaic Period cemetery at Abusir on the West Bank of Lower Egypt: Strouhal (1992: 23). *Cf.* Crubézy (2001); Tucker (2003).
368 Wood (1983: 80).
369 Clarke (1977); Rose *et al.* (1978).
370 Power (2007).
371 Lewis (2007: 87).
372 Lewis (2002: 38); Sofaer (2006b: 160); Lewis (2007: 84); Halcrow & Tayles (2011: 340).

### 4.1.2 Specific and General Age Categories

The second age-at-death distribution includes the general age category of 'Children (Unspecified)'. When viewed from this perspective, it becomes clear that skeletal age was not recorded/published by excavators for the majority of CIFBs in the sample; rather, they were generalised by juvenility (**Table 4.2; Figure 4.2**). Here, a minimum number of 1,111 (61.42% TBs) children, infants and foetuses are coalesced into a single, undefinable mass.[373] This is despite the fact that juvenile skeletons are able to be aged with far greater precision than those of adults.[374] It is quite straightforward to plot children's attained growth and development along well-defined ontogenetic trajectories, resulting in age determination to the level of numerated years or even months. As such, **Figure 4.2** represents a poignant illustration of the extent of lost opportunities for demographic understanding within in the published Egyptian archaeological record, as the number of 'Unspecified' child burials from the Early Dynastic to Middle Kingdom Periods is more than one and a half times the total of those for which age-at-death is known (MNI 698).

Detailed age-at-death distributions are instrumental to our ability to gain accurate understandings not only of palaeodemographic profiles, but also to inform our reconstructions of the socio-ecological environment/s in which populations under study were living and, indeed, dying. For example, when accurate age-at-death distributions indicate infant mortality is high, physical anthropologists are given a great deal of information regarding prevailing palaeoecologies during the risky pre- to postnatal biological transition[375] where, in addition to the stress of birth, immunologically immature neonates are exposed to new and potentially contaminated nutritional and environmental circumstances.[376] While the sample presented in **Figure 4.1** is certainly substantial enough to be considered on its own merits, one can nonetheless acknowledge that an additional 1,111 accurately-aged individuals would have added further depth to our understanding of ancient Egyptian life-ways.

[373] Patch (2007: 249) also acknowledges this phenomenon in the publication of juvenile burials.
[374] Perry (2006: 90).
[375] Wood (1983: 79).
[376] Haas (1990).

## 4.2 Age-at-Death Distributions

### 4.2.1 Specific Geographical Regions

When organised according to specific geographical regions, it is clear that the majority of the sample is concentrated in the Southern regions of Egypt (**Table 4.3; Figure 4.3**). The most 'Foetal' burials have been published for the East Bank of Upper Egypt, presenting a minimum number of 25 individuals, followed closely by Dakhla Oasis (MNI 23). Only 4 other regions present Foetal burials amongst their published data (West Bank, Upper Egypt: MNI 4; West Bank, Lower Egypt: MNI: 3; and the Western and Eastern Nile Delta regions: each with MNI 1). The remaining 4 regions have no published accounts of this age group (East Bank, Lower Egypt; West Bank, Middle Egypt; East Bank, Middle Egypt; and the Faiyum).

The East Bank of Upper Egypt presents the highest frequency of published 'Infant' burials, accounting for a minimum number of 43 individuals amongst the sample. The next most numerous accounts of Infant burials may be found on the West Bank of Upper Egypt (MNI 35), West Bank of Middle Egypt (MNI 30), and the West Bank of Lower Egypt (MNI 26). Six regions appear to have <10 Infant burials amongst their published record, including Dakhla Oasis (MNI 7), the Western Nile Delta (MNI 4), Eastern Nile Delta (MNI 4), East Bank, Lower Egypt (MNI 2), East Bank, Middle Egypt (MNI 2) and the Faiyum (MNI 1). Despite the comparatively low numbers of burials identified within this age group, Infants nevertheless have the broadest geographical representation, being present amongst published records in each of the 10 productive regions included in this study.

Burials of 'Young Children' are the most numerous among the known-age component of the sample, however their appearance is concentrated in certain geographical areas. The highest published frequencies of Young Children were observed on the Western and Eastern Banks of Upper Egypt, featuring minimum numbers of 113 and 57 interments, respectively. The next most numerous accounts of Young Children's burials include the Eastern Nile Delta (MNI 53), followed by the East Bank of Lower Egypt (MNI 17). Three regions have ≤10 Young Children amongst their published data (West Bank, Lower Egypt: MNI 10; Dakhla Oasis: MNI 10; and West Bank, Middle Egypt: MNI 9). This demographic segment is not attested in 3 of the productive regions included in this study (Western Nile Delta; East Bank, Middle Egypt; and the Faiyum).

The same regional pattern is observed for the higher end of the 'Older Children' distribution, with the Western and Eastern Banks of Upper Egypt and the Eastern Nile Delta presenting the most published accounts of this age group, each featuring a minimum of 88, 59 and 30 interments, respectively. The distribution pattern then deviates slightly to feature the Western (MNI 15) and Eastern (MNI 14) Banks of Lower Egypt as the next most frequent representations of Older Children's burials. While 2 sites feature <10 Older Children's burials (Dakhla Oasis and the West Bank of Middle Egypt, each with MNI 6), it is perhaps of greater interest that 3 regions feature no published accounts of this age group whatsoever (Western Nile Delta; East Bank of Middle Egypt; and the Faiyum).

Moving away from the known-age portion of the sample, the preponderance of CIFBs with an 'Unspecified' age is attributed to the East Bank of Upper Egypt (MNI 403). The region accounts for almost a quarter (22.28%) of all burials; more than a third (36.27%) of all Unspecified burials; and more than double (2.23) the amount of the next most frequent region in this category, the West Bank of Upper Egypt (MNI 181). 'Unspecified' age burials equal the geographical coverage of Infants among the known-age portion of the sample. They are included in the published records of each of the 10 productive regions included in this study, with an MNI of >30 in all but 2 regions (Faiyum: MNI 4; East Bank, Middle Egypt: MNI 1).

### 4.2.2 Relative Chronology

When viewed according to relative chronology, it appears that every age group is represented within each cultural period included in this study (**Table 4.4; Figure 4.4**). The greatest proportions of published Foetal burials (MNI 27), Young Children's burials (MNI 124), and Older Children's burials (MNI 115) were observed amongst the Old Kingdom published record. The Early Dynastic Period featured the most published Infant burials amongst the sample (MNI 58), as well as the highest number of CIFBs of Unspecified age (MNI 341).

### 4.2.3 Site Types

While it has already been established that cemeteries were the preferred interment space for the majority of individuals within this sample (MNI 1753; 96.90% TBs; see §3.4), further insights may be gleaned by arranging the data according to the prevalence of age categories within each site type (**Figure 4.5**). Here, the family/ies' and/or community/ies'

propensity to choose between the various interment options within the mortuary landscape is of interest, so the data is better considered in ratio rather than nominal form. According to published data, the incidence of Foetal Cemetery:Settlement burial is 10.40:1.00; Infant Cemetery:Settlement burial is 3.97:1.00; and Young Child Cemetery:Settlement burial is 88.66:1.00. No Older Children are known to be buried outside of cemetery contexts. Within the Unspecified age group, ratios between Cemetery:Settlement:Temple:Funerary Enclosure interments are 1094.00:15.00:1.00:1.00 – again, cemeteries clearly prevail as the burial location of choice.

According to these results, it may be said that while cemetery burials predominate amongst the sample, Infants are the age group most likely to be encountered outside this context during the Early Dynastic to Middle Kingdom Periods. For (approximately) every 4 cemetery interments, 1 Infant is likely to be buried in a settlement. This diachronic scenario is reinforced by interment ratios of differing age groups observed amongst the 5 synchronic mixed-type sites in the sample (see §3.4.5). Of these, only the publications of Middle Kingdom Abydos and el-Lisht provide specific age details for individuals interred across mortuary landscapes – the remainder feature only CIFBs of Unspecified age.[377] While there are more cemetery CIFBs at both Abydos and el-Lisht overall (**Figures 4.6–4.7**), the Infant age category provides the only instance where necropolis prevalence is inverted, with Cemetery:Settlement ratios of 0.43:1.00 and 0.80:1.00 observed at these sites, respectively.

## 4.3 Sex Distribution: Overview

The assignment of sex to juvenile skeletons remains one of the most controversial issues in the study of skeletal biology. A sizeable volume of scholarship has amassed over the past 100 years as researchers have attempted to isolate skeletal markers specifically associated with juvenile sex from those more generally aligned with growth. In addition to its application in modern forensic contexts, practitioners of historical disciplines acknowledge the importance of determining biological sex from juvenile skeletal remains. As aforementioned, past societies generally suffered high child, infant and foetal mortality rates, resulting in this segment of the population representing high proportions amongst skeletal datasets.[378] As such, there is unanimous agreement that attaining juvenile sex data

[377] With the singular exception of DRN 50, the burial of a <5 months *post partum* neonate buried in the sand trench surrounding the pyramid of Senwosret II at Lahun; Petrie *et al.* (1923: 4).
[378] Hewlett (1991: 8); Chamberlain (2000: 208).

would enable more accurate reconstructions of the demographic profiles of past civilisations than those currently proposed, as well as permit significant scope for research.[379] Among the most frequently mentioned research opportunities are studies of relationships between sex and susceptibility to disease and stress, as it is often reported that juvenile males are more vulnerable to the spectres of illness and poor nutrition.[380] Additionally, researchers are interested in establishing whether past societies practised preferential investment in one sex of child over another,[381] an enquiry which may be extended to address questions of actual or deferred foeticide, infanticide or pedicide.[382]

Either in conjunction with (or independent of) access to reliable molecular testing (aDNA),[383] this study promotes the utility of non-metric skeletal traits proposed by Weaver, Schutkowski and Sutter[384] to determine the sex of juvenile individuals. In many cases, the sex of juvenile skeletons can be determined with greater accuracy levels than widely-accepted methodologies used for adults.[385] Sutter reports that greater sciatic notch angle and depth, arch criterion and iliac crest curvature traits meet and exceed the minimally acceptable 75% accuracy levels for forensic applications for children up to 6 years of age; and GSN angle and depth, arch criterion and mandibular arcade shape traits meet forensic standards for children up to age 15.[386]

Unfortunately, however, while this author is willing to apply the above methodologies to assess the biological sex of child, infant and foetal remains, others have either been unable (or less-willing) to do so. As seen in **Table 4.5** and **Figure 4.8**, the sex of 95.58% (MNI 1,729) of the total sample is unknown. In some cases, this may have been due to the absence or poor preservation of osseous elements required for sex assessment. In most cases, however, the absence of juvenile sex data is due to publications pre-dating the availability of reliable sex assessment methods, or due to a lack of awareness on behalf of physical anthropologists/excavators. Unfortunately, in other cases, practitioners perpetuate

379 Saunders & Barrans (1999).
380 Stinson (1985).
381 Voland (1989); Saunders & Barrans (1999: 189, 201); Power (2007).
382 Lewis (2007: 92ff.); Voland (1989).
383 Smith & Khalia (1992); Hummel & Hermann (1994: 205); Stone *et al.* (1996: 231); Faerman *et al.* (1997: 212); Lassen *et al.* (1997), cited in Schmidt *et al.* (2003: 337).
384 Weaver (1980); Schutkowski (1993); Sutter (2003).
385 Based on population-specific seriation analyses. For example, 60% accuracy of the "composed arch" adult trait, Novotný (1972), cited in Schutkowski (1993); 70–75% accuracy of the greater sciatic notch adult trait, Acsádi and Nemeskéri (1970); 80% accuracy of the long bones' adult traits, Krogman & İşcan (1986), both cited in Schutkowski (1993). Bello & Andrews (2006: 10) also note that no morphological methodologies for establishing age and sex for human skeletal remains can guarantee 100% accuracy for *any* age group.
386 Sutter (2003).

biases towards this segment of the ancient population by not applying these experimentally-verified methods,[387] thereby unnecessarily obscuring our understanding of differential child, infant and foetal mortality and morbidity in the past.

The observation of a minimum number of 39 'males' (2.16% TBs) and 41 'females' (2.27% TBs) among the sample should not to be taken at face value, either (**Table 4.5; Figure 4.8**). Only 1 individual (DRN 131, Helwan) was physically examined and assessed as a 'possible female' by this author;[388] the remaining 79 sexed individuals were identified amongst published material. Of the 39 individuals stated to be 'male', 35 were assessed according to scientific protocols,[389] including the only individual amongst the sample (DRN 536, Harageh) confirmed as biologically male by successful aDNA typing.[390] Excavators do not state how 2 of the remaining individuals came to be assessed as 'male' (DRNs 138 and 1138), and it is possible that the sex of the final 2 'males' (DRNs 81 and 84) may have been determined via a gendered assessment of their burial assemblage.[391] Grave goods observed to be buried only with excavator-determined (as opposed to scientifically-determined) 'males' include weights,[392] precious metal[393] and a mask.[394]

This phenomenon is more strongly represented among the individuals identified as 'female' within the sample, with excavators reading gender into 16 burial assemblages.[395] Grave goods observed to be buried only with excavator-determined (not scientifically-determined) 'females' include: ceramic vessels,[396] girdles,[397] linen,[398] bags,[399] figurines,[400]

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387 Scheuer & Black (2000a; 2000b); Lewis (2002: 3, 58; 2007: 13, 47ff., 187-188); Gowland (2006: 147); Waldron (2007: 34); Oxenham *et al.* (2008: 124); Zillhardt (2009: 35).

388 DRN 131 is part of the Australian Centre for Egyptology's Helwan Project skeletal assemblage. Sex assessment was determined via Schutkowski's (1993) arcuate line criterion.

389 See DRNs 104, 106-110, 536, 1152, 1159, 1172, 1178, 1179, 1189, 1195, 1205-1210, 1213, 1216, 1218, 1220, 1228, 1231, 1246, 1255.

390 Kanawati (1993a: 56-62, 86; 1993b: 36-38).

391 This methodology was also observed for child burials pertaining to later periods; see Hassanein *et al.* (1984-1985: 42). It has also been applied to determine the sex of adult burials from all periods; for example, see Brunton (1927a: 23, 24-25; 1939: 423; 1948: 37); Hamada & el-Amir (1947: 106); Hamada & Farid (1947: 197); Lythgoe & Dunham (1965: 234-235); Grajetzki (2004a: 13, 25, 29). The sex of burials have also been questioned when gendered objects have been found in the graves of individuals of the contrary sex, for example, Naville *et al.* (1914: 15) identified a mace head, "though found in a woman's tomb". These phenomena have also been observed in the archaeology of other cultures, for example, Chalcolithic Byblos in Lebanon; see Artin (2008: 83). Gowland (2006: 147) states that "material culture plays a big part in allowing us to distinguish boys from girls". Meskell (1999b: 167) discusses the pitfalls of making gendered interpretations of grave goods from a modern Western perspective; *cf.* Meskell (1999b: 167; 2002: 142).

392 See DRN 84; GGRN 261.

393 See DRN 84; GGRN 264.

394 See DRN 84; GGRN 266.

395 See DRNs 42, 46, 49, 88, 97, 98, 160, 309, 487, 514, 539, 629, 630, 667, 1139, 1397.

396 See DRNs 42, 49, 97, 539; GGRNs 42, 64, 65, 288, 289, 1143.

397 See DRNs 42, 46; GGRNs 43, 59.

funerary furniture,[401] wooden vessels,[402] fish amulets,[403] clothing,[404] tools,[405] combs,[406] raw gemstones[407] and a plaque/inlay.[408] Excavators also appear to be influenced by individuals' physical appearance, anachronistically and ethnocentrically assessing that "plaits"[409] and "pig-tails"[410] can only have been hairstyles worn by 'females'. Excavators do not state how 13 individuals were determined to be 'female',[411] while scientific methods were used to assess the remaining 12 juveniles as biologically 'female'.[412]

Biological sex was not ascertained in enough individuals among the sample (only 80 individuals; 4.42% TBs) to carry out credible analyses of cross-culturally common socio-ecological mechanisms which bear on differential child, infant and foetal mortality and morbidity. Analyses of the differential experiences of these so-called 'proximate determinants' between male and female CIFs have the capacity to provide detailed insights into the biology,[413] household ecology[414] and cultural practices[415] of past populations, allowing researchers to tie differential manifestations of congenital abnormalities, disease, stress, trauma and/or malnutrition among skeletal samples to cultural behaviours. Unfortunately, for reasons outlined above, based on the material examined by this study it appears that the majority of this information has been lost for the 1,650 years of Egyptian

398 See DRN 42; GGRN 44.
399 See DRN 42; GGRN 46.
400 See DRNs 46, 49; GGRNs 57, 75, 76 (female figurines and accessories); 58 (dancing dwarves); 70 (animal figurine); 78, 79 (funerary figurines).
401 See DRNs 49, 487, 539, 667, 1139; GGRNs 66 (model couch); 67, 1052, 1139 (wooden boxes).
402 See DRN 49; GGRN 73.
403 See DRNs 97, 487; GGRNs 291, 292, 1049.
404 See DRN 667; GGRN 1268.
405 See DRN 1139; GGRN 2538.
406 See DRN 1139; GGRN 2540.
407 See DRN 539; GGRN 1276.
408 See DRN 1139; GGRN 2541.
409 See DRNs 487, 539, 629, 630, 1139; *contra* Brunton (1937: 105), who interprets plaits as belonging to "boys".
410 See DRN 514; *cf.* Janot (2004: 173).
411 See DRNs 164, 530, 943, 944, 951, 959, 1098, 1116, 1120, 1143, 1144, 1146, 1147.
412 See DRNs 131, 1170, 1171, 1182, 1199, 1200, 1202, 1217, 1221, 1230, 1251, 1275.
413 Genetics; see Mosley & Chen (1984).
414 Hygiene, sanitation, safety; see Mosely & Chen (1984).
415 Health care (obstetric care, ecological characteristics such as climate, rainfall, presence of disease and vectors); Nutrition (differential nutritional distribution (pre- and post-weaning) in static, abundant and famine contexts); Relationships (parental affection, geriatric care, marriage practices (exogamy, endogamy, hypergamy, egalitarian, monogamy, polygamy, gift traditions), habitation practices, pre- and extra-marital sex (illegitimacy); Family planning and management (conception, contraception and birth spacing (coital timing and stopping behaviour), abortion, infanticide, pedicide, destruction or termination of parental investment (out-adoption, abuse, neglect); Socio-economic practices (household size and composition (including birth-order), general availability of critical resources (especially food, water, land), social security (uncertainty), sex-bias in education, employment, social stratification); Legal practices (inheritance laws); Religious practices (baptism, burial, folk *versus* sanctioned practices); see Mosely & Chen (1984).

Early Dynastic to Middle Kingdom history canvassed by this research. It is hoped that in future excavators will go some way to rectifying this deficit by ensuring they use all available methods to determine and publish the biological age and sex of all CIFs exhumed within their concessions. Doing so will serve to illuminate the experiences of living, growing, suffering, convalescing and dying – not only for individuals, but for entire communities and, it is hoped, a civilisation.

### 4.3.1 Sex Distribution by Age Categories

The frequency distribution of biological sex by age categories is illustrated in **Table 4.5** and **Figure 4.9**. Again, as sex was not reliably ascertained in enough individuals among the sample, it is impossible to derive any statistical or meaningful insights from this data beyond merely reporting observed frequencies.

Of the known-sex and known-age individuals within the sample, 'male' Older Children have the highest representation (MNI 22), followed by 'male' Young Children (MNI 10). Young and Older 'female' children are equally represented (MNI 9). Infant 'females' are absent from the sample, in comparison to 4 Infant 'males'. 'Male' and 'female' Foetuses are equally represented (MNI 1). Amongst the known-sex, unknown-age portion of the sample (Children 'Unspecified'), there is a preponderance of females (MNI 22) over males (MNI 2). This disparity should be viewed with caution as more than half (MNI 13) of the 'females' in the Unspecified age category appear to have been sexed according to gendered interpretations of grave goods.[416]

## 4.4 Palaeopathology

It is widely acknowledged that the study of child and infant human skeletal remains derived from archaeological contexts provides the most accurate barometer by which the overall health of past populations may be measured.[417] By occupying the most sensitive and dependent phase of the human life-cycle,[418] children's and infants' bodies readily reflect entire populations' ambient living conditions and socio-ecologies.[419] Despite this capacity, information is only available for the health statuses of 55 individuals amongst the 1,809 CIFs in this sample (3.04% total burials). Of these, palaeopathological data was

[416] See DRNs 42, 46, 49, 88, 97, 98, 309, 514, 539, 629, 630, 667, 1397.
[417] Hewlett (1991); Adler & Ostrove (1999); Saunders & Barrans (1999: 184); Murray & Frenk (2002); Perry (2006: 89); Lewis (2007: 81-83, 186-187); Lewis & Gowland (2007).
[418] Roth, E. (1992).
[419] Saunders *et al.* (1995); Saunders & Barrans (1999).

published in a less-than-comprehensive manner for only 24 individuals (1.33% TBs) from 4 sites (1.67% total sites).[420] References to pathology were either made in isolation of all other biocultural data,[421] as preliminary reports,[422] or were unspecific.[423] This author was able to determine the health status of 21 of the remaining individuals via physical examination at the Australian Centre for Egyptology's (henceforth, *ACE*) Facility for Archaeological Research at Helwan (FARAH), Egypt between 16th December 2006 and 3rd January 2007.[424] Ms. Chris Marshall provided biodata for the further 10 individuals from Helwan, also examined at FARAH between January 2007 and March 2010.[425]

### 4.4.1 Health Assessment Methodology

It is accepted that many individuals exhumed from archaeological contexts will present little or no skeletal evidence of pathology. When an individual dies as a result of an acute illness, there is not enough time for the body to manifest an osseous response.[426] Some of the most common ailments suffered by juveniles in the past may be attributed to such acute biological/social stresses, including fevers, gastrointestinal and respiratory infections.[427] As such, the present study refers to those individuals not exhibiting skeletal evidence of disease as "non-pathological".

On the other hand, individuals with more robust immune systems may have survived repeated insults or endured disease processes for longer. As such, the chronic nature of their illness allowed enough time for skeletal lesions to develop.[428] The present study recorded the frequency of stress-indicators (including cribra orbitalia, linear enamel hypoplasia and growth disturbances) and non-specific infection (including endo- and ectocranial lesions and periosteal new bone formation), as well as evidence for other

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420 Abusir: DRN 391; Abydos: DRNs 775-779; Adaima: DRNs 691-705, 710, 716; Naga ed-Deir: DRN 661. Pathological descriptions were provided for individuals from el-Hagarsa (DRNs 536 and 537), but they are excluded from analyses as this author does not agree with the suggested diagnosis (displacement and disruption of cranium, cervical vertebra and mandible due to perimortem trauma: hanging; Kanawati (1993b: 39). Instead, the present study suggests that these are pseudo-pathological observations attributed to post-depositional movement of the axial skeleton; Duday (2006: 35-36).

421 See DRNs 691-705.

422 See DRNs 775-779.

423 See DRN 661. See also DRN 283, a multiple entry for a mass-grave under the Temple at Tell el-Rub'a (Mendes). Here, trauma was implied but not described and as such cannot be included in palaeopathological analyses: Redford (2000: 20).

424 With the permission of Prof. E. C. Köhler: DRNs 125-128, 130, 131, 1429-1441, 1449, 1451.

425 With the permission of Prof. E. C. Köhler: DRNs 1442, 1444-1448, 1450, 1452-1454.

426 Goodman & Armelagos (1989: 228); Wood *et al.* (1992); Saunders & Barrans (1999: 197).

427 Wood (1983); Basu (1989: 205); Saunders & Barrans (1999: 195).

428 Ortner (1991: 10); for further discussion of the so-called "osteological paradox", see §10.3.3.

pathologies (including specific infections, trauma, dental disease and congenital abnormalities).

Observations were recorded for each individual regarding the presence or absence of skeletal pathologies. Pathologies were recorded by frequency of incidence: for example, if a single individual had cribra orbitalia, limb dysplasia and sharp force trauma, 3 pathologies were recorded. Individuals without skeletal pathology were counted only once. Observations of occlusal wear and calculus were recorded but not included in pathological analyses. Standards for tooth notation reflect those established by the *Fédération Dentaire Internationale.*[429]

### 4.4.2 Skeletal Pathologies

Primary results of the sample's health assessment are presented graphically in **Figure 4.10**; and in tabular form in **Table 4.6**. Of the 55 individuals for which health data was available (31 of which derive from the ACE Helwan Project), 37 (2.05% TBs) featured pathological changes, while 18 individuals (1.00% TBs) bore no traces of skeletal pathology, whatsoever. Of the 37 pathological individuals, 61 osseous changes were observed, including 19 accounts of periostitis (31.15% total pathologies, henceforth, *TPs*), 12 accounts of cribra orbitalia (19.67% TPs), 7 accounts of erosive lesions (11.48% TPs), 5 accounts of congenital variations (8.20% TPs), 4 accounts each of porotic hyperostosis and linear enamel hypoplasia (each 6.56% TPs), 3 accounts of proliferative lesions (each 4.92% TPs), 2 accounts each of sharp-force trauma, other trauma, and unknown pathology (each 3.28% TPs), and 1 account of limb dysplasia (1.64% TPs).

### 4.4.3 Aetiology of Skeletal Pathologies

To further scrutinize the data, pathologies were categorised according to aetiology (most commonly attributed origin) (**Table 4.7**; **Figure 4.11**), as follows:

- Congenital abnormalities;
- Diet/deficiency related: cribra orbitalia, porotic hyperostosis, limb dysplasia, linear enamel hypoplasia;[430]
- Infectious/inflammatory: proliferative lesions, erosive lesions, other periostitis;[431]

[429] van Beek (1983: 3).
[430] Lewis (2007: 104ff., 119ff.).
[431] Lewis (2007: 134ff., 141ff.).

- Trauma: sharp force, other; and
- Unknown: pathologies for which the aetiology is not known.

In this configuration, it can be seen that pathologies of an infectious or inflammatory origin were most frequent, with 29 observations among the sample (47.54% TPs) providing socio-ecological evidence that some ancient Egyptian children and infants were exposed to environments where pathogens flourished,[432] causing chronic illness in some members of the population.[433] Furthermore, there were 22 observations of diet-deficiency related skeletal pathologies (36.07% TPs), indicating that some ancient Egyptian children and infants were subject to chronic periods of diminished nutrition. Incidence of congenital variation was relatively low amongst the sample (5 observations; 8.20% TPs), as was trauma (4 observations; 6.56% TPs).[434] Of the 55 individuals for which health data was available, 18 featured no pathological changes whatsoever (32.73% total known-health sample), indicating that some ancient Egyptian children and infants died as a result of acute biological insults which were not enduring, or were not of a nature to leave osseous signatures. There were no observations of dental pathology (for example, carious lesions) among the sample.

### 4.4.4 Aetiology of Skeletal Pathologies by Age Categories

While it is worthwhile to consider the distribution of skeletal pathologies according to age categories among the known-health portion of the sample (MNI 55; 3.04% TBs; **Figure 4.12**), findings cannot be extrapolated across the entire dataset as representation is too low. Young Children clearly have the most skeletal pathologies across the aetiological spectrum, with the most recorded/published incidences of infectious/inflammatory pathologies (23 observations; 79.31% total category, henceforth, *TC*), diet/deficiency related pathologies (13 observations; 59.10% TC), and congenital variations (3 observations; 60.00% TC). Young Children also had the highest rate of absence of skeletal pathology (66.66% TC).

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432 Sharing living quarters with animals is one of the major determinants of pathologies of infectious or inflammatory origin. Friedman (1996: 16) reports that animal pens were associated with domestic structures in Hierakonpolis; *cf.* Harlan (1982: 23); Friedman (1994: 96-97). von Pilgrim (1997: 17) and Hauschteck (2004) confirm that goats/sheep were kept in houses on the island of Elephantine. *Cf.* Filer (2001: 133, 135).

433 Wood (1983: 80).

434 The burials of 2 children of unknown age in the Old Kingdom cemetery of Elephantine, associated with the East Bank of Upper Egypt, are worth mentioning here. These two individuals (see DRN 625) were described by Kaiser *et al.* (1982: 296) as interred in a tightly contracted position with their wrists and ankles bound. Although not explicitly described with any skeletal trauma, their manner of interment is evocative of some form of violent treatment.

Death during the 'Young Child' life-course phase accounts for a high proportion of mortality amongst modern and historical data.[435] Many cultures (including ancient Egypt)[436] wean children from breastfeeding between 1 and 6 years of age, radicalising their dietary intake, gastrointestinal ecology and immunological status, while simultaneously introducing a range of opportunities for socio-ecological exposure to pathogens.[437] This scenario presents a barrage of challenges to Young Children's immune systems and can result in mortality or morbidity outcomes associated with respiratory and gastrointestinal infections.[438] Dietary changes may also impact on Young Children's nutritional statuses, as they transition to soft- and whole-foods. These foods are not as nutritious as breast milk, are more likely to be contaminated, and are less likely to be readily absorbed in the case of illness.[439] In isolation or combination, any of these factors may lead to acute or chronic malnutrition, resulting in sub-optimum health or even death.

Older Children were the next most frequently represented age group among the known-health portion of the sample. Older Children had the highest frequencies of trauma in the dataset (3 observations (75% TC). They were the second most frequently represented age group for diet/deficiency related pathologies (7 observations; 31.82% TC), no pathology (4 individuals; 22.22% TC) and congenital variations (2 observations; 40.00% TC); and they were third behind Young Children and Infants in representations of infectious/inflammatory pathologies (2 observations; 6.90% TC). Of particular interest here is the concentration of trauma observations within this age category. This is in agreement with modern and ethnographic evidence that misadventure is frequently observed in children of this age group as they gain independence and may begin to venture further from home and away from supervision.[440] They may also commence employment at this age and thus be exposed to various occupational hazards.[441] It should be noted, however, that 2 of the 3 observations of trauma are from the same site (Adaima: DRNs 710 and 716) and chronological phase (Early Dynastic Period). Both individuals, although of distinctly different age groups (a 3-6 month old infant and a 12-15 year old child), suffered

[435] Chen *et al.* (1980).
[436] Lichtheim (1976: 141); Darby *et al.* (1977: 56); Strouhal & Bares (1992); Lovell & Whyte (1999: 76); Dupras *et al.* (2001); Dupras & Tocheri (2007).
[437] Wood (1983: 79); Das Gupta (1987: 81); Goodman & Armelagos (1989: 227); Sear *et al.* (2002: 51); Lewis (2007: 99-100); Littleton (2011: 376).
[438] Katzenberg *et al.* (1996); Robins' (1993: 85-88) studies of medical papyri reveal that gastrointestinal infections were the most common ailment for infants in ancient Egypt, with prophylactic spells and amulets prescribed as treatment.
[439] Katzenberg *et al.* (1996); Lovell & Whyte (1999: 76).
[440] Hanawalt (1977: 15); Levine (1987: 290); Sear *et al.* (2002: 43).
[441] Littleton (2011: 380).

remarkably similar sharp-force injuries at or before the time of death which severed their right humeri. In the case of DRN 716, reconstruction of the severed limb was attempted within the coffin but for DRN 710, the truncated element has not been located. Considering the well-known evidence for adult interpersonal violence at Adaima during the Predynastic to Early Dynastic Periods,[442] these findings suggest that children and infants were also subjects of violence.[443]

Infants are under-represented amongst the known-health portion of the sample, with biological profiles only available for 3 individuals (5.45% total known-health sample; 0.17% TBs). The most frequent incidences of pathologies for this age group may be attributed to infectious/inflammatory origins (4 observations; 13.79% TC) – a somewhat expected outcome considering this phase of the life-course includes the vulnerable post-natal transition between endogenous and exogenous stressors on individual health.[444] Infants were also represented in the diet/deficiency (2 observations; 9.09% TC), trauma (1 observation; 25% TC) and non-pathological (1 individual; 5.56% TC) categories. Foetuses are not represented amongst the known-health sample at all.

## 4.5 Summary

This chapter has constructed a juvenile palaeodemographic profile based on published age, sex and palaeopathological assessments derived from the survey of the Early Dynastic to Middle Kingdom archaeological record, supplemented by unpublished material from the ACE Helwan Project. According to this data, the ancient Egyptian juvenile mortality profile peaks with Young and Older Children. This result contrasts with expectations of high infant mortality usually encountered in pre-industrial populations. Should this high child mortality profile be accurate, we may infer that the exogenous rigours of poor nutrition and hygiene and high levels of pathogen exposure had great bearing on the health of ancient Egyptian children, as opposed to the endogenous threats of poor maternal nutrition and health, more characteristic of high infant mortality profiles. Distributions of skeletal pathology according to aetiology appear to support this hypothesis, with lesions of infectious/inflammatory origin most frequently observed. These results indicate that further study is required to determine whether the high-infant mortality rates generally associated with pre-industrial societies were less-severely expressed in ancient Egypt.

[442] Crubézy *et al.* (2002b).
[443] Children were also among the victims of the "massacre" at Tell el-Rub'a (Mendes); see DRN 283; Redford (2000: 20).
[444] Halcrow & Tayles (2011: 340).

Also noteworthy is the broad representation of all age categories among the sample. The high proportions of Foetuses encountered in such diverse preservation environments as the dry desert margins of Upper Egypt, through to the damp soils of the Nile Delta, indicate that all environmental contexts offer great potential for encountering even these most fragile of human remains. It thus appears that our challenge to accessing and understanding the 'true' ancient Egyptian juvenile palaeodemographic profile lies less in the nature of burial environments, and more on excavators' capacities to identify, exhume, analyse, record and publish CIF biodata. This finding is underscored by the complete absence of Older Children from the published archaeological records of 3 of the 10 specific geographical regions included in this study – osteological fragility can hardly be proffered to explain the absence of this age group. The present study found that >60 percent of published juvenile burials do not feature age-at-death data; >95 percent do not feature sex assessments; and >98% do not feature health assessments, despite the gamut of analytical tests at archaeologists' disposal. These results are a strong indictment of the low priority apportioned by our discipline to exploring the physical experiences of living and dying by the youngest members of the ancient Egyptian community.

Of the small numbers of individuals for whom biological sex data was published, the results cannot be reliably extrapolated across the sample, as the sex of many appears to have been determined by gendered assessments of grave goods and/or hairstyles rather than by scientific morphological or molecular tests. Furthermore, despite the unique capacity of CIF bodies to reflect the health and ecological status of their entire communities, the small numbers of published palaeopathological profiles, even when supplemented by data generated from the analysis of unpublished skeletal material from Helwan, also remain too few to enable confident extrapolation across the sample, and certainly cannot be argued to reflect the health status of all populations encompassed by the temporal and geographical confines of this study.

One of the strongest outcomes of this chapter has been the identification of age-at-death distribution trends of interments across site types. Here, while all age groups except Older Children were observed in non-cemetery contexts, Infants have been identified as the age group most likely to be interred in extra-mural fora, with approximately 1 Infant settlement burial reported for every 4 Infants interred in cemeteries. Indeed, the Infant category at the synchronic mixed-type sites of Abydos and el-Lisht present the only examples within the sample where intramural interments exceed those in extramural contexts. Notwithstanding

these facts, the most resounding finding to precipitate from the survey of published data is that all age categories, including Infants, were most frequently interred in communal cemeteries.

While the key findings of this chapter may be reviewed on their own merits, it would be remiss not to consider how the issue of 'representativeness' may have impacted on the sample. Questions regarding the potential effect of differential burial practices; methods of recording, excavation, preservation or authorial bias; the 'osteological paradox'; and intra- and inter-observer error will all be addressed in Chapter 10 of this thesis. Chapter 10 will also undertake qualitative analyses of the palaeodemographic results levelled here.

# CHAPTER 5: BODY POSITION AND ORIENTATION

The manner in which a body is interred provides manifold information regarding community perceptions of the deceased's cultural capacities and social persona within prevailing social, religious, economic and political networks.[445] Such notions are communicated via various symbolic elements of burial, many of which will be explored in the proceeding chapters. Included among this symbolic suite is the way a body is placed within the grave:[446] its position, including the arrangement of the body and limbs; and its orientation, including the alignment of the head and face with cardinal/ordinal points or culturally significant landmarks.[447] Abiding with, or diverging from, culturally 'normative' patterns of bodily position and orientation can provide powerful indicators of the deceased's cultural capacity, including perceptions of their social position, value and agency as expressed by those responsible for their burial. In order to determine the nature and scope of child, infant and foetal bodily positions and orientations during the Egyptian Early Dynastic to Middle Kingdom periods, data derived from the archaeological survey described in §1.4.4 was analysed in terms of side placement, head and facial orientation, and positioning of the arms and legs. In adherence with the project structure outlined in §1.6, results of this research and its respective theoretical considerations are presented below. Qualitative analyses will be offered in Chapter 10.

## 5.1 Overview

Before presenting the results of the archaeological survey of CIF bodily positions and orientations, it is crucial to consider how reporting standards regarding preservation statuses of both tombs and occupants impact our ability to obtain comprehensive data for these important aspects of ancient Egyptian mortuary behaviour. According to the survey, tomb condition was not published for more than half the burials in the sample (MNI 947; 52.35% TBs; **Figure 5.1**). A minimum of 456 tombs were reportedly "Intact" (25.21% TBs), 299 tombs were "Disturbed" (16.53% TBs), 98 tombs were of "Questionable" preservation status (5.42% TBs), and a minimum of 9 tombs were reportedly "Re-used" (0.50% TBs).

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445 Chapman (2000: 188); Lillie (2008: 41).
446 Mizoguchi (1993: 225).
447 Raven (2005: 40).

Concerning the tomb occupants, bodily completion status was not published for almost three-quarters of the CIFs identified by this study (MNI 1,337; 73.91% TBs; **Figure 5.2**). Of the remaining individuals, 407 (22.50% TBs) were reported as "Complete" (all osseous elements present), while 65 (3.59% TBs) were said to be "Incomplete" (some osseous elements absent). Bodily articulation status was subject to similarly poor publication standards, this data being absent for 73.08% of individuals among the sample (MNI 1,322; **Figure 5.3**). The bodies of 414 individuals (22.89% TBs) were observed to be "Articulated" (all anatomical connections maintained), 32 individuals (1.77% TBs) were "Semi-articulated" (majority of anatomical connections maintained), while the bodies of 41 individuals (2.27% TBs) were reportedly "Disarticulated" (majority of anatomical connections displaced).

It is clear that a substantial amount of information has not been published regarding the condition of both the tombs and bodies eligible for inclusion in this survey. Nevertheless, the sample contains enough data to permit viable analyses which afford various insights into the funerary treatment of CIFs in Early Dynastic to Middle Kingdom Egypt.

## 5.2 Side Placement: Overview

In terms of the side placement of the deceased, of those individuals for whom data was published, placement on the left side was by far the most common position, with a minimum of 401 CIFs buried in this way (22.17% TBs; **Figure 5.4**). Supine interments were the next most frequent burial position, amounting to a minimum of 109 observations (6.03% TBs), followed by a minimum of 86 burials on the right side (4.75% TBs). Nine individuals were buried in a prone position (0.50% TBs), while 1 individual was reportedly buried in an upright position (0.05% TBs).[448] Side placement data was not published for 1,203 individuals among the sample (66.50% TBs).

### 5.2.1 Specific Geographical Regions

Of the known-position portion of the sample, burial on the left side was most common on the East Bank of Upper Egypt (MNI 173), West Bank of Lower Egypt (MNI 88), West Bank of Upper Egypt (MNI 59), West Bank of Middle Egypt (MNI 35), East Bank of Lower Egypt (MNI 25), Eastern Nile Delta (MNI 8) and the Western Nile Delta (MNI 6; **Table 5.1**; **Figure 5.5**). Right-sided burials were most frequently published for Dakhla

[448] Located in Qau el-Kebir, the child was seated in an upright 'crouched' position with a burial pot inverted over the top of the body: see DRN 932; Brunton (1927a: 21).

Oasis (MNI 14), while supine burials were most often reported in the Faiyum (MNI 4). What is perhaps most interesting to observe is that a variety of side placements were published for each productive region.[449] No single region exhibits a proclivity for interring the deceased on one side only.

### 5.2.2 General Geographical Regions

When considered according to general geographical regions, the pattern described above is essentially consolidated (**Table 5.2**; **Figure 5.6**). Of the known-position portion of the sample, burial on the left side was most common in Upper Egypt (MNI 232), Lower Egypt (MNI 113), Middle Egypt (MNI 35) and the Nile Delta (MNI 14). The only exception to this pattern was observed in the Dakhla Oasis region where, as aforementioned, right-sided interments were most frequently published (MNI 14).

### 5.2.3 Nilotic Geographical Regions

The predominance of left-sided interments continues when the data is organised according to Nilotic geographical distribution (**Table 5.3**; **Figure 5.7**). Of the known-position portion of the sample, bodily placement on the left side is most frequently encountered on the East Bank (MNI 198), West Bank (MNI 182) and Nile Delta (MNI 14). Regional variation is observed in the Faiyum, where supine burials are most commonly reported (MNI 4).

### 5.2.4 Relative Chronology

A pattern of gentle diminution is observed when considering the chronological distribution of side placement among the known-position portion of the sample (**Table 5.4**; **Figure 5.8**). In the Early Dynastic Period, published data indicates that the deceased was most commonly placed on the left side (MNI 146). This finding mirrors the predominance of left-sided interments observed among the adult population at this time.[450] Right-sided juvenile burials are also observed but are substantially less favoured (MNI 28), while supine (MNI 3) and prone burials (MNI 1) are rare.

Preference for the left side continues for Old Kingdom CIFBs (MNI 143), again reflecting reported trends for contemporary adult interments.[451] However, we begin to see

[449] With the exception of the Western Nile Delta region for which no side placement data is published.
[450] Reisner (1936: 11); Grajetzki (2003: 2, 7); Raven (2005: 40).
[451] Reisner (1936: 12); Grajetzki (2003: 15, 25).

alternatives of right-sided (MNI 34) and supine burials (MNI 22) more frequently employed amongst published juvenile burial data during this period. Here, prone (MNI 3) and upright burials (MNI 1) are also occasionally observed.

A subtle shift characterises the First Intermediate Period, with left-sided burials continuing to dominate amongst children's interments (MNI 76), again corresponding with synchronic adult mortuary culture.[452] During this period, however, supine burials (MNI 25) overtake right-sided interments (MNI 10) for the first time amongst published data. Prone burials remain an infrequent occurrence (MNI 3).

According to published data, the transition to supine burial prevalence is achieved in Middle Kingdom CIFBs (MNI 59), as it was for their adult contemporaries.[453] For the first time, burial on the left side is the second most common practice (MNI 36), followed in turn by right-sided interments (MNI 14). Prone burials continue to sporadically appear during this period (MNI 2).

### 5.2.5 Site Types

Side placement of the deceased is not known for the majority of cemetery burials (MNI 1,155; **Table 5.5**; **Figure 5.9**). Among the known-position portion of the sample, left-sided interments predominate among published cemetery data, accounting for a minimum of 399 burials. The supine position was next most frequently observed in cemeteries (MNI 107), followed by right-sided (MNI 84), prone (MNI 7) and upright interments (MNI 1).

We are unable to glean much meaningful information from the known-position portion of settlement burials. Here, the left, right, prone and supine sides are all equally represented among published data (each with MNI 2). Again, unfortunately, side placement information is lost for the majority of settlement burials (MNI 46). Side placement details are also not known for the temple and funerary enclosure burials among the sample.

### 5.2.6 Age Categories

Bodily positions were not published for the majority of burials in each age category (**Table 5.6**; **Figure 5.10**). However, among the known-position portion of the sample, similar distribution patterns are observed for the Unspecified and Older Children age categories, whereby burial on the left side dominates (Unspecified=MNI 290; Older Children=MNI

[452] Grajetzki (2003: 38).
[453] Grajetzki (2003: 54).

41), followed in frequency by supine (Unspecified=MNI 79; Older Children=MNI 13) and right-sided interments (Unspecified=MNI 56; Older Children=MNI 6).

While Young Children are also most frequently buried on their left sides in this sample (MNI 36), equal numbers of this age category are observed as supine and right-sided interments (each with MNI 11). Published data for Infant burials also indicates that they were most commonly interred on their left side (MNI 31), however in this case the right side is the next most frequently attested burial position (MNI 9), followed by supine interments (MNI 6). Foetal interments with known burial positions display a different burial pattern altogether, with most bodies placed on the right side (MNI 4), followed by the left (MNI 3). However, on account of the small numbers of known-position Foetal burials these results should be interpreted cautiously.

Prone burials were observed in every age category except for Older Children, with the most frequent occurrences in the Unspecified (MNI 4) and Infant groups (MNI 3). Unfortunately, age was not specified for the only example of upright burial amongst the sample.

## 5.3 Head Orientation: Overview

Information regarding the orientation of the head was published for 629 individuals among the dataset (34.77% TBs),[454] and not published for 1,180 individuals (65.23% TBs) (**Figure 5.11**). Of the known-orientation portion of the sample, burial with the head towards the North was most common,[455] accounting for a minimum number of 355 CIFs (56.44% total known-orientation burials, henceforth, *TKOBs*; 19.62% TBs). Southerly orientation was the next most frequently observed, with a minimum of 119 individuals (18.91% TKOBs; 6.58% TBs) interred in this position. Orientations towards remaining cardinal points were less-frequently observed, with a minimum of 59 individuals (9.38% TKOBs; 3.26% TBs) interred with their heads to the West, while a minimum of 35 individuals were placed with their heads towards the East (5.56% TKOBs; 1.93% TBs). Orientations towards ordinal points were less-frequently observed. Of these, burials with the head towards the North-East accounted for a minimum of 25 individuals (3.97%

[454] Head orientation data was derived either from the text or registers of published reports; or, where possible, from photographs or drawings of *in situ* burials featuring cardinal indications. It is acknowledged that ancient Egyptians may not have aligned burials according to true cardinal/ordinal points. Instead, they may have followed the orientation of significant landmarks, such as the Nile River: see Bard (1994: 53); or the local configuration of the ground: see Bourriau (2001: 2).

[455] *Cf.* Zillhardt (2009: 92).

TKOBs; 1.38% TBs), and 14 individuals were interred with heads towards the South-East (2.23% TKOBs; 0.77% TBs). Interments with heads towards the North-West and South-West were least-frequently observed, representing a minimum of 11 (1.75% TKOBs; 0.61% TBs) and 10 individuals (1.59% TKOBs; 0.55% TBs), respectively. One individual was interred with their head facing upwards,[456] thus not conforming to cardinal or ordinal orientations.

### 5.3.1 Specific Geographical Regions

Of the known-orientation portion of the sample, specific geographical regions to feature the predominant Northern head orientation include the East Bank of Upper Egypt (MNI 186), West Bank of Middle Egypt (MNI 44), Eastern Nile Delta (MNI 21), West Bank of Upper Egypt (MNI 30), Western Nile Delta (MNI 6) and the Faiyum (MNI 3) (**Table 5.7**). While Northern-oriented burials were also common on the Western (MNI 44) and Eastern (MNI 15) Banks of Lower Egypt, they were almost equalled by burials of other orientations: on the West Bank 43 individuals were interred with their heads towards the South, while on the East Bank a minimum of 14 individuals were also interred with their heads in a Southerly direction.

Dakhla Oasis was the only region to feature predominantly Western-oriented burials, with a minimum of 12 individuals reportedly interred in this way. Unfortunately, no head orientation data was published for the East Bank of Middle Egypt region.

### 5.3.2 General Geographical Regions

When organised according to general geographical regions, data for the known-orientation segment of the sample focuses on Northern head positioning (**Table 5.8**). Upper Egypt presents the most frequent observations of Northern-oriented burials amongst its published record, with a minimum of 216 individuals being interred in this manner: more than 4 times the number of the next most common regional burial position of head to the South (MNI 52). Other regions featuring predominantly Northern-oriented burials include Middle Egypt (MNI 47) and the Nile Delta (MNI 27).

An almost equal distribution is observed for the Lower Egypt region, where burials with a Northern orientation (MNI 59) marginally outnumber those oriented South (MNI 57).

[456] See DRN 932.

Once again, the Dakhla Oasis region stands alone in its preponderance of Western-oriented burials among published data (MNI 12).

### 5.3.3 Nilotic Geographical Regions

Upon arranging the data according to Nilotic geographical regions, the majority of published burials continue to feature Northern orientations (**Table 5.9**). Northern-oriented burials substantially outnumber other interment types among recorded data of the East Bank (MNI 201), West Bank (MNI 118), Nile Delta (MNI 27) and Faiyum regions (MNI 3). As aforementioned, Western-oriented burials are most common in Dakhla Oasis (MNI 12).

### 5.3.4 Relative Chronology

Viewing chronological distributions of the known-orientation component of the sample produces somewhat different outcomes to those levelled above (**Table 5.10**). As for contemporary adult burials,[457] Southern-oriented CIF interments are most frequent among published Early Dynastic Period data (MNI 78). It is not until the Old Kingdom that the Northern-oriented position prevails amongst juvenile (MNI 140) and adult burials,[458] and then is maintained through the First Intermediate Period (MNI 105) and Middle Kingdom (MNI 55).[459] However, it must be noted that the published record indicates great variability in head orientation among burials of the Early Dynastic Period, Old Kingdom and Middle Kingdom, with orientations towards all cardinal and ordinal points noted during these eras.[460] While still exhibiting some variability, the First Intermediate Period appears to be more consistent in the bodily positioning of deceased CIFs. Here a greater proportion of known-orientation burials are aligned towards the North, and where variations do occur, they are less-numerous in terms of range and frequency.

### 5.3.5 Site Types

Burials oriented with head towards the North are clearly most numerous in both cemetery and settlement contexts (**Table 5.11**). Of the known-orientation portion of cemetery burials, a minimum of 350 individuals have been interred in this manner, 3 times the

[457] Grajetzki (2003: 2, 7); Raven (2005: 40).
[458] Grajetzki (2003: 15, 25); Raven (2005: 40).
[459] Grajetzki (2003: 37, 61).
[460] Reisner (1936: 11, 12) also notes such variability in head orientation from the Early Dynastic Period onwards.

amount of the next most numerous orientation category, burials with head towards the South (MNI 117). Orientation towards the Western (MNI 58) and Eastern (MNI 34) cardinal points follow in frequency, while orientation towards ordinal points were less-represented.

The proportion of known-orientation burials is quite low in the settlement context, with data only published for 10 of the 54 intramural interments identified by this study (18.52% total settlement burials). Of these, 5 burials orient towards the North, 2 towards the South, and 1 interment is observed for each of the Eastern, South-Eastern and Western orientations.

Unfortunately, the orientation of burials located within temple and funerary enclosure contexts are unknown. So too are the majority of cemetery (MNI 1,134) and settlement burials (MNI 44) within the sample, underscoring again the substantial loss of data regarding the mortuary practices of this demographic segment of the ancient Egyptian population.

### 5.3.6 Age Categories

Northern head-orientation again dominates the known-position portion of the sample when distributed according to age categories (**Table 5.12**). This alignment is most dominant among the Unspecified (MNI 279) and Older Children age groups (MNI 37). While still most frequently recorded amongst Young Children (MNI 22) and Infants age categories (MNI 15), the prevalence of the North is not as strong in these groups, with burials aligned Southwards appearing almost as often within published data (Young Children=MNI 19; Infants=MNI 14).

Although the known-orientation portion of Foetal burials among the sample is quite small, preferred orientation towards the South in this group is noteworthy (MNI 3). The next most frequent burial orientations in this age group almost equal this amount, however, with burials oriented to the West (MNI 2), East and North East (each with MNI 1) also observed. The variability may be explained by the small numbers of comprehensively-published burials for foetuses in the Egyptian archaeological record. Moreover, the lack of age-related data for all individuals recorded as interred with their heads 'Upwards' (MNI 1) or towards the North-West (MNI 11) further highlights the lost opportunities for obtaining accurate demographic distributions of ancient Egyptian mortuary practices.

## 5.4 Facial Orientation: Overview

Facial orientation was able to be determined for 595 individuals (32.90% TBs) among the sample, while such details were not provided for 1,214 of the CIFs identified by this survey (67.11% TBs; **Figure 5.12**). For the known-orientation component of the sample, facial orientation towards the East was clearly the most frequent interment position,[461] accounting for a minimum number of 302 individuals (50.76% TKOBs; 16.69% TBs). The next most commonly observed facial orientation, towards the West, presented less than half this number (MNI 119; 20.00% TKOBs; 6.58% TBs). Deviating briefly from cardinal points, burials facing Upwards were next most frequently observed (MNI 60; 10.08% TKOBs; 3.32% TBs), while Northern (MNI 39; 6.55% TKOBs; 2.16% TBs) and Southern-facing interments (MNI 33; 5.55% TKOBs; 1.82% TBs) are the next most common positions among the known-orientation portion of the sample. The ordinal points were the least-frequently observed, with burials recorded facing South-East (MNI 18; 3.03% TKOBs; 1.00% TBs), South-West (MNI 13; 2.18% TKOBs; 0.72% TBs), North-West (MNI 4; 0.67% TKOBs; 0.22% TBs) and North-East (MNI 3; 0.50% TKOBs; 0.17% TBs) collectively only accounting for 6.38% of the burials for which orientation was known (MNI 38; 2.10% TBs). Finally, 4 individuals were reportedly interred facing 'Downwards' (0.67% TKOBs; 0.22% TBs).

### 5.4.1 Specific Geographical Regions

While interments facing East are the most common among the known-orientation portion of the sample overall, this predominance may be due to focal concentrations in well-published areas rather than a general adherence to a nationally-prescribed funerary culture (**Table 5.13**). We only see a strong prevalence (≤40.00% of regional known-orientation interments) towards Eastern-facing burials in 5 of the 10 regions included in this study, including the East Bank of Upper Egypt (MNI 171), West Bank of Upper Egypt (MNI 30), West Bank of Middle Egypt (MNI 28), Eastern Nile Delta (MNI 16) and Western Nile Delta (MNI 6). On the Western and Eastern Banks of Lower Egypt there is instead a clear prevalence of West-facing burials, with 45 observations pertaining to the West Bank and 24 to the East.

A great deal of variability is observed in all other regions. While a single orientation may present the greatest frequency of burials, it is only by a narrow margin. For example, a

[461] *Cf.* Zillhardt (2009: 92).

minimum of 8 interments are recorded as facing South in the Dakhla Oasis region, however this figure only slightly outweighs the 7 interments facing West and 5 facing North. A similar situation is observed on the West Bank of Upper Egypt where, as aforementioned, a minimum of 30 individuals are reported as buried facing East, only exceeding supine/upwards-facing interments by 2 burials (MNI 28).

Parity is observed in the Faiyum, where the only 2 individuals with published facial orientation data are buried facing completely opposite directions: 1 to the East and 1 to the West. The poor quality of published data is echoed by the situation on the East Bank of Middle Egypt, for which no facial orientation information is available.

### 5.4.2 General Geographical Regions

When organised according to general geographical distribution, the data is concentrated in one region: Upper Egypt (**Table 5.14**). Here, a minimum of 201 individuals were interred facing East. East-facing interments are also most common in published accounts for Middle Egypt (MNI 29) and the Nile Delta (MNI 22). Burials facing West were most frequently reported in Lower Egypt (MNI 69), while the tightly-contested situation in Dakhla Oasis has already been described above (see §5.4.1).

### 5.4.3 Nilotic Geographical Regions

When considered according to Nilotic geography, areas with strongest prevalence of East-facing interments are the East Bank (MNI 181), West Bank (MNI 94) and Nile Delta (MNI 22; **Table 5.15**). In this geographical configuration, regions previously identified for the variability of their known-orientation data emerge once again: parity is observed between Eastern and Western-oriented interments in the Faiyum, and only slight disparity appears between Southern and Western-oriented interments in Dakhla Oasis (see §5.4.1).

### 5.4.4 Relative Chronology

Facial orientation of the known-position portion of the sample was also considered according to relative chronology (**Table 5.16**). Burials facing West were most commonly recorded in the Early Dynastic Period (MNI 76),[462] while the East prevails as the most frequently observed orientation in the Old Kingdom (MNI 125), First Intermediate Period

[462] Castillos (1982a: 176; 1982b: 31); Raven (2005: 40).

(MNI 92) and Middle Kingdom (MNI 37).[463] However, reflecting the increasing popularity of supine interments in the Middle Kingdom,[464] one observes that incidences of 'Upwards' facing burials become much more frequent at this time, with the 34 individuals interred in this way almost equalling those facing East.

### 5.4.5 Site Types

The prevalence of East-facing interments is unquestioned amongst CIF cemetery burials, with 49.75% of the known-orientation component of the sample located in such contexts (MNI 296; **Table 5.17**). The picture is somewhat different for extra-mural interments, as parity is observed between settlement burials facing East and South-West (each with MNI 6). There is far less overall variability reported for settlement interments compared to those in cemeteries, with scattered observations falling between Northern- (MNI 2), Western-, 'Upwards'- and 'Downwards'-facing burials (each with MNI 1). There were no observations of individuals facing North-East, South-East, South or North-West in settlements. Facial orientation data is absent for burials from temple and funerary enclosure contexts.

### 5.4.6 Age Categories

East-facing burials predominate for the 'Unspecified' (MNI 233), Older Children (MNI 32) and Young Children (MNI 23) among the known-orientation component of the sample (**Table 5.18**). In terms of frequency, more variability is observed among the youngest constituents of the dataset, with parity reached between East- and West-facing Infant interments (each with MNI 13), as well as Foetus burials facing South and West (each have an MNI 3).

## 5.5 Arm Position: Overview

The position of the deceased's arms within the grave was able to be determined for 503 of the CIFs included in this study (27.81% TBs), while that of the remaining 1,306 individuals is unknown (72.19% TBs; **Figure 5.13**). Upon examining the data, 4 broad categories of arm-arrangements became apparent, including 'flexed' (forearm flexed at the elbow at an angle of <90° relative to the upper arm), 'semi-flexed' (forearm flexed at the elbow at an angle of ≥90° relative to the upper arm), 'extended' (forearm at full extension

[463] Raven (2005: 40).
[464] See §5.2.4

at the elbow at an angle of ~180° relative to the upper arm), and 'combination' (where the each of the deceased's arms were positioned in different ways; for example, the left arm was flexed while the right arm was extended).[465] Of the known-position portion of the sample, arms were most frequently reported as flexed (MNI 302; 60.04% total known-position burials, henceforth, *TKPBs*; 16.69% TBs). With less than half the number of incidences, extended arms were the next most commonly observed position amongst published data (MNI 116; 23.06% TKPBs; 6.41% TBs). The remaining two position categories were almost equally represented, with arms in semi-flexed arrangement recorded for a minimum of 45 individuals (8.95% TKPBs; 2.49% TBs), while the arm position of 40 individuals fell into the 'combination' category (7.95% TKPBs; 2.21% TBs).

### 5.5.1 Specific Geographical Regions

The flexed arm position was predominant in 7 of the 10 productive regions included in this study, including the East Bank of Upper Egypt (MNI 105), West Bank of Lower Egypt (MNI 56), West Bank of Middle Egypt (MNI 44), West Bank of Upper Egypt (MNI 48), Dakhla Oasis (MNI 23), East Bank of Lower Egypt (MNI 17) and Eastern Nile Delta (MNI 8; **Table 5.19**; **Figure 5.14**). Extended arms were most frequently observed for the Western Nile Delta (MNI 5), while equal observations were made of semi-flexed and extended arms in the Faiyum (each with MNI 1). There was an absence of published data regarding the arm positions of deceased CIFs in the East Bank of Middle Egypt region.

### 5.5.2 General Geographical Regions

When viewed according to general geographical regions, the predominance of the flexed arm position is straightforward (**Table 5.20**; **Figure 5.15**). Upper Egypt (MNI 153), Lower Egypt (MNI 73), Middle Egypt (MNI 44) and Dakhla Oasis (MNI 23) all feature flexed arms most frequently amongst their published data. While flexed arms are also most numerous in the Nile Delta (MNI 9), we see here an almost equal incidence of extended arms amongst the known-position component of this region's archaeological record (MNI 7). It should be noted that extended arms are also strongly represented in Upper Egypt (MNI 96).

[465] For example, see DRN 1120.

### 5.5.3 Nilotic Geographical Regions

In terms of arm positions in Nilotic geographical regions (**Table 5.21**; **Figure 5.16**), prevalence of flexed arm interments is observed amongst the published data of the West Bank (MNI 148), East Bank (MNI 122) and Dakhla Oasis regions (MNI 23). As described, above, the predominance of flexed arm burials in the Nile Delta is almost equalled by those presenting an extended position. The results offered for the Faiyum (parity between extended and semi-flexed arm positions; see §5.5.1) are undoubtedly due to the quality and quantity of available publications for this region.

### 5.5.4 Relative Chronology

As has been noted for contemporary adult burials,[466] the flexed arm position dominates from the Early Dynastic Period (MNI 107) through to the Old Kingdom (MNI 117) and First Intermediate Period (MNI 56; **Table 5.22**; **Figure 5.17**). During the latter period however, a substantial proportional increase in the number of extended arm interments is observed (MNI 39). Reflecting the developments reported for adult mortuary culture,[467] the extended position obtains prevalence in the Middle Kingdom, observed for a minimum of 49 children within the sample.

### 5.5.5 Site Types

Published cemetery data reveals flexed arms as the most frequently employed interment arrangement for known-position CIFBs in this context (MNI 300; **Table 5.23**; **Figure 5.18**). The number of flexed arm cemetery burials is more than 2.5 times the next most frequent interment position of extended arms (MNI 114). The situation is not quite as straightforward amongst settlement burials, with an equal number of flexed and extended arm interments observed amongst published data (each have MNI 2). This amount is almost equalled by the single representation of an individual buried with semi-flexed arms (MNI 1), again demonstrating the difficulties of making worthy analyses of such small amounts of data. The arm positions of the individuals buried in temple and funerary enclosure contexts among the sample are not known.

[466] Reisner (1936: 12); Grajetzki (2003: 2, 7, 15); Raven (2005: 40).
[467] Grajetzki (2003: 54); Raven (2005: 40).

### 5.5.6 Age Categories

When considered in terms of age categories, the flexed arm position dominates in every group among the sample by a minimum factor of 2.2 times the next most frequently observed position in each category: from Foetuses (MNI 14), Infants (MNI 25), Young Children (MNI 35) and Older Children (MNI 31), through to individuals of Unspecified age (MNI 197; **Table 5.24**; **Figure 5.19**). The closest any other position comes to challenging the prevalence of flexed arm burials are extended arms amongst the Unspecified age category (MNI 89). One can only speculate as to how more detailed information may affect our perceptions of this important aspect of ancient Egyptian mortuary behaviour.

## 5.6 Leg Position: Overview

Detailed information regarding *in-situ* leg positions was available for 531 CIFBs amongst the sample (29.35% TBs). Such information was lacking for the remaining 1,278 individuals identified by the survey (70.45% TBs; **Figure 5.20**). Three categories of leg arrangements were observed among the known-position portion of the sample, including 'flexed' (lower leg flexed at the knee at an angle of <90° relative to the thigh), 'semi-flexed' (lower leg flexed at the knee at an angle of ≥90° relative to the thigh), and 'extended' (lower leg at full extension at the knee at an angle of ~180° relative to the thigh). The majority of individuals in the dataset were interred with their legs in a flexed position (MNI 319; 60.08% TKPBs; 17.63% TBs), more than 2.5 times the next most frequently observed position of legs extended in the grave (MNI 122; 22.98% TKPBs; 6.74% TBs). The remainder of the known-position component of the sample were interred with their legs in a semi-flexed arrangement (MNI 90; 16.95% TKPBs; 4.98% TBs).

### 5.6.1 Specific Geographical Regions

Seven of the 10 specific regions included in this study feature flexed leg positions most frequently among their published data, including the East Bank of Upper Egypt (MNI 109), West Bank of Lower Egypt (MNI 64), West Bank of Upper Egypt (MNI 52), West Bank of Middle Egypt (MNI 46), Dakhla Oasis (MNI 23), East Bank of Lower Egypt (MNI 17) and the Eastern Nile Delta (MNI 7; **Table 5.25**; **Figure 5.21**). Extended leg interments were most frequently observed among the published archaeological record of the Western Nile Delta (MNI 5) and the Faiyum (MNI 3). It should be noted that extended

leg interments were also well-represented on the West Bank of Upper Egypt (MNI 43), while the East Bank of Upper Egypt also featured high frequencies of semi-flexed (MNI 61) and extended burials (MNI 53). No information was available regarding the leg positions of interments for the East Bank of Middle Egypt.

### 5.6.2 General Geographical Regions

Flexed leg interments dominate in 4 of the 5 general geographical regions canvassed by this study. Upper Egypt (MNI 161), Lower Egypt (MNI 81), Middle Egypt (MNI 46) and Dakhla Oasis (MNI 23; **Table 5.26**; **Figure 5.22**) all feature the majority of their known-position CIFBs interred in this way. Parity is observed between flexed and extended leg burials in the Nile Delta (each with MNI 8), while the strong Upper Egyptian representations of extended (MNI 96) and semi-flexed leg burials (MNI 71) are also noteworthy.

### 5.6.3 Nilotic Geographical Regions

When viewed according to distribution in Nilotic geographical regions, flexed leg interments continue to predominate amongst the sample (**Table 5.27**; **Figure 5.23**). Child, infant and foetal interments across the West Bank (MNI 162), East Bank (MNI 126), and Dakhla Oasis (MNI 23) are predominantly buried in this manner. As aforementioned, extended burials were most frequently observed amongst published Faiyum data (see §5.6.1), whilst equal numbers of flexed and extended leg burials were reported for the Nile Delta (see §5.6.2).

### 5.6.4 Relative Chronology

Among the known-position portion of the sample, flexed leg arrangements were most frequently observed for Early Dynastic (MNI 119) and Old Kingdom juvenile burials (MNI 119; **Table 5.28**; **Figure 5.24**), once again mirroring the prevailing interment trends for adults during these periods.[468] While flexed legs still present as the most frequent burial position for children during the First Intermediate Period (MNI 56), at this time a marked increase in extended position interments is also noted for both children (MNI 36) and adults.[469] Reflecting the aforementioned trends towards supine, upwards-facing interments in the Middle Kingdom, the shift to predominance of extended leg juvenile

[468] Reisner (1936: 12); Grajetzki (2003: 2, 7, 15); Raven (2005: 40).
[469] Grajetzki (2003: 15, 37); Raven (2005: 40).

burials is completed by this period (MNI 58), corresponding with broader contemporary patterns reported for adults.[470]

### 5.6.5 Site Types

Flexed leg burials form the preponderance of known-position burials in both cemetery and settlement contexts (**Table 5.29**; **Figure 5.25**). A minimum of 314 flexed leg burials were reported amongst published cemetery data, more than 2.5 times the number of extended leg burials (MNI 121), and more than 3.5 times the number of semi-flexed leg burials (MNI 89). Amongst the very small portion of known-position CIF settlement burials, only flexed leg interments register more than single observations (MNI 5). Unfortunately, leg positions were not published for either the temple or funerary enclosure burials included in this study.

### 5.6.6 Age Categories

Flexed legs are the dominant interment position for every age category included in this study (**Table 5.30**; **Figure 5.26**). Foetuses (MNI 14), Infants (MNI 33), Young Children (MNI 38), Older Children (MNI 34) and Unspecified age groups (MNI 200) each feature at least twice the number of flexed leg burials than the next most common interment position: extended legs. These are second most frequently recorded among the sample for every age group except Foetuses, where a single semi-flexed burial is the only other recorded position (MNI 1).

## 5.7 Summary

This chapter has presented the nature and scope of CIF bodily positions and orientations during the Egyptian Early Dynastic to Middle Kingdom periods. The data was derived from the archaeological survey of all available published data pertaining to this timeframe, supplemented by unpublished material from the ACE Helwan Project. Significantly, the results suggest that the burials of CIFs conformed to the same position and orientation trends as observed for contemporary adult interments. Overall, the well-known chronological trends towards bodily placement on the left side, head to the South, facing West, dominated in the Early Dynastic Period. Thereafter, a gradual shift towards Northern-oriented supine burials commenced in the Old Kingdom, increased through the First Intermediate Period and emerged as the most common interment arrangement in the

[470] Grajetzki (2003: 54); Raven (2005: 40).

Middle Kingdom. Similarly, the limb placement of CIFs also demonstrated broad agreement with synchronic adult mortuary behaviour, as flexed arm and leg interments were seen to predominate through the Early Dynastic era through to the First Intermediate Period. At this time, reflecting the aforementioned shift towards supine interments, a gradual proportional increase was observed in extended-position interments, which eventually eclipsed flexed burials in the Middle Kingdom. All age categories in the sample generally followed these distribution patterns, with the exception of Foetuses, who were mainly buried on their right side, oriented towards the South. These results, however, should be viewed with caution as the publication rates for Foetal bodily positions were extremely low.

Broadly speaking, the position and orientation trends observed in cemetery and settlement contexts reflected the broad patterns reported for the sample. While these findings indicate that this aspect of ancient Egyptian mortuary behaviour was honoured regardless of interment fora, they should nonetheless be viewed with caution. The numbers of known-position and -orientation burials in settlements were very low, and there was no position or orientation data available for temple or funerary enclosure burials, whatsoever.

While these results represent the most common bodily positions and orientations among the dataset, it must be noted that much variability was observed in all regions, periods, site types and age categories canvassed by this study. It thus appears that those responsible for orchestrating the burials of CIFs were privy to a certain degree of freedom to choose how to commit their deceased child/community member's body to the earth. What is also apparent are the poor reporting standards regarding this aspect of Egyptian mortuary behaviour, with tomb condition not reported in >50% of all published burials, and bodily completion and articulation statuses each not reported in >70% of all published burials, respectively. One should also consider the degree to which the data may be biased by scholarly prioritisation of excavation and publication in certain regions, as noted in previous chapters. Hints towards regional variability in all results categories suggest that further scholarly activities in some of the lesser-represented regions may divulge clearer articulations of cultural diversity across the Egyptian mortuary landscape.

Despite these inherent challenges, the findings presented by this research are substantial enough to be considered representative of the broad trends present in Egyptian mortuary culture within the timeframe addressed by the study. These trends, which appear to mirror

those observed among contemporary adult burials, will be subject to qualitative analyses in Chapter 10 of this thesis.

# CHAPTER 6: BODILY TREATMENT

Chapter 1 of this thesis addressed the central axiom of mortuary behaviour, namely, that the dead do not bury themselves.[471] With this in mind, the present study is concerned with exploring what the funereal treatment of children, infants and foetuses in Early Dynastic to Middle Kingdom Egypt reveals about their position, value and agency within their communities, as expressed by those orchestrating their burial. Considering that the body is the means by which so much of an individual's lived experience within a community is facilitated, negotiated, embodied and maintained,[472] poignant expressions of the deceased's cultural capacities are often manifested via their bodily treatment in death. In order to determine the nature and scope of child, infant and foetal bodily treatments during the chronological periods canvassed by this research, data derived from the archaeological survey described in §1.4.4 was analysed for evidence of corporeal engagement; including the provision of wrapping, bedding and coffins, as well as the application of mummification techniques and other topical treatments. In adherence with the project structure outlined in §1.6, results of this research and its respective theoretical considerations are presented below. Qualitative analyses will be undertaken in Chapter 10.

## 6.1 Overview

An array of mortuary treatment was found to have been applied to the bodies of CIFs within the sample. Evidence for direct corporeal engagement was published for 115 individuals (6.36% TBs; **Figure 6.1**). Further to this, it was established that 992 individuals had no published indications of bodily treatment (54.84% TBs). The treatment status of 10 individuals among the sample was unclear (0.55% TBs), while that of 692 individuals was not known (38.25% TBs). The present study only reports results for the 115 individuals for which evidence of bodily treatment was published in a concise manner.

In addition to these statistics, published data indicates that a minimum of 746 children, infants and foetuses were provided with some form of bodily container (coffin) within the grave (41.23% TBs; **Figure 6.2**), while 510 individuals had no evidence of funerary containers, whatsoever (28.19% TBs). The status of 45 individuals was unclear regarding

[471] Parker Pearson (2003: 3).
[472] Meskell (1999b: 38); Wengrow & Baines (2004: 1105); Preucel & Meskell (2007: 10).

coffins (2.49% TBs), and no information was published regarding the presence or absence of receptacles for 508 individuals (28.08% TBs). The present study only reports results of the 746 individuals for which clear evidence of funerary containers was published.

Further to the archaeological survey described above, CIF bodily treatments may be categorised and enumerated as follows: 80 observations of wrapping, 43 observations of bedding, 8 observations of 'mummification',[473] 5 observations of topical bodily applications and, as aforementioned, 746 observations of bodily containers (coffins). It is apparent that many CIFs received more than one form of corporeal intervention at or before the time of burial. As such, bodily treatments encountered among the sample were counted by individual occurrences. For example, an individual may have been wrapped in textile and subsequently placed in a wooden coffin:[474] each of these incidences was counted once. Each bodily treatment category is discussed in further detail, below.

## 6.2 Wrapping

To be eligible for inclusion in this category, an excavator must have explicitly described a body as having been "wrapped"; that is, the body was observed as completely encircled by a material/s, or there was sufficient evidence to indicate that the body was wrapped in its primary context prior to subsequent post-depositional intervention or decomposition.[475] Of the 80 observations of wrapping amongst the sample, 46 consisted of reed matting (57.50% total wrapping, henceforth, *TW*), 29 of textile (36.25% TW), 2 of animal skin (2.5% TW) and 1 each of rope matting, gold sheet and an unknown material (each 1.25% TW; **Figure 6.3**). Two individuals were observed to have more than one wrapping treatment applied to their bodies. Incidences of wrapping materials are further described, below. Materials of ≥11 published examples are described as a group, while individual cases are described for wrapping materials of ≤10 published examples.

### 6.2.1 Wrapping in Reed Matting

As aforementioned, 46 CIFs were observed to be wrapped in reed matting as part of their mortuary treatment.[476] Reed mat wrapping was attested for adults from the Predynastic

[473] *Contra* Spieser (2008: 533).
[474] For example, see DRN 49; *cf.* §6.8, below.
[475] If an excavator recorded the presence of reed matting above and below the body but did not describe it as a continuous unit, it was included in the "Bedding" category of bodily treatment; see §6.3.1, below.
[476] Here, this author is reliant upon excavators' descriptions of 'reed matting'. It is acknowledged that it is often difficult to distinguish between various types of reeds and papyrus.

period and continued throughout pharaonic history.[477] Incidences of CIF wrapping in reed matting may be further described according to their manifestations within specific, general and Nilotic geographical regions, then by relative chronology, site type and age categories, below.

#### 6.2.1.1 Specific Geographical Regions

The West Bank of Middle Egypt features the most frequent accounts of CIF reed mat wrapping amongst published data, with a minimum of 19 individuals reportedly receiving this form of mortuary treatment (**Table 6.1**; **Figure 6.4**). The Eastern Nile Delta featured the next most frequent observations (MNI 8), followed by the West Bank of Lower Egypt (MNI 6). A minimum of 4 individuals were wrapped in reed matting in both Dakhla Oasis and the East Bank of Upper Egypt, while the West Bank of Upper Egypt featured 3 observations of this treatment. The Eastern Banks of Lower and Middle Egypt were restricted to singular incidences, while the Western Nile Delta and Faiyum presented no published examples of CIFs wrapped in reed matting.

#### 6.2.1.2 General Geographical Regions

When viewed according to distribution in general geographical regions, Middle Egypt features the most published examples of CIFs wrapped in reed matting (MNI 20; **Table 6.2**; **Figure 6.5**). The Nile Delta features the second most frequent observations of this phenomenon (MNI 8), followed by equal observations for Lower and Upper Egypt (MNI 7). Dakhla Oasis presented 4 examples amongst published data.

#### 6.2.1.3 Nilotic Geographical Regions

When organised according to distributions across Nilotic geographical regions, observations of CIFs wrapped in reed matting proliferate on the West Bank (MNI 28; **Table 6.3**; **Figure 6.6**). The Nile Delta again features the second most frequent published examples of this form of mortuary treatment (MNI 8), followed closely by 6 observations on the East Bank. With 4 observations, Dakhla Oasis is the fourth most numerous region for published examples of wrapping in reed matting, while the Faiyum features no published instances of this practice.

[477] Ikram & Dodson (1998: 155); Grajetzki (2003: 2, 3, 25).

#### 6.2.1.4 Relative Chronology

Old Kingdom examples predominate amongst the sample, with a minimum of 17 individuals buried in this period reportedly receiving this form of mortuary treatment (**Table 6.4**; **Figure 6.7**). This result is followed closely by equal observations of wrapping in reed matting amongst the published record of the Early Dynastic and Middle Kingdom Periods, each featuring a minimum of 12 examples. The First Intermediate Period is least attested for this phenomenon, with only 5 individuals recorded as receiving this bodily treatment.

#### 6.2.1.5 Site Types

When organised according to site types, the clear majority of CIFs wrapped in reed matting were buried in cemetery contexts (MNI 41; **Table 6.5**; **Figure 6.8**). By contrast, only 5 of the individuals interred in settlements were reported to have received this form of mortuary treatment. No observations of wrapping in reed matting were recorded amongst published data for those individuals interred in either temple or funerary enclosure contexts.

#### 6.2.1.6 Age Categories

Amongst the known-age portion of the sample, 8 Young Children were observed to be wrapped in reed matting for burial (**Table 6.6**; **Figure 6.9**). This number was followed closely by those in the Infants category, with 7 individuals amongst this age group also receiving this form of bodily treatment. According to published data, this phenomenon was observed for 4 Older Children, while the body of 1 Foetus was reportedly treated in this way. Unfortunately, ages of the majority of children subject to this aspect of Egyptian mortuary behaviour were not specified amongst published data (MNI 26).

### 6.2.2 Wrapping in Textile

As aforementioned, 29 CIFs amongst the sample were wrapped in textile as part of their mortuary treatment. As for reed matting, bodily wrapping in textile was attested in adult burials from the Predynastic Period,[478] continuing onwards throughout the entire pharaonic era.[479] It should be noted that the true incidence of CIF textile wrapping is probably greater than that reported here. In at least 5 cases it was impossible to decipher the handwriting of W. M. F. Petrie in the "Clothing/Textile" section of his tomb cards,

[478] Jones (2008: 117).
[479] Ikram & Dodson (1998: 155).

obscuring potential identification of further examples of this form of bodily treatment.[480] The illegibility of Petrie's script is noted elsewhere in the sample and the scope of its potential impact on this study will be further discussed in Chapter 10. Notwithstanding Petrie's palaeography, the known-incidences of bodily wrapping in textile may be further described according to manifestations within specific, general and Nilotic geographical regions, then by relative chronology, site type and age categories, below.

#### 6.2.2.1 Specific Geographical Regions

According to published data, it appears that the practice of wrapping CIFs in textile is far less widespread than reed matting, with observations restricted to 5 of the 10 specific geographical regions included in this study (**Table 6.1**; **Figure 6.10**). The most numerous accounts of textile wrapping may be observed on the West Bank of Upper Egypt, with a minimum of 10 individuals reportedly treated in this way. The East Bank of Upper Egypt and the West Bank of Middle Egypt follow closely, with each presenting a minimum of 9 and 8 examples of textile wrapping, respectively. Singular examples of this phenomenon were observed amongst published data of the Faiyum and Dakhla Oasis. There were no observations of CIFs wrapped in textile among the published records of any sites in the Nile Delta, Lower Egypt or the East Bank of Middle Egypt.

#### 6.2.2.2 General Geographical Regions

The concentration of data noted above is also observed in general geographical distributions (**Table 6.2**; **Figure 6.11**). Here, we see data focused in the Southern and central portions of the country, with an outlier appearing in the Western region of Dakhla Oasis (MNI 1). Upper Egypt clearly features the preponderance of published CIF textile-wrapping, with 19 examples derived from this region. Observations of this aspect of Egyptian mortuary behaviour also precipitate from the published record of Middle Egypt, with 9 individuals reportedly treated in this way. There are no published examples of CIFs wrapped in textiles in the Nile Delta or Lower Egypt.

#### 6.2.2.3 Nilotic Geographical Regions

Arranging the data according to Nilotic geographical regions reveals a slightly more balanced outcome (**Table 6.3**; **Figure 6.12**). According to this configuration, 18 incidences of CIF bodily wrapping in textile may be attributed to the West Bank, while 9

[480] See DRNs 408-410, 414, 1145; Petrie (2000: sheets 236, 14).

were observed amongst the published data of the East Bank. As noted in §6.2.2.1, the Faiyum and Dakhla Oasis each feature singular examples, while no observations were made among the published records of the Nile Delta.

#### 6.2.2.4 Relative Chronology

The highest frequency of bodily wrapping in textile was observed amongst the published data of the Middle Kingdom (**Table 6.4**; **Figure 6.13**). During this period, a minimum of 15 CIFs were subject to this mortuary practice, more than twice the number observed for the next most frequent occurrence of 7 individuals during the Old Kingdom. Between these eras, the number of recorded textile-wrapped CIFs drops to 5 individuals during the First Intermediate Period. The fewest observations of this phenomenon are associated with the published data of the Early Dynastic Period (MNI 2).

#### 6.2.2.5 Site Types

The majority of CIFs subject to bodily wrapping in textile were buried within communal cemeteries (**Table 6.5**; **Figure 6.14**). A minimum of 24 individuals interred in such extra-mural contexts are reported to have received this form of mortuary treatment. Alternatively, a minimum of 5 individuals located in intra-mural contexts were also subject to this treatment at or before the time of burial. No observations of wrapping in textile were recorded amongst published data for those individuals interred in either temple or funerary enclosure contexts.

#### 6.2.2.6 Age Categories

Considering the proportional appearance of the various known-age categories amongst the sample,[481] the distribution of textile-wrapping may be said to be fairly balanced (**Table 6.6**; **Figure 6.15**). Amongst the known-age categories, 7 individuals from both Infant and Young Child age groups were reportedly subject to this form of mortuary treatment. Four Older Children amongst the sample were observed to be wrapped in textile, as was one Foetus. Unfortunately, the ages of many CIFs treated in this way remain unknown (MNI 10).

[481] See §4.1.1–4.1.2.

### 6.2.3 Wrapping in Animal Skin

Both incidences of wrapping in animal skin were observed in cemetery contexts. The first, DRN 1299, was attributed to the Early Dynastic site of Saqqara on the West Bank of Lower Egypt.[482] This was the intact burial of an 8 year old child in a pit grave, furnished with 3 grave goods. The second burial, DRN 1091, took place at the Old Kingdom site of el-Hemmamiya on the East Bank of Upper Egypt.[483] This 1–2 year old child had also been wrapped in textile beneath the animal skin before being wholly placed into a ceramic vessel and interred in a pit grave, the condition of which is unknown. No grave goods were recorded for this burial. These findings expand the currently-accepted attestations of this form of bodily treatment which, for adults, are thought to have been limited to the Predynastic Period, with the singular exception of the New Kingdom burial of 'Man E', who was retrieved from the Deir el-Bahari cache wrapped in a sheep skin.[484]

### 6.2.4 Wrapping in Rope Matting

An infant buried in the Old Kingdom cemetery of el-Ghurab on the West Bank of Middle Egypt, DRN 371, was the only individual amongst the sample to be wrapped in rope matting.[485] This infant was subject to 2 acts of corporeal treatment – its body was also wrapped in reed matting. The condition of this pit grave was not reported, nor was the presence of any grave goods.

### 6.2.5 Wrapping in Gold Sheet

The only incidence of wrapping in a gold sheet, DRN 1389, was observed in the Old Kingdom royal cemetery at Giza on the West Bank of Lower Egypt.[486] This author is unable to determine any parallels to this form of bodily treatment. This 12 year old child was the single occupant of a limestone-constructed mastaba which abutted the Northern mastaba wall of Prince Kai. In addition to gold sheeting, the child's body was adorned with 2 necklaces[487] and 1 belt.[488] Although the condition of the burial is not explicitly

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482 Macramallah (1940: 35); Castillos (1976: i-xii); Kaiser (1985: 45-60).
483 Brunton & Caton-Thompson (1928: 89).
484 Ikram & Dodson (1998: 154).
485 Brunton & Engelbach (1927: pl. vi).
486 Hassan (1941: 240-243) states that "fragments of thin sheet-gold" seemed to "[form] one sheet in which the skeleton was wrapped." According to Hassan's description, the sheet-gold appears to lie directly on top of and underneath the body. This description minimises the possibility that the gold foil was originally clad to the exterior coffin walls.
487 See GGRNs 2848-2849.
488 See GGRN 2850.

stated by the excavator, the presence of these aforementioned bodily adornments, as well as a funerary assemblage of 90 copper tools, vessels, implements and weapons suggests it was intact.[489] The opulent nature and scope of this burial have caused the excavator to speculate that the occupant was a member of the royal family.[490]

### 6.2.6 Wrapping in Multiple Materials

Of the 2 individuals observed to have been wrapped in multiple materials, both were located in pit burials of unknown condition within cemetery contexts pertaining to the Old Kingdom. The burial of 1 individual may be attributed to the site of el-Ghurab on the West Bank of Middle Egypt (DRN 371).[491] This infant was wrapped in both reed matting and rope matting at or before the time of burial. No grave goods are recorded for this individual.

The second interment was observed amongst the published records of el-Hemmamiya, located on the East Bank of Upper Egypt (DRN 1091).[492] The body of this 1 to 2 year old child was wrapped in both textile and animal (goat) skin, then further protected via placement within a ceramic vessel of coarse, red pottery. No grave goods were listed accompanying this burial.

## 6.3 Bedding

To be eligible for inclusion in this category, an excavator must have explicitly described a child, infant or foetus' body as having been in direct contact with one or more material: either above and/or below the body in its primary context prior to subsequent post-depositional intervention or decomposition, but not encircling or enveloping the body as was the criterion for "wrapping" (see §6.2, above). Of the 45 observations of bedding amongst the sample, 16 consisted of reed matting (35.56% total bedding; henceforth *TBG*), 7 of textile wadding or padding (15.56% TBG), 5 of each of reeds and ash (each 11.11% TBG), 4 of wooden boards (8.89% TBG), 3 of sticks (6.67% TBG), 2 of sand (4.45% TBG) and 1 each of rope matting, straw and stone (each 2.23% TBG; **Figure 6.16**). Six individuals were observed to have more than one bedding treatment applied to their bodies. Incidences of bedding materials are further described, below. Materials of ≥11 published

[489] See GGRN 2852.
[490] Hassan (1941: 240).
[491] Brunton & Engelbach (1927: pl. vi).
[492] See also §6.2.3. Brunton & Caton-Thompson (1928: 89).

examples are described as a group, while individual cases are described for bedding materials of ≤10 published examples.

### 6.3.1 Bedding in/on Reed Matting

As aforementioned, 16 CIFs amongst the sample were placed on and/or under a bed of reed matting as part of their mortuary treatment. These known-incidences of bedding in reed matting may be further described according to their manifestations within specific, general and Nilotic geographical regions, then by relative chronology, site type and age categories, below.

#### 6.3.1.1 Specific Geographical Regions

The most frequent observations of bedding in reed matting may be attributed to the West Bank of Middle Egypt (**Table 6.7**; **Figure 6.17**). Here, a minimum of 7 CIFs received this form of mortuary treatment at the time of burial. The West Bank of Lower Egypt presented the next most numerous account of this phenomenon, with a minimum of 4 individuals reportedly treated in this way. Three examples were cited for the West Bank of Upper Egypt, while singular observations of bedding in reed matting were recorded for the Eastern Nile Delta and East Bank of Upper Egypt. The Western Nile Delta, East Bank of Lower Egypt, East Bank of Middle Egypt, Faiyum and Dakhla Oasis featured no published examples of reed mat bedding.

#### 6.3.1.2 General Geographical Regions

Published data for reed mat bedding is concentrated in 4 of the 5 general geographical regions included in this study (**Table 6.8**; **Figure 6.18**). Middle Egypt accounts for the greatest proportion of evidence, with 7 individuals reportedly subject to this aspect of Egyptian mortuary behaviour. Equal representations were observed for Lower and Upper Egypt (each with MNI 4). One example of this phenomenon was observed in the Nile Delta, while there were no observations of reed mat bedding amongst the published records of Dakhla Oasis.

#### 6.3.1.3 Nilotic Geographical Regions

When assembled according to Nilotic geographical distribution, the data congregates in 3 of the 5 regions canvassed by this study (**Table 6.9**; **Figure 6.19**). The West Bank predominates with 14 CIFs receiving reed mat bedding. This result eclipses the single

observations attributed to the Nile Delta and East Bank regions. As mentioned in §6.3.1.1, the Faiyum and Dakhla Oasis regions featured no published examples of reed mat bedding.

#### 6.3.1.4 Relative Chronology

A strong pattern of diminution is observed when the data is organised according to chronological parameters (**Table 6.10**; **Figure 6.20**). There is a preponderance of evidence in the Early Dynastic period, with 9 individuals reportedly embedded in reed matting at this time. This is closely followed by the Old Kingdom, with 6 individuals recorded as receiving similar funerary treatment. A substantial decrease is observed in recorded incidences pertaining to the First Intermediate Period, with this treatment reported for only 1 individual during this phase. Following this declining trend, there are no recorded examples of reed mat bedding amongst published Middle Kingdom data.

#### 6.3.1.5 Site Types

All 16 incidences of reed mat bedding for CIFBs are ascribed to cemetery contexts (**Table 6.11**; **Figure 4.21**). This aspect of ancient Egyptian mortuary behaviour was absent from all published accounts of CIF settlement, temple and funerary enclosure burials included in this study.

#### 6.3.1.6 Age Categories

Unfortunately, specific ages are unknown for the majority of CIFBs interred with reed mat bedding (MNI 10; **Table 6.12**; **Figure 4.22**). Of the known-age component of the sample, 4 Young Children and 2 Older Children were recorded as receiving this type of mortuary treatment. There was no published evidence to indicate that reed mat bedding was provided for any Infants or Foetuses amongst the sample.

### 6.3.2 Bedding in/on Textile Wadding/Padding

All 7 instances of textile wadding/padding used as bedding materials for CIFBs are located in cemetery contexts (**Tables 6.7–6.12**). Of these, 3 pertain to the West Bank of Lower Egypt, 2 to the West Bank of Middle Egypt, and singular observations derive from the published data of both the East Bank of Upper Egypt and Dakhla Oasis.

Two of the burials with textile wadding/padding as grave-bedding are dated to the Early Dynastic Period. The first, DRN 633, is that of a child of unspecified age from an intact

pit burial in Naga ed-Deir on the East Bank, Upper Egypt.[493] This child received 2 types of bedding in the form of textile wadding/padding and placement upon a wooden board. The burial was also furnished with a minimum of 4 grave goods: a red-polished ceramic vessel, 2 alabaster vessels, and an unspecified quantity of jewellery (carnelian and garnet beads).[494] The second, DRN 1135, is that of an infant interred in a wooden coffin alongside an adult individual of unknown sex.[495] This multiple burial was observed in a staircase tomb of unknown condition in Saqqara on the West Bank, Lower Egypt. The tomb featured a mudbrick wall and separate burial chamber on the East. Linen wadding was found directly underneath the coffin lid, on top of both bodies. It is not known if any grave goods were associated with this burial.

A further 2 burials may be dated to the Old Kingdom. Both are observed in the cemetery of Kafr Ammar, on the West Bank of Middle Egypt, in intact shaft graves with burial chambers on the West. The first, DRN 411, was of a child of unspecified age interred in a papyrus coffin with a linen pad placed over the body.[496] Grave goods may have been provided for this burial but unfortunately Petrie's handwriting regarding such details is illegible. The second, DRN 417, was also a child of unspecified age placed in a wooden coffin with a linen pad underneath the body.[497] The coffin is painted with 2 eyes on the Eastern side at the Northern end. The child was also provided with a headrest of unknown material.[498] The quality of Petrie's script obscures further information about this burial.

The only burial of the First Intermediate Period to feature textile wadding/padding as grave-bedding is from the site of Balat in the Dakhla Oasis region.[499] This foetus burial, DRN 882, was one of a number of pit burials of unknown condition adjacent to the Western wall of the mastaba of Ima-Pepi. The foetus had been placed within a ceramic vessel, the mouth of which had been broken to admit the body. A quantity of linen had been placed between the vessel wall and the foetus' body in an act of "protection".[500] No grave goods are thought to be associated with this burial.

[493] Reisner (1908: 86-87).
[494] See GGRNs 1221-1224.
[495] Quibell (1923: 11).
[496] Petrie (2000: sheet 236).
[497] Petrie (2000: sheet 236).
[498] See GGRN 747.
[499] Minault-Gout (1992: 52).
[500] Minault-Gout (1992: 52).

The final 2 burials within this category may be dated to the Middle Kingdom. Both were intact multiple-roomed subterranean tombs identified amongst the published data of Kafr Tarkhan on the West Bank, Lower Egypt. The first, DRN 1386, was of a young child in a multiple burial context with 3 adult females.[501] The child was buried in a box stuccoed inside and out and painted red. As well as containing the child's body, the box was packed with linen. It is possible that grave goods were also placed inside the box but Petrie's illegible handwriting obfuscates these details. The second Old Kingdom burial, DRN 1387, was of an infant in a multiple burial context with 2 adults: 1 female and 1 of unknown sex.[502] This infant's body was also placed in a box packed with linen, accompanied by 2 beads: 1 carnelian and 1 of unknown material.[503]

### 6.3.3 Bedding in/on Reeds

Of the 5 burials observed to feature reed bedding amongst the sample, 2 are dated to the Old Kingdom, while 3 pertain to the Middle Kingdom (**Tables 6.7–6.12**). Both Old Kingdom burials were located in cemetery contexts. The first, DRN 342, was the pit burial of a child of unspecified age in an unknown condition at the site of el-Ghurab on the West Bank of Middle Egypt.[504] This child was actually the recipient of 2 forms of bedding: reeds were placed underneath the body while reed matting was placed on top of the corpse. An unspecified quantity of coarse clothing constituted the child's mortuary assemblage.[505] The second Old Kingdom burial, DRN 503, was located amongst published data for the site of Mostagedda on the East Bank of Upper Egypt.[506] This was the 'unregistered' burial of a 12 year old child; the only description afforded by Brunton was that reeds had been placed on top of the body.

All 3 Middle Kingdom interments in this category were intact pit burials within the settlement of Elephantine, affiliated with the East Bank of Upper Egypt.[507] Each of these individuals, DRNs 104 (an infant), 106 (a young child) and 107 (an infant) received similar mortuary treatment: their bodies were all wrapped in textile (7 layers in the case of DRN 106) before being laid upon a bed of reeds, underneath which had been placed a layer of ash. Of the 3 burials, only DRN 106 is described as having associated grave goods

[501] Petrie (2000: sheet 17); Grajetzki (2004a: 47).
[502] Petrie (2000: sheet 17); Grajetzki (2004a: 47).
[503] See GGRN 2847.
[504] Brunton & Engelbach (1927: pl. iv).
[505] See GGRN 672.
[506] Brunton (1937: 96).
[507] von Pilgrim (1996).

(various faience, carnelian and bone beads, pendants and knotted cords),[508] while the grave of DRN 107 appears to have been covered and possibly marked with a large flat piece of sandstone and 2 grind-stones.[509]

### 6.3.4 Bedding in/on Ash

The placement of ash within graves has often been interpreted as an act of protection on behalf of those orchestrating burials, as ash is believed to have been used as an insecticide in ancient Egypt.[510] Of the 5 CIFs within this sample known to have been placed on a bed of ash (**Tables 6.7–6.12**), 3 have already been described in §6.3.3, above, due to the fact that their graves were also bedded with reeds. These three individuals, DRNs 104, 106 and 107, were all located within the Middle Kingdom settlement on Elephantine, affiliated with the East Bank of Upper Egypt.[511] The remaining 2 individuals were interred in pit burials of unknown condition in the Old Kingdom cemetery of el-Ghurab on the West Bank of Middle Egypt. Very little information is provided for the first individual, DRN 353, merely that it was a child of unspecified age placed on a layer of ash within its grave.[512] No grave goods were described for this burial. The second Old Kingdom burial, DRN 348, was that of a 1.5–2 year old child whose bodily treatment consisted of both wrapping in reed matting and placement upon a layer of ash.[513] No grave goods were attributed to this burial, either.

### 6.3.5 Bedding in/on Wooden Boards

A minimum of 4 individuals amongst the sample were provided with wooden boards as grave-bedding (**Tables 6.7–6.12**). All incidences of wooden board bedding were observed in pit burials within cemetery contexts. The burials of 3 individuals may be dated to the Early Dynastic Period, while the remaining burial occurred during the Old Kingdom. Each of the Early Dynastic burials were identified in different locations. The first, DRN 1300, was the intact burial of a 12 year old child at Saqqara on the West Bank of Lower Egypt, whose body was wrapped in reed matting as well as placed on a wooden board.[514] The child was also supplied with an array of grave goods: 3 ceramic cylinder vessels, 2

[508] See GGRN 305.
[509] von Pilgrim (1996: 91).
[510] Miller (1987: 14ff.). Ash has also been observed in pot burials across cultures during the Early Bronze Age; Bacvarov (2008b: 65).
[511] von Pilgrim (1996: 91); see fns. 507-509, above.
[512] Brunton & Engelbach (1927: pl. v).
[513] Brunton & Engelbach (1927: pl. v).
[514] Macramallah (1940: 44); Castillos (1976: i-xii); Kaiser (1985: 45-60).

alabaster bowls, 1 breccia bowl and a limestone dish.[515] The second, DRN 1322, was the disturbed burial of a child of unspecified age at the site of Kafr Tarkhan, also on the West Bank of Lower Egypt.[516] Placement on a wooden board was the only bodily treatment described for this child. The burial was also furnished with 4 ceramic vessels.[517] The final Early Dynastic burial, DRN 633, was the intact burial of a child of unspecified age at Naga ed-Deir on the East Bank of Upper Egypt. Details of this burial have already been described in §6.3.2, above, owing to the fact that this child's bedding consisted of textile wadding/padding as well as a wooden board.[518]

The Old Kingdom burial, DRN 362, was that of a child of unspecified age in el-Ghurab on the West Bank of Middle Egypt.[519] Apart from describing the provision of a wooden board as grave bedding, very little information is provided for this burial. No grave goods were associated with this interment.

### 6.3.6 Bedding in/on Sticks

While all 3 examples of stick bedding within the sample are attributed to cemetery contexts, incidences of this aspect of ancient Egyptian mortuary treatment are broadly chronologically dispersed (**Tables 6.7–6.12**).[520] Single individuals represent this phenomenon from Old Kingdom, First Intermediate Period and Middle Kingdom phases. The Old Kingdom example, DRN 349, was a pit burial of unknown condition belonging to a 9 year old child at el-Ghurab on the West Bank of Middle Egypt.[521] This individual was the recipient of 2 forms of bodily treatment: after being placed on a bed of sticks, their body was covered by a reed mat. No grave goods were recorded for this burial. The First Intermediate Period burial, DRN 261, was an intact shaft grave of a child of unspecified age at the site of Matmar on the East Bank of Upper Egypt.[522] This child had sticks placed on top of their body, and was also supplied with 2 faience amulets.[523] The Middle Kingdom burial, DRN 490, was also an intact shaft grave of a child of unspecified age on

[515] See GGRNs 2657-2661.
[516] Petrie *et al.* (1913: pl. lxiv).
[517] See GGRN 2694.
[518] See fns. 493-494, above.
[519] Brunton & Engelbach (1927: pl. vi).
[520] Here, the present study follows excavators' explicit descriptions of this bedding material. It is acknowledged that it may be difficult to differentiate between 'sticks' and 'reeds'.
[521] Brunton & Engelbach (1927: pl. v).
[522] Brunton (1948: pl. xxvi).
[523] See GGRN 553.

the East Bank of Upper Egypt, but on this occasion from the cemetery of el-Mostagedda.[524] This child also had sticks placed on top of their body and was provided with a mortuary assemblage consisting of 1 pot-marked globular ceramic vessel and an unspecified quantity of beads and amulets.[525]

### 6.3.7 Bedding in/on Sand

The 2 individuals described with sand-bedding are actually cohabitants of a multiple burial (**Tables 6.7–6.12**). Identified as an intact shaft grave from the Old Kingdom cemetery of Harageh on the West Bank of Middle Egypt, the burial consisted of 2 children (DRNs 860 and 861) of unknown age interred with an adolescent (14 years of age) in the same coffin, at the base of which was a layer of sand.[526] The wooden coffin had mitred joints and featured repair-work in the form of plastered superficial defects. On oval slate palette was recovered from inside the coffin.[527] A further 2 coffins were also interred in this shaft grave: one contained another 14 year-old adolescent; the other held the bodies of a 12 year old child and an infant.[528]

### 6.3.8 Bedding in/on Rope Matting

The only example of rope mat bedding amongst the sample was that of an infant (DRN 218) from the First Intermediate period cemetery of Matmar on the East Bank of Upper Egypt (**Tables 6.7–6.12**).[529] The only details available for this burial include a perfunctory description of the infant's mortuary treatment: rope matting was placed over the body before being covered with an inverted deep ceramic bowl. No grave goods are described for this burial.

### 6.3.9 Bedding in/on Straw

A single instance of straw bedding was identified amongst the sample, pertaining to the burial of a child of unspecified age in an intact shaft grave in the Old Kingdom cemetery of Qau el-Kebir on the East Bank of Upper Egypt.[530] This brick-built shaft grave featured a burial chamber with mud-plastered mud-brick walls and vaulted ceiling. As the sole

[524] Brunton (1937: 114, pl. lxx)
[525] See GGRNs 1062-1068.
[526] Engelbach (1923: 14); Grajetzki (2001: 58).
[527] See GGRN 1602.
[528] See DRNs 862-863.
[529] Brunton (1948: 38).
[530] Petrie (2000: sheet 12).

occupant of this well-constructed tomb, this child received a wooden coffin with straw bedding. The mortuary assemblage consisted of a ceramic wine jar.[531]

### 6.3.10 Bedding in/on Stone

The only reported incidence of stone bedding amongst the sample is derived from a mastaba tomb in the Old Kingdom cemetery of Abusir on the West Bank of Lower Egypt (**Tables 6.7–6.12**).[532] The mastaba featured a corridor chapel with plastered walls and beaten clay floors, both of which were also whitewashed. The chapel contained 2 double niches and a false door embedded into the Western wall. Seven shafts were identified within the mastaba substructure, containing the bodies of 1 adult male, 3 females, 1 adult of unknown sex, 1 child of 12–13 years of age and 1 infant.[533] In this case, the child's burial, DRN 389, is of interest, as it provides a unique example of a body being covered by a stone (limestone) plate. No other treatments or grave goods were described for this burial.

### 6.3.11 Bedding in/on Multiple Materials

In order to demonstrate the complexity and variability of bodily treatments associated with CIFBs, it is important to emphasise that 6 individuals amongst the sample were provided with bedding in/on more than 1 material. Each of these cases have been described above, including: the child who was bedded in textile and placed upon a wooden board in the Early Dynastic cemetery of Naga ed-Deir on the East Bank of Upper Egypt (DRN 633);[534] the child who was placed on a bed of reeds and then covered by a layer of reed matting in the Old Kingdom cemetery of el-Ghurab on the West Bank of Middle Egypt (DRN 342);[535] a child from the same cemetery and period, also placed on a bed of reeds but covered instead with a layer of sticks (DRN 349);[536] and the 3 individuals (2 infants and a child) who received both reed and ash bedding in their graves within the Middle Kingdom settlement of Elephantine, affiliated with the East Bank of Upper Egypt (DRNs 104, 106 and 107).[537]

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[531] See GGRN 2282.
[532] Bárta (2000: 125-127).
[533] For the infant burial, see DRN 390.
[534] See §§6.3.2, 6.3.5.
[535] See §§6.3.1, 6.3.3.
[536] See §§6.3.3, 6.3.6.
[537] See §§6.3.3, 6.3.4.

## 6.4 Bedding and Wrapping in Multiple Materials

To further highlight examples of mortuary variability within the sample, it should also be noted that several individuals received both bedding *and* wrapping in more than one material as part of their bodily treatment. These cases have each been described above, including: the child wrapped in reed matting and placed on a wooden board in the Early Dynastic cemetery of Saqqara on the West Bank of Lower Egypt (DRN 1300);[538] the child wrapped in reed matting and placed between layers of ash in the Old Kingdom cemetery of el-Ghurab on the West Bank of Middle Egypt (DRN 348);[539] and the oft-mentioned settlement burials of Elephantine, affiliated with the East Bank of Upper Egypt, who, in addition to the double-bedding of reeds and ash described above, were also wrapped in up to 7 layers of textile (DRNs 104, 106 and 107).[540]

## 6.5 Mummification

While scholars such as Jones are producing research which suggests that the first attempts to artificially preserve human bodies may have occurred as early as the Predynastic Period,[541] the Old Kingdom has long been acknowledged as the era when Egyptian mummification practices attained a level of recognisable success.[542] To be eligible for inclusion in this category, an excavator must have explicitly described an individual as being subject to mummification techniques. All 8 individuals amongst the sample complying with this description were located within cemetery contexts. However, for 1 of these individuals, DRN 122 from the Early Dynastic cemetery of Helwan on the East Bank of Lower Egypt, it is possible that use of the term "mummy" has been misappropriated. Here, one is inclined to interpret the reference to the child's body as a "mummy" as a misnomer assigned by a non-anthropologist rather than an accurate description of bodily treatment.[543] The 7 remaining published cases of child mummification are geographically restricted to the region of Upper Egypt.

The burials of 4 mummified individuals were dated to the Old Kingdom. Each were located in intact rock-cut tombs on the West Bank of Upper Egypt: 2 at el-Hagarsa and 2 at Qubbet el-Hawa. Both el-Hagarsa interments (DRNs 536 and 537) were identified within

538 See §§6.2.1, 6.3.5.
539 See §§6.2.1, 6.3.4.
540 See §§6.2.2, 6.3.3; 6.3.4; 6.3.11.
541 Jones (2002a; 2002b; 2007); *cf.* Ikram & Dodson (1998: 109).
542 Ikram & Dodson (1998: 109-110); Grajetzki (2003: 15).
543 Greiss (1955: 231).

a multiple burial context. Their rock-cut tomb featured a chapel, a sloping passage and 2 burial chambers, the first of which contained the burials of these children as well as 2 adult males and 2 adult females. The second burial chamber was empty. Each individual was furnished with their own wooden coffin. The first of the 2 children, DRN 536, was a 7 year old boy – the only individual amongst the sample for whom biological sex was determined via aDNA testing.[544] The young boy is described as tightly wrapped in a plain flax-fibre cloth of medium weave without seams or rolled edge. Dark-brown stains on the cloth have been attributed to either bodily and/or embalming fluids. His coffin was decorated on 1 side with black-painted *wadjet*-eyes.

The second child interred in this tomb, DRN 537, was 4 years old. Unfortunately, in this case, sex could not be determined. The body is described as having been tightly wrapped in fine-woven flax-fibre cloth, described as amongst the finest textile recorded in antiquity.[545] The fabric was seamed along the left side of the body and pulled together and stitched around the feet. Dark-brown stains were observed on 1 piece of cloth, again attributed to either bodily and/or embalming fluids. The child's coffin has been extensively decorated and inscribed for "the honoured one, Hefefi", including elaborate rendering of black and white *wadjet*-eyes. However, the excavator does not believe this coffin was intended for the child, stating that its placement was "erroneous",[546] attesting to the embalmers' state of "confusion"[547] surrounding this burial, causing them to make "mistakes".[548] Nuclear and mitochondrial aDNA-typing has determined that both these children were the offspring of 2 of the adult individuals also interred within the chamber: the adult male in coffin 3 (Hefefi II), and the adult female in coffin 2 (Khewit).[549]

As aforementioned, the remaining 2 mummified Old Kingdom burials were located in disturbed rock-cut tombs at the cemetery of Qubbet el-Hawa. The first individual, DRN 1257, was an 8–9 year old 'male' child observed in a multiple burial context with 7 adult males, 3 adult females and 1 other child of unknown sex.[550] The chapel of this multi-occupancy tomb featured a false door, and while many artefacts were recorded within close proximity of the bodies, the highly-disturbed context obscures direct associations with

[544] See §4.3, fn. 390; Kanawati (1993a: 56-62, 86; 1993b: 36-38).
[545] The thread count is recorded as 55 x 15-47 x 14 threads/cm, 0.13mm thick: Kanawati (1993a: 62-63).
[546] Kanawati (1993a: 86).
[547] Kanawati (1993b: 37).
[548] Kanawati (1993b: 37).
[549] Kanawati (1993a: 56-62, 86).
[550] Edel *et al.* (2008a: 1857). In light of the high level of disturbance, this may be a secondary burial context. For details regarding the second child identified within this context, see DRN 1258.

particular individuals. The 'male' child is described as having been fully mummified and wrapped in linen bandages. The second mummified Qubbet el-Hawa burial, DRN 1287, was a 6–7 year old 'male' child, described as fully mummified, wrapped in linen bandages, and interred in a multiple burial context with 7 adult males, 9 adult females, 2 'male' children and 1 child of unknown sex.[551] The chapel of this tomb was decorated with carved and painted relief and features a false door. As described for the previous burial, the highly-disturbed context renders individual associations with grave goods impossible.

The 3 mummified Middle Kingdom individuals all derive from pit burials of unknown condition at the cemetery of Abydos on the West Bank of Upper Egypt.[552] Very few details are available for these burials (DRNs 798, 801 and 802), however the excavators explicitly use the term "mummy" to describe the appearance of each of these children, as opposed to "body" or "skeleton" used elsewhere. The case for mummification is strengthened for DRN 801, whose grave goods include quantities of a substance thought to be natron.[553] Each of these individuals are described as children of unspecified age interred in surface graves in the sand. Only DRN 801 is observed with associated grave goods, including the (possible) natron described above, as well as a small faience pendant.[554]

## 6.6 Topical Applications

Five individuals amongst the sample were observed to have various substances applied to the surfaces of their bodies at or before the time of burial, including resin, plaster and stucco. Each case is described in detail, below.

Both incidences of topical resin application are attributed to disturbed rock-cut tombs in the Old Kingdom cemetery of Qubbet el-Hawa. Details of these individuals' burials are provided above (DRN 1257 and 1287) due to their status of being "fully mummified", including the topical application of resin.[555]

Two individuals are identified amongst the sample as having plaster applied to the surface of their bodies at the time of burial. Both incidences of this treatment are attributed to

[551] Edel *et al.* (2008a: 1938). In light of the high level of disturbance, this may be a secondary burial context. For details regarding the other children identified within this context, see DRNs 1288-1289.
[552] Naville *et al.* (1914: 25).
[553] See GGRN 1515.
[554] See GGRN 1514.
[555] See §6.5; Edel *et al.* (2008a: 1857, 1938).

multiple burial contexts in the Middle Kingdom cemetery of Kom el-Hisn in the Western Nile Delta.[556] The first, DRN 404, is the multiple burial of an adult male, female and a child, whom the excavator describes as "a man, his wife, and their child",[557] an assumption based only upon differing corpse sizes! Plaster has been topically applied over all three individuals subsequent to their placement within the grave.[558] The child's age is not specified, nor are any grave goods described with the burial. The second burial, DRN 405, is also a multiple burial: on this occasion, that of an adult female and 2 children.[559] The excavator again makes familial assumptions based upon mutual association within the grave, stating that this is the burial of a "mother and her two children".[560] In this case, only the adult female and 1 of the children were covered in a thin lining of plaster after being laid in the grave. No grave goods are attributed to this burial.

The only example of topical application of stucco identified amongst the sample, DRN 84, derives from an intact Middle Kingdom subterranean shaft tomb in the cemetery of el-Arabah on the West Bank of Upper Egypt.[561] Although the excavator identifies this as a multiple burial, it is not clear exactly how many individuals are interred in this tomb. Of the three children described in this context,[562] one was identified as a 'male' – perhaps due to a gendered assessment of 'his' bodily treatment and grave goods.[563] 'His' body was dressed with a layer of stucco and a plaster mask was placed before 'his' face.[564] 'He' was placed in a wooden coffin, the exterior of which was painted with a recti-linear pattern in blue, green and white. The coffin interior was also stuccoed. An array of grave goods were associated with this individual, including an unspecified quantity of beads,[565] 2 weights,[566] 1 bone spatula,[567] 1 slate spatula,[568] 1 gold disc,[569] and an unspecified quantity of kohl grains.[570]

556 Orel (2000); Hamada & Farid (1947: 204).
557 Hamada & Farid (1947: 204).
558 Hamada & Farid (1947: 204).
559 Hamada & Farid (1947: 204); Orel (2000). For details regarding the second child identified within this context, see DRN 406.
560 Hamada & Farid (1947: 204).
561 Garstang (1901: pl. ixv, 3).
562 See DRNs 82-83.
563 See §4.3.
564 See GGRN 266.
565 See GGRN 260.
566 See GGRN 261.
567 See GGRN 262.
568 See GGRN 263.
569 See GGRN 264.
570 See GGRN 265.

## 6.7 Coffins

To be eligible for inclusion in this category, an excavator must have explicitly described a child, infant or foetus' body as having been contained within a funerary receptacle (coffin) in its primary context prior to post-depositional intervention or decomposition. Despite Garstang's statement that "no coffin was ever made specially for a child",[571] 746 CIFs were reported to have received this aspect of bodily treatment. In total, 748 coffins were identified – 2 individuals were observed with 2 coffins each. Of the 748 receptacles identified amongst the sample, 338 were constructed from wood (45.19% total coffins; henceforth, *TCNs*), 329 were in the form of ceramic vessels (43.98% TCNs),[572] 32 were constructed from basketry (4.28% TCNs), there were 8 observations each of ceramic and mud coffins (each 1.07% TCNs), 5 coffins were made from reeds (0.67% TCNs), there were 2 observations each of brick and stone coffins (each 0.27% TCNs), and a single example of a stucco coffin (0.13% TCNs). The remaining 23 funerary containers were composed of unknown materials (3.07% TCNs; **Figure 6.23**). Of the 748 coffins within the sample, 67 were subject to superficial treatment; on 12 occasions, more than one treatment was observed. Results pertaining to coffin distribution by construction materials, employment of multiple coffins in burials, and incidence of superficial coffin treatment are elaborated below. Categories with ≥11 published examples are described as a group, while individual cases are described for categories of ≤10 published examples.

### 6.7.1 Wooden Coffins

As aforementioned, 338 CIFs amongst the sample were placed within wooden coffins as part of their mortuary treatment. Wooden coffins have been attested for adult burials from the Predynastic Period and continued in use throughout pharaonic history.[573] Incidences of children's wooden coffins may be further described according to manifestations within specific, general and Nilotic geographical regions, then by relative chronology, site type and age categories, below.

#### 6.7.1.1 Specific Geographical Regions

The majority of wooden coffins identified amongst the sample derive from the East Bank of Upper Egypt (**Table 6.13**; **Figure 6.24**). Here, a minimum of 194 CIFs reportedly

[571] Garstang (1907a: 82).
[572] Of these, 1 burial was within a ceramic vessel imported from Palestine; see DRN 1308.
[573] Castillos (1982a: 147, 175); Ikram & Dodson (1998: 193-195).

received this form of mortuary treatment; more than 3 times the published amount of the next most frequent region, the West Bank of Upper Egypt (MNI 54). Further to this, evidence for wooden coffins was published for 48 individuals on the West Bank of Middle Egypt (MNI 48), 21 individuals on the West Bank of Lower Egypt, and 10 individuals in the Dakhla Oasis region. Results for the remaining regions do not exceed single figures: 5 wooden coffins were identified amongst the published data of the East Bank of Lower Egypt, 3 were observed for the Faiyum; 2 were recorded for the Western Nile Delta, and 1 for the Eastern Nile Delta. No wooden coffins were published for CIFBs in the East Bank of Middle Egypt.

#### 6.7.1.2 General Geographical Regions

The above description is consolidated when the data is organised according to distribution in general geographical regions (**Table 6.14**; **Figure 6.25**). Again, Upper Egypt dominates with wooden coffins provided for a minimum of 248 CIFs. Substantially fewer examples were identified amongst the published records of Middle Egypt (MNI 51), Lower Egypt (MNI 26) and Dakhla Oasis regions (MNI 10). Three CIFs were reported to have been placed in wooden coffins in the Nile Delta.

#### 6.7.1.3 Nilotic Geographical Regions

When considered according to distribution in Nilotic geographical regions, the East Bank presents the most published examples of CIFBs in wooden coffins (MNI 199; **Table 6.15**; **Figure 6.26**). In this configuration, the only other region to approach the dominance of the East Bank is its geographical counterpart, the West Bank, with a minimum of 123 CIFs identified as receiving this form of mortuary treatment. Examples among the remaining regions are far fewer: 10 in Dakhla Oasis, and 3 each in the Nile Delta and Faiyum.

#### 6.7.1.4 Relative Chronology

A more balanced distribution is observed when considering frequencies of CIFBs with wooden coffins from a chronological perspective (**Table 6.16**; **Figure 6.27**). The fewest observations are attributed to the Early Dynastic Period, with a minimum of 21 wooden coffins recorded for this era. There is a surge of evidence for the employment of wooden coffins in the Old Kingdom, with 130 examples published for this phase. Slightly fewer examples were identified amongst the published data of the First Intermediate Period (MNI 93), almost exactly equal to results for the Middle Kingdom (MNI 94).

#### 6.7.1.5 Site Types

The preponderance of data for CIFBs in wooden coffins precipitates from the published records of cemeteries (**Table 6.17**; **Figure 6.28**). A minimum of 327 individuals are observed to have received this form of mortuary treatment in extra-mural funerary contexts. By contrast, a minimum of 11 wooden coffin burials were described for those CIFs interred in intra-mural spaces. No examples of this aspect of Egyptian mortuary treatment could be attributed to those individuals exhumed from temple or funerary enclosure contexts.

#### 6.7.1.6 Age Categories

Our reliance upon complete publication is keenly felt when considering distributions of wooden coffins amongst the various age categories within the sample (**Table 6.18**; **Figure 6.29**). Of the 338 CIFs known to have been provided with this form of funerary container, age is unspecified for 77.51% of individuals (MNI 262) – a substantial lost opportunity for furthering understanding of ancient Egyptian mortuary behaviour across the demographic range. Nevertheless, amongst the known-age individuals in the sample, almost equal representations of wooden coffins were observed between the Infant (MNI 29) and Older Child categories (MNI 28). Young Children were also comparatively well-represented, with a minimum of 18 individuals reportedly placed in wooden funerary containers. A wooden coffin was identified for 1 Foetus within the dataset.

### 6.7.2 Ceramic Vessel Coffins (Pot Burials)

As aforementioned, 329 CIFs amongst the sample were placed within ceramic vessels as part of their mortuary treatment. Pot burials are known to have commenced for adults from the Predynastic Period,[574] although the full extent of their attestation in Egypt is the subject of some debate. To be eligible for inclusion in this category, children must have been interred within the ceramic vessel as a primary context, not as a secondary burial.[575] Incidences of so-called "pot burials" may be further described according to manifestations within specific, general and Nilotic geographical regions, then by relative chronology, site type and age categories, below.

[574] Ikram & Dodson (1998: 194-195).
[575] Bacvarov (2008b: 61)

#### 6.7.2.1 Specific Geographical Regions

According to published data, the greatest incidence of CIF pot burials took place in the Western Nile Delta (**Table 6.13**; **Figure 6.30**). Here, a minimum of 121 CIFs were placed within ceramic vessels at or before the time of burial. The next most frequent occurrence of pot burials was attributed to the East Bank of Upper Egypt (MNI 75). The East Bank of Lower Egypt (MNI 47), West Bank of Upper Egypt (MNI 38), and Eastern Nile Delta (MNI 31) are the only other regions to present double-figure incidences of this phenomenon amongst their published data. Of the remaining regions, the West Bank of Middle Egypt featured a minimum of 8 interments in ceramic vessels, 7 examples were identified for Dakhla Oasis, while the West Bank of Lower Egypt featured 2 CIFBs in ceramic vessels. No incidences of pot burials were reported for the East Bank of Middle Egypt and Faiyum regions.

#### 6.7.2.2 General Geographical Regions

When viewed according to distribution in general geographical regions, concentrations of data appear in the Northern and Southern-most aspects of the country (**Table 6.14**; **Figure 6.31**). The Nile Delta holds the greatest proportion of evidence, with a minimum of 152 CIF pot burials published for this region. This is followed by results for Upper Egypt, with a minimum of 113 individuals reportedly interred in this way. Lower Egypt presents substantially fewer examples, with 49 individuals subject to this mode of burial. Representations of pot burials are almost equal amongst the published records of Middle Egypt and Dakhla Oasis, with these regions featuring a minimum of 8 and 7 examples, respectively.

#### 6.7.2.3 Nilotic Geographical Regions

When organised to reflect Egypt's Nilotic geography, 2 regions dominate data distribution (**Table 6.15**; **Figure 6.32**). With 152 examples, the Nile Delta continues to hold the most published CIF pot burials amongst the sample. In this configuration, however, the gap between the Nile Delta and next most numerous region narrows significantly, with the East Bank presenting 122 incidences of pot burials amongst its published data. There is then a considerable decline in observations, with the next most numerous region, the West Bank, accounting for 48 examples of the phenomenon. Results then diminish to 7 incidences in Dakhla Oasis; and there were no observations of pot burials attributed to the Faiyum.

#### 6.7.2.4 Relative Chronology

According to published data, a minimum of 128 CIFs were interred in ceramic vessels during the Early Dynastic Period (**Table 6.16**; **Figure 6.33**). The number of published incidences then falls to 65 in the Old Kingdom, and further still to 8 examples in the First Intermediate Period. Coincidentally, the number of reported Middle Kingdom CIF pot burials then increases to equal the number observed during the Early Dynastic Period (MNI 128).

#### 6.7.2.5 Site Types

The overwhelming majority of CIF pot burials were observed amongst published cemetery data: 99.39% of all examples precipitated from such contexts (MNI 327; **Table 6.17**; **Figure 6.34**). Only 2 pot burials were identified amongst settlement sites, while no examples were attributed to temple or funerary enclosure contexts.

#### 6.7.2.6 Age Categories

As was the case for burials in wooden coffins, specific ages were not published for the majority of CIFs interred in ceramic vessels. Here, demographic data has been lost for 80.85% of the individuals subject to this quintessential aspect of ancient Egyptian mortuary behaviour (MNI 266; **Table 6.18**; **Figure 6.35**). Notwithstanding this loss, we are able to determine that Infants were most frequently interred in ceramic vessels amongst the known-age component of the sample (MNI 29), followed closely by Young Children (MNI 20). Eleven Foetuses reportedly received this form of funerary treatment, as did 3 Older Children within the dataset.

### 6.7.3 Basketry Coffins

As aforementioned, 32 CIFs among the sample were placed within basketry coffins as part of their mortuary treatment. Adults are known to have been buried in baskets from the Predynastic and Early Dynastic Periods.[576] Incidences of children's basketry coffins may be further described according to manifestations within specific, general and Nilotic geographical regions, then by relative chronology, site type and age categories, below.

[576] Ikram & Dodson (1998: 194-195).

#### 6.7.3.1 Specific Geographical Regions

Tabular and graphical representations of basketry coffin distributions in specific geographical regions are shown in **Table 6.13** and **Figure 6.36**. Here, it can be seen that several sites have similar incidences of this form of funerary container amongst their published data, including the West Bank of Middle Egypt (MNI 9), East Bank of Lower Egypt (MNI 8), and West Bank of Lower Egypt (MNI 7). Slightly fewer examples were observed for the East Bank of Upper Egypt (MNI 4) and West Bank of Upper Egypt regions (MNI 3). A single basketry coffin was reported in the Faiyum, while the Western Nile Delta, Eastern Nile Delta, East Bank of Middle Egypt and Dakhla Oasis regions presented no examples of this phenomenon. Absence of basketry coffins from the Delta regions may be attributed, at least in part, to decay in the damp preservation environment.

#### 6.7.3.2 General Geographical Regions

When viewed according to frequency distributions in general geographical regions, a data cluster is again observed at the upper-end of the scale (**Table 6.14**; **Figure 6.37**). In this configuration, a minimum of 15 basketry coffins were attributed to CIFBs in Lower Egyptian sites, 10 in Middle Egypt and 7 in Upper Egyptian contexts. Basketry coffin incidence then falls to zero amongst the published data of the Nile Delta and Dakhla Oasis regions.

#### 6.7.3.3 Nilotic Geographical Regions

When organised according to Nilotic geographical regions (**Table 6.15**; **Figure 6.38**), the Eastern and Western Banks account for the preponderance of CIF basketry burials, with 19 and 12 examples identified for each of these regions, respectively. Further to this, results substantially decrease to a singular observation amongst the published data of the Faiyum. Child, infant and foetal basketry burials are absent from the Nile Delta and Dakhla Oasis regions.

#### 6.7.3.4 Relative Chronology

The Early Dynastic period clearly predominates when the data is distributed according to relative chronology (**Table 6.16**; **Figure 6.39**). During this phase, we are able to account for 18 CIFBs in basketry coffins: this is more than twice the amount identified amongst

published data for the Old Kingdom (MNI 8). The Middle Kingdom presents 5 examples of this phenomenon, while only 1 instance was observed for the First Intermediate Period.

#### 6.7.3.5 Site Types

In terms of distribution among different site types, incidences of CIF basketry burials were almost exclusively restricted to cemeteries (**Table 6.17**; **Figure 6.40**). Apart from 2 examples of this mode of burial in settlement contexts, the remaining 30 observations were identified amongst published cemetery records. No examples of basketry burials were observed amongst temple or funerary enclosure contexts.

#### 6.7.3.6 Age Categories

When considering the incidence of basketry burials across the juvenile population, our understanding of ancient Egyptian mortuary behaviour is limited by incomplete publication. Here again, the ages of the majority of occupants of basketry coffins have not been specified (MNI 19; **Table 6.18**; **Figure 6.41**). Nevertheless, 11 Infants were able to be identified as recipients of this form of funerary container, as were 2 other Young Children amongst the sample. No examples of Foetal or Older Child basketry interments were observed.

### 6.7.4 Ceramic Coffins

Ceramic coffins are attested in Egypt for adults from the Predynastic Period onwards, taking many shapes and forms during their employment throughout the pharaonic period.[577] All 8 examples of CIFBs in ceramic coffins amongst the sample were located in cemetery contexts. Of these, 5 were of an Early Dynastic provenance, 2 were from the Old Kingdom, and the remaining instance was dated to the First Intermediate Period. In terms of the Early Dynastic examples, 2 were observed amongst the published data of Tura on the East Bank, Lower Egypt; 1 was noted for Kafr Tarkhan on the West Bank, Lower Egypt; while singular incidences of ceramic coffins were reported amongst the published records of both el-Amra and Hierakonpolis on the West Bank, Upper Egypt.

The el-Amra ceramic coffin was one component of the mortuary treatment of a "rather young female"[578] and an infant in an intact, mud-brick lined pit burial (DRN 307) on the West Bank of Upper Egypt. Both individuals were interred within the ceramic coffin,

[577] Castillos (1982a: 147, 175); Ikram & Dodson (1998: 195, 227, 233).
[578] Randall-Maciver & Mace (1902: 27).

which was subsequently roofed with bricks. No other information is available regarding the infant's interment, and all grave goods within this multiple burial context were clearly associated with the older female.

Both individuals observed with ceramic coffins at Tura were children of unspecified age in disturbed pit burials (DRNs 564 and 565) on the East Bank of Lower Egypt.[579] While no further information is available for their bodily treatment, both are reported to have associated grave goods. For the first individual, DRN 564, a single ceramic vessel was recorded.[580] The second individual's burial, DRN 565, also contained a ceramic vessel, and an unspecified quantity of ceramic sherds was noted amongst the funerary assemblage.[581]

The ceramic coffin observed in DRN 1134 is derived from one of the most remarkable child burials amongst the sample. Located in the Early Dynastic cemetery of Hierakonpolis on the West Bank of Upper Egypt,[582] this burial of a 10–12 year old child in a 34.20m² pit-tomb features a unique funerary assemblage of at least 319 objects. On this occasion, the ceramic coffin is of interest. Made of straw-tempered pottery, the coffin measures 37.60 x 25.50cm and features a rudimentary window or door, causing the excavator to speculate that it may be modelling the features of a house.[583]

The final Early Dynastic example, DRN 1320, was on a somewhat smaller scale. Observed amongst the published data of Kafr Tarkhan on the West Bank of Lower Egypt, this oval ceramic coffin was located in the multiple burial of 2 adult individuals of unknown sex and a child of unspecified age.[584] The child was interred within the ceramic coffin in the South-Eastern corner of this disturbed shaft grave. A shared funerary assemblage including 20 ceramic vessels (some featuring potmarks) and 10 stone vessels was provided for the trio.[585]

The two examples of Old Kingdom ceramic coffins were each observed in quite different contexts. The first, DRN 648, was derived from the shaft burial of a child of unspecified age within a small, gravel-filled mastaba tomb of unknown condition at Naga ed-Deir on

[579] Junker (1912: Table, 62ff.).
[580] See GGRN 1154.
[581] See GGRNs 1155-1156.
[582] Adams (2000: 26-27, 75-128, 162, 182-183).
[583] Adams (2000: 115).
[584] Petrie *et al.* (1913: 13, 26, pls. lxxiii, lxviii).
[585] See GGRN 2691-2692; see §9.1.1 for further discussion of 'shared' funerary assemblages.

the East Bank of Upper Egypt.[586] The mastaba is described as having "niches on the East side".[587] This brief architectural description and an account of the child's burial in an oval cist of red pottery were the only details available for this burial. No grave goods were described. The second Old Kingdom example, DRN 870, was located in the shaft burial (of unknown condition) of a child (of unspecified age) from the cemetery of Harageh on the West Bank of Middle Egypt.[588] Apart from the description of the child's ceramic funerary container, very few details are available for this burial. No objects were listed for this grave.

The only First Intermediate Period ceramic coffin amongst the sample was also identified within the published records of Harageh. This burial, DRN 868, was that of a child of unspecified age interred within a ceramic coffin in an intact shaft grave.[589] No graves goods were described for this burial.

### 6.7.5 Mud Coffins

Mud coffins were first attested for adult burials during the Early Dynastic Period.[590] All 8 examples of mud coffins identified amongst the dataset are derived from Early Dynastic cemetery contexts. A single example from Helwan is the only representation of this phenomenon from the East Bank of Lower Egypt. The remaining 7 mud coffins all pertain to Upper Egypt: 5 to Adaima on the West Bank, and 2 to Naga ed-Deir on the East Bank. The Helwan burial, DRN 1438, was located within the pit burial of unknown condition of a 9–10 year old child.[591] No other details are available for this burial at this time.

Both examples from Naga ed-Deir were observed in intact pit burials of children of unspecified age. The first, DRN 631, contained a mud coffin measuring approximately 65.00 x 30.00 x 15.00cm, with walls 2.00cm thick and rounded ends.[592] In addition to this coffin, the child was also furnished with an array of grave goods, including 2 necklaces of faience, carnelian and steatite beads, 1 alabaster cylinder jar, 1 globular ceramic vessel and 1 wooden cylinder seal.[593] The second example, DRN 632, featured a slightly larger mud

586 Reisner (1932: 225).
587 Reisner (1932: 225).
588 Petrie (2000: sheet 7).
589 Engelbach (1923: pl. lvii).
590 At Adaima, at least 3 adults have been observed with mud coffins: S980, S983 and S985; Dr. Yann Tristant, Macquarie University, *pers. comm.*; *cf.* Reisner (1908: 85-86); Petrie *et al.* (1913: 26).
591 Prof. E. C. Köhler, University of Vienna, *pers. comm.*
592 Reisner (1908: 86).
593 See GGRNs 1216-1220.

coffin; its dimensions were approximately 80.00 x 56.00 x 20.00cm, with walls 2.00cm thick.[594] No grave goods were associated with this burial.

Fortunately, detailed demographic data was available for each of the mud coffin burials at Adaima. The first 3 burials, DRNs 749–751, were 3 children interred together in a pit burial of unknown condition.[595] Partially-fired mud coffins were associated with each of the bodies of these 2, 5 and 8 year old children. Beyond these details, very little is known about this burial. The next example, DRN 714, was the pit burial of questionable condition of a 3.5 year old child.[596] In this case, the coffin walls appear to have collapsed, causing the excavator to speculate that it may have been made *in situ*.[597] The coffin also featured a lid. This child's funerary assemblage consisted of a bone bangle, a ceramic dish, a pierced shell, a piece of charcoal, and 2 (possibly intrusive) ceramic sherds.[598] The final Adaima example, DRN 716, was the intact pit burial of a 12–15 year old child.[599] This child has already been introduced within this thesis, owing to the peri-mortem trauma observed on their upper right arm.[600] In terms of the mud coffin, the excavator argues that it was also probably made *in situ*, and may have originally featured a covering of reed matting.

### 6.7.6 Reed Coffins

Each of the 5 reed coffins identified within the sample were derived from cemetery contexts.[601] Of these, 3 are attributed to the Early Dynastic Period, 1 to the Old Kingdom and 1 to the First Intermediate Period. All 3 Early Dynastic examples were observed in pit burials of children of unspecified age from the site of Kafr Tarkhan on the West Bank of Lower Egypt. In addition to the reed coffin, the first Kafr Tarkhan burial, DRN 1324, was also provided with a stone bowl.[602] The second burial, DRN 1326, had the same funerary container but additional grave goods: this individual was provided with 3 ceramic vessels,

594 Reisner (1908: 86).
595 Grimal (1999: 454).
596 Crubézy *et al.* (2002a: 377-378).
597 Crubézy *et al.* (2008: 306).
598 See GGRNs 1400-1405.
599 Crubézy *et al.* (2002a: 392-394).
600 See Tables 4.6–4.7; §§4.4.2–4.4.4.
601 Here, the present study follows excavators' explicit descriptions of 'reed coffins'. It is acknowledged that it may be difficult to distinguish between reed coffins and reed mat wrapping/bedding.
602 Petrie *et al.* (1913: pl. lxvi); Petrie (2000: sheet 16); see GGRN 2697. This burial was in a disturbed condition.

1 barrel-shaped stone vessel, and 1 quartzite grinder.[603] The final Kafr Tarkhan reed coffin burial, DRN 1328, was furnished with 3 ceramic vessels.[604]

The Old Kingdom example, DRN 411, was located in the intact burial of a child of unspecified age in a shaft-and-chamber tomb at Kafr Ammar on the West Bank of Middle Egypt.[605] This burial has already been described in §6.3.2, owing to the fact that it also received textile padding as part of its mortuary treatment. The padding was placed inside the "papyrus"[606] coffin, on top of the body. As aforementioned, further details are unable to be determined regarding this burial due to the illegibility of Petrie's script.

The First Intermediate Period reed coffin pertains to DRN 252, an intact shaft grave located at Matmar on the East Bank of Upper Egypt.[607] This child of unspecified age was also provided with an unspecified quantity of beads amongst their funerary assemblage, as well as 12 amulets.[608]

### 6.7.7 Brick Coffins

Both examples of brick coffins amongst the sample derive from cemetery contexts. One burial was dated to the First Intermediate Period, the other to the Middle Kingdom. Brick coffins have also been reported for adults during these periods.[609] The First Intermediate Period burial, DRN 1061, was that of a child of unspecified age in a shaft grave of unknown condition in Qau el-Kebir on the East Bank of Upper Egypt.[610] Very few details were provided for this burial, however we do know that the coffin was constructed of bricks in a 12 x 6 x 3 configuration, and that a string of black faience and shell beads was included in the assemblage.[611] In terms of the Middle Kingdom example, DRN 608, the minimal published data of this burial from Ehnasya el-Medina on the West Bank of Middle Egypt only allows us to determine that the individual within the brick coffin was an infant.[612] No grave goods were described for this interment.

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603 Petrie *et al.* (1913: pl. lxviii); Petrie (2000: sheet 18); see GGRNs 2700-2701, 2705. This burial was in a disturbed condition.
604 Petrie (1914: pl. xxxii); Petrie (2000: sheet 18); see GGRN 2704.
605 Petrie (2000: sheet 236).
606 Here, the present study interprets Petrie's description as being a coffin made from papyrus reeds.
607 Brunton (1948: pl. xxvi).
608 See GGRNs 519-522.
609 Grajetzki (2003: 52).
610 Brunton (1928: pl. lxv).
611 See GGRN 2139.
612 Petrie (1905: 4).

### 6.7.8 Stone Coffins

Stone coffins, also known as sarcophagi, were introduced at the beginning of the Old Kingdom for adult royal and high-official burials.[613] The Middle Kingdom cemetery of Tura, on the East Bank of Lower Egypt, provides the context for the only example of a stone coffin among the sample. In fact, this coffin housed the remains of 2 children, DRNs 527 and 528, both children of an unspecified age interred in a multiple burial with an adult male and female in a disturbed multiple-roomed subterranean shaft tomb.[614] Both children were interred in the Northern chamber within this limestone sarcophagus alongside the adult male. The dimensions of the limestone sarcophagus are recorded as 175.00 x 30.00 x 145.00cm, with walls 5cm thick. The burial chamber, which was partially blocked with a mud-brick wall, also housed the burial of the adult female in a separate wooden coffin. Possibly due to the disturbed context, the grave goods listed for this burial cannot be directly associated with any individuals. Therefore, they are not listed here.

### 6.7.9 Stucco Coffins

The only stucco coffin within the sample was identified amongst the published data of the late Old Kingdom/early First Intermediate Period cemetery of Qila ed-Daba in Dakhla Oasis.[615] This interment, DRN 142, was a surface pit burial of unknown condition in the Southern Cemetery, located among the tombs surrounding the Ima-Pepi mastaba.[616] Here, a small, rectangular stucco box contained the bodily remains of a foetus. No other details are available for this burial.

### 6.7.10 Burial in Multiple Coffins

As outlined in §6.7, above, 2 individuals amongst the sample were interred within multiple coffins. The first, DRN 365, was an infant buried in a pit grave of unknown condition in the Old Kingdom cemetery of el-Ghurab on the West Bank of Middle Egypt.[617] The infant's body had first been contained within a basketry coffin, which had then been placed inside a ceramic vessel. No grave goods are described for this burial. The second

[613] Ikram & Dodson (1998: 245); Grajetzki (2003: 35).
[614] Yacoub (1988: 201-202).
[615] For the purposes of this study, this burial has been included with the First Intermediate Period component of the dataset; see §3.3, fn. 324. Here, the present study follows the excavator's explicit description that the coffin was constructed from "stucco". It is acknowledged that stucco is generally a plaster that is applied to the surface of another base material.
[616] Minault-Gout (1995: 305).
[617] Brunton & Engelbach (1927: pl. vi).

example, DRN 752, was also a pit burial of unknown condition of a child of unspecified age at Adaima on the West Bank of Upper Egypt.[618] The child had also been placed within a basketry coffin at or before the time of burial, and subsequently placed within a ceramic vessel which was sealed with both reed matting and a lid. Few other details are available for this burial and no grave goods are described.

### 6.7.11 Coffin Treatments

Sixty-seven of the coffins within the sample were themselves subject to superficial treatment (**Figure 6.42**); on 12 occasions, more than one treatment was observed, creating a total of 80 treatments overall.[619] Superficial application of cartonnage/stucco was observed on 54 occasions,[620] inscription with text or symbols was observed on 17 occasions,[621] painting of outer and/or inner surfaces was observed on 8 occasions,[622] and 1 coffin was covered with resin.[623]

## 6.8 Multiple Treatments: Wrapping, Bedding and/or Coffins

Within the sample, 42 CIFs were subject to more than one bodily treatment at or before the time of burial. Considering that many of these individuals have already been described above, a summary of the incidences of multiple bodily treatments will suffice:

- Of the 29 CIFs who were wrapped in textile, 20 individuals (68.97%) received multiple treatments: 12 were also placed within a wooden coffin,[624] 3 were placed in basketry coffins,[625] 3 were placed on double beds of reeds and ash,[626] and 2 were placed in ceramic vessels.[627]
- Of the 46 CIFs who were wrapped in reed matting, 7 individuals (15.22%) received multiple treatments: 3 were also placed in wooden coffins,[628] 2 were placed in ceramic vessels,[629] and 2 were placed in basketry coffins.[630]

618 Mathieu (2002: 454).
619 See DRNs 42, 43, 49, 84, 365, 954, 965, 1139, 1140, 1386, 1397, 1427.
620 See DRNs 43, 49, 60, 70, 84, 109, 110, 309, 424, 539, 603, 614, 615, 660, 669-672, 871, 874, 915, 954, 957, 963, 965, 967, 1009, 1012-1014, 1016, 1018, 1020, 1032, 1043, 1049, 1051, 1052, 1056, 1065, 1071, 1073, 1123, 1134, 1139, 1140, 1142, 1144, 1146, 1195, 1386, 1387, 1397, 1427.
621 See DRNs 42, 49, 50, 52, 60, 537, 709, 710, 713, 990, 1397, 1427.
622 See DRNs 42, 43, 954, 965, 1139, 1140, 1386, 1397.
623 See DRN 42.
624 See DRNs 49, 54, 84, 215, 536, 537, 540, 544, 786, 1141, 1142, 1144.
625 See DRNs 542, 546, 651.
626 See DRNs 104, 106, 107.
627 See DRNs 881, 941.
628 See DRNs 541, 545, 1427.
629 See DRNs 343, 712.

- Of the 7 CIFs who received textile wadding/padding as bedding, 6 individuals (85.71%) received multiple treatments: 4 were also placed in wooden coffins,[631] 1 was placed in a ceramic vessel,[632] and 1 was placed in a reed coffin.[633]
- Of the 16 CIFs who received reed mat bedding, 4 individuals (25.00%) received multiple treatments: 3 were placed in ceramic vessels,[634] and 1 was placed in a coffin of unknown material.[635]
- Of the 2 CIFs who received sand-bedding, both received multiple treatment (100.00%): they were also interred in a wooden coffin.[636]
- Of the 2 CIFs who were wrapped in animal skin, 1 individual (50.00%) received multiple treatment: this child was also wrapped in textile beneath the animal skin, and then wholly placed inside a ceramic vessel.[637]
- The single individual to receive rope mat bedding received multiple treatment: this infant was also placed in a ceramic vessel.[638]
- The single individual to receive straw-bedding received multiple treatment: this child was also placed in a wooden coffin.[639]
- The single individual to be wrapped in a gold-sheet received multiple treatment: this child was also placed in a wooden coffin.[640]

## 6.9 Summary

This chapter has articulated the nature and scope of CIF bodily treatments during the Egyptian Early Dynastic to Middle Kingdom periods. The data was derived from the survey of all available publications containing archaeological information pertaining to these cultural phases, supplemented by unpublished material from the ACE Helwan Project. Observations of corporeal engagement for children include the provision of wrapping, bedding and coffins; as well as the application of mummification techniques and other topical treatments. Multiple bodily treatments were often observed.

630 See DRNs 543, 547.
631 See DRNs 437, 1135, 1386, 1387.
632 See DRN 882.
633 See DRN 411.
634 See DRNs 358, 708, 717.
635 See DRN 162.
636 See DRNs 860, 861.
637 See DRN 1091.
638 See DRN 218.
639 See DRN 1098.
640 See DRN 1389.

Perhaps the most striking finding of this chapter is that the variety of bodily treatments attested among CIF mortuary culture equals and potentially exceeds that described in contemporary adult burials. Within each of the numerous treatment categories identified in the sample, a diverse array of material culture was engaged to ensure the eternal protection, containment and preservation of children's bodies within their graves. In terms of wrapping: reed mats, textiles, animal skins, rope mats, gold sheet and unknown materials were variably employed, in isolation or combination, to envelop all age groups in both intra- and extra-mural interments in all periods, across all general and Nilotic regions included in the survey. All wrapping types were observed in cemetery contexts, while only reed mat and textile wrapping were identified in published settlement burials. The findings of CIFs wrapped in animal skins and gold sheeting are of particular note, as they expand our current understandings regarding the nature and scope of Egyptian mortuary behaviour *per se*. Concerning bedding: reed mats, textile wads/pads, reeds, ash, wooden boards, sticks, sand, rope mats, straw and stone were variably attested, in isolation or combination, to embed all age groups in both intra- and extra-mural interments in all periods, across all general and Nilotic regions within the dataset with the exception of the Faiyum. All bedding types were observed in cemetery contexts, while only reed and ash bedding were identified in published settlement burials.

Seven reliable cases of juvenile mummification were identified amongst published materials from Old and Middle Kingdom cemetery contexts on the West Bank of Upper Egypt: specifically, el-Hagarsa, Qubbet el-Hawa and Abydos. The attested age range for this form of bodily treatment spans from 4–9 years. The youngest individual among this group was mummified and wrapped in some of the finest textile recorded in antiquity. These findings suggest that CIFs were equally as eligible to receive the most expensive and technologically advanced forms of posthumous corporeal intervention as adults.

Although topical applications to CIF bodies were infrequently observed, their sheer presence among published literature nonetheless indicates that they were employed for juvenile bodily treatments during the timeframes canvassed by this research. Resin, plaster and stucco were applied to children's bodies in the Old to Middle Kingdom cemeteries of Qubbet el-Hawa and el-Arabah on the West Bank of Upper Egypt, and Kom el-Hisn in the Western Nile Delta. Mummification and topical application were the only bodily treatment categories not identified in published settlement burials.

Coffin provision was commonly observed among the dataset with receptacles of wood, ceramic vessels (pot burials), basketry, ceramics, mud, reeds, brick, stone and stucco variably attested to contain all age groups in both intra- and extra-mural interments in all periods, across all general and Nilotic regions included in the survey. Every coffin type was observed in cemetery contexts, while only wooden, ceramic vessel and basketry coffins were observed in published settlement burials. The range of coffin styles and materials employed for CIFBs echoes those described for contemporary adult interments. Furthermore, the application of one or more superficial treatments, in isolation or combination, including cartonnage/stucco, textual inscriptions, paint and resin indicates that children's coffins were as much a forum for cultural, religious, artistic and socio-economic expression as they were for the older members of the community.

Further insights into these modes of expression may be gleaned from the observations of multiple treatments afforded to CIFs bodies. Manifold combinations and variations of all categories and materials described above were employed by those responsible for orchestrating juvenile burials during the timeframes relevant to this research. Even under the obvious burdens of under-reporting and poor publication, the results presented here indicate that children's bodies were endowed with complete cultural capacity in life, expressed and invested via their treatment in death. The qualitative implications of these findings for the position, value and agency of ancient Egyptian children will be more fulsomely explored in Chapter 10.

# CHAPTER 7: TOMB ARCHITECTURE

Data derived from analyses of funerary architecture provides valuable information regarding the cultural capacities of tomb occupants. With the possible exceptions of disaster, conflict, criminal and epidemic contexts, it is agreed that the nature and scope of funerary structures are indicative of the deceased's social, economic, religious and political capabilities.[641] Alternatively, these same features may express similar capacities held by those carrying out the burial.[642] Of greatest interest to this thesis is how such expressions may be mobilised to inform our reconstructions of the social position, value and agency of deceased children, infants and foetuses in ancient Egypt. Further to this, observations of horizontal and vertical variability across demographic profiles may reveal whether or not access to certain forms of burial architecture was restricted to particular individuals or groups. With these factors in mind, data derived from the archaeological survey described in §1.4.4 was analysed in order to determine the nature and scope of child, infant and foetal tomb architecture during the Early Dynastic to Middle Kingdom periods, including tomb superstructures, substructures, size and decorative/religious features. In adherence with the project structure outlined in §1.6, results of this research and its respective theoretical considerations are presented below. Qualitative analyses will be explored in Chapter 10.

## 7.1 Overview

Eligibility for inclusion in this analysis was determined by excavators' explicit descriptions of tomb structures, as well as the unequivocal identification of child, infant or foetal interments within the confines of the tomb. For the purposes of this study, tomb architecture was determined to consist of 2 essential components: superstructure (all architectural features at or above surface level) and substructure (all architectural features below surface level).

It is not claimed that all funerary monuments featured in this survey were purpose-built explicitly for juvenile burials. A significant component of Chapter 8 is devoted to exploring the nature and scope of shared funerary spaces between children, infants, foetuses and other individuals. The key interest of the present chapter is to explore what

[641] Richards (1997: 37); Fahlander & Oestigaard (2008: 9).
[642] Crawford (2000: 173).

the archaeological record reveals about children's' access[643] to all forms of funerary architecture. It must be acknowledged that the majority of monumental royal and private funerary architectural designs purposefully catered for the burial of additional family/community members via the provision of multiple burial shafts and/or chambers.[644] Kanawati interprets these features as architectural expressions of filial affection, citing the Old Kingdom case of Wep-em-Nofret, who wrote a will (the first of its kind in Egypt) explicitly stating his desire for his son, Iby, to also be buried in his tomb.[645] Kanawati further cites the intergenerational, interconnected funerary constructions of Hepi-kem the Black (grandfather), Sobekhotep (Hepi the Black, father), and Pepi-ankh the Black (son) in the Old Kingdom rock-cut necropolis of Meir on the West Bank of Middle Egypt as archaeological evidence of the desire for relatives to be physically close to one another posthumously.[646] Kanawati also relays the biography of Djau in his Old Kingdom tomb at Deir el-Gebrawi on the East Bank of Middle Egypt, in which Djau states that:

> "he arranged to be buried in one tomb with his father not because of the lack of means to build a second tomb but out of the love to be with him in one place so that he could see his father every day."[647]

Indeed, the desire that their tombs should benefit more than one person (and indeed, more than just their family members) is articulated by Khnumhotep II in his Middle Kingdom tomb inscription at Beni Hasan on the East Bank of Middle Egypt:[648]

> "[Khnumhotep's] first deed consisted of making his township effective, as he caused his name to endure for eternity and made it effective forever in his tomb in the cemetery (as well as) making the name(s) of his council endure, they (likewise) being made effective to their offices, (namely) the efficient ones

[643] Richards (1992: 286).

[644] Goedicke (1988: 196-197, 199) argues for the possibility that these shafts/chambers may also have been available for 'subletting' to unrelated individuals at a price.

[645] Prof. Naguib Kanawati, Macquarie University, *pers. comm.*; see Hassan (1936: 190): "I gave to my eldest son, the ritualist Iby, the *Wakf* of the Northern burial chamber together with the Northern chapel of offerings, which are in the house of eternity on the necropolis, that he may be buried in it, and that offerings may come forth unto him at the voice continually there, he being the honoured one. No brother has claim to it, no wife, no children have [the right] to it except my eldest son, the ritualist Iby, to whom I have given [them]."

[646] Prof. Naguib Kanawati, Macquarie University, *pers.comm.*; see Blackman (1914: 11): "The inscription on the architrave tells us that the chapel was constructed 'for his father the nomarch (*ḥꜣty-'* )...by his son whom he loves.' "

[647] Kanawati (2006: 69).

[648] I am grateful to A/Prof. Boyo Ockinga, Macquarie University, for bringing this text to my attention.

within his household whom he distinguished from among his associates, every office which he administered, and every craft as it is undertaken."[649]

Here, Khnumhotep acknowledges the wider social networks that stood to access the beneficence of his tomb. The present study merely argues that similar sensibilities may apply in both monumental and non-monumental tomb/grave contexts. Should children be granted similar access to tomb architecture as other individuals in these contexts, we may gain insights into their cultural capacities, including their position, value and agency in ancient Egyptian society.[650]

With these considerations in mind, it can be stated that 83 individuals among the sample were interred in tombs with superstructures (4.59% TBs; **Figure 7.1**); 1,199 individuals' tombs did not feature recognisable surface features (66.28% TBs); and the presence or absence of superstructures was not decisively published for the tombs of 527 individuals (29.13% TBs). In terms of substructures, the nature of 1,419 individuals' tombs was published (78.44% TBs; **Figure 7.2**), while no published data was available for the architecture of 390 individuals' graves (21.56% TBs). Tomb size data was published in a manner conducive to research for 23 superstructures and 185 substructures, while 59 unique tomb contexts were observed to feature some form of decorative/religious architectural features. Results of the CIF tomb architecture survey are elaborated, below.

## 7.2 Superstructures: Overview

The 83 incidences of superstructures observed amongst the sample were of 4 main architectural types: 68 were mastabas (81.93% total superstructures; henceforth, *TSUPs*), 12 were brick features (14.46% TSUPs), 2 were stone markers (2.41% TSUPs), and 1 incidence of post-holes was observed (1.20% TSUPs; **Figure 7.3**). It should be noted that the determination of tomb superstructures is notoriously difficult within Egyptian archaeology, as many original surface features may have been removed, destroyed or weathered over time. As such, it is not suggested that the number of superstructures represented here is an accurate reflection of the original archaeological record. Rather, offered instead are inferences regarding the potential nature and scope of CIF funerary monuments within the cultural periods canvassed by this research. Superstructure incidence is further described, below. Superstructure types of ≥11 published examples are

[649] Simpson (2003: 420-421).
[650] Castillos (2000: 255) only acknowledges child interments in large-sized graves when they are associated with adult females in the context of multiple burials.

described as a group, while individual cases are described for types of ≤10 published examples.

### 7.2.1 Mastabas

As aforementioned, 68 CIFs were observed to be interred in tombs featuring mastaba superstructures. These incidences may be further described according to manifestations within specific, general and Nilotic geographical regions, then by relative chronology, site type and age categories, below.

#### 7.2.1.1 Specific Geographical Regions

The West Bank of Lower Egypt features the most published examples of CIFBs associated with mastaba superstructures, with 35 observations precipitating from this region (**Table 7.1**; **Figure 7.4**). With just over half that amount, Dakhla Oasis is the next most frequent region, with 18 mastaba tombs appearing amongst published data. Evidence for 7 mastaba tombs was identified for the West Bank of Upper Egypt, 4 for the East Bank of Lower Egypt, 3 for the East Bank of Upper Egypt and a single example was recorded for the Eastern Nile Delta. No examples of CIFBs within mastaba superstructures were observed in the Western Nile Delta, West Bank of Middle Egypt, East Bank of Middle Egypt and Faiyum regions.

#### 7.2.1.2 General Geographical Regions

When organised according to general geographical divisions, Lower Egypt holds the preponderance of mastaba superstructures, with 39 incidences observed amongst published data (**Table 7.2**; **Figure 7.5**). With exactly half this amount, Dakhla Oasis is the next most frequent region for mastaba tombs amongst the sample (MNI 18). Upper Egypt features evidence for 10 mastaba superstructures associated with CIFBs, while a single case was observed amongst the published record of the Nile Delta. There were no observations of CIFBs in association with mastabas in Middle Egypt.

#### 7.2.1.3 Nilotic Geographical Regions

When arranged according to Nilotic geography, the West Bank region presents the greatest incidence of CIFBs associated with mastaba tombs (MNI 42; **Table 7.3**; **Figure 7.6**). While presenting substantially fewer examples, mastaba tombs were also observed in the Dakhla Oasis (MNI 18) and East Bank regions (MNI 7). As aforementioned, a single

incidence of mastaba superstructure was observed for CIFBs in the Nile Delta, while the phenomenon was absent from published accounts of the Faiyum.

#### 7.2.1.4 Relative Chronology

Mastaba tombs were first built for adults during the Early Dynastic Period, [651] and continued in use until the Middle Kingdom.[652] Although the fewest examples of mastaba interments among the current dataset were attributed to the Early Dynastic Period, the presence of 5 CIFs within such funerary structures nonetheless indicates that they were given access to these tombs from their earliest occurrence (**Table 7.4**; **Figure 7.7**). With 43 incidences, the Old Kingdom presents the most examples of CIFBs associated with mastaba superstructures – more than all other periods combined. The First Intermediate Period presents the second most frequent observations of mastaba tombs, with 11 incidences attested amongst published data, followed closely by 9 observations within the Middle Kingdom record.

#### 7.2.1.5 Site Types

All examples of mastaba tombs within the sample were observed within cemetery contexts (MNI 68; **Table 7.5**; **Figure 7.8**). No incidences were reported within settlement, temple or funerary enclosure contexts.

#### 7.2.1.6 Age Categories

All age categories within the sample were identified in association with mastaba superstructures (**Table 7.6**; **Figure 7.9**). Of the known-age portion of the sample, Infants were most frequently associated with mastaba tombs, with 11 interments associated with this form of architecture. This was closely followed by 8 observations amongst Young Children, while 5 Older Children were buried in mastaba tombs. Unfortunately, age was not specified for the majority of CIFBs associated with mastaba superstructures (MNI 42). The mastaba tomb described for DRN 1389, the intact burial of a 10–12 year old child in the Old Kingdom cemetery of Giza on the West Bank of Lower Egypt,[653] appears to have been explicitly created for this individual. This potentially royal burial has been described

[651] Reisner (1936: 13, 367ff.); Grajetzki (2003: 7, 15, 24, 29, 34).
[652] Grajetzki (2003: 43).
[653] Hassan (1941: 240).

elsewhere in this thesis due to its unique attestation of bodily wrapping in a gold sheet and its extensive mortuary assemblage.[654]

### 7.2.2 Brick Features

As aforementioned, 12 CIFBs were published in tombs with brick features as superstructures. These incidences may be further described according to manifestations within specific, general and Nilotic geographical regions, then by relative chronology, site type and age categories, below.

#### 7.2.2.1 Specific Geographical Regions

The majority of data for CIFBs with brick-feature superstructures was observed amongst the published records of the West Bank of Upper Egypt (MNI 6; **Table 7.1**; **Figure 7.10**). The East Bank of Upper Egypt, Eastern Nile Delta and West Bank of Middle Egypt were the only other regions to display this form of architecture, with 3, 2 and 1 examples observed amongst their published data, respectively. Brick-feature superstructures were not described for CIFBs within the Western Nile Delta, West Bank of Lower Egypt, East Bank of Lower Egypt, East Bank of Middle Egypt, Faiyum and Dakhla Oasis.

#### 7.2.2.2 General Geographical Regions

A similar distribution is observed when the data is organised according to general geographical regions (**Table 7.2**; **Figure 7.11**). Here, 9 examples of brick-feature superstructures are attributed to CIFBs in Upper Egypt, while the Nile Delta and Middle Egypt feature 2 and 1 published examples, respectively. There were no incidences of brick-feature superstructures in Lower Egypt or Dakhla Oasis.

#### 7.2.2.3 Nilotic Geographical Regions

When distributed according to Nilotic geographical regions, 7 CIFBs are described with brick-feature superstructures on the West Bank, 3 are observed on the East Bank, and 2 incidences were described amongst published data of the Nile Delta (**Table 7.3**; **Figure 7.12**). As outlined above, no CIFBs were reported with associated brick-feature superstructures in the Faiyum and Dakhla Oasis regions.

[654] See §6.2.5, 6.8.

#### 7.2.2.4 Relative Chronology

According to Reisner, brick-feature superstructures were first attested during the Early Dynastic Period.[655] Within the present dataset, chronological distribution reveals a general pattern of diminution (**Table 7.4**; **Figure 7.13**). With 6 recorded incidences, the Early Dynastic Period features the most examples of CIFBs with brick-feature superstructures, followed closely by 5 observations during the Old Kingdom phase. This form of superstructure is completely absent from published First Intermediate Period data. The phenomenon then reappears in the Middle Kingdom, with a single example reported for this era.

#### 7.2.2.5 Site Types

All examples of brick-feature superstructures within the sample were observed within cemetery contexts (MNI 12; **Table 7.5**; **Figure 7.14**). No incidences were reported within settlement, temple or funerary enclosure contexts.

#### 7.2.2.6 Age Categories

Amongst the known-age portion of the sample, equal representations of brick-feature superstructures were observed in burials of Infants and Older Children; each group was represented by 2 examples of this form of monument (**Table 7.6**; **Figure 7.15**). No incidences of brick-feature superstructures were identified amongst published burial data for Foetuses or Young Children. Unfortunately, ages were not recorded for the majority of CIFs buried beneath brick-feature superstructures (MNI 8).

### 7.2.3 Stone Markers

Both examples of stone-markers as grave superstructures are attributed to intact pit burials in the Middle Kingdom settlement of Elephantine, affiliated with the East Bank of Upper Egypt (**Tables 7.1–7.6**). The first burial, DRN 107, was that of a 'male' perinatal infant (birth to 4 months *post partum*) whose prone and flexed body was wrapped in textile and placed on a bed of reeds within the grave.[656] The excavator states that the grave appears to have been roughly covered and marked with a piece of flat sandstone (40.00 x 35.00 x 12.00cm) and 2 grinding stones. No grave goods were attributed to this burial. The second burial, DRN 110, was that of a 'male' foetus (<40 weeks) whose prone and semi-

[655] Reisner (1936: 367).
[656] von Pilgrim (1996: 42); *cf.* §§6.3.3, 6.3.4, 6.3.11, 6.4 for more information regarding the burial of this individual.

flexed body was placed inside a wooden coffin bearing traces of white plaster, then interred within the grave.[657] The excavator believes that this grave may also have been marked with "amorphe Rosengranitbrocken".[658] The foetus was provided with 2 grave goods: a biconical faience bead was found at chest level, under the back,[659] and a ceramic vessel was upturned on top of the coffin lid.[660]

### 7.2.4 Post Holes

The only examples of surface post holes were observed surrounding the remarkable tomb of a 10–12 year old child at the Early Dynastic cemetery of Hierakonpolis on the West Bank of Upper Egypt (**Tables 7.1–7.6**).[661] This tomb, DRN 1134, featured a regular line of post holes along the Western and Northern perimeters, as well as a short line of 6 post-stains perpendicular to its Southern end. A further line of 26 post-stains was observed towards the East, running parallel to the Southern side of the tomb. Wood excavated from the burial chamber is believed to have been part of the original superstructure. Scientific testing has determined that this wood is of the *Acacia* species.[662] This tomb features other noteworthy architectural elements which will be discussed below,[663] as well as a vast array of grave goods which will be elaborated in Chapter 9.[664]

## 7. 3 Substructures: Overview

Of the 1,419 substructures reported amongst the sample, 6 main architectural types were identified: 826 individuals were interred in pit graves (58.21% total substructures; henceforth, *TSUBs*), 350 in shaft graves (24.67% TSUBs), 150 in rock-cut tombs (10.57% TSUBs), 69 in multi-roomed shaft tombs (4.86% TSUBs), 13 in staircase tombs (0.92% TSUBs), and 11 individuals were buried in brick-built tombs (0.76% TSUBs; **Figure 7.16**). Substructure incidence is further described, below. Considering all substructure types feature ≥11 published examples, each type is described as a group.

[657] von Pilgrim (1996: 137-138).
[658] von Pilgrim (1996: 137).
[659] See GGRN 320.
[660] See GGRN 321.
[661] Adams (2000: 27); *cf.* §6.7.4, fns. 582-583 for more information regarding the burial of this individual.
[662] Adams (2000: 111).
[663] See §7.4.2.
[664] See §9.1.

### 7.3.1 Pit Graves

As aforementioned, 826 CIFs amongst the sample were interred in pit graves. These incidences may be further described according to manifestations within specific, general and Nilotic geographical regions, then by relative chronology, site type and age categories, below.

#### 7.3.1.1 Specific Geographical Regions

Pit graves were widely attested in the sample and featured amongst the published records of all but 1 of the specific geographical regions included in this study (**Table 7.7**; **Figure 7.17**). The West Bank of Upper Egypt presented the most numerous account of pit burials, with 222 CIFs interred in this form of grave. The East Bank of Upper Egypt was the next most numerous region for pit burials (MNI 154), followed by the West Bank of Lower Egypt (MNI 133) and East Bank of Lower Egypt (MNI 105). A data cluster was observed for the Dakhla Oasis (MNI 61), West Bank of Middle Egypt (MNI 59) and Eastern Nile Delta regions (MNI 50). There is then a substantial drop in the frequency of published pit burials: from 39 in the Western Nile Delta to 3 in the Faiyum. There are no CIF pit burials reported for the East Bank of Middle Egypt.

#### 7.3.1.2 General Geographical Regions

When organised according to general geographical distribution, Upper Egypt presents the highest frequency of pit burials, with 376 CIFs interred in this form of grave (**Table 7.8**; **Figure 7.18**). Lower Egypt is the next most numerous region and has just over half this number: here, 238 CIFs were interred in pit graves. This is followed by the Nile Delta region, which presents 89 examples of this type of tomb architecture. The balance is almost evenly split between Middle Egypt and Dakhla Oasis: these regions were observed to have 62 and 61 reported examples of CIF pit burials, respectively.

#### 7.3.1.3 Nilotic Geographical Regions

With 414 examples of CIFBs in pit graves, the West Bank predominates amongst Nilotic geographical distributions of published data (**Table 7.9**; **Figure 7.19**). The East Bank is the next most numerous region, with 259 reported incidences of pit burials, followed by the Nile Delta, which presents 89 examples of the phenomenon. The Dakhla Oasis region has

61 published incidences of CIFBs in pit graves, while the Faiyum presents only 3 reported incidences.

#### 7.3.1.4 Relative Chronology

Pit burials were attested for all members of the population throughout Egyptian history.[665] The Early Dynastic Period holds the preponderance of pit graves in the present dataset, with 462 CIFs amongst the sample interred in this way (**Table 7.10**; **Figure 7.20**). This figure is more than 3 times the number presented by the next most numerous chronological phases, the Old and Middle Kingdoms, which coincidentally each featured 148 published observations of this form of funerary architecture. The fewest examples of pit burials were attributed to the First Intermediate Period: here, 68 incidences were observed.

#### 7.3.1.5 Site Types

Pit graves of CIFs were observed in every mortuary context identified by this sample (**Table 7.11**; **Figure 7.21**). The overwhelming majority of pit graves were attributed to cemeteries, with 770 individuals interred in these communal funerary spaces (93.22% total pit graves; 54.26% total substructures). All 54 published examples of CIFBs in settlement contexts were in the form of pit graves. The interments within temple and funerary enclosure contexts (each with a minimum of 1 individual) were also described as pit burials.

#### 7.3.1.6 Age Categories

Of the known-age component of the sample, 118 Infants were associated with pit burials (**Table 7.12**; **Figure 7.22**). Young Children closely follow this result, with 93 individuals identified in pit graves. Forty-three Older Children amongst the sample were also reportedly buried in this way, as were 31 Foetuses. Unfortunately, the ages of 541 CIFs buried in pit graves were not specified.

### 7.3.2 Shaft Graves

As aforementioned, 350 CIFs among the sample were interred in shaft graves. These incidences may be further described according to manifestations within specific, general

[665] Reisner (1936: 1, 365); Richards (1992: 80); Grajetzki (2003: 2, 4, 25, 37, 52, 71ff.).

and Nilotic geographical regions, then by relative chronology, site type and age categories, below.

#### 7.3.2.1 Specific Geographical Regions

Amongst specific geographical regions, shaft graves are most numerous on the East Bank of Upper Egypt (**Table 7.7**; **Figure 7.23**). This region accounts for 247 CIFBs in shaft graves of varying shapes and sizes. The next most frequent regions present substantially fewer numbers, with 35 incidences of shaft graves reported for the West Bank of Lower Egypt, 34 for the West Bank of Middle Egypt, 24 for the West Bank of Upper Egypt, and 10 for the East Bank of Lower Egypt. Shaft graves were unattested for CIFBs within the remaining regions, including the Western Nile Delta, Eastern Nile Delta, East Bank of Middle Egypt, Faiyum and Dakhla Oasis.

#### 7.3.2.2 General Geographical Regions

When organised according to general geographical regions, the majority of data coalesces in Upper Egypt. Here, 271 CIFBs were described with shaft grave architecture (**Table 7.8**; **Figure 7.24**) – more than 3 times the total number of shaft graves in all remaining regions. Of these, only Lower and Middle Egypt featured examples of CIFBs in shaft graves amongst their published data, with 45 and 34 observations attributed to these areas, respectively. No incidences of shaft graves were attributed to either the Nile Delta or Dakhla Oasis regions.

#### 7.3.2.3 Nilotic Geographical Regions

When the data is viewed according to Nilotic geography, incidences of CIFBs in shaft graves are restricted to 2 regions (**Table 7.9**; **Figure 7.25**). The East Bank accounts for the preponderance of data, with 257 CIF shaft graves recorded for this region. The West Bank, on the other hand, presents 93 incidences of this form of funerary architecture. There were no published examples of shaft graves amongst the Nile Delta, Faiyum and Dakhla Oasis regions.

#### 7.3.2.4 Relative Chronology

Shaft graves were first attested for adult burials in the Early Dynastic Period[666] and continued to be employed, in varying degrees, throughout the pharaonic era.[667] The fewest observations of shaft graves among the sample were attributed to the Early Dynastic Period: here, 25 CIFs were interred within this form of substructure (**Table 7.10**; **Figure 7.26**). An exponential increase in this form of funerary architecture is observed in the Old Kingdom, with 160 CIF shaft burials published for this period. There is a gradual decline in observations over the remaining chronological phases included in this study: 115 CIFs were reportedly buried in shaft graves during the First Intermediate Period, while 50 individuals are known to have received this form of interment during the Middle Kingdom.

#### 7.3.2.5 Site Types

All examples of shaft graves amongst the sample are attributed to cemeteries (MNI 350; **Table 7.10**; **Figure 7.27**). There were no observations of CIFBs in shaft graves in any of the settlement, temple or funerary enclosure contexts identified by this study.

#### 7.3.2.6 Age Categories

Amongst the known-age portion of the sample, Older Children were most frequently associated with shaft grave architecture, with 29 examples attributed to this age group (**Table 7.12**; **Figure 7.28**). Young Children were the next most frequently observed group, with 15 individuals reportedly buried in shafts. Of the remaining age groups, 11 Infants were associated with shaft grave architecture, as were 2 Foetuses amongst the sample. Unfortunately, age was not published for the majority of CIFs interred in shaft graves (MNI 293).

### 7.3.3 Rock-Cut Tombs

As aforementioned, 150 CIFs within the dataset were interred in rock-cut tombs. These incidences may be further described according to manifestations within specific, general and Nilotic geographical regions, then by relative chronology, site type and age categories, below.

[666] Reisner (1936: 5, 365, 366); Grajetzki (2003: 8, 15).
[667] Richards (1992: 80); Grajetzki (2003: 23, 36, 52, 71).

#### 7.3.3.1 Specific Geographical Regions

Incidences of CIFBs in rock-cut tombs are almost entirely restricted to 1 specific geographical region: the West Bank of Upper Egypt (**Table 7.7**; **Figure 7.29**). Here, 147 individuals were reportedly interred within this elaborate form of funerary architecture. The only other observations of CIFBs in rock cut tombs were identified amongst published data of the Faiyum (MNI 2) and the West Bank of Middle Egypt (MNI 1). There were no reported incidences of CIF rock-cut tomb burials in the Western Nile Delta, Eastern Nile Delta, West Bank of Lower Egypt, East Bank of Lower Egypt, East Bank of Middle Egypt, Dakhla Oasis and East Bank of Upper Egypt.

#### 7.3.3.2 General Geographical Regions

When viewed according to general geographical distributions, the data is concentrated within 2 regions (**Table 7.8**; **Figure 7.30**). Upper Egypt features the greatest number of examples, with 147 CIFs interred within rock-cut tombs in this region. This is followed by Middle Egypt, which presents 3 CIF rock-cut tomb burials amongst its published records. Such interments are absent from the remaining regions, including the Nile Delta, Lower Egypt and Dakhla Oasis.

#### 7.3.3.3 Nilotic Geographical Regions

When distributed according to Nilotic geographical regions, the data is concentrated further (**Table 7.9**; **Figure 7.31**). In this configuration, 148 CIFBs in rock-cut tombs are attributed to the West Bank, while 2 were observed in the Faiyum region. There were no observations of CIF rock-cut tomb burials in the Nile Delta, East Bank and Dakhla Oasis regions.

#### 7.3.3.4 Relative Chronology

Rock cut tombs were favoured among the higher socio-economic echelons during the mid-latter phases of pharaonic history.[668] The first attestations of rock-cut tombs for adult burials are attributed to the Old Kingdom.[669] Children appear to have been provided contemporaneous access to this mode of burial. The Old Kingdom features the most examples of CIFBs in rock-cut tombs among the dataset, with 133 individuals interred in these elaborate funerary spaces (**Table 7.10**; **Figure 7.32**). The number of reported

[668] Grajetzki (2003: 43, 69).
[669] Grajetzki (2003: 15).

incidences declines to 4 amongst published data of the First Intermediate Period, then rises to 13 during the Middle Kingdom. As may be expected, there were no observations of CIFBs in rock-cut tombs in any Early Dynastic contexts.

#### 7.3.3.5 Site Types

It is perhaps not surprising to report that all incidences of CIFBs in rock-cut tombs were described within cemeteries (MNI 150; **Table 7.11**; **Figure 7.33**). There were no observations of CIFBs in rock-cut tombs in any of the settlement, temple or funerary enclosure contexts identified by this study.

#### 7.3.3.6 Age Categories

Fortunately, demographic reporting for interments within rock-cut tombs is quite detailed. As a result, we are able to construct relatively robust demographic profiles of the occupants of these tombs. Of all age groups, Older Children were most frequently interred in these funerary spaces, with 73 examples identified amongst the dataset (**Table 7.12**; **Figure 7.34**). This result is closely followed by the observation of 66 Young Children buried within rock-cut tombs. There is then a substantial decline to the next most numerous age group, Infants, with 3 individuals from this age category included in this mode of interment. Two Foetuses were also buried within rock-cut tombs. Only 6 individuals interred in these structures were of Unspecified age. While no incidences of a child's sole-occupancy of a rock-cut tomb were observed within the dataset, there were certainly instances where individual burial chambers were wholly devoted to independent child interments. An example is DRN 1152, the intact burial of a 6–8 year old 'male' child in Sargkammer β of the Old Kingdom rock cut tomb necropolis of Qubbet el-Hawa on the West Bank of Upper Egypt.[670] The child was buried in a 105.00 x 51.00 x >30.00cm wooden coffin with a mortuary assemblage comprising ≥50 objects including ceramic vessels, stone vessels, a cosmetic palette, grinding stone, copper mirror, wooden boxes, ivory spoons and spatulas, and various pieces of jewellery.[671] The tomb chapel was decorated with carved relief and featured a false door.

[670] Edel *et al.* (2008b: 101ff.).
[671] See GGRNs 2571-2620.

### 7.3.4 Multi-Roomed Shaft Tombs

As aforementioned, 69 CIFs amongst the sample were interred in multi-roomed shaft tombs. These incidences may be further described according to manifestations within specific, general and Nilotic geographical regions, then by relative chronology, site type and age categories, below.

#### 7.3.4.1 Specific Geographical Regions

The West Bank of Upper Egypt presents the most numerous account of CIFBs in multi-roomed shaft tombs, with 18 examples observed amongst the published data of this region (**Table 7.7**; **Figure 7.35**). This result is followed by observations of 16 CIF interments on the East Bank of Lower Egypt, 12 on the East Bank of Upper Egypt, and 10 interments each on the Western Banks of Lower and Middle Egypt. There were 2 observations of CIFBs in multi-roomed shaft tombs amongst published data for the Eastern Nile Delta, and a single example identified for Dakhla Oasis. The remaining regions produced no examples of this form of funerary architecture, including the Western Nile Delta, East Bank of Middle Egypt and Faiyum.

#### 7.3.4.2 General Geographical Regions

When organised according to general geographical distributions, Upper Egypt is seen to present the highest frequency of CIFBs in multi-roomed shaft tombs amongst the sample, with 30 examples attributed to this region (**Table 7.8**; **Figure 7.36**). This is closely followed by Lower Egypt, with 26 individuals reportedly interred within this type of tomb. Incidences then reduce to 10 observations amongst the published record of Middle Egypt, 2 observations in the Nile Delta, and a single burial is recorded for Dakhla Oasis.

#### 7.3.4.3 Nilotic Geographical Regions

According to Nilotic geographical distributions, the majority of data is attributed to the Western and Eastern Banks, with 38 (**Table 7.9**; **Figure 7.37**) and 28 observations in these regions, respectively. Otherwise, 2 incidences of CIFBs in multi-roomed shaft tombs were recorded for the Nile Delta, and a single burial was published data for Dakhla Oasis. Multi-roomed CIF shaft tomb burials were not observed in the Faiyum.

#### 7.3.4.4 Relative Chronology

The appearance of multi-roomed shaft tombs is first noted for adult burials amongst the Early Dynastic archaeological record, then continues through Egyptian history.[672] In reference to the current dataset, there appears to be a general incremental data trend for CIFBs in multi-roomed shaft tombs from the Early Dynastic Period onwards, with the exception of the First Intermediate Period (**Table 7.10**; **Figure 7.38**). Sixteen individuals are described in this mode of burial during the Early Dynastic Period, increasing to 19 observations amongst published data for the Old Kingdom. A sharp decline to 4 interments is then observed during the First Intermediate Period, followed by a steep increase to 30 reported incidences in the Middle Kingdom.

#### 7.3.4.5 Site Types

All examples of CIFBs in multi-roomed shaft tombs are attributed to cemeteries (**Table 7.11**; **Figure 7.39**). There were no observations of CIFBs in multi-roomed shaft tombs in any of the settlement, temple or funerary enclosure contexts identified by this study.

#### 7.3.4.6 Age Categories

Of the known-age portion of the sample, there were 4 examples each of Infants and Young Children interred in multi-roomed shaft tombs (**Table 7.12**; **Figure 7.40**). The burials of 3 Older Children were also associated with this form of funerary architecture, as was that of a single Foetus. Unfortunately, ages of the greatest proportion of CIFs interred in multi-roomed shaft tombs were not specified (MNI 57).

### 7.3.5 Staircase Tombs

As aforementioned, 13 CIFs amongst the sample were interred in staircase tombs. These incidences may be further described according to manifestations within specific, general and Nilotic geographical regions, then by relative chronology, site type and age categories, below.

#### 7.3.5.1 Specific Geographical Regions

Despite the small number of CIFBs associated with staircase tombs amongst the dataset, they are relatively well-distributed across the specific geographical regions canvassed by

[672] Reisner (1936: 5, 365); Grajetzki (2003: 8, 71).

this study (**Table 7.7**; **Figure 7.41**). Three regions lay equal claim to the most published accounts of CIFBs in staircase tombs: the East Bank of Lower Egypt, Dakhla Oasis and the East Bank of Upper Egypt each feature 3 examples. These results are followed closely by 2 incidences of staircase tombs on the West Bank of Upper Egypt, and single observations for the Western Banks of Lower and Middle Egypt. The remaining regions feature no published examples of CIFBs associated with staircase tombs, including the Western Nile Delta, Eastern Nile Delta, East Bank of Middle Egypt and Faiyum.

#### 7.3.5.2 General Geographical Regions

When arranged to reflect general geographical distributions, Upper Egypt narrowly emerges with the most published examples amongst the dataset. Here, 5 CIFBs were associated with staircase tombs (**Table 7.8**; **Figure 7.42**). Lower Egypt immediately follows with 4 incidences, scarcely exceeding the 3 observations attributed to Dakhla Oasis. A single CIFB is reported within a staircase tomb in Middle Egypt, while the Nile Delta features no published examples of the phenomenon.

#### 7.3.5.3 Nilotic Geographical Regions

When viewed according to Nilotic geographical distributions, the East Bank presents the most numerous accounts of CIFBs associated with staircase tombs, with 6 examples published for this region (**Table 7.9**; **Figure 7.43**). Four incidences of staircase tombs were reported for the West Bank, followed closely by 3 observations in Dakhla Oasis. No CIFBs were observed amongst the published records of the Nile Delta.

#### 7.3.5.4 Relative Chronology

The first observations of staircase tombs for adult interments are attributed to the Early Dynastic Period.[673] The most frequent associations within the present study were also during this era, with 8 published CIFBs observed in this mode of burial (**Table 7.10**; **Figure 7.44**). The Old Kingdom follows in both chronology and frequency, accounting for the remaining 5 examples amongst the dataset. There were no published examples of CIF interments in staircase tombs during the First Intermediate and Middle Kingdom periods.

[673] Reisner (1936: 5, 365-366); Grajetzki (2003: 8).

#### 7.3.5.5 Site Types

All examples of CIFBs in staircase tombs are attributed to cemeteries (**Table 7.11**; **Figure 7.45**). There were no observations of CIFBs in staircase tombs in any of the settlement, temple or funerary enclosure contexts identified by this study.

#### 7.3.5.6 Age Categories

Fortunately, age was published for a substantial proportion of individuals interred in staircase tombs. Of these, Older Children are most frequently associated with this form of burial, with 6 individuals identified amongst the sample (**Table 7.12**; **Figure 7.46**). Infants were associated with half this number of tombs (MNI 3), while a single Young Child was reportedly interred in this way. There were no published incidences of Foetal burials within staircase tombs. Age was not specified for the 3 remaining individuals interred in this form of funerary architecture.

### 7.3.6 Brick-Built Tombs

As aforementioned, 11 CIFs amongst the sample were interred in brick-built tombs. These incidences may be further described according to manifestations within specific, general and Nilotic geographical regions, then by relative chronology, site type and age categories, below.

#### 7.3.6.1 Specific Geographical Regions

Observations of CIFBs within brick-built tombs are restricted to 4 of the 10 specific geographical regions included in this study (**Table 7.7**; **Figure 7.47**). With 4 published burials, the Eastern Nile Delta has the most examples of this form of funerary architecture. Three incidences of CIFBs within brick-built tombs were observed amongst published data of both the Western Nile Delta and East Bank of Upper Egypt, while a single example was attributed to Dakhla Oasis. There were no observations in the remaining regions, including the West Bank of Lower Egypt, East Bank of Lower Egypt, West Bank of Middle Egypt, East Bank of Middle Egypt, Faiyum and West Bank of Upper Egypt.

#### 7.3.6.2 General Geographical Regions

When organised according to distributions across general geographical regions, the Nile Delta emerges as the predominant region for CIFBs in brick-built tombs, with 7 individuals

reportedly interred in this manner (**Table 7.8**; **Figure 7.48**). With 3 examples, Upper Egypt is the next most frequent region, and the single incidence from Dakhla Oasis completes observations among the sample. There were no published examples of CIFBs in brick-built tombs from either Lower or Middle Egypt.

7.3.6.3 Nilotic Geographical Regions

When viewed according to Nilotic geographical regions, the Nile Delta maintains the highest frequency of CIFBs in brick-built tombs, with 7 observations amongst the dataset (**Table 7.9**; **Figure 7.49**). The East Bank features the next most numerous examples of the phenomenon, with 3 incidences identified amongst its published record. The single brick-built tomb described for Dakhla Oasis was highlighted in the preceding sections. Brick-built tombs were not described for any CIFBs within the West Bank and Faiyum regions.

7.3.6.4 Relative Chronology

Brick-built tombs are first observed for adult burials during the Early Dynastic Period.[674] During the chronological phases canvassed by this study, there appears to be an incremental trend in the appearance of CIFBs in brick-built tombs, with the exception of the First Intermediate Period (**Table 7.10**; **Figure 7.50**). Commencing with the Early Dynastic Period, 2 individuals are described in this mode of burial. Continuing through to the Old Kingdom, 4 CIFs are observed with brick-built tombs; however as aforementioned, incidences fall sharply to zero during the First Intermediate Period. A resurgence is observed amongst Middle Kingdom published data, with 5 individuals observed in this form of funerary architecture.

7.3.6.5 Site Types

All examples of CIFBs in brick-built tombs are attributed to cemeteries (**Table 7.11**; **Figure 7.51**). There were no observations of CIFBs in brick-built tombs in any of the settlement, temple or funerary enclosure contexts identified by this study.

7.3.6.6 Age Categories

Of the known-age portion of the sample, Older Children were most frequently associated with brick-built tombs, with 3 individuals from this age category reportedly buried in such

[674] Reisner (1936: 367).

structures (**Table 7.12**; **Figure 7.52**). One Young Child was described within a brick-built tomb, while there were no published examples of Infant or Foetal burials within this form of funerary architecture. Unfortunately, age was not disclosed for the majority of individuals interred in brick-built tombs (MNI 7).

## 7.4. Tomb Size: Overview

Architectural measurements were published for 723 individuals amongst the sample. The recording of such dimensions was extremely inconsistent across publications. It was often unclear to which parts of the tomb such measurements pertained;[675] measurement series were often incomplete: usually only 2 out of 3 dimensions were provided,[676] and in some cases only shaft depths were indicated;[677] and measurement units (imperial or metric) were often either not clearly stated, or a combination of units were employed at different points in the same publication.[678]

To minimise error, measurements were subjected to an integrity assessment. Tombs with incomplete, inconsistent or unintelligible data were eliminated from analyses. Furthermore, to minimise duplication, multiple interments within single tomb structures were consolidated to single entries.[679] Subsequent to these protocols, 23 tombs were eligible for superstructure size analysis, and 185 for substructure analysis.

While all care has been taken to ensure the accuracy of these analyses, it is acknowledged that the aforementioned data integrity issues significantly impact on our ability to make comprehensive statements regarding the size of tombs which housed deceased CIFs in ancient Egypt. Therefore, the proceeding results should be received with caution. At best, perhaps we can obtain an understanding of the tomb size-range to which this demographic group had access. Further to this, perhaps we can extrapolate the resources required to procure and produce such spaces, thus intimate the nature and scope of the deceased's cultural capacities and provide some indication regarding their social position, value and agency in ancient Egyptian society.

[675] For example, see DRNs 942, 898, 1312.
[676] For example, see DRNs 187, 188, 217, 223, 243, 259, 263, 265, 280, 295, 297, 298, 386, 418, 427-429, 433, 434, 439, 442-445, 446, 458, 466-468, 478, 481, 482, 487, 611, 770, 771, 774, 1008, 1018, 1062, 1037, 1078, 1089, 1138.
[677] See DRNs 45, 47, 71, 72, 98, 927, 942, 943, 1096, 1097.
[678] For example, see Engelbach (1915).
[679] For superstructures, see DRNs 389, 1401, 1403, 1407, 1408, 1410, 1412, 1413, 1416, 1433; for substructures see DRNs 113, 114, 116, 188, 429, 444, 446, 528, 537, 656, 867, 1036, 1433.

### 7.4.1 Superstructure Size

Subsequent to integrity tests and metric conversion, 23 tomb superstructures were deemed eligible for inclusion in size analyses (**Table 7.13**). The nature of the data determined that analyses should occur across 2 parameters: area and volume. This approach facilitates retention of a greater number of tombs: of those structures for which size data was published, the majority recorded only length and width measurements (area), far fewer also featured height dimensions (volume).

In terms of area, of the 23 CIF tomb superstructures included in analyses, the mean superstructure measurement was 55.23m². The smallest published superstructure was 0.14m². This tomb, DRN 107, was the intact pit burial of a neonatal infant within the Middle Kingdom settlement of Elephantine, affiliated with the East Bank of Upper Egypt.[680] The superstructure consisted of a rudimentary stone arrangement: a large, flat piece of sandstone measuring 0.40 x 0.35 x 0.12m and 2 grinding stones.

The largest superstructure was 512.00m², observed for DRN 1138, the disturbed Old Kingdom burial of a 2 year old 'male' child in a wooden sarcophagus within galleries beneath a mastaba tomb in Saqqara on the West Bank of Lower Egypt.[681] The mastaba, measuring 16.00 x 32.00m, combined with a step pyramid and bastioned and panelled enclosure wall to form the unfinished funerary enclosure of King Horus Sekhemkhet, second ruler of the Third Dynasty. The entire complex measures 481.30 x 166.60m (80,184.58m²). The child's burial was the only extant interment within the complex. 'He' was provided with an unspecified quantity of stone vessels, remnants of gold foil and gemstones as part of 'his' funerary assemblage.[682]

In terms of volume, 12 CIF tomb superstructures were eligible for inclusion in size analysis. Here, the mean superstructure measurement was 117.19m³. The smallest published superstructure measured 0.02m³, for DRN 107, the same neonatal settlement burial described for Elephantine, above. The largest published superstructure measured 1,933.89m³, DRN 673, the disturbed burial of a child of unspecified age beneath a mastaba in Naga ed-Deir on the East Bank of Upper Egypt.[683] The mastaba, dating to the Old Kingdom, measured 16.40 x 8.80 x 13.40m and featured a cruciform chapel and 11 extant

[680] von Pilgrim (1996: 42). *Cf.* §§ 7.2.3, 6.3.3, 6.3.4, 6.3.11, 6.4 for further details regarding this burial.
[681] Lauer (1976: 137-140). It is not known how sex was determined in this case.
[682] See GGRNs 2535-2537.
[683] Reisner (1932: 232-233).

niches on its Southern face, 8 extant niches on the Northern face, and 1 extant niche on the Western face. The burial of another individual of unknown age and sex was also associated with this structure. The child was interred in a ceramic red-ware cist-coffin and was accompanied by a mud vessel – described by the excavator as a "flower pot" – as a funerary offering.[684]

### 7.4.2 Substructure Size

Subsequent to integrity tests and metric conversion, 185 tombs were deemed eligible for inclusion in substructure size analyses (**Table 7.14**). As described above, the nature of the data required analyses to be restricted to area and volume. For some tombs, a range of measurements were published; for example, DRN 665, where burial chamber measurements were recorded as 1.80 x 0.80-1.70 x 0.60m.[685] In these cases, the minimum measurement was selected for computation.

In terms of area, the mean substructure measurement was 2.96m². The smallest published substructure was 0.22m², that of DRN 837 from Abu Rawash, on the West Bank of Lower Egypt. This Early Dynastic grave is described as a pit burial with a separate chamber, measuring 0.55 x 0.40m².[686] It housed the body of a child of unspecified age in a basketry coffin. The largest published substructure was 45.75m², being that of DRN 1138, the child buried within the unfinished funerary enclosure of King Horus Sekhemkhet at Saqqara, described above.[687] The gallery in which the child was placed measured 2.10 x 17.50m, accessed by a shaft measuring 3.00 x 3.00m.

In terms of volume, 136 CIF tomb substructures were eligible for inclusion in size analysis. Mean substructure volume was 4.85m³. The smallest published substructure size was 0.17m³, belonging to DRN 78, a child of unspecified age in the Middle Kingdom cemetery of Qau el-Kebir on the East Bank of Upper Egypt.[688] This shaft grave of questionable condition measured 0.30 x 0.91 x 0.61m and contained not only the child's body but also a suite of grave goods including a ceramic vessel, some blue faience beads, and a blue faience scarab with hieroglyphic symbols inscribed on the base.[689]

[684] See GGRN 1278; Reisner (1932: 233).
[685] See also DRNs 659, 664, 665, 871-874, 1399-1401, 1407, 1408.
[686] Klasens (1960: 71).
[687] Lauer (1976: 137-140).
[688] Brunton (1927b: pl. ii); Petrie (2000: sheet 10).
[689] See GGRNs 235-237.

The largest published substructure was 34.20m³, being that of DRN 1134, the monumental child's tomb from Hierakonpolis on the West Bank of Upper Egypt.[690] The tomb measured 5.70 x 3.00 x 2.00m. It was lined with mudbrick walls 2 courses thick, on the surface of which traces of mud- and white-mica plaster were detected.[691] There were two benches constructed at opposing ends of the tomb, as well as a deeper excavation in the centre with 2 or 3 possible post-holes carved into the bedrock. The roof was lined with wooden planks.[692]

## 7.5 Decorative/Religious Features

The sample was also examined in order to determine whether or not any CIFs were interred in tombs featuring extant decorative/religious architectural elements. While it is acknowledged that in many cases these tombs and their decorative/religious schemes were not specifically created for the CIFs interred within,[693] what is of key interest to this study is determining the nature and scope of CIFs' access to various types of funerary architecture as a marker of their cultural capacity, reflective of their social position, value and agency in ancient Egyptian society. Moreover, as will be argued in Chapter 8, according to ancient Egyptian beliefs anyone interred or named within these mortuary spaces was entitled to their beneficence.

A minimum of 181 CIFs amongst the sample were identified in tombs with 1 or more extant decorative/religious architectural elements. Of these, 140 individuals were observed in multiple burial contexts with other CIFs, reducing the number of unique tomb contexts to 59 tombs. Of these, 39 tombs featured 1 or more extant decorative/religious elements, producing a total of 96 observations, including 30 tombs with false doors, 20 with cult spaces including chapels and/or niches, 19 with plaster finishing, 18 with painted/carved scenes and/or inscriptions, 5 with a serdab, 2 with stelae, and 2 were fitted with wood panelling (**Figure 7.53**).

## 7.6 Summary

This chapter has examined the results of the archaeological survey in order to determine the nature and scope of CIFs' access to funerary architecture during the Egyptian Early

[690] Adams (2000: 26-27, 75-128, 162, 182-183); *Cf.* §§7.2.4, 6.7.4, fns. 582-583 for further details regarding this burial.
[691] Adams (2000: 27).
[692] Adams (2000: 157).
[693] See §7.1, above.

Dynastic to Middle Kingdom Periods. Significantly, this data indicates that CIFs were included in a diverse range of mortuary spaces. While the present study does not claim that all funerary monuments identified by this study were purpose-built explicitly for the CIFs interred within them – although in many cases they certainly were – it must also be acknowledged that not every adult interred within a tomb can be identified as its exclusive owner, either. Many Egyptian tomb-types were deliberately designed to house a number of burials, not just that of the tomb owner. Of key interest here is the determination of an individual's cultural capacity – adults and children alike – to access such monuments as a marker of their position, value and agency in ancient Egyptian society.

In terms of tomb superstructures, CIFBs were identified in tombs with mastabas, brick features, stone markers and post holes. The issue of representativeness is of particular concern for this aspect of mortuary behaviour. In addition to the usual challenges of under-reporting and poor publication levels, the true nature and scope of superstructure incidence is obscured by their removal following both natural and cultural transformation processes over millennia. Notwithstanding these obstacles, individuals from all age groups and periods included in this research were variably attested in tombs with superstructures across all general and Nilotic regions, with the exception of the Faiyum. In terms of differential distribution across site types, all forms of superstructure were attested in cemeteries, with the exception of stone markers. These were the only form of superstructure observed in published settlement burial contexts.

A wide range of substructures were also attested among the sample, including pit graves, shaft graves, rock-cut tombs, multi-roomed shaft tombs, staircase tombs and brick-built tombs. These substructure types were variably attested among the dataset across all general and Nilotic regions, in all periods, across all age groups included in this research. All substructure types were observed in cemetery contexts, while pit burials were the only form of substructure employed in CIF settlement burials. It should be noted that in each case where new super- and substructure architectural types were introduced during the periods canvassed by this study, children and adults appear to have been afforded contemporaneous access, including mastaba and brick feature superstructures and all substructure types except pit graves, which were introduced during the Predynastic Period. This finding suggests that access to architectural innovation was determined according to socio-economic and political statuses, as opposed to age. Dependent on parents'/carers'

access to resources, it appears that they were free to choose from a variety of interment options for their deceased child, infant or foetus.

It thus appears that CIFs had access to an extensive array of funerary architecture. With the possible exception of certain modes of burial preserved for royalty, such as pyramid tombs, CIFs were included in every contemporary structural category within the Egyptian funerary repertoire. Indeed, this caveat may even be challenged when considering the burial of a 2 year old child within the unfinished Old Kingdom step pyramid complex of King Horus Sekhemkhet at Saqqara. While a general trend was observed among the dataset towards greater access to larger and more elaborate funerary architecture with increasing age, this Saqqara example also indicates that such a rule cannot be comprehensively imposed.

The occasion of children's deaths would have caused parents/carers to mobilise their resources for the procurement and production of mortuary spaces, the nature and scope of which reflected children's cultural, religious and socio-economic integration. Indeed, the size-range of children's tombs, as well as their inclusion in mortuary spaces with such decorative/religious schemes as false doors, cult spaces, plastered/painted/wood panelled/carved wall furnishings, serdabs and stelae provide no indications of cultural ostracism. In fact, the reverse appears to be true. The nature and scope of CIFs' access to funerary architecture among the periods investigated by this research appears to at least equal – and in some notable cases, surpass – that of contemporary adult burials. The qualitative implications of these results will be further discussed in Chapter 10.

# CHAPTER 8: ASSOCIATED FEATURES

Spatial relationships between human burials and other features in the archaeological record are analogous to dialogues between and amongst individuals, kinship groups, communities, structures and ideologies. When viewed through this lens, analyses of spatial relationships facilitate reconstructions of social networks amongst and between communities of the living and the dead,[694] and explicate the cultural capacities of their constituents.[695] Results of such analyses may then be extrapolated to illuminate aspects of the lived experiences of individuals and communities in ancient Egyptian society.[696] The spatial relationships of child, infant and foetal burials have been subject to varying interpretations in Egyptian archaeology. Some scholars only include children's burials in their analyses when they are present in adults' graves.[697] Others excuse children's presence amongst 'adult' archaeological spaces as deviant, "intrusive" behaviour.[698] At best, such treatments restrict children's roles in archaeological dialogues within the bounds of passivity, relativism and tokenistic inclusion; at worst, they are completely excluded. With a view to determining what the spatial relationships of juvenile burials reveal about their position, value and agency in ancient Egyptian social networks, data derived from the archaeological survey described in §1.4.4 was analysed to ascertain the nature and scope of child, infant and foetal burial associations during the Early Dynastic to Middle Kingdom periods. In accordance with the project structure outlined in §1.6, results of this research and its respective theoretical considerations are presented below. Qualitative analyses will be presented in Chapter 10.

## 8.1 Overview

For the purposes of this exercise, an associated feature is defined as any immovable component of the archaeological record – including other burials – with which a child, infant or foetal burial directly physically communicates, adjoins, abuts, intersects or corresponds. Of the 1,809 individuals included in the sample, associated features were

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694 Meskell (1999b: 117; 2002: 210); Baines & Lacovara (2002: 9); Richards (2003: 405); Stevenson (2009a: 183-185).

695 Pettitt (2006: 293); Laneri (2007: 1).

696 Rowland (2004: 1004) discusses the capacity of spatial relationships to act as legitimizing statements of relationship strength with ancestors.

697 For example, see Castillos (2000: 255).

698 For example, see Garstang (1907a: 102).

identified for 490 CIFs (27.09% TBs; **Figure 8.1**), while 905 CIFs were buried independently in self-contained graves (50.03% TBs). Unfortunately, the spatial relationships of the remaining individuals amongst the sample were unclear as 411 CIFs' burial associations were unstated (22.72% TBs), while that of the final 3 individuals was ambiguous (0.17% TBs).

Of the 490 CIFs observed with associated features, 487 were identified in spatial relationships of various configurations with other human burials (99.39% total associated features; henceforth, *TAFs*; **Figure 8.2**), the burials of 2 individuals were connected with pyramids (0.41% TAFs), and 1 individual was associated with an unknown feature (0.20% TAFs).[699] Incidences of associated features will be further elaborated, below. Spatial relationships with human burials will be classified according to 2 types of burial associations: 'multiple' burials (that is, 'shared' burials within the same primary context), and 'corresponding' burials (that is, burials in related contexts). In order to determine the extent of these phenomena amongst the dataset, burial configurations were counted by incidence, not by individuals. Of the 487 CIFs amongst the sample associated with other human burials, some individuals were simultaneously engaged in both multiple *and* corresponding burial configurations. As such, the overall sum of multiple and corresponding burial incidence is greater than this base number. Incidences of multiple and corresponding human burials are first described according to distributions in specific, general and Nilotic geographical regions, then by relative chronology, site type and age categories. Further to this, the nature and scope of burial associations between CIFs and other individuals in the archaeological record are examined according to demographic and structural configurations. Incidences of associations with pyramids and unknown features are presented on a case-by-case basis.

## 8.2 Multiple Burials: Incidence

Of the 487 CIFBs identified in spatial relationships with other human burials, there were 222 incidences of 'multiple' burials. Relatively few scholars have commented on the phenomenon of multiple burials in ancient Egypt.[700] According to Grajetzki, multiple

[699] Interestingly, there were no observations among the dataset of CIFBs associated with animal interments, a phenomenon often reported in the archaeology of other cultures; for example, see Fahlander (2008: 36-38).

[700] Murray (1956: 90); Hendrickx (1984); Niwiński (1984); Feucht (1995); Thomas (2004); Grajetzki (2003; 2007); Rowland (2003: 66); Quirke (2005: 113ff.); Stevenson (2006; 2009a: 184); Harrington (2007: 61). The subject has also received limited treatment in the archaeology of other cultures; see Mizoguchi (2000); Jiao (2001: 52); Stoodley (2002); Crawford (2007); Shepherd (2007: 99); Littleton (2011).

burials only became common during and after the late Middle Kingdom,[701] with single burials as the "rule" in the Predynastic, Old Kingdom and early Middle Kingdom periods.[702] The only acknowledged exceptions to this rule pertain to the "common" practice in the Predynastic, First Intermediate and early Middle Kingdom periods of "plac[ing] husband and wife in a single tomb."[703] Feucht, on the other hand, acknowledges that children are attested in multiple burials, and extrapolates familial associations from these interment types by stating that all adults buried with children were their "mother",[704] "father",[705] or parents.[706] In terms of the present study, familial associations were only able to be reliably determined in 1 case of multiple burial amongst the sample, that of DRN 536 at the Old Kingdom cemetery of el-Hagarsa on the West Bank of Upper Egypt,[707] where aDNA testing was employed to confirm genetic relationships between individuals in this multiple burial context. Otherwise, the only opportunity to determine genetic relationships via burial associations with confidence is in the case of adult/adolescent females buried with a foetus *in situ*, of which there were 6 instances amongst the sample.[708]

For the purposes of this study, 'multiple' burials are defined as any interments of 2 or more individuals within the same primary context, most likely occurring at the same time.[709] In the case of pit and some shaft graves, this generally necessitates that burial of deceased individuals would have taken place at the same time. In the case of other tomb structures,

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701 Grajetzki (2003: 72, 86, 102, 126).

702 Grajetzki (2003: 58). Murray (1956: 90), on the other hand, states that multiple burials were only prevalent in the Amratian Period and then only occurred under the framework of "foreign influence". *Contra* Castillos (1982a: 127); Midant-Reynes (2003); Friedman *et al.* (2011: 174), who all attest to the phenomenon from the Predynastic Period onwards.

703 Grajetzki (2003: 58; 2007: 16, 19, 22, 26). Grajetzki's (2007: 23) further suggestion that the bodies of predeceased spouses or family members were kept in storage until their partner or other family members died in the Middle Kingdom is unsubstantiated.

704 Feucht (1995: 128, 130-131; 2001a: 262); *cf.* Garstang (1901: 25); Petrie *et al.* (1912: 5); Hamada & Farid (1948: 308); Strouhal (1992: 21); Grajetzki (2003: 83; 2007: 19, 20).

705 Feucht (1995: 130, 131; 2001a: 262); *cf.* Hamada & Farid (1947: 204; 1948: 307); Grajetzki (2007: 23).

706 Feucht (1995: 133); *cf.* Hamada & Farid (1947; 1948); Hamada & el-Amir (1947); Davis (1983: 27); Yacoub (1983); Cagle (2003a; 2003b); Grajetzki (2003: 72; 2007: 23, 26); Harrington (2007: 61); Spieser (2008: 501).

707 Kanawati (1993a: 56-62, 86; 1993b: 36-38).

708 See DRNs 39, 403, 511, 958, 960, 1394. DRN 831 may also be included amongst this group as it is possible that the excavator has described the phenomenon of postmortem foetal extrusion (also known as 'Sarggeburt' or 'coffin birth'), whereby the accumulation of putrefactive gasses in the abdomen applies pressure on the uterus, causing it to prolapse and expel the foetus via the birth canal; see Jungmichel & Musick (1941); Panning (1941); Schulz *et al.* (2005); Lewis (2007: 36).

709 Stoodley (2002: 106) refers to this category of multiple burials as "contemporary". Multiple burials are distinct from a "mass grave", inasmuch as a mass grave is defined as "any location containing two or more associated bodies, indiscriminately or deliberately placed, of victims who have died as a result of extra-judicial, summary or arbitrary executions, not including those individuals who have died as a result of armed confrontations or known major catastrophes"; Jessee & Skinner (2005: 56).

such as brick-built tombs, multiple-roomed shaft graves, staircase tombs and rock-cut tombs, it is exceedingly difficult to prove simultaneous burial in the absence of highly detailed stratigraphical and/or archaeothanatological reports[710] – the majority of archaeological publications lack such analyses. In any case, what is of interest here are the deliberate actions (choices) of those burying the dead to place bodies within shared funerary spaces, regardless of timing, as opposed to the provision of autonomous burial. Although broader spatial relationships amongst and between *all* cemetery occupants are of interest, the present study is restricted to analysing only those interments with which a child, infant or foetal burial directly physically communicates. Multiple burial incidence may be further described according to manifestations within specific, general and Nilotic geographical regions, then by relative chronology, site type and age categories, below.

### 8.2.1 Specific Geographical Regions

Multiple burials were identified in 9 of the 10 specific geographical regions included in this study. The most prolific region for the phenomenon was the West Bank of Upper Egypt, with 67 CIFs reportedly interred in this way (**Table 8.1**; **Figure 8.3**). This was followed by the East Bank of Upper Egypt, with 62 incidences of multiple burial, and 34 examples for the West Bank of Middle Egypt. Equal numbers of multiple burials were described for the Western and Eastern Banks of Lower Egypt, while observations did not exceed single figures in the Eastern Nile Delta (MNI 9), Western Nile Delta and Dakhla Oasis (each with MNI 7), and Faiyum regions (MNI 2). There were no published incidences of CIF multiple burials in the East Bank of Middle Egypt.

### 8.2.2 General Geographical Regions

When viewed according to general geographical regions, Upper Egypt has the highest frequency of CIF multiple burials amongst the dataset, accounting for 129 examples of the phenomenon (**Table 8.2**; **Figure 8.4**). The next most numerous region, Middle Egypt, featured 36 incidences of child burials in shared primary contexts: 3.5 times fewer observations than Upper Egypt. Following this, 34 incidences were described amongst the published record of Lower Egypt, and 16 examples were observed for the Nile Delta. The

[710] Archaeothanatology is the study of the dynamic processes that take place within the grave/tomb following initial deposition of the body. It is concerned with distinguishing between post-depositional movement that may occur as a result of either the natural decomposition of the body and other organic elements within the burial, and/or cultural practices that may include disturbance/s of the grave. See Duday (2006).

Dakhla Oasis region presented the lowest incidence of multiple burials, with 7 CIFs reportedly buried in this way.

### 8.2.3 Nilotic Geographical Regions

When organised according to Nilotic geographical distributions, the data is concentrated in 2 regions: the West Bank features 118 observations of CIF multiple burials (**Table 8.3**; **Figure 8.5**), and the East Bank presents 79 examples amongst published records. The remaining regions feature substantially fewer accounts of the phenomenon, with 16 observations attributed to the Nile Delta, 7 in the Dakhla Oasis region, and 2 multiple burials identified in the Faiyum.

### 8.2.4 Relative Chronology

It may be said that CIF multiple burials are well-represented within each of the chronological phases included in this study (**Table 8.4**; **Figure 8.6**).[711] The Old and Middle Kingdoms feature equal observations, each with 72 accounts of the phenomenon. The Early Dynastic Period presents the next most numerous account of this aspect of ancient Egyptian mortuary behaviour, with 52 published examples identified within this cultural phase. With 26 incidences of CIFBs in shared primary contexts, the First Intermediate Period presented the fewest examples of multiple burials amongst the dataset.

### 8.2.5 Site Types

Among the 4 site types identified by this study, cemeteries dominate multiple burial data, with 213 CIFs observed in shared primary interments in such contexts (**Table 8.5**; **Figure 8.7**). Beyond this, 8 individuals were observed in multiple burial configurations in published settlement sites, while at least 1 child, infant or foetus was part of a mass-burial within a temple complex. There were no observations of CIF multiple burials within funerary enclosures.

### 8.2.6 Age Categories

Of the known-age portion of the sample, Infants predominate as most frequently interred in shared primary contexts with other individuals (MNI 27; **Table 8.6**; **Figure 8.8**). Older and Younger Children are almost equally represented in multiple burials amongst the sample, with 20 and 19 incidences reported for these age-groups, respectively. Foetal

[711] *Contra* Murray (1956: 90) and Grajetzki (2003: 58); see §8.2, above.

burials feature the fewest published incidences of the phenomenon, with 8 examples identified amongst this age group. Unfortunately, age-at-death was not published for the majority of CIFs attested in multiple burials amongst the sample, with the absence of 148 individuals' demographic data substantially impacting on our understanding of this important facet of ancient Egyptian mortuary behaviour.

## 8.3 Multiple Burials: Nature and Scope

The sample was also examined in order to determine the nature and scope of multiple burial configurations amongst the CIFs of the Egyptian archaeological record. According to published data, multiple burials manifested in the following configurations: 'simple' multiple burials with other CIFs, 'simple' multiple burials with adults/adolescents, 'combined' multiple burials with adults/adolescents, and 'combined' multiple burials with adults/adolescents and other CIFs. For the purposes of this study, 'simple' multiple burials are defined as any burial of a child, infant, or foetus within the same primary context as another individual/s from a single demographic category: for example, the burial of an infant with an adult female.[712] On the other hand, 'combined' multiple burials are defined as any burial of a child, infant, or foetus within the same primary context as other individuals from more than 1 demographic category: for example, the burial of an infant with an adult female and an adult male. It should be noted that in some cases, exact numbers of individuals interred within multiple burials were not published. On these occasions, a minimum number of '1' was counted for each demographic category explicitly mentioned by the excavator.[713] Incidences of multiple burial configurations are elaborated, below.

### 8.3.1 Simple Multiple Burials with Other CIFs

Among the sample, 41 individuals were found to be engaged in simple multiple burial configurations with another child, infant or foetus (**Figure 8.9**). Of the known-age portion of the sample, Infants were most frequently interred in multiple burials with other CIFs, with 7 examples cited amongst published data. This was followed by 4 observations of Young Children and a single example of an Older Child placed in a multiple burial with another child. There were no observations of Foetuses in simple multiple burial contexts with other CIFs amongst the sample. Unfortunately, age-at-death was not published for 29

[712] Griswold (1992: 61) counts multiple burials of women with newborns as a single burial, thus denying both categories of individuals independent social identities.
[713] For example, see DRNs 82-84, 282-283, 630, 634.

individuals identified in multiple burials. The maximum number of CIFs interred in this multiple burial configuration was 4, the minimum was 2, and the mean was 2.31.

### 8.3.2 Simple Multiple Burials with Adults/Adolescents

We may also consider incidences of children, infants or foetuses interred in the same primary contexts as adult/adolescent males, females, and individuals of unknown sex. Within the dataset, 18 CIFs were identified in simple multiple burial configurations with 21 adult/adolescent males, producing a burial ratio of 1.00:1.17 (**Figure 8.10**). The maximum number of adult/adolescent males observed in a multiple burial context with a single child, infant or foetus was 4. In terms of age distributions, 1 Foetus, 1 Young Child, 4 Older Children and 12 individuals of Unspecified Age were observed in simple multiple burials with adult/adolescent males (**Figure 8.11**). There were no published examples of Infants in simple multiple burials with adult/adolescent males.

The survey revealed that 54 CIFs were identified in shared primary contexts with 61 females, producing a burial ratio of 1.00:1.13 (**Figure 8.10**). The maximum number of adult/adolescent females observed in a multiple burial context with a single child, infant or foetus was 3. In terms of age distributions, 6 Foetuses, 9 Infants, 7 Young Children, 3 Older Children and 29 individuals of Unspecified Age were observed in simple multiple burials with adult/adolescent females (**Figure 8.12**).

Unfortunately, biological sex data was not provided for many of the adults/adolescents identified in simple multiple burial contexts. Here, 33 CIFs were engaged in multiple burials with 42 adults/adolescents of unknown sex, producing a burial ratio of 1.00:1.27 (**Figure 8.10**). The maximum number of adults/adolescents of unknown sex observed in a multiple burial context with a single child, infant or foetus was 4. In terms of age distributions, 3 Infants, 4 Young Children, 5 Older Children and 21 individuals of Unspecified Age were observed in simple multiple burials with adults/adolescents of unknown sex (**Figure 8.13**). There were no published examples of Foetuses in simple multiple burials with adult/adolescents of unknown sex.

### 8.3.3 Combined Multiple Burials with Adults/Adolescents

Within the sample, 13 CIFs were identified in combined multiple burial contexts with 36 adults/adolescents from differing demographic categories: 14 adult/adolescent males, 17 adult/adolescent females, and 1 adult/adolescent of unknown sex, producing a burial ratio

of 1.00:1.07:1.31:0.08 (**Figure 8.14**). A maximum of 2 adult/adolescent demographic categories were observed amongst these combined multiple burials. Male:Female:Child configurations were observed on 12 occasions, while there was and 1 observation of a Female:Unknown Sex Adult/Adolescent:Child burial among published data. The maximum number of adult/adolescent males observed in a combined multiple burial was 2, the maximum number of adult/adolescent females was 5 and, as aforementioned, there was 1 observation of a combined multiple burial with an adult/adolescent of unknown sex. In terms of age distributions, there was 1 Foetus, 3 Infants, 1 Older Child and 8 Individuals of unspecified age interred in combined multiple burials with adults/adolescents (**Figure 8.15**). There were no published examples of Young Children in combined multiple burials with adults/adolescents.

### 8.3.4 Combined Multiple Burials with Adults/Adolescents and Other CIFs

The survey identified 62 children in multiple burial configurations with adults/adolescents and other CIFs. To provide a more detailed analysis of the nature and scope of these burials, each burial was calibrated to a single child, infant or foetus, and the remaining constituents were counted according to demographic categories. It should be noted that in some cases, exact numbers of individuals interred within multiple burials were not published. On these occasions, a minimum number of '1' was counted for each demographic category explicitly mentioned by the excavator.[714] Further to these considerations, 29 children, infants and foetuses were identified in multiple burial configurations with 11 adult/adolescent males, 20 adult/adolescent females, 24 adult/adolescent individuals of unknown sex, and 33 other children, infants and/or foetuses, producing a burial ratio of 1.00:0.38:0.69:0.83:1.14 (**Figure 8.16**).

A maximum of 3 demographic categories were observed among these combined multiple burials. Unknown Sex Adult/Adolescent:Child:Child configurations were observed on 15 occasions, Female Adult/Adolescent:Child:Child configurations were observed on 8 occasions, Male Adult/Adolescent:Female Adult/Adolescent:Child:Child configurations were observed on 4 occasions, and there were 2 observations of Male Adult/Adolescent:Child:Child multiple burials amongst the sample.

In terms of age-at-death distributions, 5 Infants, 3 Young Children, 6 Older Children and 48 individuals of Unspecified Age were attested in combined multiple burials with

[714] See DRNs 82-84, 282, 283, 630.

adults/adolescents and other CIFs (**Figure 8.17**). There were no published examples of Foetuses in combined multiple burials with adults/adolescents and other CIFs.

## 8.4 Corresponding Burials: Incidence

Of the 487 CIFs identified in spatial relationships with other human burials, 293 individuals were observed in 266 'corresponding burial' associations. For the purposes of this study, 'corresponding burials' are defined as any interments of 2 or more individuals in related contexts, most likely occurring at different times. These are distinguished from multiple burials which are observed within a shared primary context, most likely occurring at the same time. Examples of corresponding burials may include: secondary-context burials explicitly communicating, adjoining, abutting, intersecting or corresponding with primary-context burials; burials in discreet *loci* of the same tomb; subsidiary/satellite burials surrounding a central/focal burial; and burials in disturbed contexts which, although clearly associated, can no longer be scrutinised according to primary/secondary-context configurations. Incidences of corresponding burials may be further described according to their manifestations within specific, general and Nilotic geographical regions, then by relative chronology, site type and age categories, below.

### 8.4.1 Specific Geographical Regions

Corresponding burials were observed in 7 out of the 10 specific geographical regions included in this study. The West Bank of Upper Egypt had the majority of corresponding burials, with 161 incidences identified amongst the published record (**Table 8.1**; **Figure 8.18**). The remaining regions featured substantially fewer incidences, with 54 examples cited for Dakhla Oasis, 29 for the West Bank of Lower Egypt, 24 for the East Bank of Upper Egypt, 20 for the East Bank of Lower Egypt, 3 for the West Bank of Middle Egypt, and 2 observations were made for the Eastern Nile Delta. There were no published examples of CIFs in corresponding burial associations in the Western Nile Delta, East Bank of Middle Egypt and Faiyum regions.

### 8.4.2 General Geographical Regions

When viewed according to distributions across general geographical regions, Upper Egypt clearly dominates with 185 CIFBs engaged in this aspect of ancient Egyptian mortuary behaviour (**Table 8.2**; **Figure 8.19**). Far fewer observations of corresponding burials were

made among the published data of the remaining regions, with 54 incidences identified for Dakhla Oasis, and 49 examples observed in Lower Egypt and the Nile Delta (MNI 2).

### 8.4.3 Nilotic Geographical Regions

When organised to reflect Nilotic geographical distributions, the data is concentrated on the West Bank. Here, 193 CIF corresponding burials were identified amongst published data (**Table 8.3**; **Figure 8.20**). The next most numerous region, Dakhla Oasis, presents 54 observations, while the East Bank features 44 examples of corresponding burials: more than 4 times less than its geographical counterpart. Substantially fewer incidences were reported for the Nile Delta with only 2 examples cited for this region. As discussed in §8.4.1, there were no published observations of CIFs in corresponding burials in the Faiyum.

### 8.4.4 Relative Chronology

In terms of chronological incidences, the highest frequency of CIF corresponding burials were observed amongst published data of the Old Kingdom, with a total of 169 examples attributed to this cultural phase (**Table 8.4**; **Figure 8.21**). Results are more balanced among the remaining chronological periods included in this study, with 50 incidences pertaining to the Middle Kingdom, 46 to the First Intermediate Period, and 28 examples were identified amongst the Early Dynastic component of the sample.

### 8.4.5 Site Types

The clear majority of CIF corresponding burials were observed amongst published cemetery data. Here, 278 incidences were described (**Table 8.5**; **Figure 8.22**), compared to 15 examples in settlement contexts. There were no reported incidences of CIF corresponding burials in either temple or funerary enclosure contexts.

### 8.4.6 Age Categories

All age categories included in this sample feature strong representations of corresponding burials (**Table 8.6**; **Figure 8.23**). Amongst the known-age portion of the sample, Young Children are most frequently reported in corresponding burial configurations, with 77 incidences described amongst published data. While Older Children follow closely with 74 observations, Infants and Foetuses present substantially fewer cases of corresponding burial, with 29 and 24 examples identified for these age categories, respectively.

Unfortunately, age-at-death was not published for the majority of corresponding burials among the sample (MNI 89).

## 8.5 Corresponding Burials: Nature and Scope

The sample was examined in order to determine the nature and scope of corresponding burial associations between CIFs and other individuals within the Egyptian archaeological record. Matters of key interest include determining the demographic profiles of corresponding burials, as well as the nature of spatial relationships within the funerary context. These matters are expounded, below.

### 8.5.1 Corresponding Burials: Demographic Overview

To facilitate accurate analysis of the corresponding burial phenomenon, each interment was calibrated to a single child, infant or foetus. The remaining constituents were then counted according to demographic categories. In cases where the exact number of individuals interred within a corresponding burial was not published, a minimum number of '1' was counted for each demographic category explicitly mentioned by the excavator.[715] It should also be noted that the assignment of sex to adults in both multiple and corresponding burial contexts was dubious on several occasions. Some excavators displayed a tendency to sex adult skeletons based on their associations with children, with a distinct bias towards 'female' designation.[716] Such designations align with the aforementioned tendency to apportion parental roles in multiple/corresponding burial contexts.[717] In 1 case, the sex of the associated adult differed in the same report,[718] and in another instance biological sex was assigned based on a gendered assessment of grave goods,[719] a phenomenon noted in Chapter 4 of this thesis.[720] Notwithstanding these challenges, 153 CIFs were observed in corresponding burials with 311 adult/adolescent males, 254 adult/adolescent females, 148 individuals of unknown age/sex, and 142 other children, infants or foetuses, producing a burial ratio of 1.00:2.03:1.66:0.97:0.93 (**Figure 8.24**).

[715] For example, DRN 1420.
[716] See DRNs 4, 6, 137, 1425, 1426; *cf.* Patch (2007: 252, fn. 4).
[717] See §8.2, above. Such tendencies have also been noted in the archaeology of other cultures; see Stoodley (2002: 115).
[718] Perhaps a typographical error. See DRN 1127; Adams (1987: 20-21).
[719] See DRN 39.
[720] See §4.3.

A maximum of 4 demographic categories were observed amongst corresponding burials.[721] In descending order of frequency, overall demographic configurations of corresponding burials were Unknown Age/Sex Individual/s:Child/ren (70 cases); Male Adult/Adolescent/s:Female Adult/Adolescent/s:Child/ren (37 cases); Male Adult/Adolescent/s:Female Adult/Adolescent/s: Unknown Age/Sex Individual/s:Child/ren (13 cases); Child/ren:Child/ren (10 cases); Female Adult/Adolescent/s:Child/ren (8 cases); Male Adult/Adolescent/s:Child/ren (8 cases); and Male Adult/Adolescent/s:Unknown Age/Sex Individual/s:Child/ren (7 cases).

Age-at-death distributions for CIFs engaged in corresponding burials were reported in §8.4.6, above (**Figure 8.23**).

### 8.5.2 Corresponding Burials: Nature of Association

As aforementioned, 153 incidences of corresponding burials were observed among the sample. The following corresponding burial configurations were observed in descending order of frequency: burials in highly disturbed contexts; mutually associated burials within antecedent burial space; burials within discreet tomb contexts; burials in mutual association; corresponding *and* multiple burials in discreet tomb contexts; burials in antecedent burial space; and burial via archaeological intervention. Incidences of corresponding burial configurations are further elaborated, below. In all categories, each corresponding burial was calibrated to a single child, infant or foetus. The remaining constituents were then counted according to demographic categories.

#### 8.5.2.1 Corresponding Burials in Highly Disturbed Contexts

The survey revealed 47 cases of CIF corresponding burials in highly disturbed spaces where all evidence of primary context had been lost. All incidences of this burial configuration were identified within the Old to Middle Kingdom use-phases of the rock-cut tomb necropolis of Qubbet el-Hawa on the West Bank of Upper Egypt. Here, 47 children were described in corresponding burials with 280 Adult/Adolescent Males, 230 Adult/Adolescent Females, 18 Individuals of Unknown Age/Sex, and 85 other CIFs, producing a burial ratio of 1.00:5.95:4.89:0.38:1.80 (**Figure 8.25**).

[721] See DRNs 390, 1159, 1161, 1162, 1167, 1190, 1218, 1225, 1249, 1250, 1274, 1286, 1290.

A maximum of 4 demographic categories were observed for burial configurations in these contexts.[722] There were 30 observations of Adult/Adolescent Male/s:Adult/Adolescent Female/s:Child/ren configurations; 12 observations of Adult/Adolescent Male/s:Adult/Adolescent Female/s:Individual/s of Unknown Age/Sex:Child/ren configurations; 3 observations of Adult/Adolescent Female/s:Child/ren configurations; and 2 observations of Adult/Adolescent Male/s:Individual/s of Unknown Age/Sex:Child/ren configurations.

In terms of age-at-death distributions, all 132 CIFs amongst the sample observed in corresponding burials within highly disturbed contexts were of known-age, including 2 Foetuses, 3 Infants, 62 Young Children and 65 Older Children (**Figure 8.26**).

#### 8.5.2.2 Mutually Associated Corresponding Burials within Antecedent Burial Contexts (*versus* "Intrusive" Burials)

Thirty-four cases of mutually associated corresponding burials within antecedent burial contexts were observed amongst the sample. This configuration accounts for many of the so-called "intrusive" burials among the literature,[723] that is, secondary burials associated in vertical/horizontal stratigraphical relationships with each other, within another individual/s antecedent primary burial space. The present study is reluctant to perpetuate the term "intrusive" for these burials as it semantically assigns negative, elitist, deviant connotations to one of the most widespread practices in Egyptian mortuary culture. In nature, 'intrusive burials' bear all the characteristics of cultural investment. In scope, their sheer abundance is indicative of normative behaviour. The present study proposes "corresponding burials within antecedent burial contexts" as an alternative phrase, as it offers a scientific description of the spatio-temporal archaeological relationships of these burials while removing cultural judgement.

As discussed in Chapter 7,[724] it was the Egyptians' intention that monumental royal and private funerary architecture should have the capacity to purposefully cater for the corresponding burial of family/community members via the optional provision of multiple burial shafts and/or chambers.[725] The present study argues that while the physical expressions of corresponding burial in communal cemetery contexts (clustering,

[722] See DRNs 1159, 1161, 1162, 1167, 1190, 1218, 1225, 1249, 1250, 1274, 1286, 1290.
[723] See also §8.5.2.6, below. For example, see Quibell (1923: 18); Reisner (1932: 232); Weinstein (1973: 405); Redford (2000: 18); Grajetzki (2007: 16).
[724] See §7.1.
[725] *Cf.* Goedicke (1988:196-197, 199).

intercutting, and/or insertions)[726] may be less formal and structured than in monumental tombs, they nonetheless bear the same ontological premise. As evidenced by the *Coffin Texts*,[727] it was the greatest wish of Egyptians to be posthumously reunited not only with their families,[728] but also with their wider social networks. The Egyptians actively and explicitly sought to generate continuing bonds[729] with their fathers,[730] mothers,[731] children,[732] brethren (and their relatives),[733] dependants,[734] friends,[735] loved ones,[736] companions,[737] concubines,[738] associates,[739] workers,[740] and servants.[741] In death, as in life, they considered themselves "incomplete" without them.[742] As such, it is reasonable to extrapolate that the spatial relationships observed in the necropolis mirrored corporeal relationships held on earth. The present study therefore suggests that corresponding and multiple[743] burial configurations may have comprised of individuals from any of the preceding groups.

Working examples of the broad social networks described above can be seen in the vast Old Kingdom mastaba cemeteries of Giza and Saqqara on the West Bank of Lower Egypt. Here, posthumous beneficence derived from proximity to royal or noble tombs has long been promoted as an acceptable practice within archaeological narratives of aristocratic mortuary

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726 Crawford (2007: 84).

727 For example, with reference to Faulkner (1973: 113, 116, 121-124), Spell 131: "The Sealing of a Decree Concerning the Family: The Giving of a Man's Family [to Him] in the Realm of the Dead"; Spell 134: "Spell for Sealing a Decree for a Man Concerning His Family"; Spell 135: "Recitation for Sealing a Decree Concerning the Family and for Giving a Man's Family to Him in the Realm of the Dead"; Spell 136: "Assembling a Family in the Realm of the Dead"; Spell 142: "Assembling for Him the Dependants of *N* Who are in the Realm of the Dead"; Spell 143: "Assembling *N*'s Family for Him in the Realm of the Dead and Giving His Family to Him in the Realm of the Dead"; Spell 144: "Spell for Assembling the Family"; and Spell 146: "Assembling a Man's Family for Him in the Realm of the Dead", "Assembling the Family, Father, Mother, Friends, Associates, Children, Women, Concubines, Servants, Workers and Everything Belonging to a Man for Him in the Realm of the Dead. A Spell a Million Times Right".

728 Meskell (2001: 35).

729 Lloyd (1989: 120); Klass *et al.* (1996); Walter (1996); Klass & Walter (2001).

730 *CT* 131.151; *CT* 144.178; *CT* 146.181, 185, 186, 192; all cited in Faulkner (1973).

731 *CT* 131.151; *CT* 146.182, 185, 186, 192; all cited in Faulkner (1973).

732 *CT* 131.151; *CT* 136.164; *CT* 146.182, 183, 186, 193; all cited in Faulkner (1973).

733 *CT* 131.151; *CT* 136.164; *CT* 146.182, 187; all cited in Faulkner (1973).

734 *CT* 131.151; *CT* 142.174; *CT* 143.176; all cited in Faulkner (1973).

735 *CT* 146.182, 187, 193; all cited in Faulkner (1973).

736 *CT* 146.182, 187, 193; all cited in Faulkner (1973).

737 *CT* 136.164; cited in Faulkner (1973).

738 *CT* 146.183, 184, 193; all cited in Faulkner (1973).

739 *CT* 146.182, 184, 189, 193; all cited in Faulkner (1973).

740 *CT* 146.205; cited in Faulkner (1973).

741 *CT* 131.151; *CT* 146.182, 189, 195; all cited in Faulkner (1973).

742 *CT* 141 II.174; cited in Faulkner (1973). Prof. Naguib Kanawati, Macquarie University, *pers. comm.*, also cites the presence of family members in Old Kingdom wall scenes of fishing and fowling as further indicators of filial affection, semantically indicating the tomb owner's desire to be joined by his family members in perpetuity. For example, see the Old Kingdom tomb of Ibi at Deir el-Gebrawi on the East Bank of Middle Egypt, South Wall, East of Entrance: Kanawati (2007: 27ff., pls. 7-10, 45-46, 67).

743 See §8.2, above.

behaviour.[744] The present study suggests that similar sensibilities also translate to those outside aristocratic spheres and, in conjunction with the personal wishes articulated within the *Coffin Texts*, two further lines of argument are offered to support this claim. Firstly, all evidence suggests that fundamental religious beliefs, such as basic afterlife entitlement, permeated all socio-economic groups in Egypt. Therefore, it follows that groups/individuals of meagre means would also be eligible to seek perpetual beneficence via proximity to more affluent groups/individuals' tombs. Secondly, the ontological underpinnings of such religious beliefs were the social obligations of the centralised, redistributive Egyptian economy. Even when this model evolved to feature elements of free enterprise, those of greater means shared resources with impecunious family members and dependents.[745] In agreement with Assmann's "Versorgungsgemeinschaft",[746] the present study argues that this model was perpetuated into the funereal realm, with spatially-determined beneficences manifesting via associations between and amongst burials across the mortuary landscape. Membership in such a community was the "only way for the deceased to partake of the sustenance of the gods",[747] and the very act of sharing was what granted membership into the gods' community.

To refer to corresponding burials as "intrusive" fails to account for the agency of those orchestrating burials – as well as that of the deceased themselves – to mobilise space as a mechanism which creates and assures deliberate, perpetual dialogues between and amongst living and dead individuals and communities within mortuary landscapes.[748] Following Schiffer and Crawford, the present study views primary, antecedent burials as a 'systemic context',[749] as they are invested with meaning and retain a physical and metaphorical place within social memory. In this framework, Mizoguchi views subsequent associated burials as demonstrative statements of remembrance which deliberately locate the deceased in multiple constellations of the living and the dead.[750] Here, diachronic spatial dialogues forge continuing bonds between antecedent burials, which in turn create their own synchronic systemic context with which their own kinship group or community may

[744] Kemp (1991: 239); Baines & Lacovara (2002: 9, 19).
[745] Kemp (1991: 239-240) cites as an example the First Intermediate Period Hekanakht archives.
[746] Assmann (1989: 145-146, 152); *cf.* Assmann (1976: 16-20).
[747] Assmann (1989: 145).
[748] Baines (1991: 147); Baines & Lacovara (2002: 9); Pettitt (2006: 293); Robb (2007: 291, fn. 1); Hopwood (2008: 120).
[749] Schiffer (1976: 27-28); Crawford (2007: 84); *cf.* Shepherd (2007: 99).
[750] Mizoguchi (2000: 143); *cf.* Baines & Lacovara (2002: 19); Crawford (2007: 84, 86). Pettitt (2006: 293) also argues that notions of fixed dichotomies between the living and the dead are "products of enlightenment thought"; symptomatic of the "modern, scientifically informed and anti-superstitious world".

engage: a pattern which may be repeated over time.[751] Harrington argues that ancestors may have had a special role in protecting children, adding a further dimension to funereal spatial relationships involving children and adults.[752] That such spatial relationships were intended to be intergenerational is exemplified by the interconnected funerary constructions of Hepi-kem the Black (grandfather), Sobekhotep (Hepi the Black, father), and Pepi-ankh the Black (son) in the Old Kingdom rock-cut necropolis of Meir on the West Bank of Middle Egypt;[753] then in later times by the New Kingdom tomb of Paheri at Elkab on the East Bank of Upper Egypt.[754] Paheri's tomb was constructed next to that of his grandfather, the warrior hero Ahmose Son of Abana, which Paheri also claims to have built.[755] Continuing bonds can be traced for at least five generations inside Paheri's tomb, as he is depicted receiving offerings from his children and his children's children (msw msw=f),[756] while his father, mother, grandfather and grandmother also all feature in his banqueting scenes.[757]

Within the present dataset, 34 CIFBs were described in mutually associated burials within antecedent burial contexts with 10 Adult/Adolescent Male/s; 6 Adult/Adolescent Female/s; 41 Individual/s of Unknown Age/Sex; and 9 other CIFs, producing a burial ratio of 1.00:0.29:0.18:1.20:0.26 (**Figure 8.27**). The presence of both adults *and* CIFs is significant in this context: clearly, engagement with antecedent burials was not restricted to the youngest members of the population.[758] Moreover, as noted above, associations in this context may not be restricted to the primary antecedent burial. Spatial dialogues, with all their politico-religious implications, should be viewed as occurring amongst and between antecedent and subsequent[759] interments within mortuary communities.

751 For the social production and significance of space, see Tilley (1994: 10).

752 Harrington (2005: 79) argues that ancestors may have had a special role in protecting children, adding a further dimension to funereal spatial relationships involving children and adults.

753 Prof. Naguib Kanawati, Macquarie University, *pers. comm.*; *cf.* Richards (2007) for her discussions of the spatial relationship between the tombs of the 6th Dynasty official Weni and his father Iuu in the Middle Cemetery at Abydos.

754 18th Dynasty; Tylor & Griffith (1894).

755 Tylor & Griffith (1894: 24).

756 Tylor & Griffith (1894: 18, pl. x); Feucht (1995: 524); Meskell (2001: 35). Khewen-wekh also represents his grand-daughter in his Old Kingdom tomb at Quseir el-Amarna on the East Bank of Middle Egypt; El-Khouli & Kanawati (1989: 37, 47, 56). The involvement of grandchildren in the burial ritual (at least in name) has also been observed in material culture. Edel (1966: 50) notes that votive offering pots excavated from the burial of a certain Lady Ipi in the necropolis of Qubbet el-Hawa on the West Bank of Upper Egypt were inscribed with the names of her children and grandchildren.

757 Tylor & Griffith (1894: 23, pls. v-vi).

758 For example, see DRNs 140-144, 146-148, 153-154, 872, 876-880, 881, 882-897, 928.

759 Stoodley's (2002: 106) "consecutive" burials.

A maximum of 3 demographic categories were observed in burial configurations in this context.[760] There were 30 observations of Individual/s of Unknown Age/Sex:Child/ren; 2 observations of Adult/Adolescent Male/s:Adult/Adolescent Female/s:Child/ren; 1 observation of Adult/Adolescent Male/s:Individual/s of Unknown Age/Sex:Child/ren; and 1 observation of Child/ren:Child/ren configurations.

In terms of age-at-death distributions, 43 CIFs amongst the sample were observed in mutually associated corresponding burials within antecedent burial contexts: 19 Foetuses, 6 Infants, 2 Older Children and 16 individuals of Unspecified Age (**Figure 8.28**). There were no observations of Young Children within this burial category.

#### 8.5.2.3 Corresponding Burials within Discreet Tomb Contexts

The survey revealed 20 cases of corresponding burials within discreet tomb contexts. This configuration accounts for synchronic burials interred within different parts of the same tomb. Here, 20 CIFs were described in such configurations with 4 Adult/Adolescent Males; 1 Adult/Adolescent Female; 22 Individuals of Unknown Age/Sex; and 9 other CIFs, producing a burial ratio of 1.00:0.20:0.05:1.10:0.45 (**Figure 8.29**).

A maximum of 3 demographic categories were observed in burial configurations in this context.[761] There were 12 observations of Individual/s of Unknown Age/Sex:Child/ren; 2 observations of Child/ren:Child/ren; 2 observations of Adult/Adolescent Male:Child/ren; 1 observation of Adult/Adolescent Female:Child/ren; and 1 observation of Adult/Adolescent Male:Adult/Adolescent Female:Child/ren configurations.

In terms of age-at-death distributions, 29 CIFs amongst the sample were observed in corresponding burials within discreet tomb contexts: 7 Infants, 6 Young Children, 1 Older Child and 15 individuals of Unspecified Age (**Figure 8.30**). There were no observations of Foetuses within this burial category, whatsoever.

#### 8.5.2.4 Mutually Associated Corresponding Burials

Among the dataset, 18 cases of corresponding burials were observed in mutually associated contexts. This configuration accounts for burials associated by direct vertical/horizontal stratigraphical relationships. These burials are distinct from configurations described in §8.5.2.2, above, inasmuch as the interments do not appear to

[760] See DRNs 876, 878.
[761] See DRN 770.

have taken place in *antecedent* burial contexts. The 18 CIFs within this category were identified in association with 4 Adult/Adolescent Males; 1 Adult/Adolescent Female; 8 Individuals of Unknown Age/Sex; and 15 other CIFs, producing a burial ratio of 1.00:0.22:0.06:0.44:0.83 (**Figure 8.31**).

A maximum of 2 demographic categories were observed in burial configurations in this context.[762] There were 8 observations of Individual/s of Unknown Age/Sex:Child/ren; 7 observations of Child/ren:Child/ren; 2 observations of Adult/Adolescent Male:Child/ren; 1 observation of Adult/Adolescent Female:Child/ren configurations.

In terms of age-at-death distributions, 33 CIFs among the sample were observed in mutually associated corresponding burials: 1 Foetus, 10 Infants, 4 Young Children, 2 Older Children and 2 Children of Unspecified Age (**Figure 8.32**).

Four observations were made of mutually associated corresponding burials in noteworthy contexts. The first two examples, DRNs 783 and 784, are the disturbed shaft graves of children of unspecified ages serving amongst 62 subsidiary burials to a royal tomb, described by the excavator as that of the third king of the First Dynasty Uadji (Djed), in the Early Dynastic cemetery of Abydos.[763] The graves are roofed with timber, above which has been placed a layer of reed matting to prevent the filling from falling into the grave. The grave walls are faced with mud plaster. Each grave had a rubble-filled domed mudbrick superstructure with a small niche at the South end of the East façade. Extant grave goods include 3 ceramic vessels in the first child burial, and 2 ceramic vessels in the second interment.[764]

The remaining mutually associated corresponding burials in noteworthy contexts were those of DRNs 1388 and 1389, both located in the Old Kingdom mastaba fields of Giza on the West Bank of Lower Egypt. The former, DRN 1388, was the interment of a Young Child in a shaft grave with a burial niche associated with the mastaba tomb of Re'-Wer.[765] It is not known whether any grave goods were provided for this burial. The latter, DRN 1389, was the burial of a 12 year old 'male' child in 'his' own limestone-constructed mastaba tomb with burial shaft and chamber.[766] This burial has already been described by this thesis, due to its unique example of funerary treatment: the child was wrapped in a

[762] See DRNs 92, 100, 652, 653, 769, 783, 784, 792, 898, 927, 1388-1390, 1451.
[763] Emery (1954: 5-6, 13, 33).
[764] See GGRNs 1503-1507.
[765] Hassan (1932: 58).
[766] Hassan (1941: 240).

gold sheet, placed in a wooden coffin, and furnished with an assemblage of over 90 grave goods.[767] Pertinent to the present discussion however, is the fact that the child's mastaba uses the Northern wall of the larger antecedent mastaba of Prince Kai as its Southern wall, establishing not only a *terminus post quem* of the child's tomb construction, but also consolidating a significant spatial dialogue. Hassan interprets the association as evidence that the child was a member of the royal family.[768]

8.5.2.5 Corresponding *and* Multiple Burials within Discreet Tomb Contexts

The survey identified 14 cases of corresponding *and* multiple burials within discreet tomb contexts. This configuration accounts for synchronic burials which are not only multiple in nature but also correspond with other interments located in different parts of the same tomb. Here, spatial dialogues between individuals and groups of individuals extend across specific contexts. Fourteen CIFs were described in such configurations with 11 Adult/Adolescent Males; 14 Adult/Adolescent Females; 17 Individuals of Unknown Age/Sex; and 14 other CIFBs, producing a burial ratio of 1.00:0.79:1.00:1.21 (**Figure 8.33**).

A maximum of 4 demographic categories were observed in burial configurations in this context.[769] There were 4 observations of Adult/Adolescent Male/s:Adult/Adolescent Female/s:Child/ren; 4 observations of Individual/s of Unknown Age/Sex:Child/ren; 4 observations of Adult/Adolescent Female/s:Child/ren; 2 observations of Adult Adolescent Male/s:Individual/s of Unknown Age/Sex:Child/ren; 1 observation of Adult/Adolescent Male:Child/ren; and 1 observation of Adult/Adolescent Male/s:Adult/Adolescent Female/s:Individual/s of Unknown Age/Sex:Child/ren configurations.

Within this category, 3 individuals were observed in corresponding and multiple burials within the same noteworthy context: DRNs 881, 1125 and 1126 were all interred in the burial chamber of the mastaba tomb of Governor Ima-Pepi in the late Old Kingdom/early First Intermediate Period cemetery of Balat in the Dakhla Oasis. The first multiple burial, DRN 881, was that of a foetus, interred within a ceramic vessel in the same primary context as the Governor himself.[770] While an abundance of grave goods were described in this context, the only item that was reliably associated with the foetus was a quantity of

[767] See §§7.2.1.6, 6.2.5, 6.8.
[768] Hassan (1941: 240).
[769] See DRN 390.
[770] Minault-Gout (1992: 43).

beads, some of which were covered in gold foil.[771] The corresponding multiple burials of DRNs 1125 and 1126 were those of children of unspecified ages, interred within the burial chamber during its secondary-use phase along with 2 adults of unknown sex. An assemblage of 2 ceramic globular vessels and 1 bivalve shell was provided for DRN 1125,[772] while DRN 1126 was provided with 8 ceramic globular vessels and 1 bivalve shell.[773]

In terms of age-at-death distributions, 28 CIFs amongst the sample were observed in corresponding and multiple burials within discreet tomb contexts: 2 Foetuses, 1 Older Child and 25 individuals of Unspecified Age (**Figure 8.34**). There were no observations of Infants or Young Children in this burial category.

#### 8.5.2.6 Corresponding Burials in Antecedent Burial Contexts

Among the sample, 18 cases of corresponding burials were observed in antecedent burial contexts. This configuration accounts for secondary-context burials within another individual/s' primary-context burial space. Such interments are also referred to as "intrusive" among the literature, particularly when seemingly 'non-elite' secondary-context burials adjoin, abut or intersect with 'elite' antecedent tombs/graves. This category of burials is distinct from those described in §8.5.2.2, above, as they are not associated with any other secondary-context burials, only that of the antecedent/s. While examples of this form of interment proliferate amongst elite burials, they are not considered "intrusive" in such contexts. For example, a doorway was cut into the antecedent decorated wall of the Old Kingdom tomb of the Vizier Mereruka in the Teti Cemetery at Saqqara to create an entrance to the mortuary chapel of Mereruka's son, Meri-Teti.[774] Rather than being 'intrusive', the excavator describes such associations as "communicating".[775] The present study merely appeals for similar considerations to be given to "communicating" or 'corresponding' burials in non-elite contexts. Here, 18 CIFs were described in such configurations with 2 Adult/Adolescent/Males; 2 Adult/Adolescent Females; and 15 Individuals of Unknown Age/Sex, producing a burial ratio of 1.00:0.11:0.11:0.83 (**Figure 8.35**). There were no Child:Child corresponding burials in this context.

[771] See GGRN 1632.
[772] See GGRNs 2342, 2343.
[773] See GGRNs 2344-2346.
[774] Entrance cut into the Pillared Hall A13; Kanawati *et al.* (2010: 39).
[775] Prof. Naguib Kanawati, Macquarie University, *pers. comm.*

A maximum of 3 demographic categories were observed in burial configurations in this context.[776] There were 14 observations of Individual/s of Unknown Age/Sex:Child; 2 observations of Adult/Adolescent Female/s:Child; 1 observation of Adult/Adolescent Male:Child; and 1 observation of Adult/Adolescent Male:Individual of Unknown Age/Sex:Child configurations. Once again, the presence of both adults and children should be noted in this context. Moreover, there were 2 incidences among the sample whereby adult interments were subsequent to an antecedent child burial.[777]

One observation was made of corresponding burial in noteworthy antecedent burial context: DRN 158, the disturbed pit burial of a 3–5 year old child in the North-East corner of the mastaba of Prince Netjer-Aperef in the Old Kingdom cemetery of Dahshur on the West Bank of Lower Egypt.[778]

In terms of age-at-death distributions, 18 CIFs amongst the sample were observed in corresponding burials within antecedent burial contexts: 3 Infants, 5 Young Children, 2 Older Children and 8 individuals of Unspecified Age (**Figure 8.36**). There were no observations of Foetuses in this burial category.

#### 8.5.2.7 Corresponding Burial via Archaeological Intervention

One case of corresponding burial via modern archaeological intervention was observed amongst the sample. This burial, DRN 124, accounts for the reburial of 9 children, 27 adults, more than 800 ceramic vessels and an unspecified quantity of stone vessels by Zaki Saad in a so-called "storage tomb"[779] at the Early Dynastic cemetery of Helwan on the East Bank of Lower Egypt. Saad did not record the provenance of these human remains, so all original associations have been lost. Nevertheless, cultural transformation processes such as archaeological intervention should be acknowledged within diachronic analyses and as such, these individuals are represented here. In the absence of published age-at-death distributions and sex assessments, reporting is restricted to a simple Adult:Child burial ratio of 3.00:1.00.

[776] See DRN 874.
[777] See DRNs 685, 871.
[778] Alexanian (1999: 168).
[779] Köhler (2003: 18).

## 8.6 Burials Associated with Pyramids

Two individuals amongst the sample are engaged in burial associations with pyramids. The first, DRN 50, is the burial of a 5 months *post-partum* neonate in the marl bank on the North side of the Southern sand trench surrounding the base of the Middle Kingdom pyramid of Senwosret II at Lahun on the West Bank of Middle Egypt.[780] The deposit was covered with broken marl chips. The body was placed in a plain wooden box, marked at the Southern end with the seal of an Official of the Treasury. The burial was furnished with 1 limestone and 2 ceramic bowls as grave goods.[781] Brunton explains the presence of this burial as a "foundation sacrifice".[782] The present study disagrees with this interpretation and offered a historiographical appraisal of Brunton's comments in Chapter 2 of this thesis.[783]

The second burial, DRN 1138, is the interment of a 2-year old 'male' child within the gallery of the South tomb of the unfinished Old Kingdom monumental funerary complex of Horus Sekhemkhet, second ruler of the Third Dynasty, at Saqqara on the West Bank of Lower Egypt.[784] The complex featured a step pyramid, similar to that of Horus Sekhemkhet's predecessor Djoser, as well as a bastioned and panelled enclosure wall. Lauer explains the presence of the burial as follows:

> "The child was certainly not the king, who would have rated a more luxurious coffin made of alabaster or hardstone. It could only be a young prince who died a short time after his father's death, perhaps during a distant campaign, and this might explain why the king's body was not buried beneath his pyramid and why the building of his funerary monument had suddenly been cut short."[785]

It is certainly possible that the child interred within the gallery may have been the offspring of Horus Sekhemkhet. However, in alignment with arguments offered earlier in this chapter,[786] the present study is inclined to interpret this burial merely as that of a child somehow imbricated in the king's broader familial and/or social networks.

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780 Petrie *et al.* (1923: 4).
781 See GGRNs 80-82.
782 Petrie *et al.* (1923: 4). Weinstein (1973: 403, 415) states that there is no textual or archaeological evidence for human foundation sacrifice in pharaonic Egypt.
783 See §2.4.
784 Lauer (1976: 137-140); see §§7.4.1, 7.4.2, 7.6 for further details regarding this burial.
785 Lauer (1976: 139).
786 See §8.5.2.2, fns. 727-742.

## 8.7 Unknown Features

One burial, DRN 66, is known to have been associated with at least 1 other feature in the archaeological record, but the nature of association is not clear. The interment is the intact burial of a child of unspecified age, wrapped in reed matting and placed on a funerary bed somewhere within the Middle Kingdom cemetery of Beni Hasan on the East Bank of Middle Egypt.[787] The precise grave location and type are not disclosed.[788] Very few details are available for this burial; although Garstang describes it as "intrusive",[789] he does not provide any information regarding the nature and scope of the antecedent burial space, nor of the individual to whom it belongs.

## 8.8 Summary

This chapter has examined CIFB associations during the Egyptian Early Dynastic to Middle Kingdom Periods. Data was derived from the survey of all available archaeological publications pertaining to this timeframe, supplemented by unpublished material from the ACE Helwan Project. Analyses sought to determine what the nature and scope of CIFB associations reveals about their position, value and agency amongst and between the communities of the living and the dead. The majority of individuals among the sample were interred in independent graves, thus establishing that autonomous burial was well within the cultural capacity of this demographic group. Of those CIFs for whom associated features were attested, the majority consisted of spatial relationships with other human burials. Far fewer CIFs were observed in association with other features, including 2 pyramids and a structure of unknown nature.

The study identified 2 broad categories of human spatial relationships in Egyptian mortuary contexts: multiple burials and corresponding burials. Each category featured further distinctions in order to accommodate for the manifold ways that space may be mobilised by individuals, kinship groups and communities in the context of the burial ritual. Multiple burials – that is, any interments of 2 or more individuals within the same primary context – were variably attested among the sample for all age groups, across all general and Nilotic geographical regions, in all chronological periods, across all socio-economic strata, and in all site types except funerary enclosures. These findings expand the nascent understandings of this phenomenon within Egyptian mortuary behaviour, as it

[787] See GGRN 210.
[788] Garstang (1907a: 102).
[789] Garstang (1907a: 102).

has previously been restricted to occasional burials of male and female 'couples' prior to the Middle Kingdom, with somewhat broader demographic attestations thereafter. Indeed, relative to publication rates, the fairly balanced observations across all chronological periods within this study suggest that it was a normative, enduring cultural practice.

Overall, of all the juvenile age categories, Infants were most frequently identified within multiple burial configurations, dispelling notions that these practices were restricted to older members of the community. Further analysis of these configurations determined that children were most likely to be interred with other children; then with an adult of one demographic category (male or female, but most often, due to poor recording, with an individual of unknown sex); followed by adults of more than one demographic category; and finally with adults and other children.

Corresponding burials – that is, any interments of 2 or more individuals in related, not shared, contexts – were also variably attested among the sample for all age groups, across all general and Nilotic geographical regions except the Faiyum, in all chronological periods, across all socio-economic strata, in both settlement and cemetery contexts. In this case, Young Children were most commonly observed in corresponding burial associations. A variety of configurations were identified for this mode of burial amongst the sample. Most frequently, children were engaged in spatial relationships with individuals of unknown sex and age, again highlighting the poor reporting of many archaeological publications. Further to this, children were seen to be interred with individuals from all demographic groups in every conceivable configuration.

Corresponding burials were identified across a wide range of contexts, most frequently in highly disturbed spaces where all evidence of primary context had been lost. The next most frequent observations were of CIFs in mutually associated burials within antecedent burial space, followed by burials within discreet tomb contexts, burials in mutual association, burials featuring corresponding *and* multiple burial configurations within discreet tomb contexts, burials in antecedent burial space, and finally, burial via archaeological intervention.

The major findings of this chapter are threefold. Firstly, the discovery of children in multiple burial contexts prior to the Middle Kingdom extends current understanding of this facet of ancient Egyptian mortuary behaviour. The articulation of the nature of multiple burials also contributes to knowledge in this area. Here, the attestation of burials which

include all demographic groups in every conceivable configuration quashes the supposed 'rule' that only adult male and female 'couples' were engaged in such posthumous spatial relationships.

Secondly, assumptions regarding the nature of these spatial relationships must be called into question. This research identified many instances where scholars apportioned familial (husband, wife) and genetic (mother, father, parent) relationships based on burial association alone. Within the entire dataset, familial relationships were only able to be reliably established for one burial group through aDNA typing. In the absence of such scientific tests, the only other cases where genetic relationships may be inferred are those of adult/adolescent females buried with a foetus *in situ*. While it is accepted that some of the multiple burials within the dataset may have been those of parents and children, it is highly improbable that *all* cases of multiple burial represent simultaneously deceased individuals from the same immediate family.[790] Such sustained, consistently localised mortality rates would have had devastating effects on community fecundity, cohesion, economy and politics. Moreover, such interpretations cannot account for the variety of demographic configurations presented here. Multiple burials are more likely to replicate wider individual, kinship, community, structural and ideological social networks,[791] spatially manifest as continuing bonds between and amongst deceased individuals from all these groups.

Thirdly, this research has questioned the current conceptions of 'corresponding burials' in the Egyptian archaeological record as "intrusive" and offered new terminology to describe the phenomenon. Individuals from every demographic segment of the ancient population, across all socio-economic strata, in all major forms of funerary architecture were here seen to be engaged in corresponding burials which featured all the hallmarks of cultural investment. In some cases, adults were interred in children's antecedent mortuary space. Rather than deferring to the long-held sensibility that such burials amongst any demographic segment were "intrusive", the present study has considered these interments from a different perspective. It suggests we mobilise them as opportunities to witness synchronic and diachronic dialogues in systemic contexts which function between and amongst the communities of the living (those orchestrating the burial) and the dead (those previously and subsequently buried). Again, the present study argues that such deliberate

[790] Hendrickx (1984: 227); Meskell (1999b: 117); Mizoguchi (2000: 145).
[791] Mizoguchi (2000: 145); Shepherd (2007: 99).

spatial relationships within the mortuary sphere echo those in the realm of the living. It calls for the widely-accepted conceptions of spatially-determined beneficences between and amongst aristocratic antecedent and subsequent interments to be extended across the entire mortuary community. Such an approach mirrors the socio-political and religious ontological underpinnings of the redistributive economy, whereby the wealth of the country trickled through every socio-economic and demographic stratum. As for so many aspects of ancient Egyptian culture, it is suggested that the structures and facilities instituted within the living community also persisted after death.

While further research is required across the entire ancient population to determine the complete spectrum of associated features within Egyptian mortuary behaviour, each of the findings levelled here appear to indicate that this facet of children's mortuary culture parallels that observed for contemporary adult burials, and is certainly more complex than currently thought. The spatial relationships observed amongst the sample suggest that CIFs were thoroughly embedded in social networks during the timeframes canvassed by this study. These findings promote them as active participants in social dialogues between and amongst communities of the living and the dead, and upturn their previous relegation to the margins of society. The qualitative implications of these results for the position, value and agency of ancient Egyptian children will be considered further in Chapter 10.

# CHAPTER 9: GRAVE GOODS

The provision of grave goods is one of the most characteristic elements of ancient Egyptian mortuary behaviour. Artefacts and ecofacts derived from funerary contexts inform not only our reconstructions of ancient Egyptian funerary practices and beliefs, but due to the dearth of published settlement data, they are also foundational to our understandings of ancient Egyptian life-ways. Notwithstanding the weighty responsibilities placed upon this category of evidence to comprehensively represent ancient Egyptian civilisation, studies concerning the distribution of grave goods across demographic profiles are exceedingly limited in number. Where extant, they focus on *quantitative* analyses of adult data, using the elite adult male as the barometer against which all other evidence is calibrated.[792] Within such a framework, children's grave goods are invariably intellectually processed in one of two ways. On one hand, they may be overtly *excluded* from quantitative analyses when they differ in type or number to those of adults,[793] thereby perpetuating disciplinary narratives which promulgate children's social, religious, political and economic ostracism and poverty. On the other hand, "exceptional" children's grave goods are summarily *included* when they exceed excavators' expectations. Generally, however, they are not accepted as children's property, rather 'ownership' is guarantored via associations with adults.[794] In order to determine what children's grave goods reveal about their social position, value and agency in Early Dynastic to Middle Kingdom Egypt, data derived from the archaeological survey described in §1.4.4 was analysed to ascertain the nature and scope of published child, infant and foetal funerary assemblages, including their distributions, categories, materials, origins and inscriptions. In accordance with the project structure outlined in §1.6, results of this research are presented below, as are some theoretical considerations which stand to elucidate the procurement, processing and understanding of this category of evidence. Qualitative analyses of these results will be offered in Chapter 10.

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792 For example, Petrie (1925).

793 For example, Petrie (1914: 21); Castillos (1982a: 68, 95).

794 For example, see Castillos (1977-1978: 92, 93, 97; 1982a: 51, 52, 55, 61, 65, 125, 145, 176; 1982b: 31; 2000: 255); *cf.* Garwood (2007: 75); Stevenson (2009b: 174).

## 9.1 Overview

The sample was examined to determine how many CIFs were identified with grave goods among the published archaeological record of the Early Dynastic to Middle Kingdom Periods. A minimum of 835 individuals (46.16% TBs; **Figure 9.1**) were reported as receiving a minimum of 4,749 grave goods, producing a sample mean of 5.69 items per furnished interment. The minimum number of grave goods amongst furnished burials was 1, while the maximum number of items identified in a single burial was 319: that of DRN 1134, the Early Dynastic tomb of an 8–10 year old child at Hierakonpolis on the West Bank of Upper Egypt.[795] Conversely, 302 individuals amongst the sample were explicitly identified without grave goods (16.69% TBs), 205 individuals may have received grave goods, although this cannot be determined with certainty (11.33% TBs), and the provision status of 467 individuals was not published (25.82% TBs). Anecdotally, it should be noted that adults were also interred with and without grave goods during the periods canvassed by this research, with the extent of individual's funerary assemblages determined by both fashion[796] and socio-economic status.[797] Direct comparisons between the nature and scope of child and adult grave good provision would exponentially expand our understandings of differential demographic mortuary behaviour in ancient Egypt. While such investigations fall beyond the scope of the present research, they are nonetheless intended for future extensions of this project.

It is acknowledged that the aforementioned figures only represent a fraction of the 'true' scope of CIF funerary assemblages of the Early Dynastic to Middle Kingdom Periods. As discussed in §5.1, 22.45% of burials among the sample were identified as 'disturbed', 'possibly disturbed', or 're-used'; and tomb condition was not published for 52.35% of burials. Only 25.21% of burials were reported as 'archaeologically intact' (see **Figure 5.1**). Tomb robbery was endemic throughout Predynastic, pharaonic and post-pharaonic Egypt.[798] While not denying that tomb robbery was a social, economic and occupational cultural phenomenon worthy of study in its own right, its profound impact on our reconstructions of ancient Egyptian culture is nonetheless widely accepted.[799] Indeed, it may be argued that the plundering of children's tombs is evidence that they contained enough quality and quantity of materials to justify thieves' time, effort and risk. Further, it demonstrates that CIFs were

[795] For further information regarding this burial, see §§6.7.4, 7.2.4, 7.4.2.
[796] Grajetzki (2003: 16, 20, 24-26, 35, 38, 42, 90).
[797] Grajetzki (2003: 7, 24, 52, 90).
[798] Richards (1992: 67); Savage (1995: 125ff.; 1997: 253); Meskell (1999a: 195); Baines & Lacovara (2002: 24-25).
[799] Kemp (1991: 242-246, 248, 272-273); Anderson (1992: 60); Griswold (1992: 52); Castillos (1998a: 27; 1998b: 28-29); Baines & Lacovara (2002: 13, 24-25); Rowland (2004: 999).

not subject to any differential treatment, even amongst the more nefarious elements of Egyptian culture.

It is also acknowledged that a substantial proportion of grave goods may have been organic in nature, thus highly susceptible to decomposition and difficult or impossible to identify in archaeological contexts.[800] This phenomenon has the propensity to obfuscate 'true' provision rates of such grave good categories as food, fuel, textile, clothing and footwear, the composite materials of which are often organically-based. Furthermore, archaeobotanical investigations of soil matrices and vessel contents are relatively recent to Egyptian archaeology. Due to the highly specialised nature of sample collection, processing and analysis, such studies have not received widespread applications, thus further limiting opportunities for understanding this category of evidence.

Moreover, from a historiographical perspective, one cannot underestimate the impact of excavators' tendencies to only publish – or only publish in explicit detail – 'exceptional' burials: those of great size, content, quantity, quality, interest or contrast.[801] There were also those who declined to publish burial data if it seemed to resemble assemblages that had been published elsewhere.[802] Such practices dramatically inhibit our capacity to accurately reconstruct the 'true' nature and scope of every evidence category within the archaeological record; thus also limiting our ability to draw meaningful, ethical, balanced interpretations which represent all demographic and socio-economic facets of ancient

[800] Fahlander & Oestigaard (2008: 10).

[801] For example, at Abydos: Ayrton (1904: 7) only published burials of "importance"; Frankfort (1930: 213) "merely describe[d] the tombs which contained objects or information of sufficient importance to make a full record of the circumstances of the finding desirable", because "full publication" was an "unjustifiable strain". At el-Amra: MacIver & Mace (1902: 15ff.) only published "tombs which contained objects or combinations of some interest". At Armant: Myers & Fairman (1931: 230) only recorded burials with objects. At Ballas: Quibell (1896: 4) only published "selected tombs". At Kom el-Hisn: Hamada & Farid (1947: 201; 1948: 303) only described "rich", "important" or "very important" tombs. At el-Mahasna: Ayrton & Loat (1908-1909: 6) only published "important tombs"; Garstang (1903) only published 13 exceptional adult graves out of "five or six hundred" tombs, further discussed by Thomas (1987: 55). At Minshat Abu Omar: Kroeper (1988: 13) does not consider "graves of burials without offerings and ... foetus burials in vessels" in her classifications, and counts only "exceptional burials" (1992: 135-136). At el-Mostagedda: Brunton (1937: 98, 100, 101) says that graves were "not registered, as they contained no objects, or none of any new interest". At Naqada: Petrie (1896: 23) only published "notable graves", the "great majority" being "so much alike that the important facts would be easily lost sight of in the wilderness of notes if they were all printed". At Qau el-Kebir and Badari: Brunton (1927a: 10, 50; 1930: 1, 2) does not "consider" child burials and only published pot burials with associated objects. At Riqqeh and Memphis: Engelbach (1915: 4) only published "special graves". At Sedment: Brunton (1924: 13) only described "principal graves". At Tarkhan and Memphis: Petrie *et al.* (1913: 3) only recorded burials with more than one pot. *Cf.* Richards (1992: 66, 68); Strouhal (1992: 9); Castillos (2000: 254); Baines & Lacovara (2002: 13); Crubézy *et al.* (2008: 289); Weeks (2008: 9).

[802] For example, for Hierakonpolis: de Morgan (1984: 57).

Egyptian society.[803] Although the juvenile demographic is particularly susceptible to archaeological ostracism via 'exceptional' publication practices, the material testimonies of individuals of *all* ages and sexes have been rendered inadmissible by being too 'normal', 'unexceptional', 'poor' or 'insignificant' to warrant publication. By excluding such 'unexceptional' evidence after the 'destructive' processes of excavation, the majority of exhumed Egyptian material testimonies have been lost.[804] Notwithstanding such loss, it should be noted that in almost every 'exceptional' publication list, at least 1 child, infant or foetal burial is identified in some way as remarkable.[805]

Further to this, 518 grave good entries within the sample do not feature explicit quantities because such information was not published. Many excavators merely registered object types without enumeration.[806] In such 'unspecified' cases, a minimum number of '1' was counted for the purpose of this analysis. In other cases, where 'minimum' grave good quantities were published, only the specific amount identified by excavators was processed within the database. The present study acknowledges that such under-reporting praxes greatly compromise our understanding of the nature and scope of ancient Egyptian funerary culture.[807]

A more mundane, yet equally detrimental phenomenon observed amongst the sample was the illegibility of Petrie's handwriting, already noted in Chapter 6 of this thesis.[808] On many occasions, types and quantities of grave goods could not be determined as his script, exacerbated by the poor resolution of the Petrie Museum CD-ROM, could not be deciphered.[809] It is hoped that future extensions of this project will include examination of Petrie's actual tomb-cards and notebooks, potentially resolving some of the issues encountered with digital versions.

### 9.1.1 Theory of Entitlement

A final theoretical consideration must address the issue of 'shared' grave good associations, problematised by the well-attested phenomenon of child and adult 'multiple' burials described in Chapter 8. Despite the ubiquity of multiple burials amongst published data, and the widespread attestation of funerary monuments which facilitate such

[803] Ciałowicz (1985: 157).
[804] Grajetzki (2004b: 21; 2005: 18).
[805] For example, see Kroeper (2004: 878).
[806] For example, see Yacoub (1983: 105).
[807] For example, see GGRNs 707, 2676-2677.
[808] *Cf.* §§6.2.2; 6.3.2; 6.7.6.
[809] See DRNs 381, 407-417, 1145, 1386.

interments, no study thus far has examined the theoretical implications of objects encountered in such shared spaces, especially regarding notions of 'ownership'.[810] In multiple burials, when direct corporeal associations are not apparent between individuals and objects, 'ownership' appears to be inconsistently determined: either by physical proximity to objects;[811] by deferral to the 'highest-ranking' constituent as determined by the excavator;[812] or by gendered/ageist assessments of grave goods.[813] The theoretical implications of such approaches profoundly affect our reconstructions of ancient Egyptian social, economic and religious dynamics, producing distorted perceptions of activity and agency amongst and between communities of the living and the dead. According to these 'ownership' configurations, when children, infants and foetuses are engaged in multiple burials with adults, they are denied access to the funerary repasts and assemblages in their graves, ostensibly intended to sustain the dead for eternity.[814] Ontologically, such interpretations delimit deceased children's cultural capacities in one of two ways: at best, they are designated as posthumous parasites, sustained by adult hosts;[815] at worst, as mortuary stowaways without accessibility or entitlement.[816]

The present study argues that such reconstructions do not take into account the duty-of-care that was central and quintessential to Egyptian mortuary culture. Those burying the dead were responsible for ensuring their posthumous safety and sustenance. The 680 examples of independent, fully-furnished CIFBs identified by the present study's archaeological survey demonstrate that deceased children were undeniably beneficiaries of this cultural imperative. To think otherwise would implicate the Egyptians in a 'sin' of such gravity that it features in the *Negative Confession*: "I have not taken the milk from the mouths of children."[817] Moreover, representations of deceased children as shared recipients in offering scenes from stelae and tomb walls provide iconographic evidence to substantiate the claim that they were entitled to partake of offerings brought to the tomb/grave.[818] As such, the present study advocates for revisions of archaeological

[810] Problematised by Grajetzki (2003: 53).
[811] Castillos (1977-1978: 92, 93, 97; 1982a: 51, 52, 55, 61, 65, 125, 145, 176; 1982b: 31; 2000: 255).
[812] Castillos (1977-1978: 92, 93, 97; 1982a: 51, 52, 55, 61, 65, 125, 145, 176; 1982b: 31; 2000: 255); Grajetzki (2003: 70).
[813] Grajetzki (2003: 6, 11, 36, 39, 52, 61, 83, 111).
[814] For example, see Garwood (2007: 75); Zillhardt (2009: 35).
[815] For example, see Zillhardt (2009: 90).
[816] For example, see Castillos (1982a: 57).
[817] *The Papyrus of Ani, Book of the Dead*, Chapter 125; Faulkner *et al.* (1998: 115).
[818] Feucht (1995: 388ff.). See the Old Kingdom stela of Nefer and Kahay from Saqqara, cited in Feucht (1995: 389, fig. 34); as well as the Middle Kingdom stela from Thebes and the New Kingdom stela of Humay and Senetnofret, both in the Metropolitan Museum of Art, cited in Harrington (2007: 58, figs. 10 and 11). Perhaps the best-known of the many representations of children sharing in offering scenes

dialogues which allow such culturally-bound magnanimity to permeate the interstices of shared mortuary spaces.[819] The proposed theory expands the current understanding of grave good 'ownership' to include considerations of 'entitlement' in multiple burials from 'individual' to 'shared' provisions.[820] 'Shared' designations of grave goods should only be made in intact or relatively complete contexts when it is clear that objects have been deposited in mutual/neutral space.[821] In practice, this approach calls for a reconsideration of how shared funerary assemblages are procured, recorded, published and interpreted amongst disciplinary analytical protocols.

By way of clarification, by no means does the present study suggest that *all* grave goods in *all* multiple burials should be recorded or considered as 'shared'. In fact, shared associations could not be determined with confidence for many multiple burials amongst the sample and, as such, the accompanying objects were not recorded in the database.[822] In other cases, clear spatial delineations between and amongst multiple burial constituents indicated straightforward individual associations;[823] in some cases, children appeared as primary beneficiaries in multiple burial configurations that included adults.[824] In the particular context of this study, 'shared' grave good associations between two or more children, infants and foetuses in multiple burial contexts presented more practical than theoretical concerns. Here, while grave goods were clearly listed as 'shared' between 2 or

derives from TT359, the 20th Dynasty tomb of Inherkha'u. Here, Inherkha'u and his wife receive offerings accompanied by their deceased grandchildren; for image, see Davies (2001: pl. 26.4).

819 *Cf.* Mizoguchi (2000: 148).

820 Following Jiao (2001: 56), who advocates the consideration of "shared property" for grave goods in multiple burials of adults in the Dawenkou culture of Neolithic China. In Egyptology, Strudwick (2005: 51) also advocates that groups of people buried in tombs with textual inscriptions "shared" in their efficacy. Harrington (2007: 61) raises the possibility that children buried with their "parents" may have been able to "receive offerings brought to the tomb".

821 Examples of 'shared' object associations among the present study include: DRN 531, with GGRNs 1094-1096; DRN 532, with GGRNs 1097-1098; DRN 534, with GGRNs 1102-1115; DRN 664, with GGRN 1265; DRN 665, with GGRN 1266; DRN 675, with GGRNs 1282-1291; DRN 679, with GGRNs 1307-1332; DRN 681, with GGRNs 1349-1351; DRN 682 and 683, with GGRNs 1352-1365; DRN 684, with GGRNs 1366-1371; DRN 686, with GGRNs 1376-1384; DRN 818, with GGRNs 1451-1548; DRN 841, with GGRNs 1565-1573; DRN 842, with GGRNs 1574-1578; DRN 843, with GGRNs 1579-1585; DRN 864, with GGRNs 1603-1610; DRN 873, with GGRNs 1624-1628; DRN 941, with GGRN 1710; DRN 954, with GGRNs 1731-1734; DRN 1136, with GGRNs 2533-2534; DRN 1319, with GGRNs 2689-2690; DRN 1320, with GGRN 2691-2692.

822 See DRNs 51, 133, 187, 247, 250, 277, 292, 295, 344, 422, 458, 467, 492, 669, 772-774, 866, 867, 953, 958, 960, 967, 1022, 1068, 1140, 1148, 1189, 1239, 1246, 1256, 1432, 1433, 1444-1447, 1453.

823 See DRN 112, with GGRNs 323, 324; DRN 113, with GGRN 325; DRN 115, with GGRN 326; DRN 260, with GGRN 552; DRN 307; DRN 874, with GGRNs 1613-1616; DRN 949, with GGRNs 1723, 1917-1921; DRN 950, with GGRNs 1724-1725, 1922; DRN 966, with GGRNs 1781-1782, 2250-2256; DRN 1127, with GGRNs 2347-2352.

824 See DRN 1028, with GGRNs 1956-1961. In other contexts, children were the only individuals to receive grave goods amongst the funerary population; see Patch (2007) for an example pertaining to the Third Intermediate Period.

more children, they were only entered into the database once; hence only counted once to avoid data duplication and distortion of results.[825]

## 9.2 Grave Good Distribution

Having identified the major practical and theoretical considerations required for nuanced understanding of grave goods as a source of evidence, the present study may now proceed to report the nature and scope of CIF funerary assemblages amongst available published data. The incidence (number of individuals with grave goods) and extent (number of items) of grave good provision is first described according to manifestations within specific, general and Nilotic geographical regions, then by relative chronology, site type and age categories, below.

### 9.2.1 Specific Geographical Regions

The highest incidence of grave good provision was observed on the East Bank of Upper Egypt. Here, 374 individuals received a total of 2,085 items (**Figures 9.2–9.3**), producing a mean of 5.57 objects per furnished burial. The next highest incidence of grave good provision was substantially less than this amount: the West Bank of Upper Egypt featured 106 individuals with a total of 917 items amongst published data, producing a higher mean of 8.65 objects per furnished burial. This was followed by the West Bank of Lower Egypt, where 101 individuals received 927 items (the highest mean of 9.18 objects per furnished burial); the Eastern Nile Delta, where 80 individuals received 223 items (mean of 2.79 objects per furnished burial; henceforth, $\bar{x}$ #/FB); the West Bank of Middle Egypt, where 67 individuals received 303 items ($\bar{x}$ 4.52/FB); the East Bank of Lower Egypt, where 44 individuals were observed with 131 grave goods ($\bar{x}$ 2.98/FB); and Dakhla Oasis, where 26 individuals featured 93 items amongst published data ($\bar{x}$ 3.58/FB). Incidences of grave good recipients across the remaining regions do not exceed single figures, with 4 individuals in the Faiyum published with 23 items ($\bar{x}$ 5.75/FB), and 1 individual on the East Bank of Middle Egypt identified with 1 object.

### 9.2.2 General Geographical Regions

When viewed according to distributions across general geographical regions, Upper Egypt emerges with the highest grave good provision frequency, with 480 individuals recorded

[825] See DRNs 211 and 212, with GGRN 394; DRNs 443 and 444, with GGRNs 801-813; DRNs 860 and 861, with GGRN 1602; DRN 948, with GGRNs 1720-1722, 1900-1913.

with 3,002 items amongst published data, producing a mean of 6.25 objects per furnished burial (**Figures 9.4–9.5**). The remaining regions featured substantially fewer incidences, with the next most frequent region, Lower Egypt, accounting for 145 individuals with a total of 1,058 items (the highest mean of 7.30 objects per furnished burial), followed by the Nile Delta with 112 individuals receiving 269 items ($\bar{x}$ 2.40/FB). In Middle Egypt, 72 individuals were reported with a total of 327 grave goods ($\bar{x}$ 4.54/FB), while 26 individuals were described with a total of 93 items amongst published data for Dakhla Oasis ($\bar{x}$ 3.58/FB).

### 9.2.3 Nilotic Geographical Regions

When organised according to Nilotic geographical distribution, the East Bank features the highest incidence of grave good provision amongst published data, as 419 individuals are described with a total of 2,217 items, producing a mean of 5.29 objects per furnished burial (**Figures 9.6–9.7**). This was followed by the West Bank, where 274 individuals received 2,147 items among their funerary assemblages, producing a mean of 7.84 objects per furnished burial. As described in §9.2.2, above, 112 individuals received a total of 269 items in the Nile Delta ($\bar{x}$ 2.40/FB), and 26 individuals are known to have received 93 items in the Dakhla Oasis region ($\bar{x}$ 3.58/FB). The Faiyum featured 4 individuals with 23 published grave goods, equating to 5.75 objects per furnished burial.

### 9.2.4 Relative Chronology

The Early Dynastic Period features the highest published incidence of grave good provision amongst the sample, with 291 individuals reported to have received 1,908 items ($\bar{x}$ 6.56/FB; **Figures 9.8–9.9**). Despite the trend in aristocratic burials of the Old Kingdom to replace grave goods with scenes and inscriptions on tomb walls,[826] object provision continued for children as it did for many adults during this period, with published accounts for 226 CIFs furnished with a total of 1,079 items ($\bar{x}$ 4.77/FB). While the Middle Kingdom featured 162 individuals with a total of 733 published items ($\bar{x}$ 4.52/FB), the First Intermediate Period demonstrated fewer overall individuals with funerary assemblages (156 CIFs), although their total number of grave goods was higher than the Middle Kingdom (1,029), therefore producing a higher mean rate of 6.60 objects per furnished burial.

[826] Grajetzki (2003: 18, 32).

### 9.2.5 Site Types

Of the 835 individuals amongst the sample to have been provisioned with grave goods, 821 were interred within cemetery contexts. Of the 4,749 grave goods identified by this study, 4,606 were observed in cemetery interments, producing a mean of 5.61 objects per furnished burial (**Figures 9.10–9.11**). While only 14 individuals interred in settlement contexts were identified with a total of 143 grave goods, this nonetheless represents a much higher mean rate of 10.21 objects per furnished burial – almost double that observed for cemeteries. No grave goods were reported for those individuals amongst the sample buried in temple and funerary enclosure contexts.

### 9.2.6 Age Categories

Amongst the known-age portion of the sample, Young Children featured the highest incidence of grave good provision, with 102 individuals from this group identified with 405 items, producing a mean of 3.97 objects per furnished burial (**Figures 9.12–9.13**). While fewer Older Children were published with grave goods (Σ=90), they featured substantially more items, with a total of 1,208 published grave goods producing a mean rate of 13.42 objects per furnished burial. According to published data, 57 Infants were provided with a total of 312 items ($\bar{x}$ 5.47/FB), while only 4 Foetuses were published with a total of 12 items, producing a mean of 3.00 objects per furnished burial. Unfortunately, age-at-death data was not published for the greatest proportion of burials furnished with grave goods, resulting in the loss of demographic information for 582 individuals and their respective 2,812 objects ($\bar{x}$ 4.83/FB).

## 9.3 Grave Good Categories

The sample was examined in order to determine the nature and scope of grave good categories associated with CIFBs. In total, 23 object categories were identified (**Figure 9.14**), these representing 114 different object types (**Table 9.1**). In descending order of frequency, categories observed amongst the sample include: Jewellery (Σ=1,710), Ceramic Vessels (Σ=1,277), Amulets (Σ=556),[827] Tools (Σ=294), Stone Vessels (Σ=240), Cosmetic Equipment and Products (Σ=126), Funerary Furniture (Σ=88), Shells and Fossils (Σ=84),

[827] It was decided to keep Amulets as a separate category to Jewellery as it is important to quantify the symbolic associations of particular amuletic categories in CIFBs.

Figurines and Models (Σ=68), Scarabs (Σ=56),[828] Recreation Items (Σ=48), Personal Adornment and Equipment (Σ=40), Seals and Seal Impressions (Σ=27), Food Items (Σ=25), Weaponry (Σ=24), Other Vessels (Σ=23), Textiles (Σ=19), Clothing and Footwear (Σ=13), Inorganic Raw Materials (Σ=10), Organic Raw Materials (Σ=8), Organics: Fuel (Σ=8), Unknown (Σ=6),[829] and Animal Products (Σ=4).

It should be noted that on some occasions a single grave good represented more than one object type. For example, a cosmetic palette with malachite adhered to its surface can be counted as both cosmetic equipment as well as cosmetic product.[830] For this reason, the number of categories and object types observed in **Figure 9.14** and **Table 9.1** produce a slightly higher result than the overall number of grave goods. Differential recording practices are also noteworthy: for example, some excavators listed a necklace as '1' object,[831] while others would record each of its constituent beads and amulets as individual objects.[832] In this situation, the present study honours excavators' original recordings in terms of overall grave good quantities. However, upon more detailed discussions of grave good categories, objects such as amulets have their full incidences reported, including appearances in items such as necklaces, in order to determine items most commonly-associated with CIFBs.

Other items can be considered multi-functional – either on pragmatic or symbolic planes. For example, while shells are one of the more commonly attested grave goods amongst the sample, their function is arguable. In some cases, they featured suspension holes and appeared to have been worn as a form of adornment. The imitation of shells in various materials as amulets, however, suggests that they may not have been regarded as merely aesthetic objects, rather imbued with symbolism and contextualised meaning. In other cases, they are used as containers for cosmetic products such as malachite, adding further layers of pragmatism, luxury and ritual to these objects' cultural significance. Other possible uses for shells may include eating implements or means of exchange.[833] 'Model' objects may also be considered multi-functional, causing one to question whether they should be counted as an independent category, or grouped with the objects they

[828] It was decided to keep Scarabs as a separate category to Jewellery as they often have uses other than ornamentation, including administration. It is important to quantify CIFs access to such objects, as well as their access to objects such as scarabs which feature inscriptions.
[829] See GGRNs 27, 2502, 2688, 2689, 2881, 2978.
[830] For example, see GGRN 2359.
[831] For example, see GGRNs 15, 22, 23.
[832] For example, see GGRNs 120, 121, 610.
[833] For the diverse functions and symbolism associated with shells in cross-cultural mortuary contexts, see Lillie (2008: 38); Oxenham *et al.* (2008: 132); Tillier (2008: 3).

ideologically represent.[834] Regrettably, the present study's administrative parameters prevent further discussions of these important ontological questions regarding the parallel use-lives of objects. Instead, what is offered are categorisations of objects based on their apparent *primary* function following careful assessment of published context, descriptions, drawings and photographs.

Having identified the major practical and theoretical considerations of processing grave goods as a source of evidence, we may now proceed to reporting the nature and scope of CIF object categories among available published data. Category incidences are described in descending order of frequency according to manifestations within specific geographical regions, then by relative chronology, site type, and age categories, below. Due to administrative constraints, general and Nilotic distributions are not presented. Categories consisting of ≥11 published examples are described as a group, while individual cases are described for categories featuring ≤10 published examples. The 'Unknown' category of objects is not described. As a means of comparison, the reported chronological attestations for adult burials are also described in each grave good category.

### 9.3.1 Jewellery

Jewellery emerged as the most frequently recorded grave good category within the sample, being published in CIFBs on 1,710 occasions. The highest provision frequency was observed on the East Bank of Upper Egypt, where 889 jewellery offerings were identified amongst published data (**Figure 9.15**). The remaining regions feature substantially fewer incidences, and are listed here in descending frequency order: West Bank of Lower Egypt (Σ=411), West Bank of Upper Egypt Egypt (Σ=216), West Bank of Middle Egypt (Σ=72), Western Nile Delta (Σ=36), East Bank of Lower Egypt (Σ=34), Eastern Nile Delta (Σ=24), Dakhla Oasis (Σ=19) and the Faiyum (Σ=9). There were no published incidences of jewellery within funerary assemblages of the East Bank of Middle Egypt.

Jewellery is attested in adult funerary assemblages in all periods of Egyptian history.[835] In terms of its attestation in CIF mortuary culture, the Early Dynastic Period featured the highest frequency of CIF jewellery offerings, with 632 incidences identified amongst published data (**Figure 9.16**). In descending frequency order, the remaining periods

[834] Ciałowicz (1985: 157); Grajetzki (2003: 11, 19).
[835] Richards (1992: 81); Grajetzki (2003: 2-3, 5, 8, 10, 11, 20, 21, 23ff., 36, 38, 41, 43, 51, 52, 55, 58, 59, 61, 65, 70ff., 82ff., 86, 89ff., 98, 107, 114ff.).

appear as follows: First Intermediate Period (Σ=437), Old Kingdom (Σ=368) and Middle Kingdom (Σ=273).

When considered according to incidences across site types, cemeteries clearly predominate with 1,627 incidences of jewellery provision for CIFBs within this context (**Figure 9.17**). There were 83 instances of jewellery offerings observed amongst settlement contexts, however there were no published examples of this category of evidence in temple or funerary enclosure contexts.

Older Children feature the highest frequency of jewellery provision amongst the known-age portion of the sample, with 205 incidences identified amongst published data (**Figure 9.18**). This result was followed by Young Children (Σ=180), Infants (Σ=83) and Foetuses (Σ=3). Unfortunately, age-at-death data was not published for individuals associated with 1,239 jewellery offerings amongst the sample.

### 9.3.2 Ceramic Vessels

Ceramic vessels were observed on 1,277 occasions amongst CIF funerary assemblages within the sample.[836] These incidences can be further described by object types: there were 187 instances of decorated ceramic vessels, 298 instances of undecorated ceramic vessels, and the nature of 792 ceramic vessels was not specified (**Table 9.1**). Approximately 30 vessels amongst the sample were inscribed with potmarks of varying descriptions.[837] In terms of vessel types, there were 279 vessels of excavators' own types (only vessel codes offered), 218 vessels of unknown types (no descriptions offered), 145 globular vessels, 110 bowls, 72 cylinder vessels, 66 closed high-shouldered vessels, 64 ovoid vessels, 58 ceramic vessel sherds, 56 beer jars, 47 dishes, 40 wine jars, 36 squat vessels, 17 bag-shaped vessels, 12 plates, 11 bread-moulds, 9 beakers/cups, 8 jugs/juglets, 7 barrel-shaped vessels, 6 closed low-shouldered vessels, 4 Meidum Ware vessels, 7 flasks, 2 ewers, 2 waisted-vessels and 1 example of Tell el-Yahudiyeh ware.

The highest provision frequency was observed on the East Bank of Upper Egypt, where 364 ceramic vessels were identified as grave goods amongst published data (**Figure 9.19**). Incidences in remaining regions are listed in descending frequency order as follows: West Bank of Lower Egypt (Σ=301), West Bank of Upper Egypt (Σ=292), Eastern Nile Delta (Σ=153), West Bank of Middle Egypt (Σ=85), Dakhla Oasis (Σ=40), East Bank of Lower

[836] This figure does not include ceramic vessels provided as coffins, detailed in §6.7.2.
[837] See GGRNs 142, 148, 710, 1062, 1531-1533, 1599, 1808, 1860, 2136, 2285, 2691, 2887.

Egypt (Σ=37), Faiyum (Σ=4) and Western Nile Delta (Σ=1). There were no published incidences of ceramic vessels within funerary assemblages of the East Bank of Middle Egypt.

Ceramics were ubiquitous in adult funerary assemblages throughout Egyptian history,[838] although their attestations are slightly reduced during the Ramesside Period.[839] Within the present dataset, the Early Dynastic Period featured the highest frequency of CIF ceramic vessel offerings, with 729 incidences identified amongst published data (**Figure 9.20**). When organised according to descending frequency, the remaining regions appear in logical chronological order, as follows: Old Kingdom (Σ=200), First Intermediate Period (Σ=177) and Middle Kingdom (Σ=171).

When considered according to site types, cemeteries continue to predominate with 1,272 incidences of ceramic vessel provision for CIFBs in this context (**Figure 9.21**). Only 5 incidences of ceramic vessel offering were identified amongst published settlement contexts, while there were no published examples of this category of evidence in temple or funerary enclosure contexts.

Older Children feature the highest ceramic vessel provision amongst the known-age portion of the sample, with 327 incidences recorded for this age group (**Figure 9.22**). Young Children and Infants present almost equal provision of ceramic vessels among their funerary assemblages, with 117 and 112 incidences identified for these age groups, respectively. Six instances of ceramic vessel provision were observed for Foetal burials. Unfortunately, the majority of ceramic vessels amongst the sample were associated with individuals of unknown age (Σ=715).

### 9.3.3 Amulets

In terms of primary offerings, amulets were observed on 566 occasions amongst CIF funerary assemblages within the sample. These primary incidences can be expanded to include descriptions of amulets within other primary objects, for example, necklaces and bracelets. Such expansion is essential to quantify the symbolic significance of amulet types associated with CIFBs. According to this methodology, amulet incidence may be enumerated in descending frequency order, as follows: Amulets (Non-Specific, Σ=208), Lions (Σ=49), Scorpions (Σ=42), Hathor/Cow (Σ=27), Horus/Hawk/Falcons (Σ=24),

838 Richards (1992: 81); Grajetzki (2003: 2, 3, 4, 5, 8, 10, 11, 19, 21, 23, 25, 30, 31, 38, 39, 49, 51, 52, 55, 59ff., 63, 65, 70ff., 77, 83, 86, 89ff., 107, 110ff., 117, 120).

839 Grajetzki (2003: 84, 89).

Humanoids (Σ=24), Shells (Σ=22), Rams (Σ=20), Dogs (Σ=19), Human Legs (Σ=17), Crocodiles (Σ=14), Birds (Σ=12), Wadjet Eyes (Σ=12), Human Hands, Sphinxes (each Σ=11), Royal Crowns (Σ=9), Tawaret/Hippopotami (Σ=8), Human Heads, Heh (each Σ=7), Fish, Flower/Plants/Fruit (each Σ=6), Catfish, Anubis/Jackals (each Σ=5), Bastet/Cats, Children/Infants, Flies, Frogs, Human Arms, Thoth/Ibises, Monkeys, Uraeus/Cobra/Snakes (each Σ=4), Ankh, Osiris/Djed Pillars, Vultures (each Σ=3), Bes, Bulls, Furniture, Ichneumons, Cylinder Amulets (each Σ=2), Bread, Cartouche, Gazelle, Heart, Hieroglyphic Symbol, Mace Head, Min, Rabbit, Seed Pod, and Sekhmet (each Σ=1; **Table 9.1**). Amongst this assortment, it is pertinent to note the manifold presence of amulets of overt pharaonic and religious symbolism.[840] This finding indicates that children were entitled to access the protective beneficence bestowed by both the king and the Egyptian pantheon, thereby denoting their identity as fully vested members of the community. Conversely, the relative infrequency of published amulet types stereotypically associated with CIFs amongst the literature, such as Bes and Tawaret,[841] is also noteworthy. Further study may elucidate whether the potency of these deities was more generally associated with the protection of living as opposed to deceased children. Such a belief may be manifest in the archaeological record via the spatial demarcation of object frequencies between domestic and funerary contexts.

The highest provision frequency was observed on the East Bank of Upper Egypt, where 496 amulets were identified as primary grave goods amongst published CIFB data (**Figure 9.23**). Remaining regions present substantially fewer incidences of amulet provision and are listed in descending frequency order as follows: West Bank of Upper Egypt (Σ=28), West Bank of Middle Egypt (Σ=20), Western Nile Delta (Σ=6), West Bank of Lower Egypt (Σ=3), East Bank of Lower Egypt (Σ=2) and Dakhla Oasis (Σ=1). There were no published incidences of amulets within funerary assemblages in the Eastern Nile Delta, East Bank of Middle Egypt and Faiyum regions.

[840] This trend was also noted by Leclant (1986: 248-249) in Protodynastic excavations at Minshat Abu Omar, where 'bull's head' amulets were "found to be placed in an obvious position in children's tombs". Andrews (1994: 15, 74) states that amulets resembling royal regalia, such as crowns and sceptres, or royal animals such as the cobra and sphinx were "imbued with authority and power, or else were representative of a certain condition, state or quality which the deceased desired to enjoy in the afterlife". She further states that theomorphic amulets "would have been worn purely to place their wearer, whether dead or alive, under the protection of a particular deity ... to assimilate the person of the deity represented and thus gain access to their particular powers or characteristics ... or to show patronage by or devotion to the deity".

[841] Robins (1994-1995: 29); Meskell (2002: 79); Grajetzki (2003: 107).

Amulets of varying descriptions were first attested in adult burials from the Predynastic Period, and continued in use throughout Egyptian history.[842] The highest frequencies of CIF amulet offerings in the dataset were observed amongst published Old Kingdom contexts, with 260 instances attributed to this phase (**Figure 9.24**). The First Intermediate Period demonstrated 223 instances of amulet provision, while 66 observations precipitated from Middle Kingdom contexts. There were 7 instances of amulet provision recorded for the Early Dynastic Period.

The majority of cases of amulet provision were identified amongst CIF funerary assemblages from cemetery contexts (**Figure 9.25**). Here, 533 instances of amulet provision were observed, as opposed to 3 instances from settlement burials. There were no published examples of this category of evidence in temple or funerary enclosure contexts.

Among the known-age portion of the sample, Older Children dominate amulet distribution in published funerary assemblages, with 81 instances attributed to this age group (**Figure 9.26**). There were 21 instances of amulet provision reported for Young Children, while amulets were described among Infants' assemblages on 11 occasions. There were no published incidences of amulet provision for Foetuses. Unfortunately, age-at-death data was not specified for individuals associated with 443 amulets amongst the sample.

### 9.3.4 Tools

Tools were observed on 294 occasions amongst CIF funerary assemblages within the sample (**Table 9.1**). These incidences can be further described by object types: there were 230 instances of general tools including flints, scrapers, chisels, diggers, knives (including ripple-flaked), grinders, scoops, needles, borers, blades, bladelets and adzes; 2 instances of weights; 83 ceramic discs; and 15 pebbles/stones.

The highest tool provision frequency was observed on the West Bank of Upper Egypt, where 128 instances were observed amongst published CIFB assemblages (**Figure 9.27**). This was closely followed by the East Bank of Upper Egypt (Σ=100) and West Bank of Lower Egypt (Σ=57). The remaining regions demonstrated substantially fewer incidences of tool provision and are listed in descending frequency order as follows: East Bank of Lower Egypt (Σ=4), West Bank of Middle Egypt (Σ=3) and Eastern Nile Delta (Σ=2).

[842] Grajetzki (2003: 5, 29, 30, 36, 38, 58, 60, 84, 86ff., 89ff., 98ff., 103, 107, 111, 115, 120ff.).

There were no published incidences of tools within funerary assemblages in the Western Nile Delta, East Bank of Middle Egypt, Faiyum and Dakhla Oasis regions.

Tools were observed in adult funerary assemblages from the Predynastic Period,[843] only declining in popularity during the Ramesside Period following shifting trends in object provision.[844] The highest frequency of CIF tool offerings were observed amongst the published Early Dynastic Period record, with 124 instances attributed to this phase (**Figure 9.28**). The First Intermediate Period featured the next highest frequency of tool provision amongst CIFB assemblages, with 91 instances observed amongst published data, followed closely by 62 instances in the Old Kingdom. The Middle Kingdom featured fewest examples of tool provision, with 17 instances reported for burials at this time.

All incidences of tool provision precipitate from CIFBs in cemetery contexts (**Figure 9.29**). There were no published examples of tools amongst CIF funerary assemblages from settlement, temple or funerary enclosure contexts.

Older Children feature the highest frequencies of tool provision amongst the known-age portion of the sample, with 258 instances identified amongst funerary assemblages of this age group (**Figure 9.30**). Ten instances of tool provision were reported for Young Children, while 7 instances were attributed to Infant burial contexts. There were no published incidences of tools amongst Foetal funerary assemblages. On this occasion, demographic data was quite well-reported for individuals with tools as grave goods, with only 19 instances associated with individuals of unknown age-at-death.

### 9.3.5 Stone Vessels

Stone vessels were observed on 240 occasions amongst CIFB assemblages within the sample (**Table 9.1**). Instances of stone vessels can be further described according to object types: open vessels (Σ=91; including cups/flasks, bowls (some with spouts), cylinder vessels, dishes, plates and squat vessels); closed vessels (Σ=78; including bowls, dishes, globular shapes, ovoid shapes, barrel shapes, high-shouldered vessels, elongated vessels and squat vessels – each type featured variations with and without handles); non-specific vessels (Σ=53); composite vessels (Σ=13); and fragmented vessels (Σ=5).

[843] Richards (1992: 81); Grajetzki (2003: 2, 5, 10, 11, 19, 28, 38, 39, 48, 82, 86).
[844] Grajetzki (2003: 84, 89).

The highest stone vessel provision frequency was observed on the East Bank of Upper Egypt, where 63 instances were observed amongst published CIFB assemblages (**Figure 9.31**). Stone vessel provision seems more widespread across remaining regions than previous object categories, appearing in descending frequency order as follows: West Bank of Lower Egypt (Σ=58), West Bank of Upper Egypt (Σ=38), East Bank of Lower Egypt (Σ=36), Eastern Nile Delta (Σ=24), West Bank of Middle Egypt (Σ=18) and Dakhla Oasis (Σ=3). There were no published incidences of stone vessels within funerary assemblages in the Western Nile Delta, East Bank of Middle Egypt and Faiyum regions.

Stone vessels were first attested as adult grave goods in the Predynastic Period, and persisted throughout the pharaonic period[845] until the Ramesside shift in mortuary trends.[846] The highest frequency of CIF stone vessel offerings amongst the dataset were observed amongst published Early Dynastic data, with the 153 instances attributed to this phase eclipsing results for other periods (**Figure 9.32**). The Old Kingdom featured precisely 3.00 times fewer recorded instances of stone vessels than the preceding period (Σ=51), while 25 instances of this category of evidence derived from Middle Kingdom contexts. There were 11 instances of stone vessel provision observed amongst published First Intermediate Period CIF funerary assemblages.

A singular instance of stone vessel provision was attributed to an infant settlement burial (**Figure 9.33**). All remaining examples of stone vessels derive from CIFBs in cemetery contexts (Σ=239). There were no published examples of stone vessels amongst CIF funerary assemblages from temple or funerary enclosure contexts.

Older Children continue to present the highest object frequencies amongst the known-age portion of the sample, with 102 instances of stone vessel provision attributed to assemblages associated with this age group (**Figure 9.34**). Young Children were furnished with stone vessels in 21 instances, while Infants presented 10 examples amongst published data. There were no published incidences of stone vessels amongst Foetal funerary assemblages. Unfortunately, demographic data was not published for individuals associated with 107 stone vessels amongst the sample.

[845] Richards (1992: 81); Grajetzki (2003: 2, 5, 10, 19, 23, 30, 35, 39, 59, 60, 65, 70ff., 83, 107, 111).
[846] Grajetzki (2003: 84, 89).

### 9.3.6 Cosmetic Equipment and Products

Cosmetic equipment and products were observed on 126 occasions amongst CIFB assemblages within the sample. Instances of cosmetic equipment and products can be further described according to object types: cosmetic containers (Σ=6), kohl pots (Σ=12), kohl sticks (Σ=7), mirrors (Σ=13), mortar (Σ=1), palettes (Σ=39), pestles/spatulas (Σ=6), and cosmetic products (Σ=28; including malachite, ochre, galena and kohl; **Table 9.1**).

The highest provision frequency of cosmetic equipment and products was observed on the West Bank of Upper Egypt, with 50 instances amongst published CIFB assemblages (**Figure 9.35**). The East Bank of Upper Egypt and West Bank of Lower Egypt are equal second, each with 26 recorded instances of cosmetic equipment and products. Data for the remaining regions are presented in descending frequency order as follows: Dakhla Oasis (Σ=14), East Bank of Lower Egypt (Σ=6), West Bank of Middle Egypt (Σ=2), Western Nile Delta (Σ=1) and the Eastern Nile Delta (Σ=1). There were no published incidences of cosmetic equipment and products within funerary assemblages in the East Bank of Middle Egypt and Faiyum regions.

Cosmetic equipment and products are first attested in Predynastic adult burials,[847] but also declined in popularity during the Ramesside Period.[848] Within the present study, the highest frequency of CIF stone vessel offerings were observed amongst published Early Dynastic data, with 65 instances amongst the sample (**Figure 9.36**). The remaining regions feature substantially fewer examples of cosmetic equipment and product provision, with 28 instances identified for the Middle Kingdom, 19 for the Old Kingdom, and 14 observations associated with CIF funerary assemblages of the First Intermediate Period.

All incidences of cosmetic equipment and product provision precipitate from CIFBs in cemetery contexts (**Figure 9.37**). There were no published examples of cosmetic equipment and products amongst CIF funerary assemblages from settlement, temple or funerary enclosure contexts.

Once again, Older Children feature the highest provision rates amongst the known-age component of the sample, with 33 observations of cosmetic equipment and products identified amongst published assemblages of this age group (**Figure 9.38**). There were 18

[847] Grajetzki (2003: 2, 3, 4, 5, 8, 11, 29, 35, 36, 38, 39, 41, 51, 52, 59, 70, 77); *cf.* Richards (1992: 81).
[848] Grajetzki (2003: 84, 89).

Young Children and 13 Infants described with this category of evidence amongst their grave goods, while 1 published example of a cosmetic product was identified in a Foetal burial.

### 9.3.7 Funerary Furniture

Funerary furniture was observed on 88 occasions amongst CIFB assemblages within the sample. Instances of funerary furniture can be further described according to object types: general funerary furniture (Σ=71, including headrests, boxes, beds, couches, pillows, baskets, furniture components, including bull's-feet furniture legs), plaques/inlays (Σ=12), offering tables/slabs (Σ=4), and a ceramic lamp (Σ=1; **Table 9.1**).

The majority of funerary furniture provisions were observed on the West Bank of Upper Egypt, where 66 instances were observed amongst published CIFB assemblages (**Figure 9.39**). The remaining regions feature substantially fewer provisions, listed in descending frequency order as follows: East Bank of Upper Egypt (Σ=8), West Bank of Middle Egypt (Σ=7), West Bank of Lower Egypt (Σ=2), Faiyum (Σ=2), and single observations were recorded for the Eastern Nile Delta; East Bank of Middle Egypt and Dakhla Oasis. There were no published incidences of funerary furniture within CIF assemblages from the Western Nile Delta and East Bank of Lower Egypt regions.

Funerary furniture was first included for adult burials in the Predynastic Period and was variably attested throughout the pharaonic era.[849] In the present study, the highest frequency of CIF funerary furniture provisions were observed in published Early Dynastic data, with 64 instances amongst the sample attributed to this phase (**Figure 9.40**). The remaining chronological periods feature substantially fewer examples of funerary furniture amongst CIFB assemblages. Ten instances were attributed to the Old Kingdom, while the First Intermediate Period and Middle Kingdom each feature 7 examples amongst published data.

All incidences of funerary furniture provision are attributed to CIFBs in cemetery contexts (**Figure 9.41**). There were no published examples of funerary furniture amongst CIF assemblages from settlement, temple or funerary enclosure contexts.

Older Children continue to present the highest object provision rates, with 67 examples of funerary furniture identified amongst funerary assemblages of this age group (**Figure 9.42**). Single observations of funerary furniture provision were identified amongst

[849] Richards (1992: 81); Grajetzki (2003: 6, 10, 11, 20, 23, 25, 27, 28, 30, 34, 42, 43, 45, 49, 55, 56, 58, 59, 60, 63, 65, 67, 70ff., 77, 82ff., 86, 111, 114, 117).

published assemblages of Young Children, Infants and Foetuses. There were 18 examples of funerary furniture provision derived from CIF assemblages for whom age-at-death data was not provided.

### 9.3.8 Shells and Fossils

In terms of primary offerings, shells and fossils were observed on 84 occasions amongst CIF funerary assemblages within the sample (**Table 9.1**). Shell types (species) are expounded in the 'materials' section of this chapter (see §9.4.4, below). The majority of shell and fossil provisions were observed on the East Bank of Upper Egypt, with 38 instances identified amongst published CIFB assemblages from that region (**Figure 9.43**). The next highest incidence was recorded for the West Bank of Lower Egypt, with 24 examples described amongst CIF grave goods. The remaining regions featured substantially fewer incidences of shell and fossil provision, and are listed in descending frequency order as follows: West Bank of Upper Egypt (Σ=9), East Bank of Lower Egypt (Σ=5), West Bank of Middle Egypt (Σ=4) and Dakhla Oasis (Σ=4). There were no published incidences of shells and fossils as primary grave goods within CIF assemblages in the Western Nile Delta, Eastern Nile Delta, East Bank of Middle Egypt and Faiyum regions.

To date, no comprehensive studies have been presented regarding chronological attestations of shell and fossil provision in ancient Egypt. Anecdotal evidence indicates that they were first observed amongst Predynastic adult funerary assemblages,[850] however further research is required to determine the nature and scope of their employment as a funerary item. In terms of the present study, the highest frequency of CIF shell and fossil provision was observed amongst published Early Dynastic data, with 38 instances attributed to this phase (**Figure 9.44**). Equal observations of shell and fossil provision were observed amongst published data from the Old Kingdom and First Intermediate Period (each Σ=18), while 8 examples were attributed to CIFB assemblages dating to the Middle Kingdom.

All incidences of shell and fossil provision are attributed to CIFBs in cemetery contexts (**Figure 9.45**). There were no published examples of shells and fossils as grave goods amongst CIF funerary assemblages from settlement, temple or funerary enclosure contexts.

[850] For example, Kom el-Khilgan; Dr. Yann Tristant, Macquarie University, *pers. comm.*; *cf.* Dartevelle-Puissant (1937); Lucas & Harris (1999: 39).

Older Children predominate as recipients of shells and fossils amongst the known-age sample, with 9 incidences attributed to funerary assemblages associated with this age group (**Figure 9.46**). Young Children featured slightly fewer examples, with 6 incidences reported for this demographic segment. There was 1 example of shell and fossil provision cited in an Infant burial, while no Foetuses were described in association with this object category.

### 9.3.9 Figurines and Models

Figurines and models were observed amongst CIFB assemblages on 68 occasions. Instances of figurines and models can be further described according to object types: animals (23, including dogs, hedgehogs, birds, lions, bovines, fish, pigs, crocodiles, hippopotami, baboons and 'monsters'), deities (Σ=1; Ptah-Sokar), shabtis (Σ=6), humanoids (Σ=21; males, females, children, dwarves, prisoners) and their accessories (Σ=2: wigs), non-specific figurines (3), model scenes (Σ=9; granaries and grain grinding, butchery, row-boats and sail boats), model vessels (Σ=2), and model tools (Σ=1; chisel; **Table 9.1**).

Two regions shared the highest frequencies of figurine and model provisions: 25 observations of this category of evidence were attributed to published CIFB assemblages from the West Banks of Middle and Upper Egypt (**Figure 9.47**). The remaining regions featured substantially fewer incidences and are listed in descending frequency order as follows: Faiyum (Σ=6), East Bank of Lower Egypt, Dakhla Oasis and East Bank of Upper Egypt (each Σ=3), Eastern Nile Delta (Σ=2) and Western Nile Delta (Σ=1). There were no published incidences of figurines and models within CIF assemblages in the West Bank of Lower Egypt and East Bank of Middle Egypt regions.

Figurines and models were attested in adult graves from the Predynastic Period and were variably attested throughout the pharaonic era.[851] The Middle Kingdom featured the highest incidences of figurines and models in CIFB assemblages, with 36 examples attributed to this phase (**Figure 9.48**). This result aligns with broader trends concerning the popularity of this category of grave goods during the Middle Kingdom.[852] There were 28 instances of figurine and model provision identified amongst published data of the Early Dynastic Period, while the Old Kingdom and First Intermediate Period each presented 2 examples of this object category.

[851] Richards (1992: 81); Grajetzki (2003: 5, 10, 11, 19, 20, 21, 23, 27, 28, 29, 34, 35, 37, 39ff., 48ff, 52, 55, 57ff., 60, 63, 68, 71, 77, 82ff., 86ff., 89, 95, 101, 110, 114, 120).

[852] Forbes (1995); Ikram & Dodson (1998: 30-31).

In terms of distribution by site types, the greater portion of figurines and models identified amongst CIFB assemblages were derived from cemetery contexts. Here, 56 instances were reported, as opposed to 12 examples from settlement burials (**Figure 9.49**). There were no published examples of figurines and models amongst CIF funerary assemblages from temple or funerary enclosure contexts.

Amongst the known-age portion of the sample, Older Children feature the highest frequency of figurine and model provision, with 26 examples derived from burial assemblages associated with this age group (**Figure 9.50**). There were 14 instances of figurine and model provision reported for Infant burials, 1 example with the burial of a Young Child, and no reported incidences of figurines and models associated with Foetal burials.

### 9.3.10 Scarabs

Scarabs are often considered as status symbols of religious or administrative office when found in adult tombs, thus their appearance in children's tombs is noteworthy.[853] In terms of primary offerings within the dataset, scarabs were observed amongst CIF funerary assemblages on 56 occasions. These primary incidences can be expanded to include a further 6 descriptions of scarabs within other primary objects such as necklaces and bracelets (**Table 9.1**). Such expansion is essential to obtain an accurate estimate of CIFs access to these symbolic objects, as well as their inscriptions. Of the 56 scarabs observed in CIFB assemblages, 25 were inscribed with hieroglyphic text and symbols (excavators' transliterations include: *nfr* and the crown of Lower Egypt,[854] *mn ḫpr r'* ,[855] *nesher defer nesher*,[856] *ankh*,[857] and *kꜣ*[858]), as well as stylised patterns (including scrolls[859]) and shapes.[860]

The majority of scarab provisions were observed on the East Bank of Upper Egypt, with 37 instances identified amongst published CIFB assemblages for that region (**Figure 9.51**). The remaining regions featured substantially fewer incidences and are listed in descending frequency order as follows: West Bank of Middle Egypt (9), West Bank of Upper Egypt (Σ=8), East Bank of Lower Egypt (Σ=1) and Faiyum (Σ=1). There were no published

853 Grajetzki (2003: 39).
854 See GGRN 195.
855 See GGRN 281.
856 See GGRN 63.
857 See GGRN 530.
858 See GGRN 2862.
859 See GGRNs71, 136, 162, 188, 255, 594
860 See GGRNs 63, 71, 136, 162, 169, 188, 195, 232, 237, 255, 281, 530, 541, 594, 965, 966, 987, 1038, 1039, 1046, 1048, 1061, 1069, 2150.

incidences of scarabs within CIF assemblages in the Western Nile Delta, Eastern Nile Delta, West Bank of Lower Egypt, East Bank of Middle Egypt and Dakhla Oasis.

Scarabs were first included among adult funerary assemblages during the late Old Kingdom,[861] and then continued in use for the remainder of pharaonic history.[862] The highest frequency of scarab provision amongst CIFB assemblages was observed during the Middle Kingdom (Σ=30; **Figure 9.52**). Equal quantities of scarabs were identified in published data for the Old Kingdom and First Intermediate Periods (each Σ=13). In alignment with attestations for adult tombs, there were no observations of scarab provision amongst Early Dynastic CIF funerary assemblages.

One incidence of scarab provision was identified amongst the funerary assemblage of an Infant settlement burial (**Figure 9.53**). The remaining incidences are all derived from cemetery contexts. There were no published examples of scarabs amongst CIF funerary assemblages from temple or funerary enclosure contexts.

Older Children continue to dominate grave good distributions, with 8 incidences of scarab provision identified amongst funerary assemblages for this age group (**Figure 9.54**). Scarabs were also described amongst the published burial assemblages of 4 Infants and 2 Young Children. There were no accounts of scarabs in Foetal burials.

### 9.3.11 Recreation Items

Recreation items were observed on 48 occasions amongst CIF funerary assemblages within the sample. Instances of recreation items can be further described according to object types: miscellaneous amusement items (Σ=32), board games (Σ=15) and musical instruments (Σ=1) (**Table 9.1**).

The highest frequency of recreation items was observed on the West Bank of Middle Egypt, with 35 instances identified amongst published CIFB assemblages for that region (**Figure 9.55**). Only 2 other regions amongst the sample feature incidences of recreation items in CIFB assemblages: the West Bank of Upper Egypt (Σ=12), and the Eastern Nile Delta (Σ=1). There were no further instances of this object category amongst the sample.

[861] Andrews (1994: 51).
[862] Andrews (1994: 50); Grajetzki (2003: 38-39, 43, 52, 59, 61, 65, 70ff., 107).

Recreation items were observed amongst adult funerary assemblages from the Early Dynastic Period,[863] only diminishing in frequency during the cultural shifts brought about by the Ramesside Period.[864] The majority of recreation items amongst the sample are attributed to CIFB assemblages of the Middle Kingdom, with 35 instances derived from contexts of this date (**Figure 9.56**). According to published data, 13 recreation items were included amongst CIF grave goods during the Early Dynastic Period. There are no examples of recreation items reported for Old Kingdom and First Intermediate Period burial contexts.

It is important to note that this category of evidence presents the first and only occasion where object frequencies in settlement burial assemblages outnumber those in cemetery contexts. This finding may indicate that this category of objects had a strong association with the domestic sphere. According to published data, recreation items were interred in 35 settlement CIFBs, as opposed to 13 incidences in cemeteries (**Figure 9.57**). This is an intriguing finding, considering that recreation items are relatively common among adult cemetery assemblages from the Early Dynastic Period onwards. There were no published examples of recreation items amongst CIF funerary assemblages from temple or funerary enclosure contexts.

Infants feature the highest frequency of recreation items amongst the known-age portion of the sample, with 35 examples identified amongst published burial assemblages. This was followed by 13 examples observed amongst Older Children's offerings (**Figure 9.58**). There were no examples of recreation items interred with Foetuses or Young Children amongst the sample. For the first and only occasion amongst the sample, all incidences of this object category were associated with known-age burials.

### 9.3.12 Personal Adornment and Equipment

Items of personal adornment and equipment were observed on 40 occasions amongst CIF funerary assemblages within the sample. Incidences of personal adornment and equipment items can be further described according to object types: personal adornment ($\Sigma$=10, including headbands, girdles, belts, diadems, sashes and ornaments), face masks ($\Sigma$=3), bags ($\Sigma$=2), combs ($\Sigma$=2), hairpins and pins ($\Sigma$=11), spoons ($\Sigma$=9), and staves and staff heads ($\Sigma$=3) (**Table 9.1**). Several items from this category, including belts, face masks,

[863] Grajetzki (2003: 8, 70ff., 111).
[864] Grajetzki (2003: 84, 89).

staves and staff heads are often interpreted as symbols of status or authority when found in adult tombs. Here again, it noteworthy that such items are also attested in CIF funerary assemblages.[865]

The highest frequency of personal adornment and equipment provisions precipitated from the West Bank of Lower Egypt, with 12 observations of this category of evidence amongst published assemblages of this region (**Figure 9.59**). This result was closely followed by 11 instances on the West Bank of Upper Egypt; and 10 on the East Bank of Upper Egypt. The remaining regions demonstrated substantially fewer incidences of personal adornment and equipment provision and are listed in descending frequency order as follows: West Bank of Middle Egypt ($\Sigma$=3), Eastern Nile Delta, East Bank of Lower Egypt, Faiyum and Dakhla Oasis (each $\Sigma$=1). There were no observations of personal adornment and equipment items amongst published CIFB assemblages in the Western Nile Delta and East Bank of Middle Egypt.

Personal adornment and equipment items were attested in adult burials from the Predynastic Period onwards.[866] This category of objects was also subject to a brief hiatus during the Ramesside Period,[867] but experienced a renaissance thereafter.[868] A fairly balanced representation of personal adornment and equipment items was observed amongst CIFB assemblages of all periods canvassed by this study. The Early Dynastic Period features the highest frequency of this object category ($\Sigma$=12, **Figure 9.60**), followed closely by equal observations in the Old and Middle Kingdoms ($\Sigma$=10). The First Intermediate Period presents the fewest published incidences of personal adornment and equipment provisions, with 8 observations attributed to this phase.

All incidences of personal adornment and equipment provision are attributed to CIFBs in cemetery contexts (**Figure 9.61**). There were no published examples of personal adornment and equipment items amongst CIF funerary assemblages from settlement, temple or funerary enclosure contexts.

Amongst the known-age component of the sample, Older Children present the highest frequencies of personal adornment and equipment items amongst published funerary assemblages. There were 18 observations of this category of evidence attributed to this age group (**Figure 9.62**), as opposed to 8 instances for Infant burials and 4 examples for

[865] Grajetzki (2003: 3, 60).
[866] Grajetzki (2003: 3, 10, 11, 23, 29, 41, 43, 48, 50, 51, 56, 58, 59, 60, 65, 70ff., 80, 83).
[867] Grajetzki (2003: 84, 89).
[868] Grajetzki (2003: 86, 88, 98, 102, 112, 114ff.).

Young Children. There were no observations of items of personal adornment or equipment amongst Foetal funerary assemblages. Unfortunately, demographic data was not provided for individuals associated with 10 items from this object category.

### 9.3.13 Seals and Seal Impressions

In terms of primary offerings, seals and seal impressions were observed on 27 occasions amongst CIF funerary assemblages within the sample. These primary incidences can be expanded to include a further 6 descriptions of seals and seal impressions within other objects, for example, necklaces and bracelets. Such expansion is essential to obtain accurate estimates of object types most frequently associated with CIFBs (**Table 9.1**). The variety of seals observed amongst CIFB assemblages include: button seals (several with backs assuming animal shapes, including baboons, dogs and frogs) and cylinder seals of many different materials. It is axiomatic that all of the items in this object category were inscribed, variably featuring cartouches (including that of Senwosret III[869]), stylised patterns and shapes,[870] and images of deities (including Anubis,[871] Thoth,[872] Khepri[873] and Seth[874]).

The highest frequency of seals and seal impressions was observed on the East Bank of Upper Egypt, with 16 instances identified amongst published CIFB assemblages of that region (**Figure 9.63**). The remaining regions featured substantially fewer incidences of seals and seal impressions and are listed in descending frequency order as follows: West Bank of Middle Egypt (Σ=5), Dakhla Oasis (Σ=4), Eastern Nile Delta (Σ=1) and West Bank of Upper Egypt (Σ=1). There were no observations of seals and seal impressions amongst published CIFB assemblages in the Western Nile Delta, West Bank of Lower Egypt, East Bank of Lower Egypt, East Bank of Middle Egypt and Faiyum regions.

Seals and seal impressions are first observed in adult burials in the Early Dynastic Period,[875] and persisted in use[876] until the changing trends of Ramesside Period.[877] There appears to be fairly balanced chronological distributions of seals and seal impressions

869 See GGRN 38.
870 See GGRNs 626, 1630.
871 See GGRN 611.
872 See GGRN 1638.
873 See GGRN 1261.
874 See GGRN 1752.
875 Prof. E. C. Köhler, University of Vienna, *pers. comm.*; attested at the Early Dynastic necropolis of Helwan.
876 Grajetzki (2003: 28, 35, 37).
877 Grajetzki (2003: 84, 89).

amongst published CIFB assemblages. The Middle Kingdom narrowly emerges with the highest frequency of this object category, with 9 instances of seals and seal impressions attributed to this period (**Figure 9.64**). The Old Kingdom and First Intermediate Period follow closely behind, with 8 and 7 observations, respectively. The Early Dynastic Period features the fewest representations of seals and seal impressions, with 3 examples identified amongst CIFBs of this era.

One incidence of seal provision was identified within the funerary assemblage of an Infant settlement burial (**Figure 9.65**). The remaining 26 incidences are all derived from cemetery contexts. There were no published examples of scarabs among CIF funerary assemblages from temple or funerary enclosure contexts.

Once again, the greatest number of seals and seal impressions among the known-age portion of the sample were identified in the funerary assemblages of Older Children. This object category was identified with individuals from this age group on 7 occasions (**Figure 9.66**), while singular instances were observed in the burials of a Young Child and an Infant. There were no observations of seals and seal impressions amongst Foetal funerary assemblages. Unfortunately, 18 instances of seal and seal impression provision were associated with individuals for whom demographic data was not provided.

### 9.3.14 Organics: Food Items

Food items (including seeds, bread and animal bones[878]) were observed on 40 occasions amongst CIF funerary assemblages within the sample (**Table 9.1**). Comments made at the beginning of this chapter regarding the survival potential of organic remains are again evoked here. The highest frequency of *extant* food items was observed in the Eastern Nile Delta, with 9 instances identified amongst published CIFB assemblages of that region (**Figure 9.67**). This result was closely followed by 8 observations of food items on the West Bank of Upper Egypt, and 5 observations from the East Bank of Upper Egypt. Only 2 other regions feature incidences of food provision, with 2 instances observed in Dakhla Oasis and 1 on the West Bank of Lower Egypt. There were no observations of food items amongst published CIFB assemblages in the Western Nile Delta, East Bank of Lower Egypt, West Bank of Middle Egypt, East Bank of Middle Egypt and Faiyum regions.

[878] Three bucrania were observed amongst the sample (see GGRNs 913 and 1191). Although this author is uncertain as to whether this part of the beast was placed within the grave for food consumption or symbolic purposes, the present study defers to Ikram's (1995: 118) assessment of bucrania as food items while awaiting further research on this issue.

Food items were attested amongst adult burials from the Predynastic Period onwards,[879] although attestations diminished during the Ramesside Period.[880] In the present study, the highest frequency of food items was observed amongst CIFB assemblages of the Early Dynastic Period, with 14 instances observed amongst published data from this phase (**Figure 9.68**). There is a sequential decline in published incidences of food provision from this point onwards, with 8 observations precipitating from Old Kingdom CIFBs, 2 observations from the First Intermediate Period, and a single observation attributed to the Middle Kingdom period.

All incidences of food provision are associated with CIFBs in cemetery contexts (**Figure 9.69**). There were no published examples of food items amongst CIF funerary assemblages from settlement, temple or funerary enclosure contexts.

On this occasion, Young Children emerge with the highest incidence of food provision amongst the known-age portion of the sample (Σ=8; **Figure 9.70**), followed closely by 7 observations for Infants and 6 for Older Children. There were no observations of food provision amongst Foetal funerary assemblages. On 4 occasions, food items were associated with individuals of unknown age-at-death.

### 9.3.15 Weaponry

Weaponry items (including arrowheads, maceheads, spearheads, axeheads, slingshots, harpoons, and spears) were observed on 24 occasions amongst CIF funerary assemblages within the sample (**Table 9.1**). The highest frequency of weaponry items were observed on the West Bank of Lower Egypt, with 15 instances identified amongst published CIFB assemblages (**Figure 9.71**). Only 3 other regions feature incidences of weaponry provision, including 7 observations on the West Bank of Upper Egypt, and singular examples for the West Bank of Middle Egypt and East Bank of Upper Egypt. There were no observations of weaponry amongst published CIFB assemblages in the Western Nile Delta, Eastern Nile Delta, East Bank of Lower Egypt, East Bank of Middle Egypt, Faiyum and Dakhla Oasis regions.

Weaponry was attested in adult burials from the Predynastic Period onwards.[881] Compared to other early civilisations, this category of objects is relatively rare in Egyptian funerary assemblages[882] and is often interpreted as a symbol of status when encountered in adult

[879] Grajetzki (2003: 2, 8, 10, 11, 21, 39, 43, 48-49, 61, 65, 70, 83).
[880] Grajetzki (2003: 84, 89).
[881] Ciałowicz (1985) notes the presence of weaponry in CIFBs from the Predynastic Period; Grajetzki (2003: 5, 8, 11, 38, 39, 41, 48, 55, 60, 70).
[882] Grajetzki (2003: 61).

tombs.[883] As such, their appearance in CIF tomb assemblages is noteworthy. Like many other object categories, weaponry diminished in popularity during the Ramesside Period,[884] and then experienced a slight resurgence in the Third Intermediate Period.[885] Within the present study, the Old Kingdom features the highest frequency of weaponry provision, with 17 instances derived from published CIF funerary assemblages (**Figure 9.72**). The remaining chronological phases feature substantially fewer incidences, with 6 examples of weaponry provision attributed to the Early Dynastic Period and 1 observation precipitating from the Middle Kingdom. There were no published examples of weaponry amongst CIFB assemblages from the First Intermediate Period.

One incidence of weaponry provision was identified in the funerary assemblage of an Infant settlement burial (**Figure 9.73**). The remaining 23 incidences are all derived from cemetery contexts. There were no published examples of weaponry amongst CIF funerary assemblages from temple or funerary enclosure contexts.

Amongst the known-age portion of the sample, the clear majority of weaponry provision is associated with Older Children, with 18 incidences identified in published funerary assemblages of this age group (**Figure 9.74**). Single observations of weaponry provision were attributed to the burials of an Infant and a Young Child. There were no observations of weaponry amongst Foetal funerary assemblages. On 4 occasions, weapons were associated with individuals of unknown age-at-death.

### 9.3.16 Other Vessels

'Other Vessels' were observed on 23 occasions amongst CIF funerary assemblages within the sample. The category of 'Other Vessels' serves to represent those vessels constructed from materials other than ceramics and stone, and can be further elaborated as follows: faience vessels ($\Sigma$=9), mud vessels ($\Sigma$=2) and a wooden vessel ($\Sigma$=1; **Table 9.1**). The highest frequency of Other Vessels was observed on the West Bank of Lower Egypt, with 11 instances identified amongst published CIFB assemblages for that region (**Figure 9.75**). This result was closely followed by 8 observations for the East Bank of Upper Egypt. Only three other regions featured examples of Other Vessels amongst CIF grave goods, including 2 observations for the West Bank of Middle Egypt, and 1 observation each for the East Bank of Lower Egypt and the West Bank of Upper Egypt. There were no

[883] Grajetzki (2003: 38, 61).
[884] Grajetzki (2003: 84, 89).
[885] Grajetzki (2003: 98, 101, 111).

observations of Other Vessels amongst published CIFB assemblages in the Western Nile Delta, Eastern Nile Delta, East Bank of Middle Egypt, Faiyum and Dakhla Oasis regions.

Other Vessels were first attested in adult burials during the Early Dynastic Period,[886] then continued in use throughout Egyptian history.[887] The highest frequencies of Other Vessel provision within the dataset were attributed to the Old Kingdom, with 12 incidences derived from published funerary assemblages of this phase (**Figure 9.76**). There were only slightly fewer observations of this object category in the First Intermediate Period (Σ=8), while Other Vessels were only observed on 2 occasions in the Early Dynastic Period, and once amongst published data for the Middle Kingdom.

All incidences of Other Vessel provision are attributed to CIFBs in cemetery contexts (**Figure 9.77**). There were no published examples of Other Vessels amongst CIF funerary assemblages from settlement, temple or funerary enclosure contexts.

Older Children predominate amongst the known-age component of the sample as the major recipients of this object category. There were 18 incidences of Other Vessel provision identified amongst funerary assemblages associated with this age group (**Figure 9.78**). Otherwise, there was a single observation of a faience vessel amongst the grave goods of a Young Child, and no observations of Other Vessels in any Foetal or Infant burials. On 4 occasions, Other Vessels were associated with individuals for whom age-at-death was not known.

### 9.3.17 Textiles

Textiles were observed on 19 occasions amongst CIF funerary assemblages within the sample (**Table 9.1**). To be eligible for inclusion in this category, a quantity of textile – usually in folded form – must have been explicitly described by an excavator as a component of a deceased's funerary assemblage. It should be noted that textiles provided as part of mortuary treatment (wrapping, padding and wadding)[888] are *not* included here as grave goods. Moreover, textiles used in the construction of clothing are also not listed here, as clothing is treated as a separate object category, below. Comments made at the beginning of this chapter regarding the survival potential of organic remains, including textiles, are again evoked here.

[886] Prof. E. C. Köhler, University of Vienna, *pers. comm.*; attested at the Early Dynastic necropolis of Helwan.
[887] Grajetzki (2003: 20, 23, 49, 55, 61, 70ff., 83, 90, 98, 101).
[888] See §§6.2.2, 6.3.2.

The highest frequencies of *extant* textiles were observed on the East Bank of Upper Egypt, with 15 instances identified amongst published CIFB assemblages for that region (**Figure 9.79**). Three other regions featured instances of textile provision, including 2 examples for the West Bank of Upper Egypt, and singular observations for the Western Banks of Lower and Middle Egypt. There were no observations of textiles amongst published CIFB assemblages in the Western Nile Delta, Eastern Nile Delta, East Bank of Lower Egypt, East Bank of Middle Egypt, Faiyum and Dakhla Oasis regions.

Textiles were first attested as grave goods during the Early Dynastic Period,[889] and continued in regular use[890] until the dramatic shifts in funerary culture brought about by the Ramesside Period.[891] Almost equal incidences of textile provision were observed amongst published CIFB assemblages for the Old Kingdom and First Intermediate Periods, with these regions demonstrating 8 and 7 observations of this object category, respectively (**Figure 9.80**). Parity was observed amongst Early Dynastic and Middle Kingdom data, with single examples of textile provision reported for each of these cultural phases.

All incidences of textile provision are attributed to CIFBs in cemetery contexts (**Figure 9.81**). There were no published examples of textiles amongst CIF funerary assemblages from settlement, temple or funerary enclosure contexts.

Unfortunately, demographic data was only available for a small number of individuals who featured textiles among their funerary assemblages. Here, we see 2 incidences of textile provision associated with burials of Young Children (**Figure 9.82**), and single instances identified amongst Infant and Older Child Assemblages. There were no observations of textiles amongst Foetal funerary assemblages. On this occasion, 15 observations of textiles were attributed to individuals of Unspecified Age.

### 9.3.18 Clothing and Footwear

Clothing and footwear were observed on 13 occasions amongst CIF funerary assemblages within the sample. More specifically, there were 10 incidences of clothing provision and 3 of footwear (sandals; **Table 9.1**). Considering that these items were constructed from organic materials, comments made at the beginning of this chapter regarding the survival potential of such remains are again evoked here. The highest frequency of *extant* clothing

[889] Jones (2008: 121).
[890] Grajetzki (2003: 43, 65, 70).
[891] Grajetzki (2003: 84, 89).

and footwear was observed on the West Bank of Middle Egypt, with 8 instances identified amongst published CIFB assemblages from that region (**Figure 9.83**). The remaining regions featured substantially fewer incidences of clothing and footwear as grave goods and are listed in descending frequency order as follows: East Bank of Upper Egypt (Σ=3), West Bank of Lower Egypt (Σ=1) and West Bank of Upper Egypt (Σ=1). There were no observations of clothing and footwear amongst published CIFB assemblages in the Western Nile Delta, Eastern Nile Delta, East Bank of Lower Egypt, East Bank of Middle Egypt, Faiyum and Dakhla Oasis regions.

Items of clothing were first observed amongst adult funerary assemblages of the Early Dynastic Period[892] and continued in use thereafter,[893] albeit at a reduced scale during and after the Ramesside Period.[894] Within the present study, the highest frequencies of clothing and footwear provision were attributed to the Old Kingdom, with 5 instances derived from published CIF assemblages of this phase (**Figure 9.84**). This result was closely followed by 4 observations amongst Middle Kingdom assemblages, while the Early Dynastic and First Intermediate Periods each featured 2 published instances of clothing and footwear.

One incidence of clothing and footwear provision was identified amongst the funerary assemblage of an Infant settlement burial (**Figure 9.85**). The remaining 11 incidences are all derived from cemetery contexts. There were no published examples of clothing and footwear amongst CIF funerary assemblages from temple or funerary enclosure contexts.

A similar provision profile is observed for clothing and footwear as was described for textiles, above. Here, Young Children feature the highest incidence of clothing and footwear provision amongst the known-age portion of the sample, with 3 incidences identified amongst published assemblages associated with this group (**Figure 9.86**). Again, Infants and Older Children feature equal distributions of this object category, with 2 instances described for each group. There were no observations of clothing and footwear amongst Foetal funerary assemblages. Unfortunately, on 6 occasions clothing and footwear was associated with individuals for whom age-at-death data was not provided.

892 Jones (2008: 121).
893 Grajetzki (2003: 5, 25, 42, 67, 70, 86).
894 Grajetzki (2003: 84, 89).

### 9.3.19 Inorganic Raw Materials

The 10 incidences of inorganic raw materials amongst the sample pertain to 2 object types: precious metal (Σ=7; 5 incidences of gold, 2 of copper)[895] and gemstones (Σ=3; among them carnelian, amethyst and graphite;[896] **Table 9.1**).

All incidences of precious metal provision were attributed to the West bank, with 4 instances observed in Upper Egypt (3 in Hierakonpolis; 1 in el-Arabah), 2 in Middle Egypt (1 each in Lahun and Harageh), and 1 in Lower Egypt (Saqqara). The Early Dynastic Period represented the highest frequencies of precious metal provision amongst the sample, with 4 examples identified amongst published data for this phase. Two observations of precious metals were observed amongst CIFB assemblages of the Middle Kingdom, while a single instance was attributed to an Old Kingdom interment. There were no incidences of precious metal provision amongst First Intermediate Period assemblages, whatsoever. All observations of precious metals as grave goods precipitated from cemetery contexts; there were no recorded incidences of this object type amongst settlement, temple or funerary enclosure contexts. Amongst the known-age portion of the sample, 3 incidences of precious metal provision were identified in assemblages of Older Children, while 1 example was recorded in the burial of a Young Child. There were no observations of precious metals among funerary assemblages of Infants or Foetuses. On 3 incidences, precious metals were associated with individuals of Unspecified Age.

Gemstones were observed in 2 published CIFB assemblages in el-Kubaniya and Hierakonpolis on the West Bank of Upper Egypt, and a singular instance was attributed to Saqqara on the West Bank of Lower Egypt. Singular observations of gemstone provision precipitated from the published records of the Early Dynastic, Old Kingdom and Middle Kingdom periods. There were no examples of gemstones within First Intermediate Period burials, whatsoever. All incidences of gemstone provision derived from cemetery contexts; this object type was not represented amongst settlement, temple or funerary enclosure funerary assemblages. Singular observations of gemstones were identified among the published grave goods of a Young Child, an Older Child and a child of Unspecified Age. Gemstones did not appear amongst Foetal or Infant funerary assemblages.

[895] See GGRNs 137, 264, 724, 2490, 2492, 2536. Here, the present study is dependent on excavators' published descriptions. It may have been that these items were objects from other categories of grave goods that the excavator/s failed to recognize.

[896] See GGRNs 1276, 2477, 2537.

### 9.3.20 Organic Raw Materials

The 8 incidences of organic raw materials amongst the sample may be sub-divided into 5 types: clay (Σ=3),[897] wood (Σ=2),[898] resin (Σ=1),[899] natron (Σ=1)[900] and a wreath (Σ=1).[901] Comments made at the beginning of this chapter regarding the poor survival potential of organic remains are again evoked here. All instances of clay provision were attributed to Early Dynastic CIF assemblages from cemetery contexts in Abydos (Σ=2) and Adaima on the West Bank of Upper Egypt (Σ=1). Clay was described among the grave goods of a Foetus, a Young Child and a child of Unspecified Age.

Both instances of wood provision were observed in Upper Egyptian cemetery contexts: 1 in the Old Kingdom burial of an Older Child in Qubbet el-Hawa on the West Bank, the other in a Middle Kingdom Infant burial at Abydos on the East Bank. The single observation of resin amongst the sample was derived from the Early Dynastic cemetery burial of an Older Child at Hierakonpolis on the West Bank of Upper Egypt, cited on many occasions elsewhere in this thesis.[902]

The only instance of natron provision amongst the sample was identified within the funerary assemblage of a child of Unspecified Age in the Middle Kingdom cemetery of Abydos on the West Bank of Upper Egypt. The only published instance of a 'wreath' amongst the sample was described within the First Intermediate Period burial of a child of Unspecified Age in the cemetery of Sedment on the West Bank of Middle Egypt.

### 9.3.21 Organics: Fuel

Of the 8 incidences of fuel provision amongst the sample, 6 are of charcoal[903] and 2 are of animal dung.[904] Considering these items are also organic in nature, comments made at the beginning of this chapter regarding the poor survival potential of such remains are again

[897] See GGRNs 1399, 1440, 1520. According to individual classification, clay may be also regarded as an inorganic substance.
[898] See GGRNs 1493, 2623.
[899] See GGRN 2497.
[900] See GGRN 1515. According to individual classification, natron may be also regarded as an inorganic substance.
[901] See GGRN 2563. Petrie (2000) provided a single word description – 'wreath' – for this item in one of his notoriously illusive tomb cards. In alignment with archaeological best practice, this find is interpreted here as a simple cluster/bunch of vegetation, i.e., Raw Materials, as opposed to the modern, Western, funerary interpretation of a 'wreath'. The absence of any description of this object's position within the grave prevents its appropriation as a piece of Personal Adornment and Equipment.
[902] For further details regarding this burial, see §§6.7.4, 7.2.4, 7.4.2, 9.1.
[903] See GGRNs 1403, 1405, 2863-2865, 2985.
[904] See GGRN 379.

evoked here. Perhaps it is also worth questioning whether or not this category of evidence is consistently identified, collected, recorded and published in excavation protocols.

Of the 6 incidences of charcoal provision amongst the sample, 3 are attributed to Early Dynastic cemetery burials on the West Bank of Upper Egypt: 2 at Adaima and 1 at Hierakonpolis. Both Adaima burials are of Young Children, while the Hierakonpolis example once again stems from the frequently-mentioned burial of an Older Child, cited above.

Both instances of animal dung provision are derived from the burial of a Young Child in the Old Kingdom cemetery of Matmar on the East Bank of Upper Egypt.

### 9.3.22 Animal Products

Four examples of animal products were observed as grave goods amongst the sample, including an ostrich egg,[905] a large animal tooth,[906] quantities of tusk[907] and a felid claw.[908] Here again, our understanding of the preservation potential of organic remains calls us to question how decomposition processes may affect representations within this object category.

The ostrich egg was described in the burial of an Older Child in the Old Kingdom cemetery of Balat in the Dakhla Oasis. The large animal tooth was also derived from an Old Kingdom burial, on this occasion amongst the funerary assemblage of a Young Child in the cemetery of Naga ed-Deir on the East Bank of Upper Egypt. Unfortunately, age is not known for the individual who received quantities of tusk among their cemetery burial in the Early Dynastic cemetery of Hierakonpolis on the West Bank of Upper Egypt; we do however know that the remarkable example of a felid claw from the same cemetery, may have been part of a leopard skin (which included the bones of the hand or at least the claws), identified amongst the extraordinary funerary assemblage of a 10–12 year old child often cited throughout this thesis.[909]

## 9.4 Grave Good Materials

The sample was examined in order to determine the nature and scope of materials used to manufacture CIF grave goods. In this case, the objective was to measure material incidence *per entry* in the grave good database; for example, if a single necklace featured quantities of faience, carnelian and steatite beads, each listed material received an

[905] See GGRN 1620.
[906] See GGRN 1238.
[907] See GGRN 2351.
[908] See GGRN 2986.
[909] For further details regarding this burial, see §§6.7.4, 7.2.4, 7.4.2, 9.1, 9.3.20.

incidence count of '1' for this object, rather than counting the individual number of beads made from each material. Such a protocol mitigates (somewhat) the variable levels of recording between publications. It should be noted that the results of this section *only* reflect the *material constituents of grave goods*, not of any other components of the burial; for example, wood from a coffin or architectural feature are not included, nor is the textile used in bodily wrapping. These materials have been accounted for in previous chapters of this thesis.

Again, it must be stated that the present study does not claim that the following results are an accurate account of the 'true' archaeological record. The cultural and natural transformation processes outlined in §9.1 which affect preservation levels, one the one hand, and recovery, recording and publication potentials on the other, have equal bearing on representations of materials within the archaeological record.

Further to these methodological considerations, 14 material categories were identified amongst the sample (**Figure 9.87**), these representing 126 individual material types (**Table 9.2**). In descending order of frequency, material categories observed amongst the sample include: Ceramics (Σ=913), Local Stone (Σ=781), Unknown (Σ=496), Faience and Glaze (Σ=482), Animal Products (Σ=237), Metal (Σ=134), Organics (Σ=46), Wood (Σ=41), Textiles (Σ=38), Imported Stone (Σ=34), Minerals (Σ=32), Raw Materials (Σ=22), Glass and Frit (Σ=9) and Manufactured Materials (Σ=6). Material incidence is further described in descending order of frequency according to manifestations within specific geographical regions, then by relative chronology, site type and age categories, below. Categories consisting of ≥11 published examples are described as a group,[910] while individual cases are described for categories featuring ≤10 published examples.

### 9.4.1 Ceramics

Ceramic materials were observed in CIFB assemblages on 913 incidences amongst the sample. Of these, additional surface treatments (for example, washes, slips, incised decorations) were applied on 183 incidences (**Table 9.2**). The highest incidence rates were observed on the East Bank of Upper Egypt, where ceramic materials were present on 365 incidences amongst published funerary assemblages (**Figure 9.88**). Incidences in remaining regions are listed in descending frequency order as follows: West Bank of Upper Egypt (Σ=220), West Bank of Lower Egypt (Σ=149), West Bank of Middle Egypt (Σ=88), East

[910] With the exception of the 'Unknown' material category which, by nature, cannot be described further.

Bank of Lower Egypt (Σ=39), Dakhla Oasis (Σ=30), Eastern Nile Delta (Σ=16), Faiyum (Σ=4) and Western Nile Delta (Σ=2). There were no published incidences of ceramic materials employed within funerary assemblages of the East Bank of Middle Egypt.

In terms of incidence by relative chronology, the Early Dynastic Period featured the highest use of ceramic materials, with 449 incidences identified amongst published CIF assemblages (**Figure 9.89**). A decline in occurrence is then observed over all proceeding periods, with 175 incidences attributed to the Old Kingdom, 164 incidences to the First Intermediate Period, and 125 to the Middle Kingdom phase.

The majority of ceramic material incidence is attributed to published cemetery burials, with 907 observations derived from assemblages within this context (**Figure 9.90**). There were 6 incidences of ceramic materials amongst settlement burial assemblages, while there were no published incidences within temple or funerary enclosure contexts.

Amongst the known-age component of the sample, the highest frequencies of ceramic materials were observed with Older Children, with 171 incidences identified within the funerary assemblages of this age group (**Figure 9.91**). Ceramic materials were observed in each of the remaining age categories amongst the sample, including 98 incidences in Young Children's interments, 77 incidences in Infant burials and 6 within Foetal funerary assemblages. Unfortunately, on 435 occasions, demographic data was not published for individuals featuring grave goods manufactured from ceramic materials.

### 9.4.2 Local Stone

Local stone (that is, stone quarried within Egypt) was employed in object manufacturing on 781 occasions amongst the sample, with the incidence of 52 specific stone types listed in descending frequency order as follows:[911] carnelian (Σ=231), alabaster (Σ=92), non-specific stone (Σ=63), limestone (Σ=46), calcite (Σ=41), steatite (Σ=40), blue steatite (Σ=31), slate (Σ=30), flint (Σ=27), amethyst (Σ=25), garnet (Σ=17), green steatite (Σ=12), serpentine (Σ=10), feldspar, quartz, sandstone (each Σ=9), diorite (Σ=7), quartzite, rock crystal (each Σ=5), haematite, pink limestone, green feldspar, greywacke, marble, schist, soapstone (each Σ=4), basalt, breccia, white feldspar, porphyry, black steatite (each Σ=3), agate, azurite, black limestone, yellow limestone, blue schist, chert, dolemite, white steatite (each Σ=2), chalcedony, gypsum, onyx, graphite, brown limestone, red limestone, green

[911] Designation of stone types adheres to descriptions in original publications. Identifications of stone origins follow Aston *et al.* (2000: 5-77).

diorite, granite, black granite, siltstone, steaschist, jasper and green jasper (each Σ=1; **Table 9.2**). Of these, there were 2 incidences of local stone objects receiving additional surface treatments (pigment).[912]

The highest inclusion rates of local stone were observed among the published data of the East Bank of Upper Egypt, with 306 incidences identified within CIFB assemblages in this region (**Figure 9.92**). Incidences in remaining regions are listed in descending frequency order as follows: West Bank of Upper Egypt (Σ=217), West Bank of Lower Egypt (Σ=96), West Bank of Middle Egypt (Σ=54), East Bank of Lower Egypt (Σ=42), Eastern Nile Delta (Σ=25), Dakhla Oasis (Σ=21), Western Nile Delta (Σ=18) and Faiyum (Σ=2). There were no published incidences of local stone materials employed within funerary assemblages of the East Bank of Middle Egypt.

The Early Dynastic Period presented the highest rates of local stone employment, with 310 incidences observed in published CIF assemblages from this cultural phase (**Figure 9.93**). The Middle Kingdom featured the next highest incidence of local stone materials, with 185 observations attributed to this period. This result was closely followed by 165 published incidences in the Old Kingdom, and 121 incidences in the First Intermediate Period.

In terms of site types, apart from 7 observations among settlement burial assemblages, the remaining 767 incidences of local stone employment were identified in published CIF cemetery grave goods (**Figure 9.94**). There were no published examples of local stone materials amongst CIF funerary assemblages from temple or funerary enclosure contexts.

Older Children demonstrated the highest inclusion rates of local stone amongst the sample, with 237 incidences attributed to this age group (**Figure 9.95**). The remaining age categories presented substantially fewer observations amongst published funerary assemblages, with 64 incidences attributed to Young Children's burials, and 45 incidences identified within Infant interments. There were no incidences of local stone amongst published Foetal funerary assemblages. Unfortunately, 435 incidences of local stone employment were attributed to items associated with individuals for whom age-at-death was not provided.

[912] Both were sandstone objects; see GGRNs 2389, 2390.

### 9.4.3 Faience and Glaze

Due to the similarities in their manufacturing methods, faience and glaze are included within the same material category. There were 482 incidences among the dataset where faience and glaze materials were employed in grave good manufacture. Faience accounted for 430 incidences, while glaze was observed on 52 occasions (**Table 9.2**). Of these, there were 2 incidences when faience objects received additional surface treatments (paint).[913] The highest incidences of faience and glaze were observed on the East Bank of Upper Egypt, with these materials included amongst CIFB assemblages on 333 incidences (**Figure 9.96**). The remaining regions feature substantially fewer published instances of these materials, and are listed in descending order of frequency as follows: West Bank of Upper Egypt (Σ=62), Western Nile Delta and West Bank of Middle Egypt (each Σ=26), West Bank of Lower Egypt (Σ=16), Dakhla Oasis (Σ=13), East Bank of Lower Egypt (Σ=4), and the Eastern Nile Delta and Faiyum (each Σ=1). There were no published incidences of faience and glaze materials employed within funerary assemblages of the East Bank of Middle Egypt.

The First Intermediate Period featured the highest inclusion rates of faience and glaze, being identified amongst published CIF funerary assemblages on 171 occasions (**Figure 9.97**). The Old Kingdom presented only slightly fewer examples, with 157 incidences reported in burial contexts dating to this phase. This was followed by 107 incidences of faience and glaze amongst Middle Kingdom assemblages, while the Early Dynastic Period demonstrated the least employment of these materials amongst CIF grave goods (Σ=47).

Seven incidences of faience and glaze materials were identified amongst settlement CIF funerary assemblages (**Figure 9.98**). The remaining 475 incidences are all derived from cemetery contexts. There were no published examples of faience and glaze materials amongst CIF funerary assemblages from temple or funerary enclosure contexts.

Faience and glaze materials were observed on 73 occasions in the burial assemblages of Older Children (**Figure 9.99**). These materials were also observed amongst the grave goods of each of the remaining age categories, including 38 incidences for Young Children, 38 incidences for Infants, and 1 example was attributed to a Foetal burial. Unfortunately, demographic data was not available for individuals associated with 351 incidences of faience and glaze within the dataset.

[913] See GGRNs 1778, 2551.

### 9.4.4 Faunal Materials

Faunal materials were observed to be employed in grave good manufacturing on 237 incidences amongst the sample. This figure is comprised of 28 specific materials listed in descending frequency order, as follows: non-specific shells (Σ=68); ivory (Σ=63);[914] bone (Σ=31); *Cowrie* shells (marine gastropod; Σ=11); *Conus* and *Nerita* shells (marine gastropods, Red Sea; each Σ=9); leather, ostrich eggshell (each Σ=6); horn (Σ=5), oyster shells (marine bivalve; Σ=4); *Nassa* shells (marine gastropod; Σ=3); *Cardium* (Nile bivalve), *Collumbella* (marine gastropod, Mediterranean), mussel (marine bivalve), *Mutela* (Nile bivalve) and *Spatha* (Nile mollusc) shells (each Σ=2); and animal skin,[915] tortoise shell, *Caelatura* (Nile bivalve), *Echinoid* (marine 'sea urchin'), *Helix* (terrestrial gastropod), *Mitra Maculosa* (marine gastropod), *Petunculus* (marine bivalve), *Patella* (marine mollusc), *Tonna* (marine gastropod), *Glycymeris* (marine bivalve), *Chlamys* (marine bivalve) and *Macrocallista* (marine bivalve) shells (each Σ=1; **Table 9.2**).

The highest inclusion rates of faunal materials were observed on the East Bank of Upper Egypt, with 92 incidences identified amongst CIFB assemblages in this region (**Figure 9.100**). Substantially fewer published instances of these materials were observed within the remaining regions, and are listed here in descending frequency order: West Bank of Upper Egypt (Σ=62), West Bank of Lower Egypt (Σ=33), East Bank of Lower Egypt (Σ=15), West Bank of Middle Egypt (Σ=13), Eastern Nile Delta and Dakhla Oasis (each Σ=7), and the Western Nile Delta and Faiyum (each Σ=4). There were no published incidences of faunal materials employed within funerary assemblages of the East Bank of Middle Egypt.

The peak of faunal material employment in CIF grave goods was observed during the Early Dynastic Period, with 99 incidences identified for this cultural phase (**Figure 9.101**). This result was followed by 63 incidences in the Old Kingdom and 45 incidences in the Middle Kingdom. The First Intermediate Period presented the fewest published examples of faunal material employment, with 30 examples derived from CIFB assemblages of this date.

The majority of items manufactured from faunal materials were observed in cemetery burials, with 233 incidences identified in such contexts (**Figure 9.102**). Of the remaining

[914] There were no distinctions made between hippopotamus (indigenous in ancient Egypt) and elephant ivory (imported from the Sudanese savannah; Krzyszkowska & Morkot (2000: 322-327) in original publications.

[915] Leopard skin, GGRN 2986, possibly imported from Africa; see van Driel-Murray (2000: 302).

site types, faunal materials were observed in settlement burials on 4 occasions; there were, however, no published incidences of faunal materials in temple or funerary enclosure CIFB assemblages.

Older Children featured the highest faunal material inclusion rates amongst the known-age portion of the sample, with 55 incidences attributed to published funerary assemblages of this age group (**Figure 9.103**). Inclusion rates then appear to diminish relative to age: there were 32 incidences associated with Young Children, 15 incidences associated with Infants, and no published incidences of faunal materials within Foetal funerary assemblages. Unfortunately, 135 incidences of faunal materials were derived from funerary assemblages for which demographic data was not known.

### 9.4.5 Metal

Metal was observed in grave good materials on 134 incidences amongst the sample, with incidences of 7 specific materials listed in descending frequency order, as follows: gold (Σ=60), copper (Σ=46), silver (Σ=15), bronze (Σ=5), non-specific metal (Σ=4), electrum (Σ=3) and tin (Σ=1;[916] **Table 9.2**). The highest incidence of metal inclusion was observed on the East Bank of Upper Egypt, with 38 observations amongst published CIFB assemblages from this region (**Figure 9.104**). This result was almost equalled by the West Bank of Upper Egypt, which presented 37 instances of metal materials. Metal was also observed amongst grave goods in the following regions in descending frequency order: West Bank of Lower Egypt (Σ=24), West Bank of Middle Egypt (Σ=19), Western Nile Delta (Σ=5), Dakhla Oasis (Σ=5), Eastern Nile Delta (Σ=3), and East Bank of Lower Egypt (Σ=3). There were no published incidences of metal within funerary assemblages in the East Bank of Middle Egypt and Faiyum regions.

On this occasion, the Middle Kingdom presents the highest inclusion rates, with metal identified on 50 incidences amongst published CIF funerary assemblages from this period (**Figure 9.105**). Inclusion rates were quite balanced among the remaining regions, with 31 incidences of metal attributed to the Old Kingdom, 30 to the Early Dynastic Period, and 23 incidences were identified amongst First Intermediate Period CIFBs.

[916] According to Ogden (2000: 171), the incidence of tin in ancient Egyptian grave goods was extremely rare. While the identification of tin should not be ruled out here (see GGRN 2543), it should nonetheless be treated with caution.

There was 1 example of metal within the grave goods of an Infant settlement burial (**Figure 9.106**). The remaining 133 incidences are all derived from cemetery contexts. There were no published examples of metal materials amongst CIF funerary assemblages from temple or funerary enclosure contexts.

The majority of metal materials observed amongst the known-age component of the sample were associated with Older Children, with 40 incidences attributed to the published funerary assemblages of this age group (**Figure 9.107**). The remaining age categories feature substantially fewer examples of metal grave goods, with 9 incidences associated with Young Children, 4 incidences associated with Infants, and a singular example of metal was observed in a Foetal burial. Unfortunately, age-at-death data was not published for individuals associated with 80 incidences of metal materials amongst the sample.

### 9.4.6 Organics

Organic materials were observed in grave goods on 46 incidences among the dataset, comprised of 14 specific materials listed in descending frequency order, as follows: non-specific animal remains ($\Sigma$=8), charcoal ($\Sigma$=7), vegetable matter ($\Sigma$=6), bovine remains, seeds (each $\Sigma$=5), non-specific organics ($\Sigma$=4), goat/sheep remains ($\Sigma$=3), dates ($\Sigma$=2), and animal dung, avian remains, bread, fibres, grain, hair (each $\Sigma$=1; **Table 9.2**). The highest incidence of organic materials was observed on the West Bank of Upper Egypt, with 17 observations amongst this region's published CIFB assemblages (**Figure 9.108**). Organic materials were also observed in the following regions in descending order of frequency: East Bank of Upper Egypt ($\Sigma$=13), Eastern Nile Delta ($\Sigma$=7), East Bank of Lower Egypt ($\Sigma$=3), Faiyum ($\Sigma$=2), Dakhla Oasis ($\Sigma$=2), West Bank of Lower Egypt ($\Sigma$=1) and West Bank of Middle Egypt ($\Sigma$=1). There were no published incidences of organic materials within funerary assemblages in the Western Nile Delta and East Bank of Middle Egypt regions.

The Early Dynastic Period demonstrates the highest inclusion rates of organic materials, with 17 incidences attributed to published CIFB assemblages from this cultural phase (**Figure 9.109**). This is closely followed by results from the Old and Middle Kingdoms, which feature 14 and 12 reported incidences of organic materials, respectively. The First Intermediate Period demonstrated the fewest examples of organic materials, with 3 incidences identified amongst published CIF grave goods during this cultural phase.

All incidences of organic materials are attributed to CIFBs in cemetery contexts (**Figure 9.110**). There were no published examples of organic materials amongst CIF funerary assemblages from settlement, temple or funerary enclosure contexts.

The highest frequencies of organic materials were observed amongst the grave goods of Older and Younger Children, with 13 and 10 incidences attributed to these age groups, respectively (**Figure 9.111**). Equal inclusion rates were observed for Infants and Foetuses, with 2 incidences identified amongst published funerary assemblages of each of these age categories. Unfortunately, there were 19 incidences of organic material inclusion amongst the grave goods of individuals for whom age-at-death estimates were not provided.

### 9.4.7 Wood

Wood was observed in CIFB assemblages on 41 incidences amongst the sample;[917] of these, applied surface treatment (paint) was observed on 8 occasions (**Table 9.2**).[918] Wood was most frequently observed amongst published funerary assemblages from the West Bank of Middle Egypt, where it was employed on 14 incidences (**Figure 9.112**). Wood was also observed in funerary assemblages from the following regions in descending order of frequency: West Bank of Upper Egypt ($\Sigma$=12), East Bank of Upper Egypt ($\Sigma$=9), Faiyum ($\Sigma$=4), West Bank of Lower Egypt ($\Sigma$=1) and East Bank of Middle Egypt ($\Sigma$=1). There were no published incidences of wood within funerary assemblages in the Western Nile Delta, Eastern Nile Delta, East Bank of Lower Egypt and Dakhla Oasis regions.

The highest inclusion rates were observed for the Middle Kingdom, with 20 incidences of wooden objects attributed to CIFB assemblages from this phase (**Figure 9.113**). The remaining chronological periods feature substantially fewer incidences of wooden items, with 9 observations reported for the Old Kingdom, and 6 attributed to published CIF grave goods of both the Early Dynastic and First Intermediate Periods.

There were 4 incidences of wooden items within published CIF settlement burials (**Figure 9.114**). The remaining 37 incidences are all derived from cemetery contexts. There were no published examples of wooden objects amongst CIF funerary assemblages from temple or funerary enclosure contexts.

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[917] Tree species were not published for the wooden objects among the sample. This is unfortunate as wood was a valuable commodity in ancient Egypt, with the paucity of indigenous timber-producing trees leading to substantial imports of wood from the Mediterranean, Africa, the Near East and possibly India; Gale *et al.* (2000: 334).

[918] See GGRNs 75, 102, 2871-2876.

Older Children again featured the highest inclusion rates of wooden items among the sample, with 11 incidences identified amongst published funerary assemblages for this age group (**Figure 9.115**). On this occasion, Infants demonstrated the next most frequent inclusions of wooden items, with 5 incidences reported amongst published data. Young Children were furnished with wooden items on 2 occasions, while there were no published incidences of wooden grave goods in Foetal burials.

### 9.4.8 Textiles

Here, the present study sought to determine the incidence of textile as a material constituent of grave goods. Textiles were identified in CIFB assemblages on 38 occasions amongst the sample, including 33 incidences of linen and 2 of twine (**Table 9.2**). The highest incidence rates were observed amongst published funerary assemblages from the East Bank of Upper Egypt, where textiles were observed on 21 occasions (**Figure 9.116**). Textiles were also observed in the following regions in descending order of frequency: West Bank of Middle Egypt ($\Sigma$=9), West Bank of Upper Egypt ($\Sigma$=6) and West Bank of Lower Egypt ($\Sigma$=2). There were no published incidences of textiles within funerary assemblages in the Western Nile Delta, Eastern Nile Delta, East Bank of Lower Egypt, East Bank of Middle Egypt, Faiyum and Dakhla Oasis regions.

The highest frequency of textile inclusion was observed amongst CIF grave goods of the Old Kingdom, with 14 observations attributed to this period (**Figure 9.117**). This result was closely followed by 13 reported incidences amongst Middle Kingdom data, and 8 incidences in First Intermediate Period funerary assemblages. The Early Dynastic Period demonstrated the fewest textile objects, with 4 incidences attributed to this cultural phase.

The highest frequencies of textiles were identified in published cemetery burials, with 34 incidences attributed to CIF assemblages in this context (**Figure 9.118**). There were 4 reported incidences of textile inclusion amongst grave goods in settlement burials, while no textiles were observed in CIFBs from temple or funerary enclosure contexts.

On this occasion, Young Children demonstrate the highest inclusion rates of textiles among the known-age component of the sample, with textiles featuring in their published grave goods on 8 occasions (**Figure 9.119**). Infants exhibited the next highest-frequency of textiles, with 5 incidences identified among their assemblages, followed by Older Children, for whom textile items were observed on 2 occasions. There were no published

examples of textiles amongst Foetal grave goods. Unfortunately, age was not known for individuals associated with 23 textile items amongst the sample.

### 9.4.9 Imported Stone

Imported stones were observed in grave goods on 34 occasions amongst the sample,[919] with incidences of 5 specific materials listed in descending frequency order as follows: lapis lazuli (Σ=14; Afghanistan),[920] turquoise (Σ=11, Sinai),[921] obsidian (Σ=5; Armenia, Cappadocia, Ethiopia, Yemen, Tibesti, Mediterranean Islands),[922] nephrite (Σ=3; Western Asia),[923] and olivine (Σ=1; Island of Zabargad/St. John's Island, Red Sea;[924] **Table 9.2**). The highest published incidence of imported stone was observed on the West Bank of Upper Egypt, with 18 observations attributed to CIFB assemblages within this region (**Figure 9.120**). Imported stones were also observed amongst funerary assemblages in the following regions in descending frequency order: West Bank of Middle Egypt (Σ=9), East Bank of Upper Egypt (Σ=3), Eastern Nile Delta (Σ=2), West Bank of Lower Egypt (Σ=1) and East Bank of Lower Egypt (Σ=1). There were no published incidences of imported stone within funerary assemblages in the Eastern Nile Delta, East Bank of Middle Egypt, Faiyum and Dakhla Oasis regions.

The highest frequency of imported stone objects was observed during the Middle Kingdom, with 16 incidences attributed to CIFB assemblages from this era (**Figure 9.121**). The Early Dynastic Period demonstrated the next highest inclusion rates, with 11 incidences described amongst published data. The Old Kingdom and First Intermediate Period feature successively fewer imported stone objects, with 5 and 2 incidences respectively reported for each cultural phase.

All incidences of imported stone objects are attributed to CIFBs in cemetery contexts (**Figure 9.122**). There were no published examples of imported stone items amongst CIF funerary assemblages from settlement, temple or funerary enclosure contexts.

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919 Designation of stone types adheres to descriptions in original publications. Identifications of stone origins follow Aston *et al.* (2000: 5-77).

920 Aston *et al.* (2000: 39-40); Hendrickx & Bavay (2002: 61). Griswold (1992: 6, 223) argues that in the early periods of Egypt, lapis lazuli and turquoise was primarily associated in the burials of women and children, possibly due to the "symbolism of blue stones". He states that these materials are therefore indicative of gender and age, rather than status. Owing to the economic and effort expenditure required to procure such foreign objects (Richards 1992: 51), the present study argues that it is more appropriate to interpret this material as an intersection of all three of these facets of identity.

921 Aston *et al.* (2000: 62-63); Hendrickx & Bavay (2002: 60).

922 Aston *et al.* (2000: 46-47). Hendrickx & Bavay (2002: 60) state that it is improbable that obsidian found in Egyptian Predynastic and Early Dynastic contexts was sourced from the Near East (Armenia and Cappadocia).

923 Aston *et al.* (2000: 38-39).

924 Aston *et al.* (2000: 47-48).

Furthermore, all incidences of imported stone objects are attributed to the funerary assemblages of Older Children (**Figure 9.123**). There were no examples of imported stone items amongst published Young Child, Infant or Foetal grave goods. It is possible, however, that these age categories may have been represented amongst those individuals associated with 19 imported stone objects for whom demographic data was not provided.

### 9.4.10 Minerals

Minerals were identified in grave goods on 32 occasions amongst the sample, with incidences of 4 specific materials listed in descending frequency order as follows: malachite (Σ=20), kohl (Σ=6), galena (Σ=5), and ochre (Σ=1; **Table 9.2**). With 13 observations, the highest incidence of minerals was observed in grave goods from the West Bank of Upper Egypt (**Figure 9.124**). Only 3 of the remaining regions featured minerals among their published funerary assemblages, including the East Bank of Upper Egypt (Σ=11), West Bank of Lower Egypt (Σ=5) and Dakhla Oasis (Σ=3). There were no published incidences of minerals amongst published grave goods of the Western Nile Delta, Eastern Nile Delta, East Bank of Lower Egypt, West Bank of Middle Egypt, East Bank of Middle Egypt and Faiyum regions.

The majority of grave goods with mineral constituents were observed in the Early Dynastic Period, with 25 incidences attributed to published CIFBs of this phase (**Figure 9.125**). The remaining chronological periods demonstrated substantially fewer examples of mineral inclusion, with 3 incidences identified amongst First Intermediate Period data, and 2 incidences observed in published assemblages of both the Old and Middle Kingdoms.

All incidences of mineral inclusion are attributed to CIFBs in cemetery contexts (**Figure 9.126**). There were no published examples of mineral constituents amongst CIF funerary assemblages from settlement, temple or funerary enclosure contexts.

There were equal observations of mineral inclusion for Young and Older Children, with each category featuring 6 incidences among published burial assemblages (**Figure 9.127**). Coincidentally, there were also equal observations of mineral inclusions amongst Infant and Foetal burials, with each category presenting single instances of minerals amongst their grave goods. Unfortunately, 19 incidences of mineral grave goods were associated with individuals for whom age-at-death data was not provided.

### 9.4.11 Raw Materials

Raw Materials were identified in grave goods on 22 occasions amongst the sample, with incidences of 5 specific materials listed in descending frequency order, as follows: clay ($\Sigma$=10), unbaked mud ($\Sigma$=7), resin ($\Sigma$=3), and natron and pink clay (each $\Sigma$=1; **Table 9.2**). The highest raw material incidence rate was observed on the West Bank of Upper Egypt, with 8 examples observed amongst published CIFB assemblages (**Figure 9.128**). These results were closely followed by the West Bank of Middle Egypt ($\Sigma$=5), West Bank of Lower Egypt ($\Sigma$=3), East Bank of Upper Egypt and Dakhla Oasis (each $\Sigma$=2), and East Bank of Lower Egypt and Faiyum regions (each $\Sigma$=1). There were no published incidences of raw materials amongst grave goods of the Western Nile Delta, Eastern Nile Delta, and East Bank of Middle Egypt regions.

The highest frequency of raw material inclusion was observed in the Middle Kingdom, with 12 incidences attributed to published CIFB assemblages from this cultural phase (**Figure 9.129**). The next highest incidence rate was observed during the Early Dynastic Period, with 8 observations of raw materials derived from contexts of this date. Further to this, the Old Kingdom and First Intermediate Period each featured 1 instance of raw materials among published grave goods.

There were 5 incidences of raw materials within published CIF settlement burials (**Figure 9.130**). The remaining 17 observations were all derived from cemetery contexts. There were no published examples of items with raw material constituents amongst CIF funerary assemblages from temple or funerary enclosure contexts.

Infants featured the highest inclusion rate of raw materials amongst the known-age portion of the sample. Seven incidences were attributed to published grave goods associated with individuals from this age group (**Figure 9.131**). This result was followed by 5 observations for Older Children, while a singular instance was identified amongst the funerary assemblage of a Young Child. There were no published incidences of raw materials amongst the Foetal age category. Unfortunately, on 9 occasions objects with raw material constituents were associated with individuals for whom demographic data was not provided.

### 9.4.12 Glass and Frit

Glass was reported as a material constituent of grave goods on 8 occasions among the sample.[925] On 7 incidences, it was in the form of beads strung in necklaces interred with children of Unspecified Age in Upper Egypt: 5 in the Middle Kingdom cemetery of el-Kubaniya on the West Bank,[926] and 1 each in the First Intermediate Period cemetery of Qau el-Kebir, as well as in the Middle Kingdom cemetery of Abydos, both on the West Bank.[927] The final incidence was observed amongst the grave goods of a 3 year old child in the First Intermediate Period cemetery of Matmar on the East Bank of Upper Egypt. Here, an ivory 'goat-sucker' (bird) pendant was described with inlaid blue glass bead eyes.[928]

Blue frit was described on 1 occasion in the sample, in the form of loose beads interred with a child of unspecified age in the Middle Kingdom cemetery of Kom el-Hisn in the Western Nile Delta.[929] Beads of gold, carnelian, steatite, turquoise and glazed quartz were also reported in this context.

### 9.4.13 Manufactured Materials

For the purpose of this study, 'manufactured materials' include cartonnage/stucco and ink. There were 4 examples of cartonnage/stucco employment amongst the sample. Two incidences were identified as the primary constituent of face masks:[930] the first, in the burial of a 12 year old child in the First Intermediate Period cemetery of Qau el-Kebir on the East Bank of Upper Egypt;[931] the second, in the burial of a child of Unspecified Age in the Middle Kingdom cemetery of el-Arabah on the West Bank of Upper Egypt.[932] The third instance of cartonnage/stucco employment was identified on a wooden box amongst the grave goods of a child of Unspecified Age in the First Intermediate Period cemetery of Qau el-Kebir, mentioned above.[933] The final example manifest in a wooden stuccoed

[925] In the absence of scientific testing and/or expert analysis, Nicholson & Henderson (2000: 195ff.) state that all reported 'glass' items in Egypt prior to the New Kingdom should be viewed with caution as they may be erroneously diagnosed by excavators, and/or accidents of production, rather than deliberately locally manufactured or imported objects.
[926] See GGRNs 1189, 1192-1195.
[927] See GGRNs 1516, 1961.
[928] See GGRN 398.
[929] See GGRN 2.
[930] As stated in §6.7.9, the present study follows the excavator's explicit descriptions that the items were constructed from "stucco".
[931] See GGRN 1753.
[932] See GGRN 266.
[933] See GGRN 1733.

model boat, interred with a 2 year old child in the Old Kingdom rock-cut tomb necropolis of Qubbet el-Hawa on the West Bank of Upper Egypt.[934]

Ink was identified on 2 occasions amongst the sample. Both incidences derived from the Old Kingdom cemetery of Naga ed-Deir on the East Bank of Upper Egypt: the first, as an ink inscription (text not provided) on a stone in the burial of a Young Child;[935] the second, also as an ink inscription on a stone in the burial of an Older Child, reading: "... sole companion *Yepy*...".[936]

## 9.5 Grave Good Origins

The presence of imported objects and/or materials as grave goods is often cited to infer the high social status of tomb owners, with distance from objects' material source or place of manufacture often used indexically to determine their relative worth.[937] Apart from providing indications regarding the socio-economic capacities of deceased CIFs, the appearance of imported items and/or materials in their burials places them within international trade networks,[938] even as beneficiaries. The imported items and/or materials in CIFB assemblages have already been noted in §§9.4.4, 9.4.7 and 9.4.9, including 34 incidences of imported stone and possible cases of imported floral (wood) and faunal (ivory and animal skin) materials. Further examples of imported items amongst CIF grave goods within the sample include:[939] a Nubian decorated ceramic vessel in the burial of a 2–2.5 year old child in the Early Dynastic cemetery of Adaima on the West Bank of Upper Egypt;[940] a Palestinian ceramic vessel in the vast funerary assemblage of a 10–12 year old child in the Early Dynastic cemetery of Hierakonpolis, also on the West Bank of Upper Egypt;[941] an African or Sudani ceramic box in the burial of a 12 year old child in the First

934 See GGRN 2631.
935 See GGRN 1266.
936 See GGRN 1281.
937 Richards (1997: 37-38).
938 Hendrickx & Bavay (2002: 59-60); Rowland (2004: 1004); Wengrow & Baines (2004: 1102). It is important to note that the use of the word 'trade' is not semantically appropriate concerning Canaanite (Palestinian) objects/materials, particularly during the late Early Bronze Age I period. At this time, Egypt controlled Southern Canaan, however relations between these nations certainly changed over time; Hendrickx & Bavay (2002: 59-75).
939 Although not a grave good *per se*, the use of a Palestinian vessel as a funerary container in the pot burial of a 7–9 month old infant in the Predynastic to Early Dynastic cemetery of Minshat Abu Omar in the Eastern Nile Delta is noteworthy; see DRN 1308; Kroeper (1994: 28); Kroeper & Wildung (2000: 80); *cf.* Hendrickx & Bavay (2002: 67, Table 3.5).
940 See GGRN 1450. It is acknowledged that foreign pottery was most probably imported into Egypt for the contents, rather than the vessel itself; see Hendrickx & Bavay (2002: 58).
941 See GGRN 2532.

Intermediate Period cemetery of Sedment on the West Bank of Middle Egypt;[942] and unspecified quantities of 'imported' ceramic vessels observed within the expansive burial of a 9 year old child in the Early Dynastic cemetery of Minshat Abu Omar in the Eastern Nile Delta.[943] Adams also claims that the silver used to manufacture a bead from the aforementioned funerary assemblage of a 10–12 year old child from Hierakonpolis was imported,[944] stating that "silver was a rare commodity in Egypt which had to be imported from Syria."[945] Ogden, however, argues that some silver used in manufacturing in ancient Egypt may have been 'aurian' silver extracted from Egyptian and Nubian gold mines.[946] Although the relative scarcity and value of silver, particularly in early periods, is not contested, one cannot state with certainty that *all* silver objects were imports.[947]

## 9.6 Grave Good Inscriptions

The presence of inscribed items in CIFB assemblages has already been noted in §§9.3.2, 9.3.10, 9.3.13 and 9.4.13, above, including approximately 30 ceramic vessels inscribed with potmarks;[948] 25 scarabs inscribed with hieroglyphic text, stylised patterns and shapes; 27 seals and seal impressions inscribed with cartouches, stylised patterns and shapes and images of deities; and 2 stones inscribed with hieroglyphic script in ink.[949] Further examples of inscribed items amongst CIF grave goods include: 20 ceramic jars with attached inscribed labels (featuring content descriptions),[950] 4 pieces of jewellery,[951] 2 funerary figurines (featuring the name *Hont-nofret*, Lady of the House,[952] and *htp-di-nsw* formulae[953]), 2 ivory

942 See GGRN 2539. To explain the presence of this imported object within the child's grave, the excavator surmises that they were "probably a foreign slave"; Petrie & Brunton (1924: 10).
943 See GGRN 2678.
944 See GGRN 2472.
945 Adams (2000: 102).
946 Ogden (2000: 170); *cf.* Gale & Stos-Gale (1981).
947 Hendrickx & Bavay (2002: 66)
948 While many potmarks may not be in hieroglyphic script *per se*, the present study follows Baines (2004: 150-151, 158-161) in his acknowledgement that they are nonetheless a form of communication and may be precursors to later script. In his discussions regarding the inscribed material from the Protodynastic Tomb U-j at Abydos, Baines compares the ivory labels and potmarks, stating: "I therefore believe that the two media and modes of inscription of the U-j material belong to the same overall system and constitute two graphically distinct, but systematically almost identical and mutually convertible forms. Comparable duality, plurality and convertibility is known from later Egyptian writing; the modern names for principal script forms are 'hieroglyphic' and 'hieratic'. Many scripts in other civilizations have had numerous realizations, but Egyptian may be the clearest case where this characteristic was integral from the start. The complex as a whole constitutes "writing"..." As such, potmarks are included here. *Cf.* Baines (1989); Mawdsley (2011).
949 *Cf.* Feucht (1995: 127) regarding the presence of inscribed items in children's tombs.
950 See GGRNs 2635-2637.
951 See GGRNs 55, 2568, 2618-2619.
952 See GGRN 78.
953 See GGRN 79.

plaque/inlays (featuring hieroglyphic symbols),[954] 2 copper mirrors (featuring the names *Bebt-tha*[955] and *Idut*,[956] both Priestesses of Hathor) and 2 amulets (featuring pharaonic prenomens of *Senwosret* and *Amenemhat* III).[957] In some cases, objects assume the form of hieroglyphs, such as gold plaques forming the *ḫnt* sign[958] in the necklace of a child of unspecified age buried in the Middle Kingdom cemetery of Saqqara on the West Bank of Lower Egypt;[959] or the carnelian and gold leaf beads forming the *ḥr* sign[960] in 2 necklaces belonging to a 6–8 year old 'male' child in the Old Kingdom rock-cut tomb necropolis of Qubbet el-Hawa on the West Bank of Upper Egypt.[961]

Although each of the objects listed above have been included within detailed descriptions for their respective object categories, it is nonetheless worthwhile to briefly examine the 86 incidences of inscribed objects according to their distributions across specific geographical regions, relative chronology, site types and age categories. In terms of geographical distribution, the majority of inscribed objects were reported amongst CIFB assemblages of the East Bank of Upper Egypt, with 41 incidences attributed to this region (**Figure 9.132**). The remaining regions feature substantially fewer incidences and are listed in descending frequency order as follows: West Bank of Upper Egypt (Σ=14), West Bank of Middle Egypt (Σ=12), Dakhla Oasis (Σ=5), West Bank of Lower Egypt (Σ=4), Faiyum (Σ=4), Eastern Nile Delta (Σ=3), Western Nile Delta (Σ=2), and East Bank of Lower Egypt (Σ=1). There were no observations of inscribed objects amongst published CIF assemblages of the East Bank of Middle Egypt.

The Middle Kingdom featured the highest frequencies of inscribed objects, with 32 incidences identified amongst published data for this period (**Figure 9.133**). Almost equal observations were made for the Old Kingdom and First Intermediate Period, with 24 and 22 incidences attributed to these cultural phases. The Early Dynastic Period demonstrated the fewest examples, with 8 inscribed items derived from contexts of this date.[962] Even so,

954 See GGRNs 1542, 2687.
955 See GGRN 667.
956 See GGRN 1654.
957 See GGRNs 29, 2861.
958 Gardiner (1994: 529, sign-list W17).
959 See GGRN 55.
960 Gardiner (1994: 450, sign-list D2).
961 See GGRNs 2618-2619.
962 Further to fn. 948, above, the present study notes that 6 of the 8 inscribed Early Dynastic items were ceramic vessels featuring potmarks; GGRNs 441, 1596, 1599, 1808, 2691, 2887. The remaining 2 items were inscribed pieces of ivory; GGRNs 1542, 2687.

it is crucial to note that CIFs had access to inscribed objects, even at the time when writing was first introduced into Egyptian culture and society.

There were 3 incidences of inscribed objects within published CIF settlement burials (**Figure 9.134**). The remaining 83 incidences are all derived from cemetery contexts. There were no published examples of inscribed items amongst CIF funerary assemblages from temple or funerary enclosure contexts.

Amongst the known-age component of the sample, Older Children featured the highest frequencies of inscribed objects, with 12 incidences identified amongst published funerary assemblages of this age group (**Figure 9.135**). This was followed with equal observations amongst Young Child and Infant age categories, with 5 observations attributed to each of these groups. There were no observations of inscribed objects amongst published Foetal grave goods. Unfortunately, demographic data was not published for individuals associated with 64 incidences of inscribed objects, significantly impeding opportunities for contextualised understandings of this important component of ancient Egyptian cultural practices.

## 9.7 Summary

Using data derived from the survey of the published archaeological record, supplemented by unpublished material from the ACE Helwan Project, this chapter has determined the nature and scope of CIF grave goods during the Early Dynastic to Middle Kingdom Periods. The research has ascertained the distribution of children's grave goods, as well as their constituent categories, materials, origins and inscriptions. These findings serve to illuminate children's cultural capacities during the timeframes included in this study; particularly, how the occasion of children's death motivated their parents/carers to mobilise the burial ritual as a material expression of children's position, value and agency in ancient Egyptian society.

While poor publication practices have diminished our capacity to access the funerary assemblages of at least one-third of the individuals within the dataset, we can nonetheless observe that almost half of the published CIFBs from the Early Dynastic Period to the Middle Kingdom were furnished with grave goods of some description. These findings parallel anecdotal evidence for contemporary adult burials, which were also furnished and unfurnished according to both fashion and socio-economic status. Grave goods were variably included in CIFBs in all geographical regions encompassed by this study, as well

as in all chronological periods, for all age groups, in cemetery and settlement contexts. The study determined that burials in cemetery contexts had higher *overall* grave good provision rates, while settlement burials had substantially higher *mean* provision rates per furnished burial. These findings indicate that intra-mural interments received commensurate cultural investment to those in extra-mural interments. These results contrast current disciplinary sensibilities regarding children's cultural ostracism, poverty and 'nonpersonhood'. There were no published accounts of grave good provision in temple or funerary enclosure contexts.

Children were observed with 23 grave good categories among the sample, including Jewellery, Ceramic Vessels, Amulets, Tools, Stone Vessels, Cosmetic Equipment and Products, Funerary Furniture, Shells and Fossils, Figurines and Models, Scarabs, Recreation Items, Personal Adornment and Equipment, Seals and Seal Impressions, Food Items, Weaponry, Other Vessels, Textiles, Clothing and Footwear, Inorganic Raw Materials, Organic Raw Materials, Organics: Fuel, Animal Products and Unknown Objects. Every grave good category was attested in cemetery contexts. On the other hand, published settlement burials did not feature any Tools, Cosmetic Equipment and Products, Funerary Furniture, Shells and Fossils, Personal Adornment and Equipment, Other Vessels, Textiles, Inorganic Raw Materials, Organic Raw Materials, Organics: Fuel, or Animal Products. The 'Recreation Items' category represented the only occasion among the sample where published incidences were higher in settlement burials than those in cemeteries. This finding is suggestive of a strong association of this category of grave goods with the domestic sphere. Overall, the range of objects observed in children's funerary assemblages appears to mirror that available to contemporary adult burials during the periods canvassed by this research.

These grave good categories were variably constructed from 14 different materials, including Ceramics, Local Stone, Faience and Glaze, Animal Products, Metal, Organics, Wood, Textiles, Imported Stone, Minerals, Raw Materials, Glass and Frit, Manufactured Materials, and Unknown Materials. Every material type was observed in cemetery contexts, while published settlement burials did not feature any Organics, Imported Stone, Minerals, Glass and Frit, or Manufactured Materials.

In terms of demographic distribution, there were clear trends throughout the sample towards increased grave good provision with age,[963] both in terms of overall frequencies, as well as by category and material types. Older Children featured the highest provision rates across grave good categories within the known-age component of the sample, except for Recreation Items (where Infants prevailed); Food Items, Textiles, Clothing and Footwear, and Fuel (where the highest provisions were attributed to Young Children); and Raw Materials (specifically, gemstones, where equal observations were made for both Young and Older Children). Older Children were also observed with the highest provision rates for grave good materials within the known-age component of the sample, except for Raw Materials (most often associated with Infant burials); Textiles (most often provided for Young Children); Manufactured Materials (equally provided for Infants, Young Children and Older Children); and Minerals (equally provided for Young and Older Children). While such provision patterns are noteworthy from a quantitative perspective, it is crucial to note that they do not necessarily constitute ontological identity differences between age groups; rather, they are illustrative of scale.

Identity differences may be better articulated via the presence or absence of certain objects among demographic groups.[964] Future extensions of this project would seek to undertake this exercise for the entire ancient Egyptian population. In terms of the present study, Foetuses presented the narrowest range of grave good categories among the known-age component of the sample, only featuring 5 of the 23 categories identified by the survey, including Jewellery, Ceramic Vessels, Cosmetic Products, Funerary Furniture and Organic Raw Materials. With 18 categories observed amongst Infants' burials, their provision range was significantly higher, only missing Other Vessels, Inorganic Raw Materials, Fuel, Animal Products and Unknown grave goods. Young Children's provision range was still higher: the 21 object categories observed for this age group were only missing Recreation Items and Unknown grave goods from their funerary assemblages. Every grave good category identified by the study was observed amongst the burials of Older Children. While these results go some way to determining differences in the cultural capacities of the

[963] Robins (1994-1995: 28).

[964] For example, items such as stelae or canopic jars were not observed in any juvenile burials. However, this may be due to post-depositional transformation processes, as empty stela niches were observed in the domed mudbrick superstructures of the tombs of 2 children of unspecified age, DRNs 783 and 784, subsidiary to the tomb of King Djed at Abydos (see §8.5.2.4). In terms of canopic jars, 7 of the children amongst the sample were mummified (see §6.5). Of these, only 2 of their tombs (DRNs 536 and 537) were observed to be intact. It is possible that canopic jars may have featured amongst the mortuary assemblages of 1 or some of the remaining 5 children, but been subsequently removed from their original context.

juvenile demographic, it is certain that poor recording practices have impacted on our ability to establish comprehensive results. Here, an absence of evidence is most certainly not evidence of absence. Further research will aim to contextualise these results within broader population profiles in order to crystallise our understandings of how material culture was mobilised in the burial ritual to express individuals' cultural capacities across the demographic spectrum.

In addition to its empirical findings, this study has also considered the theoretical dimensions of material culture research as it pertains to the mortuary sphere. Issues of representativeness pervade this chapter, as they have elsewhere in this thesis. As aforementioned, incomplete publication practices were of particular concern, as was tomb robbery and object decomposition. Each of these transformation processes, in isolation and combination, contributes to the obfuscation of the 'true' archaeological record. Of these, perhaps the most avoidable loss of data may be attributed to the poor publication practices which precipitate from authorial bias, particularly to the widespread practice of only publishing (or, only publishing in detail) 'exceptional' burials – those judged by excavators to be of greatest size, content, quantity, quality, interest or contrast.

Subsequent to this chapter's finding of equity between children's and adults' access to grave goods during the periods canvassed by this study, perhaps the most significant outcome of the research is the correlate observation of equity in authorial bias. As a transformation process, authorial bias does not discriminate by age; rather, by materially expressed, extant indicators of socio-economic status. Generally, it appears that burials were not ignored because they belonged to children; they were not recorded and/or published because they were materially poor. The burials of countless impecunious adults have suffered the same fate. Evidence to support this argument resides in the manifold examples of 'exceptional' burial litanies resident amongst the literature. On almost every occasion, a child features within such lists. While further research is required to determine the true extent of authorial bias on material testimonies across the entire ancient population, the present study suggests that it is elitism, not ageism, that has had the greatest impact on our capacity to access the true record of Egyptian CIF mortuary culture.

In principle, this chapter has determined that children were given equal access to resources in the funerary sphere as their adult contemporaries. Importantly, there did not appear to be a lag in terms of the introduction of certain grave good categories in children's tombs; objects including Recreational Items, Seals and Seal Impressions and Other Vessels (Early

Dynastic Period), as well as Scarabs (late Old Kingdom/First Intermediate Period) were introduced during the timeframe canvassed by this research and were concurrently attested in both adult and juvenile funerary assemblages. Whether or not children's access to grave goods was a direct function of their own independent socio-political and economic status remains as much of a question as it does for adults. The issue at hand is whether or not the death of *any* individual/s elicited comparable cultural responses amongst their community to facilitate their transition between worlds of the living and the dead. The presence of all manner of grave goods in children's burials – objects locally and internationally manufactured from Egyptian and imported materials; inscribed objects; objects imbued with pharaonic and religious symbolism; and objects associated with status and power – suggests that the death of CIFs in ancient Egypt elicited responses that were at least ontologically, if not materially, equitable to the death of adults.

Further to this, this chapter also argued for a reconsideration of the manner in which we intellectually and physically process objects identified in 'shared' burial contexts. The issue was problematised by the present study owing to the presence of multiple burials involving CIFs, adults and adolescents amongst the dataset. However, the topic would undoubtedly benefit from further consideration across the discipline of Egyptology. What was the philosophy of entitlement in Egyptian mortuary behaviour? *Who* was entitled to *what* in the manifold contexts of multiple and corresponding burials? Based on its empirical findings of ontological equity between all members of the ancient population, the deliberate construction of communal funerary spaces across all socio-economic strata, and the culturally-bound magnanimity which permeates all aspects of religious and social morality, the present study suggests that in some multiple interments, the Egyptians liked to share. The compulsion to determine individual ownership in the archaeological record perhaps says more about the capitalistic sensibilities of modern scholars than it does about our subjects. The qualitative implications of each of these findings for the position, value and agency of children will be explored in the following chapter.

# CHAPTER 10: DISCUSSION

The central aim of this thesis is to assess how current perceptions of ancient Egyptian child, infant and foetal mortuary culture compare with its *actual* nature and scope in published literature of the Early Dynastic to Middle Kingdom Periods. With a view to achieving this aim, this chapter will juxtapose the quantitative archaeological survey results detailed in Chapters 3–9 against the prevailing perceptions of juvenile mortuary culture outlined in the literature review of Chapter 2. Further to this, the present study will pursue qualitative data analyses by engaging archaeological, mortuary, ethnographic and social theories to interpret the survey results. It will also investigate the extent to which the lived experiences and cultural capacities of ancient Egyptian children can be gleaned through the funerary nexus, including their social position, value and agency. These qualitative analyses will be compared to the current paradigms of children's lived experiences and cultural capacities in Egyptological discourse to determine the accuracy of prevailing sensibilities and evaluate the need for review.

Crucial to the above endeavours, however, are reflections on one's ability to make comprehensive statements about funerary data, especially considering the particular context under which its great majority was originally recorded and published. As such, this chapter will also consider the study's practical and theoretical limitations, with a primary focus on the issue of representativeness, including differential preservation, incomplete excavation, the 'osteological paradox', intra- and inter-observer error, and poor reporting. It may be argued, however, that the greatest obstacle to accurate representations of ancient Egyptian children resides in the issue of authorial bias. As a means to illustrate the nature, scope and effect of these biases, this chapter will draw on archaeological evidence identified in Chapters 3–9 to construct critical, historiographical reviews of those aspects of child, infant and foetal mortuary culture most frequently stereotyped and misconstrued among the Egyptological discourse including 'toys', coffins, differential burial practices and status. These case studies serve to caution against the unequivocal use of published mortuary data in reconstructions of ancient Egyptian society. However, they also demonstrate that engagements with archaeological, mortuary, ethnographic and social theories can mitigate inherent gaps and partialities in the dataset and strengthen qualitative interpretations. Within this framework, plentiful opportunities arise for detailed, nuanced,

ethically-balanced reconstructions of the cultural experiences of *all* members of the ancient population, including children, infants and foetuses.

## 10.1 Quantitative Summary

In accordance with the research objectives outlined in §1.3 and parameters delineated in §1.4, a comprehensive survey was carried out on all available published literature for any references to CIF mortuary culture from the Egyptian Early Dynastic to Middle Kingdom Periods. Survey data was supplemented by unpublished Early Dynastic material from the ACE Helwan Project. The survey sought to address the prevailing assumption identified by the literature review of Chapter 2: that published cemetery data rarely includes significant numbers of CIFBs, thereby rendering them unavailable for study.[965] As detailed in Chapter 3, of the 240 sites included in the survey, 68 sites (28.33%) produced a minimum of 1,809 CIFBs in excavation reports spanning almost 200 years of disciplinary activity.[966] One may view these results from several perspectives. Some may argue that the majority of sites (Σ=172; 71.67%) examined by the survey produced no CIFBs amongst their published data whatsoever, thus confirming the aforementioned assumption regarding the relative absence of children from cemetery data. However, the present study would view such an interpretation as a superficial, uncritical reading of the archaeological record. Such a view lacks understanding of the manifold cultural transformation processes in archaeology which ultimately dictate and create modified, commodified versions of the 'true' Egyptian archaeological record.[967] These transformation processes will be explored throughout this chapter. The 68 productive sites within the survey provided glimpses into the 'true' archaeological record and established that CIF mortuary culture is by no means 'rare' in published cemetery data. The 1,809 CIFBs identified by the survey, together with their 4,749 associated grave goods, amount to a substantial dataset. While the present study does not claim that these figures represent a complete account of CIF mortality during the Early Dynastic to Middle Kingdom Periods, it nonetheless provides a worthy sample of the prevailing spectrum of Egyptian mortuary behaviour during these eras. Child, infant and foetal mortuary culture is not merely available for study, it is a fertile substrate for contemporary research questions which have the potential to recalibrate some of the central doctrines of Egyptology.

[965] See §2.1, fns. 99, 100.
[966] See §3.1. *Cf.* Appendix: attached as a CD-ROM to the inside back cover of this volume.
[967] *Cf.* Lillehammer (2000: 19).

### 10.1.1 Differential Burial Practices

One such enduring doctrine attributes the apparent absence of CIFBs from published cemetery data to differential burial practices for these individuals, based on an assumption that at this young age, they were not considered embodied members of the community.[968] As discussed in the literature review of Chapter 2, one of the most frequently stereotyped aspects of CIF mortuary culture in Egyptology is that they have been found buried under the floors of houses or in the foundations of buildings.[969] As described in Chapter 3, while the archaeological survey certainly identified some CIF interments within settlement contexts, such burials were by no means common amongst the sample. In terms of distribution by site type, the archaeological survey identified 1,753 individuals in communal cemeteries (96.90% TBs), 54 individuals in settlement contexts (3.00% TBs), >1 (<18) individual/s were buried under a temple (≥0.05% TBs), and a minimum of 1 individual was buried in a funerary enclosure (0.05% TBs). The identification of the majority of CIFBs in communal cemetery contexts emerges as one of the most significant findings of this research,[970] upturning long-standing stereotypes of juvenile spatial ostracism to the settlement realm. The issue of differential burial practices will be further discussed in §10.7, below.

It would be overly simplistic, however, to limit investigations of differential burial practices to the locations of CIF interments within the mortuary landscape. Therefore, the present study sought to determine the nature and scope of *every* extant element of CIF mortuary culture through the archaeological survey. Such an approach sought to establish a sturdy empirical platform from which to view the mobilisation of the burial ritual on behalf of parents/carers as an expression of their perceptions of children's social personae, potentially reflecting their lived experiences and cultural capacities. It is widely accepted that differential treatment in the funereal realm may function as a marker of difference in the lived sphere, thus enabling us to test statements such as that made by Robins, that "... few resources were spent by the ancient Egyptians on the burial of children. Very often bodies were put into crude or reused containers, or poorly fashioned coffins; and the typical child burial was accompanied by very few grave goods ... few children received any formal funerary monuments of their own."[971] However, when aligned against

968 See §2.1, fns. 101, 102.
969 See §2.3.
970 *Cf.* Hodder & Cessford (2004); Kogălniceanu (2008: 107); Moses (2008: 46, 47); Zillhardt (2009: 87).
971 Robins (1994-1995: 26).

anecdotal evidence from contemporary adult burials, the archaeological survey consistently produced data of resounding similarity rather than difference. In every category of evidence examined in Chapters 3–9 of this study, including bodily position and orientation, bodily treatment, tomb architecture, associated features and grave goods, and every geographical region, chronological period, age and socio-economic group, CIFs appear to have been given access to the same range of mortuary treatment, at the same time, as that afforded to adults. These findings thus refute enduring assumptions regarding the supposed poverty of juvenile mortuary culture, and problematise prevailing reconstructions of children's lived experiences and cultural capacities as subordinate to adults.

### 10.1.2 Corporeality

Further disciplinary assumptions regarding CIF mortuary culture concern their physical bodies in the archaeological record. There is a lack of awareness regarding both the preservation potential of CIF skeletal remains, as well as the specialised excavation and analysis procedures required to deal with this material.[972] Although these issues were theoretically addressed in the literature review of Chapter 2, their practical impact on the dataset's representativeness will be discussed further in §10.3, below.

A further assumption suggests that even if juvenile remains are exhumed, 'we are unable to make meaningful demographic conclusions' from their remains, as it is thought that they cannot be aged, sexed or analysed from a bioanthropological perspective. The inaccuracy of this assumption was demonstrated in Chapter 4 of this thesis. Despite the majority of excavation reports not providing fulsome bioanthropological information,[973] the present study was nonetheless able to use biodata derived from the archaeological survey, supplemented by unpublished skeletal material from the ACE Helwan project, to construct a juvenile mortality profile for the 'known-age' component of the sample. This mortality profile peaks with Young and Older Children, contrasting the expectations of high infant mortality usually encountered in pre-industrial populations and diminishing possibilities for the widespread, culturally-sanctioned/tolerated practice of infanticide. Should this high child mortality profile be accurate, we may infer that the exogenous rigours of poor nutrition and hygiene and high levels of pathogen exposure had greatest bearing on the health of Egyptian Early Dynastic to Middle Kingdom children. Distributions of skeletal pathology according to aetiology appear to support this hypothesis, with lesions of

[972] See §2.1, fns. 104, 105; §2.5.
[973] *Cf.* Rowland (2007: 1631).

infectious/inflammatory origin most frequently observed. Through further study, one may therefore question whether the high infant mortality rates generally associated with pre-industrial societies were less-severely expressed in ancient Egypt during the timeframes canvassed by this research.[974] The high-proportions of infant burials noted by Patch in New Kingdom and Third Intermediate Period cemeteries of el-Ghurab (*ca.* 50.00%), Matmar (*ca.* 48.00%) and el-Mostagedda (*ca.* 42.00%) suggest that infant mortality was high in later periods.[975] Additional research may determine the geographical and chronological extents of this phenomenon and test for correlations between increased population levels and infant mortality rates.

It is possible that the high child mortality curve presented within this thesis may be a by-product of authorial bias. A general tendency towards increased access to resources with increased age was observed among the sample.[976] As such, considering many excavators' tendencies to only record and publish 'exceptional' material, it is possible that the data may be biased towards older elite children. The impact of such status-driven archaeological praxes on our understanding of ancient Egyptian CIF mortuary culture will be further discussed in §10.8, below.

## 10.2 Qualitative Analyses

The present study has considered the archaeological survey's quantitative results and will test a range of interpretative options for closeness of fit within larger fields of social and cultural representation.[977] At the simplest level, it may be argued that the very fact that CIFs have been buried at all testifies to their inclusion in communal afterlife beliefs[978] and importance in family and community networks.[979] In the majority of cases, children were provided with their own graves/tombs and funerary assemblages, signifying their status as 'individuals' within the community,[980] and refuting the idea that parent/carer-child relationships were not constituted by strong emotional bonds.[981] To bring the infanticide question to a close, ethnographic evidence indicates that societies, such as ancient Egypt,

[974] Castillos (1998c: 258) also notes a decreasing infant mortality rate from the Badarian (*ca.* 30.00%), through to Naqada I (*ca.* 15.00%) and the late Predynastic Period (*ca.* 10.00%). He interprets this decline as evidence of substantially improved living conditions during these eras. *Cf.* Castillos (1977: 23; 1982b: 31).
[975] Cited in Robins (1994-1995: 28).
[976] Robins (1994-1995: 28).
[977] Ascher (1961: 323); Wahrman (2004: 45); Orrelle (2008: 72).
[978] Zillhardt (2009: 87).
[979] Feucht (1995: 128); Harrington (2007: 60); Naumov (2007: 266); Szpakowska (2008: 34).
[980] Janik (2000: 124); Meskell (2000: 431); Midant-Reynes *et al.* (2004: 478).
[981] Duchesne *et al.* (2003: 148-152).

which consider newborns as fully-fledged social beings[982] are much less likely to tolerate infanticide than those in which they are not.[983] The withholding of full 'personhood' until some time after birth is considered as a mechanism by which infanticide may be rendered socially acceptable.

Already, these preliminary outcomes challenge prevailing sensibilities regarding the supposed disembodiment and ostracism of children in ancient Egypt. Perhaps the most significant finding to stem from this research, however, is that there appears to be no essential differentiation between the mortuary culture of children and adults during the timeframes canvassed by this research.[984] In light of high child and infant mortality levels in pre-industrial populations, Parker Pearson suggests that incidences where child burials received similar mortuary treatment and provision to that of adults are more surprising and noteworthy than when they were buried with less, if any, consideration in such contexts.[985] In alignment with the research aims outlined in Chapter 1, this finding will be interpreted within a consultative framework of archaeological, mortuary, ethnographic and social theories. It does so with a view to exploring what the funerary nexus may reveal about the lived experiences and cultural capacities of CIFs in Early Dynastic to Middle Kingdom Egypt.

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982 *Contra* Tooley (1983), who controversially contends that newborn infants cannot be said to have the right to life.

983 Hrdy (1992); Mays (2000: 181).

984 *Cf.* Feucht (1995: 125, 128; 2001a: 262); Filer (1998: 391-393); Patch (2007: 249); Zillhardt (2009: 40). *Contra* Robins (1994-1995: 28). Meskell (1994: 38-40; 1999a: 181; 1999b: 146; 2000: 425, 429; 2001: 24) also notes this phenomenon in the 18th Dynasty Eastern Necropolis at Deir el Medina; *cf.* Harrington (2007: 61). While Feucht (1995: 125) recognises this phenomenon, she limits it only to multiple burials of children and adults: "bei den Begräbnissen, die Beigaben enthielten, lagen die kleinen Kinder dicht bei einem Erwachsenen, dem die Beigaben wohl galten." Anderson (1992: 57) details higher provision rates for children than adults for Predynastic cemetery burials at Badari. Midant-Reynes *et al.* (2004: 478) notes the similarity of burial treatment for children and adults in the Predynastic cemetery of Kom el-Khilgan. Stevenson (2006: 29; 2009b: 174ff.) also notes the general equity of child and adult mortuary culture at the Predynastic cemetery of el-Gerzeh; *cf.* Murray (1956: 93). Stevenson however states that the absence of wavy-handled vessels and imported objects from children's burials may have served as an age indicator. By contrast, both wavy-handled vessels and imported objects were well-represented within the present sample, so perhaps Stevenson's findings are suggestive of a differing mortuary treatment in the Predynastic Period, or of a variable expression localised to el-Gerzeh. Further research is required to determine the extent of this finding across the Predynastic Period. For attestations of wavy-handled vessels within the present study, see GGRNs 1285, 1290, 1298, 1303, 1310, 1311, 1312, 1313, 1314, 1338, 1339, 1340, 1341, 1800, 1805, 2375, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2718. For discussion of imported objects, see §9.5. In terms of the attestation of this phenomenon in later periods of Egyptian history, Bowen (2003: 85) comments on the similarity of burial treatment for foetuses, infants, children and adults in the early Christian cemetery of Kellis 2, which she interprets as an equal "expectation of resurrection"; *cf.* Marlow (2001: 108, 109).

985 Parker Pearson (2003: 103).

### 10.2.1 Understanding Mortuary Behaviour

To date, much of the disciplinary research into mortuary data revolves around the principle that social organisation is the primary determinant of funerary practices.[986] As a result, socially institutionalised, philosophical-religious beliefs and world views have (somewhat ironically) not had academic priority in the study of Egyptian mortuary culture. This typically empiricist view classifies beliefs as "epiphenomena",[987] only loosely related to more 'core' cultural institutions and practices, which are thought to be predominantly responsible for both cultural continuity and change. Therefore, philosophies and beliefs have been seen as less relevant to the study of human socio-ecology, socio-cultural adaptation and social evolution in general, and to the study of mortuary practices, in particular.[988]

As a published proponent of this view, Binford suggests that archaeologists must be restricted to study the *structure* rather than the *form* of mortuary remains.[989] He reasons that the form of any mortuary practice holds merely an arbitrary relationship to the beliefs or social identities it might reflect, which remain archaeologically unreconstructable.[990] However, Binford does not consider that this same structured variation in mortuary remains might analogously reflect the organisation of a society's philosophical-religious beliefs and themes which may, in part, also comprise the society's world-view.[991]

Binford's thesis aligns with prevailing voices in Egyptological discourse by implying that burial data simply reflects occupants' socio-economic status.[992] However, the present study's finding of material equity between child and adult mortuary culture problematises this hypothesis. According to Binford and others,[993] children have not yet lived the life of adults, they have not had the opportunity to accumulate independent wealth, and are not considered as embodied members of the community. So, why does their mortuary culture differ so little from their adult counterparts? What does this say about the position of CIFs in ancient

986 Carr (1995: 106).
987 Downes (1997: 218-224).
988 Carr (1995: 114).
989 Binford (1971); *Cf.* Saxe (1970); Tainter (1975; 1978).
990 Binford (1971: 16).
991 This point of particular relevance to Egyptian archaeology, owing not only to the great amount of textual evidence available from early times asserting the paramount role of philosophical-religious beliefs in the development of mortuary culture, but particularly considering that the entire pharaonic society was subject to a divine king; Frankfort (1948).
992 Stevenson (2009a: 180).
993 See §2.3; *cf.* Alekshin (1983: 140).

Egyptian society? To date, the prevailing empirical view in many disciplines,[994] including Egyptology,[995] is that materially wealthy or equitable child burials are merely indicative of a ranked society with ascribed socio-economic status. Such interpretations, however, may be considered myopic as they only address one aspect of individuals' cultural capacities within their community and take no account of their broader identity or embodiment, nor do they consider the function and purpose of the specific ritual context of burial.[996] We must accept that mortuary behaviour reflects both the socio-economic *and* philosophical-religious aspects of Egyptian culture. These mortuary practices are not passive, mindless, mechanical reflections of social organisation. They are the manifestation of active, cognitive social, philosophical and personal choices and strategies, which comprise the dynamics of social relations and organisation and are made relative to beliefs.[997]

Brown has identified the mortuary treatment of children as a key indicator of the relationship between social and demographic variables.[998] In cases where children are exclusively buried with particular artefacts, or conversely, are the only individuals deposited without them, this is understood in terms of horizontal differentiation and the deliberate construction of cognitive difference between age groups. Following Brown's theory, the lack of distinction between the type, quantity, and quality of child and adult burial assemblages suggests that there was ontological equity between these groups during the timeframes canvassed by this research.[999] This argument gains cadence when considering Malafouris' thesis that "the relationship between the world and human cognition is not one of abstract representation or some other form of action at a distance but one of ontological inseparability".[1000] It is acknowledged that this database does not include a detailed survey of Early Dynastic to Middle Kingdom *adult* graves. Nevertheless, this interpretation can be made with confidence owing to such studies as those of

[994] Peebles & Kus (1977: 431); Lillie (1997: 223); Parker Pearson (2003: 77-78, 119); Roveland (2000: 34); Baxter (2005: 103-104); Rowland (2005: 59); Wileman (2005: 86); King (2006: 170); Shepherd (2007: 101, 104-105). *Cf.* Crawford (2000: 175); Kogălniceanu (2008: 109); Thomas *et al.* (2011: 774).

[995] Predynastic Armant: Bard (1988: 74; 1994: 71); Wilkinson (2001: 30); David (2002: 62); Predynastic el-Gerzeh: Murray (1956: 94); Predynastic Hierakonpolis: Wilkinson (2001: 30-31); Early Dynastic Minshat Abu Omar: see DRN 1312, Kroeper (1992: 135-136, 140; 2004: 878); Wilkinson (2001: 22); Early Dynastic Kafr Tarkhan: Ellis (1992: 254). *Cf.* Bard (1994: 35, 69); Rowland (2003: 67; 2005: 59; 2007: 1631, fn. 16).

[996] Parker Pearson (2003: 78); Stevenson (2009b: 169).

[997] Carr (1995: 111).

[998] Brown (1981: 29); *cf.* Chapman & Randsborg (1981: 1-24); O'Shea (1981: 39-52).

[999] *Contra* Szpakowska (2008: 34), who states that "while newborns were certainly valued and even already named, what they may have lacked at this stage was any sort of social status."

[1000] Malafouris (2004: 58).

Grajetzki,[1001] Ikram and Dodson,[1002] Raven,[1003] Reisner[1004] and Richards,[1005] which provide detailed descriptions of adult mortuary practices and socio-economic differentiation contemporary to this study's dataset.

Ontological equity between children and adults has also been noted within the mortuary culture of many ancient populations.[1006] Scholars across disciplines unanimously agree this phenomenon reflects the early integration of children into the social, economic, religious and political activities of their respective groups.[1007] In many of these cases interpretations are buttressed by bioanthropological evidence – including caries rates, incidence of enamel hypoplasia, trace element levels and stable isotope ratios – which does not indicate any differential access to dietary resources, either between sexes or age classes. In combination, these manifold studies generate an archaeological 'class action' which serves to dispel prevalent, reactionary notions that child burials reflect nothing more than their parents' (particularly their fathers') wealth, prestige and position in social hierarchies. According to the outcomes of the archaeological survey, the present study concludes that ancient Egyptian children's cultural capacities were perceived as equitable to adults. They were fully manifested social beings in their own right.

### 10.2.2 The Ritual Context of Burial

It must be remembered, however, that the Egyptian funerary nexus represents a specific, ritualised response to the pragmatics of corpse disposal following the biological imperative of death.[1008] As such, the above findings must be further scrutinised within the ritual context of burial.[1009] From an anthropological perspective, the burial ritual's *purpose* within the community rarely features in Egyptological discussions,[1010] as focus is usually

[1001] Grajetzki (2003).
[1002] Ikram & Dodson (1998).
[1003] Raven (2005).
[1004] Reisner (1936).
[1005] Richards (1997).
[1006] For example, Upper-Middle Upper Palaeolithic Austria: Einwögerer *et al.* (2006; 2008: 17). Upper Palaeolithic La Madeleine; Rocher de la Peine; Grottes des Enfants; Kostenki XV; Sungir: Roveland (2000: 34). Mesolithic Latvia: Lillie (2008: 35, 39, 41). Mesolithic-Neolithic Serbia/Romania: Boric & Stefanovic (2004). Mesolithic-Neolithic Ukraine: Lillie (1997: 224); Kamp (2001: 6); Baxter (2005: 98). Neolithic & Chalcolithic Romania: Kogălniceanu (2008: 107). Middle Neolithic Sweden: Lillehammer (2000: 220). Holocene South Africa: Jerardino *et al.* (2000: 44, 47). Archaic Greece: Shepherd (2007: 98). Anglo-Saxon England: Crawford (2000: 173).
[1007] See Rega (1997); *cf.* Lillie (1997).
[1008] Davies (2002: 1); Stutz (2008: 23).
[1009] Barrett (1998: 31); Garwood (2007: 66).
[1010] Stevenson (2009a: 175).

maintained on its material and religious elements.[1011] Such a focus is perhaps understandable, considering that many aspects of the community's experience of burial do not leave tangible traces in the archaeological record. Indeed, social practices central to ritual performances such as intellectual heritage, emotions, beliefs, ideologies, and relationships would be paramount in such frameworks,[1012] but remain ephemeral and/or ethereal in nature, and therefore difficult or impossible to identify materially.[1013] Nevertheless, it is crucial to attempt an understanding of *why* such "formalised, consecrated"[1014] performances were considered necessary if one hopes to arrive at interpretations of archaeological assemblages that were deposited in such contexts. Here, prior to a description of *how* CIFs' identities are composed within the funerary nexus, it is essential to consider *why* they are formed, transmitted and transferred.

The burial ritual is but one facet of the suite of cultural responses to death.[1015] In agreement with Assmann, the present study suggests that the Egyptian burial ritual was mobilised as an opportunity for transmission and transference of cultural knowledge, memory and collective identity between family/community social networks.[1016] Simultaneously, the burial ritual served to reconfigure and reinforce intersubjective familial/communal bonds subsequent to the removal of an individual from within that social network, facilitating and eventually mitigating the individual and collective experiences of grief brought about by the physical separation of death.[1017] From an archaeological perspective, residues of earthly material goods, especially food or drink

[1011] Willems (1988; 1996; 2001a) has made valuable contributions regarding the ritual significance of coffins. Roth, A. (1992) explores the ritual of the Opening of the Mouth ceremony. Savage (1995: 195ff.) presents evidence for ritual activity in the Predynastic cemetery of Naga ed-Deir. Duchesne *et al.* (2003) explore the ritual aspects of jewellery in Predynastic infant burials at Adaima. Raven (2005) considers the ritual aspects of the orientation of the human body within the grave. Stevenson (2009b: 72ff.) discusses the significance of mortuary ritual in her analyses of the Predynastic cemetery of el-Gerzeh. *Cf.* Assmann (1989); Richards (1992: 54); Bard (1994: 34); Wengrow & Baines (2004: 1100ff.).

[1012] Taylor (2001: 187); *cf.* van Gennep (1960); Morris (1992); Tarlow (1999: 21); Heinze (2000: vii-xiii); MacDonald (2001); Morris (2007: 16). Scholars have called for 'theories of emotion' to be explored by anthropology and archaeology; see Kus (1992: 172-173); Meskell (1994: 40; 1999b: 120, 128-129; 2002a: 193); Tarlow (1999: 22-49). Consider, however, Huntington & Metcalf (1979: esp. 23-43); Young & Papadatou (1997).

[1013] Garstang (1907a: 8); Bourriau (1991: 4; 2001: 1); Richards (1992: 54, 62); Rowland (2004: 998; 2005: 57); Pettitt (2006: 293); Stevenson (2006: 56); Fahlander & Oestigaard (2008: 6).

[1014] Willems (1996: 10).

[1015] Morris (1992: 2); Willems (1996: 7); Pettitt (2006: 292).

[1016] Assmann's (1992) "*kulturelles Gedächtnis*"; Durkheim's (1995: 375, 405) "*conscience collective*"; *cf.* Shanks & Tilley (1982: 130); David (1992: 184); Barrett (1998: 31); Baines & Lacovara (2002: 27-28); Davies (2002: 4, 10); Wengrow & Baines (2004: 1100ff., 1105); Laneri (2007: 1-2, 5, 8, 9).

[1017] Lloyd (1989: 120, 122-125, 130); Baines (1991: 134); Durkheim (1995: 403, 405); Walter (1996: 13, 14, 20; 2007: 123,125); Barrett (1998: 31); Klass & Walter (2001: 440, 441); Meskell (2001: 28, 31); Baines & Lacovara (2002: 27-28); Davies (2002: 1, 4, 6, 10, 15, 16); Robben (2004: 13); Wengrow & Baines (2004: 1102-1103); Pettitt (2006: 292); Laneri (2007: 1-2, 5); Fahlander & Oestigaard (2008: 10).

(either literally or symbolically),[1018] may be viewed as manifestations of the same social dynamics we witness in funerary texts.[1019] Here, humans – both individually and collectively – connect via their earthly and posthumous dependence on the same vital sources,[1020] forging and reinforcing inextricable links between sustenance and community. Within this framework, knowledge, memory and identity become community resources.[1021] Burial is a learned behaviour. It is a socially prescribed comportment involving engagement with artefacts, buildings, and a natural environment that has itself been transformed through human use. According to ethnographic examples, the shared experience and possession of the knowledge, memory and identity inherent within the burial ritual is the groundmass that solidifies bonds between the members of small groups, such as families. The ritual also legitimates and naturalises relationships with members of other community groups and broader social networks.[1022] Infants, children and adolescents are increasingly involved in the rituals to facilitate the transmission of culture and ensure its continuity.[1023]

When death is experienced in a community, the nature and substance of the burial ritual are decisive elements in the restoration of normative individual and collective socio-cultural dynamics after such a traumatic and dramatic event.[1024] The burial ritual thus provides an opportunity for mourners to participate in the restoration of order (*ma'at*) by performing what they know, remember and recognise as their collective cultural identity.[1025] Here, we return to Place's theories of 'child data' and 'data child' to consider *how* children's identities were performed by their families/communities in the burial ritual through the treatment and placement of their bodies and their mutual associations with artefacts and features in their mortuary assemblages.[1026]

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[1018] Renfrew (2004: 29); Wengrow & Baines (2004: 1102).

[1019] Assmann (1989: 146, 152) cites *CT* III, *passim*; see Faulkner (1973: 142ff.); also *pBM* 10470 (*pAni*) col.3-4: "A truly righteous one. Let him be given bread and beer, which issues forth from Osiris. He shall be forever amongst the followers of Horus".

[1020] Hornung (1992: 181).

[1021] Assmann (1989: 143ff.); Mizoguchi (1993: 231); Barrett (1998: 31).

[1022] Tonkinson (1988);

[1023] Janik (2000: 117); *cf.* Davies (2002: 109); Ardren (2006: 11). Children's presence at and participation in Egyptian funerary rituals is confirmed via mourning scenes in tomb art representations, including that of the 18th Dynasty Amarna princess, Meketaten, and the tombs of Neferhotep (TT49) and Ramose (TT55); Feucht (1995: 122-123, 134, 348, figs. 25 and 26); Harrington (2007: 56). In the 19th/20th Dynasty tomb scenes of Nebenmaat (TT219), children are present at the Opening of the Mouth ritual held for their parents; Harrington (2007: 57). The presence of infants at funerals is also confirmed via representations of young girls carrying babies in slings in mourning processions in the wall scenes of the 18th Dynasty tomb of Neferhotep (TT49) and the 19th Dynasty tomb of Qen (TT4); Harrington (2007: 57).

[1024] Laneri (2007: 4).

[1025] Laneri (2007: 10).

[1026] See §2.11.1. *Cf.* Wengrow & Baines (2004: 1088); Robb (2007: 289).

### 10.2.3 Construction, Transmission and Transference of Collective Identity

The oft-repeated axiom that 'the dead do not bury themselves' is again evoked here, as the burial ritual is further dissected as a vested, symbolic performance of the deceased's cultural capacities by those orchestrating the burial, as opposed to a representation made by an individual on their own behalf.[1027] From this perspective, the present study has been influenced by the work of Butler,[1028] who has argued that certain facets of cultural identity, such as gender, should be viewed in the context of performativity, inasmuch as they are recitals of culturally-situated and -negotiated tropes synchronically and diachronically enacted across a variety of sites or stages in society.[1029] Butler's work builds on the phenomenology of Husserl and Heidegger, which repudiates separation between the observer and the observed;[1030] and seeks to explore the social constitutions of worldviews through acts of (inter)subjective experience.[1031] Phenomenological approaches argue that human thought and behaviour, whether intuitive or conscious, always relates to 'things' (natural or synthetic), thus making objects social agents.[1032] In this way, analyses of the funerary nexus find particular resonance with Butler's theses, as they seek to explore facets how of social identity, including constructs of sex, gender, age and status, are thought, imagined and practiced via performative engagement with material culture.[1033]

Identities are performed by communities in the ritual context of burial through repeated, stylised patterns of behaviour, bodily practices and cultural forms which are temporally and operationally linked by long-term material effects.[1034] Identity claims are performed as social acts, made on behalf of the individual/s being buried. The nature and substance of these ritual performances may be understood as a 'representational economy'.[1035] Theories of representational economy were developed in sociology and have subsequently

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[1027] In the particular context of Egyptian elite monumental tombs, it is accepted that many of the artistic and epigraphic components of the burial would have been controlled to some extent by the deceased, considering the logistical and temporal requirements for construction to commence before their death; Lloyd (1989: 124); *cf.* Chapman (2000: 188); Meskell (2001: 32).

[1028] Butler (1990; 1993); *cf.* Tambiah (1979: 119); Gilchrist (2007: 148); Preucel & Meskell (2007: 15).

[1029] *Cf.* Searle (1995), whose consideration of 'institutional facts' illuminate the constitution of social reality/ies through the linguistic and material regulation and practice of particular activities, including burial. The present study agrees with Willems'(1996: 9, fn. 39) assessment of Bell's (1992: 37ff., 108) criticisms of ritual 'performance theory', both in terms of her ambiguous distinctions between theory and practice, as well as her claims regarding the lack of awareness amongst ritual participants.

[1030] Trigger (2006: 472-473); Lillehammer (2010: 17, 19).

[1031] Butler (1988: 522).

[1032] Robb (2004: 137-138).

[1033] Jenkins (1996); Gunn (2006: 132).

[1034] Butler (1988: 519; 1990: 140); Gunn (2006: 152); *cf.* Goffman (1961; 1970); Parker Pearson (1982: 31); Barrett (1998: 30-31); Meskell (1999b: 77).

[1035] Law & Hetherington (1998: 2).

been engaged by many disciplines to understand how individuals/groups represent, re-present, perform or communicate concepts which reflect the state of their world.[1036] Considerations of representational economies include analyses of the manner in which a concept's composite elements are generated, allocated and weighted in performance or communication,[1037] including that/those being described (object/s), links between that/those being described (relations), the situation of knowledge about object/s and/or relations (epistemology), and the situation of those who have that knowledge (subjectivity/intersubjectivity).[1038] In this way, the present study suggests that the material remnants of the burial ritual may be 'read' as a representational economy, which, in its original performance, sought to communicate the cultural identity of the deceased in relation to those performing the burial.

The notion of 'selfhood' is a fundamental epistemological element within the representational economy of the Egyptian burial ritual. According to Meskell, the Egyptian notion of identity was unbounded and traversed the limitations of corporeality to be functional in both life and death.[1039] To the Egyptians, death was not thought of as a truncation, rather a punctuation of existence. As such, death required dynamic mediation to facilitate the identity transition and transfiguration ( *s-ꜣḫ*)[1040] of the deceased into a radiant *ꜣḫ* for their "new existence in an interstitial realm".[1041] The observation of ontological equity between the mortuary culture of children and adults in Egypt therefore suggests that biographical distinctions of attained age-at-death were not involved in the representational economy of the burial ritual. Regardless of whether death occurred at the end of the life course, or at the very beginning, it appears that the *function* of the burial ritual was to 'perform' a cultural funerary identity on behalf of the deceased which facilitated and assured their transition into the afterlife.[1042] This cultural identity was 'funerary' inasmuch as

[1036] Tambiah (1979: 119); Tarlow (1999: 3).
[1037] Law & Benschop (1997).
[1038] Law & Hetherington (1998: 3).
[1039] Meskell (1999b: 108; 2001: 31; 2002a: 203); *cf.* Robb (2007: 288).
[1040] Assmann (1989: 136-137, 139-140, 142, 147-149, 155); Lloyd (1989: 126); Baines (1991: 147); Meskell (2001: 32).
[1041] Meskell (2002a: 210); *cf.* Baines (1991: 145); Richards (1992: 58); Laneri (2007: 5). Assmann (1989: 135ff., 143) uses textual evidence from the *Pyramid Texts*, *Coffin Texts* and the *Book of the Dead* to expresses this transition as an "initiation into the realm of the dead"; *cf.* Morenz (1952); Grieshammer (1974). Roth, A. (1992) describes how the Opening of the Mouth ceremony facilitates the posthumous transition of bodies or statues to partake of the metaphysical nourishment from offerings.
[1042] Humphrey & Laidlaw (1994: 88-107) state that the essence of ritual involves transformation in the intentionality of action; *cf.* Assmann (1989: 143); Parker Pearson (1993: 204); Willems (1996: 9); Chapman (2000: 189); Davies (2002: 10); Wengrow & Baines (2004: 1092); Bloch (2005: 21). Baines & Lacovara (2002: 26) speculate that the provision of the grave and performance of burial ritual may have

its material, spatial and temporal performance was restricted to the mortuary sphere.[1043] Aligning with Bourdieu's *habitus*,[1044] this cultural funerary identity was 'collective' inasmuch as it was materially and immaterially created,[1045] performed and shared by all eligible members of the group.[1046] However, according to both Butler and Bourdieu,[1047] to be constituted within such a framework does not necessitate being determined by it. Therefore, there is always the possibility of agency to appear to transform, reinscribe or even subvert cultural practices. Therefore, while accommodating a certain level of heterogeneity of forms (due to entropy, creative expressions of individuality, socio-economic capacity and/or choice),[1048] Egyptian cultural funerary identity was homogenous inasmuch as its every performance served the same fundamental purpose.

As argued above, the *purpose* of the burial ritual was to transmit and transfer cultural knowledge, memory and collective identity within familial/community networks, while reconfiguring and reinforcing specific intersubjective relationships during the processes of individual and collective grieving for the deceased's physical removal from broader social networks.[1049] To reiterate, the *function* of the burial ritual was to 'perform' a cultural funerary identity on behalf of the deceased which facilitated and assured their transition into the afterlife. As a material expression of the burial ritual's representational economy, broadly speaking, Egyptian mortuary culture does not articulate *any* individuals' age status because that is *not its purpose nor its function*[1050] – not for foetuses, infants, children, adolescents, young adults, middle adults or the elderly. To ascertain such notions of age, it appears that one must look elsewhere.[1051] The inclusion of children in fully-vested burial

been the essential facets of Egyptian mortuary behaviour – more important than the long-term maintenance of the funerary cult. *Cf.* Klass & Walter (2001: 433, 439).

[1043] Garwood (2007: 67); Meskell & Preucel (2007: 125).

[1044] Bourdieu (1990: 54).

[1045] DeMarrais (2004: 12-13).

[1046] See also Durkheim (1995: 403).

[1047] Butler (1988: 520; 1993: 125, 139); *cf.* Barrett (1998: 31).

[1048] Butler (1988: 520); Tarlow (1999: 41); Wengrow & Baines (2004: 1097). Meskell (2001: 28) also argues that ritual is not a binary structure and acknowledges that a range of practices may have been involved in burial. From the perspective of a field anthropologist, Tambiah (1979: 115) reminds us that no two ritual performances, no matter how prescribed, are the same, due to the variability of the officiants, participants, audience, environment, material and immaterial components, *et cetera*.

[1049] Here, the present study departs from the 'communal' or 'social grieving' theories of Ariès (1974, 1981) and Durkheim (1995) in its acknowledgement that individuals were just as profoundly affected by the experience of loss and grief and the reconfiguration of identity following the death of someone from their familial or social network/s.

[1050] Many scholars agree that the burial ritual does not necessarily constitute an unambiguous reflection of social organisation or individual biography; see Ucko (1969: 273-274); Hodder (1982: 141, 144-145); Savage (1995: 229, 260-261); Garwood (2007: 67). *Contra* Anderson (1992:57ff.).

[1051] Meskell (1994: 37; 1999a: 181; 1999b: 169) acknowledges the need for an Egyptian 'theory of age'.

rituals therefore indicates the totality of their cultural capacity,[1052] their complete integration into familial/community networks, and a social position, value and agency equal to that of adults.

### 10.2.4 Departures [1053]

By arguing for recognition of the Egyptian burial ritual as a specific performative context which constructs, transmits and transfers a collective funerary identity, the present study represents somewhat of a departure from interpretations of children's mortuary culture offered by scholars of other disciplines. Such studies promote the mobilisation of CIFBs as a negotiation of parents' and carers' self-identity. They suggest that adults' notions of selfhood were constructed referentially to children.[1054] The death of a child is argued to have problematised the self-identity of the parent and other adult carers. The child's burial is therefore understood to have been specifically mobilised by adults as a symbol of loss, manipulated by adults to map themselves "in a mesh of imagined life-courses, genealogies, self-identities and social expectations from which they reconstitute themselves."[1055] It is postulated that parents/carers therefore apportioned 'adult' mortuary culture to CIFs as a deliberate performance of unrealised or projected social status.[1056] Considering that children are fundamental to the continuation of society, and represent its collective future,[1057] it is proposed that the allocation of 'adult' mortuary treatment places the child in a symbolic, spatio-temporally mapped genealogy which serves to signify their unfulfilled cultural future and potential.[1058]

The present study acknowledges that notions of 'cultural biography' were also active in ancient Egyptian society. The term 'cultural biography' is used within social, ethnographic and mortuary theory to designate the processes of identity construction, transformation and transmission by which each individual is invested with a culturally-idealised narrative of the life course.[1059] These biographies serve as referents for individuals to locate their past

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[1052] Ucko (1969: 264).
[1053] An homage to the film by the same name, which exquisitely articulates the specific performative context and representational economy of the Japanese burial ritual: Takita (2008). I am grateful to Dr. Susanne Binder, Macquarie University, for her recommendation to see this film.
[1054] Mizoguchi (1992; 2000: 142).
[1055] Mizoguchi (2000: 149).
[1056] Mizoguchi (2000: 149); Garwood (2007: 63, 64).
[1057] Buchli & Lucas (2000: 132); Feucht (2001c: 503); Baxter (2006a: 3). Meskell (1999b: 20); Robins (1994-1995: 24).
[1058] Lillehammer (2000: 23; 2010: 31, 33); Mizoguchi (2000: 149).
[1059] Robb (2007: 288).

experiences and determine their future activities at various stages of the life course,[1060] as well as those of other individuals within the community. As demonstrated through manifold linguistic examples, the adult phase of the Egyptian cultural biography was certainly determined with reference to children, and more importantly, a completed childhood.[1061]

However, the present study does not conform to the aforementioned interpretations levelled by other disciplines which promote the idealisation of 'adult' mortuary culture. Such interpretations appear to unwittingly perpetuate the "idealisation of adulthood"[1062] within archaeological narratives and the subordination of children as 'unideal', 'unfulfilled' and 'incomplete' by focusing on what children are "going to be, rather than what he or she presently is".[1063] These appear to be the self-same paradigms scholars have been toiling against for the past 30 years.[1064] By viewing Egyptian CIF mortuary culture as the material remnants of the specific performative context of burial ritual, the function of which was to construct, transmit and transfer collective funerary identity, the present study departs from models of negotiated equity and allows for true ontological equity between all demographic segments of the ancient community.

### 10.2.5 Cultural Capacities and Lived Experiences

While the present study has demonstrated that the ontological equity of CIF and adult mortuary culture is indicative of equitable cultural capacity, it is yet to address the issue of children's lived experiences. Here again, we must return to the ritual context of burial to consider how, and indeed *if*, the lived experiences of Egyptian CIFs can be located through the funerary nexus. As aforementioned, the present study has argued that the burial ritual's function was to perform a collective cultural funerary identity on behalf of the deceased which facilitated their transition into the afterlife. It further argued that the purpose of the burial ritual was to transmit and transfer cultural knowledge, memory and collective identity within familial/community networks, while reconfiguring and reinforcing specific

[1060] Renfrew (1994: 3-12) previously described similar concepts as "*mappas*".

[1061] For example, *id(w)*: *WB* I, 151.8-11; "child; young ones" and "pupil"; *ḏd*: *WB* I, 242.11-19; "youth" and "servant"; *mnḥ*: *WB* II, 83.13-17; "youth" and "stripling"; *rwn.t*: Hannig & Vomberg (1999: 408); "girl" and "young woman (virgin)"; *rnp*: *WB* II 434.14-17; "youth" and "young man"; *rnn.t*: *WB* II, 435.18; "youth (female)" and "young woman"; *ḥwn(t)*: *WB* III 52.2-53.5; "infant, child, boy, girl" and "young man (also above 30 years of age), youthful man, unmarried girl, to be youthful, to regenerate"; *šri(t)*: *WB* IV 526.9-23, 527.1-9; "boy, girl" and "son, daughter, man, assistant".

[1062] Lillehammer (2000: 23; 2010: 31, 33); *cf.* Roveland (2000: 33); Fahlander & Oestigaard (2008: 11); Stevenson (2009b: 174).

[1063] Goodwin (1997: 1).

[1064] For example, Lillehammer (2010: 37) states that "As long as children are perceived as immature and incomplete human beings, they are relegated to a subordinated position in the society."

intersubjective relationships during the processes of individual and collective grieving for the physical removal of the deceased from the lived sphere. As such, it may be argued that it was *not* the explicit purpose of the burial ritual to articulate biographical elements of the deceased's true 'lived experiences', although, on occasion we may observe reflections (or refractions) of the materiality of that experience. As will be discussed below, the presence of certain objects within tombs does not necessitate 'ownership' on behalf of the deceased. Objects may have been placed in tombs as gifts, tributes or heirlooms and may not have been used, or even seen, by the deceased in their lifetime.[1065] As such, it is dangerous to speculate that the presence of certain objects in a tomb provide reliable indications of the deceased's profession, proclivities or personality. While on some occasions such interpretations of objects may be bolstered by the appearance of accompanying texts, these should also be viewed with circumspection as it is argued that certain elements of Egyptian "ideal biographies" may have been prescribed, or at least formulaic.[1066]

According to Parker Pearson, child burials "bring home the gap between those being buried and those doing the burying".[1067] Here, Parker Pearson underscores the fact that children's burial rituals would have been orchestrated by adults.[1068] While other children may have been present, or even participated in the funeral,[1069] it is highly unlikely they would have coordinated the event. Children are therefore manipulated by adults within the burial ritual to address its specific function and purpose. It thus appears that CIF mortuary culture does not accurately reflect children's worlds or experiences, only the experiences of adults attempting to negotiate the cultural, biological, social and psychological implications of their deaths.[1070] In this way, CIF mortuary culture is epistemologically similar to the artistic and epigraphic representations of children described in the literature review of Chapter 2. Its representational economy is created by adults to mediate the philosophical-religious constructs borne out of adult responses to the biologically imperative, socially traumatic experience of death. As such, the present study suggests that the lived experiences of Egyptian CIFs are somewhat illuminated via the finding of their complete and embedded cultural capacities during the timeframe canvassed by this research, including an equitable

[1065] Fahlander & Oestigaard (2008: 7); Stevenson (2009a: 181).
[1066] Parkinson (1991b: 762); Strudwick (2005: 43ff.); *contra* Lichtheim (1988: 7).
[1067] Parker Pearson (2003: 183).
[1068] For artistic and textual examples of children's funerals in ancient Egypt, Feucht (1995: 122-123, 134) cites the scene where royal parents Akhenaten and Nefertiti mourn the death of their daughter Meketaten, along with their surviving children (for the scene, see Robins (1997: 152, fig. 176); as well as a late Greek text that reports a funeral ceremony for a child.
[1069] *Cf.* fn. 1023, above.
[1070] Lucy (1994); Parker Pearson (2003: 183); Roveland (2000: 34).

social position, value and agency with contemporary adults. However, it appears that the specific ritual context of burial does not allow CIF mortuary culture to serve as a forum where children's personal experiences or views are expressed.[1071]

Children's physical remains may provide more apposite windows through which to view certain aspects of their lived experiences.[1072] By studying children's bodies we have the potential to glean profound insights into their diet, lifestyle, health, relationships, environment and geographical location, at both individual and group levels. The present study has only been able to achieve this aim to a limited degree, owing to the small sample size and poor reporting of published skeletal data. As detailed in §10.1.2, above, the present study's palaeodemographical and palaeopathological profiles suggest that the lived experiences of some ancient Egyptian children involved periods of compromised nutrition, unhygienic socioecological environments and practices, and high levels of pathogen exposure. Some of these experiences resulted in chronic and/or acute biological insults and death. Should future projects obtain greater access to larger datasets and more sophisticated analytical technologies, they could potentially open the world of children as experienced through their bodies even further. Syntheses of children's 'osteobiographies'[1073] within appropriate historical and cultural contexts would enable sensitive, nuanced interpretations of children's corporeality. As will subsequently be discussed in terms of the 'paradox' of mortuary samples, however, it must be remembered that the skeletons of children in archaeological contexts represent those who, for whatever reason, did not survive beyond a young age. As such, children in mortuary samples may provide powerful insights into cultural experiences of sickness and therapy in ancient Egypt. In terms of the healthier population, we must not forget that every adult exhumed from archaeological contexts represents a biological repository of successful ontogenetic experiences. Adult bones and teeth retain osseous signatures of biological, nutritional, occupational or emotional stress experienced during the processes of growth. When viewed in context with other sources of evidence, the presence of such signatures – or

[1071] Kamp (2001: 24); *cf.* Welinder (1998: 188); Crawford (2000: 174); Garwood (2007: 66, 79); Shepherd (2007: 93, 104-105); Stevenson (2009b: 168, 174); Lillehammer (2010: 33).

[1072] Meskell (1999c: 129); Kamp (2001: 9-10); Stutz (2008: 19-20).

[1073] 'Osteobiography' is a widely-used term in biological anthropology to describe the variable corporeal aspects of individuals' biographical profiles, as attested at the time of their death, that provide insights into their life histories; for example, age, biological sex, genetic/isotopic signatures, nutritional/pathological statuses, occupational/stress markers, handedness, body modification, osteometrics, *et cetera*. See Mayes & Barber (2008: 574).

indeed, the lack of them – stands to provide significant insights into the lived experiences of every adult through the entirety of their life course, from birth to death.[1074]

## 10.3 Limitations of the Study: Representativeness

It is acknowledged that the 1,809 individuals identified by this research are not a complete account of all the CIFs that died and were buried in Early Dynastic to Middle Kingdom Egypt. With the total population during this timeframe estimated by Butzer at approximately 4.6-5 million,[1075] it is clear this figure is far too low to represent any kind of demographic reality.[1076] Indeed, the exact extent to which any archaeological assemblage constitutes a reliable sample of its original population remains unknown.[1077] Several factors may act alone or in combination to affect the representativeness of the recovered archaeological record.[1078] Among them, differential preservation, incomplete excavation, the 'osteological paradox', intra- and inter-observer error, poor reporting and authorial bias may all render archaeological samples under-representative of the population from whence they came.[1079] The present study briefly explores each of these factors with a view to determining their potential impact on the dataset, as well as their capacity to compromise one's ability to draw sound conclusions from this research.

Of these, the issue of authorial bias appears to have had the largest impact on archaeological praxes surrounding published CIF mortuary culture. Excavators' variable, predetermined ideas regarding what constitutes viable archaeological evidence seems to have significantly influenced their decisions regarding what to (and what *not* to) excavate, record, and publish.[1080] Therefore, the greater part of the known archaeological record potentially reflects more of excavators' personal/cultural sensibilities and less of a 'true' material record of past populations. As such, the present study will pursue a more detailed

[1074] Meskell (2000: 423); Glencross (2011).

[1075] Butzer (1976): Early Dynastic Period, *ca.* 1 million; Old Kingdom, *ca.* 1.6 million; Middle Kingdom, *ca.* 2 million; no data available for the First Intermediate Period. *Cf.* Filer (1995: 22); O'Connor (1972; 1995: 572); Baines & Lacovara (2002: 12). These figures are more conservative than Strouhal's (1992: 256) population projection of 5.25 billion for Dynastic Egypt.

[1076] The high child and infant mortality rates of 20–56 percent usually associated with preindustrial societies would project a revised estimate of *ca.* 1–2.5 million; see Chamberlain (2000: 208). Mortensen (1991: 29) notes the general under-representation of *all* demographic categories from cemetery data in comparison to population projections; *cf.* Williams (1994: 278).

[1077] Ubelaker (1999: 135); Waldron (2001: 46); Bello & Andrews (2006: 10).

[1078] Richards (1992: 56); Meskell (1999: 129).

[1079] Boddington (1987: Table 14.4); Molleson (1991); Crawford (1993, 1999); Buikstra & Ubelaker (1994: 39); Lucy (1994: 26); Larsen (1997: 335); Mays (1998); Saunders & Barrans (1999: 184); White & Folken (1999: 437); Chamberlain (2000: 102); Perry (2006: 81, 89ff.); Lewis (2007: 83); Lewis & Gowland (2007: 118).

[1080] Lillehammer (2000: 19).

examination of the phenomenon of authorial bias in Egyptology towards the end of this chapter. It does so with a view to exploring its particular impact on the representation of CIF mortuary culture in the archaeological record, as well as the reconstructions of ancient Egyptian children's lived experiences and cultural capacities through the funerary nexus.

### 10.3.1 Differential Preservation

As outlined in Chapter 2, the absence of CIF mortuary culture in Egyptological literature is frequently attributed to differential preservation.[1081] As noted in §2.5, it is often reported that the reduced mineral content of juvenile bones makes them more susceptible to diagenesis than those of adults.[1082] Density and mineral content levels decrease after birth and are maintained at minimum values during the first year post-partum. They rise to re-achieve birth levels at the end of the second year and continue to increase until adulthood.[1083] Reduced mineralisation results in low tensile and compressive strength and hardness,[1084] making juvenile bones extremely vulnerable to crushing by the pressure of overlying sediments.[1085] Poor mineralization also makes juvenile bones more porous and soluble,[1086] their small crystals presenting a large surface area for invasion by the acid products of organic matter decomposition or by acid and saline soils.[1087]

There is no doubt that diagenesis would have impacted on the preservation of CIFs in the Early Dynastic to Middle Kingdom archaeological record over the transpiring millennia since their burial. However, it is impossible to quantify the number of individuals whose biological testimonies have been obscured as a result of such processes. In terms of the present study, it is pertinent to note the relatively strong representation of CIFBs in areas commonly promulgated as poor preservation environments, especially the Nile Delta. As demonstrated in Chapter 3, a minimum of 269 CIFs (14.87% TBs) were identified amongst the published records of the Nile Delta, representing the third-highest result of the 5 general geographical regions included in the survey.[1088] This result was only slightly less than that of Lower Egypt (MNI 325; 17.97% TBs), and substantially more than Middle

[1081] See §2.1.
[1082] Gordon & Buikstra (1981); Boddington (1987: 181); Jackes (1992: 206); Nawrocki (1995); Walker (1995: 41); Guy *et al.* (1997); Paine & Boldsen (2002: 169); Stojanowski *et al.* (2002); Perry (2006: 90-91); Bello & Andrews (2006: 10); Gilchrist (2007: 143); *contra* Lewis (2007: 37).
[1083] Chatterji *et al.* (1972); Galloway *et al.* (1997).
[1084] Vinz (1970); Galloway *et al.* (1997).
[1085] Lyman & Fox (1997).
[1086] Baud *et al.* (1977).
[1087] White & Hannus (1983); Garland & Janaway (1989); Gill-King (1997); Schultz (1997).
[1088] See §3.2.2.

Egypt (MNI 128; 7.08% TBs) and Dakhla Oasis (MNI 78; 4.31% TBs), each of which have highly favourable preservation environments compared to the damp, organically-profuse soils and sands of the Delta. Broadly speaking, the evidence produced from the Delta indicates that CIF bones in ancient Egyptian burial environments have greater preservation potential than the catastrophic diagenesis projections proposed within the literature. This argument is supported by the fact that many published cemetery sites feature juvenile palaeodemographic profiles that fall well within the expected mortality rates for pre-industrial populations of 20.00–56.00%,[1089] including el-Gerzeh (20.48%)[1090] Kom el-Hisn (43.00%),[1091] Minshat Abu Omar (22.00%);[1092] and as noted in §10.1.2, above, el-Ghurab (*ca.* 50.00%), Matmar (*ca.* 48.00%), Mirgissa (50.00%)[1093] and el-Mostagedda (*ca.* 42.00%).[1094]

It thus appears that the relatively low levels of CIFBs in the known archaeological record have less to do with the natural transformation processes of diagenesis and more to do with the cultural transformation processes of excavation, recording and publishing. Rather than reflecting localised unfavourable preservation environments, the geographical distribution of data echoes regional prioritisation of excavation and publication activities, following enduring disciplinary foci on monumental tomb architecture and associated artistic and epigraphic studies. These findings challenge disciplinary assumptions regarding the poor preservation potential of CIF remains and, as stated in Chapter 3,[1095] intimates towards the extent to which Egyptological knowledge may be spatially determined. The impact of other modern cultural transformation processes, such as political, religious, or commercial/residential expansion issues should also be noted,[1096] especially with reference to settlement archaeology.

### 10.3.2 Incomplete Excavation and Recording

As established in Chapter 2, juvenile skeletons are less likely to be recovered than those of adults because their graves and bodies are smaller and less easily identified.[1097] Compared

[1089] Hewlett (1991: 8).
[1090] Petrie *et al.* (1912: 5).
[1091] Orel (2000: 45)
[1092] Kroeper & Wildung (1985: 26).
[1093] Baines & Lacovara (2002: 14); Harrington (2007: 60).
[1094] Crubézy *et al.* (2002a: 418) also state that the juvenile palaeodemographic profile in the Eastern Necropolis of Adaima represents a "population naturelle".
[1095] See §3.2.1.
[1096] Garstang (1907a: 1); Strouhal (1992: 8); Meskell (1999c: 129).
[1097] See §2.6.

to the 206 bones of an adult skeleton, that of a perinate consists of *ca.* 156 separate bones, while the skeleton of a 6 year old is comprised of *ca.* 332 bony elements.[1098] Excavators who had been trained using only adult skeletal material may not recognise the unusual shapes and forms of juvenile epiphyses and bone segments.[1099] Furthermore, the amorphous shapes of human foetal and infant bones have caused even the most experienced excavators to occasionally confuse them with those of animals, particularly if they have been commingled with adult or animal remains.

Studies devoted to the earliest phases of skeletal ontogeny are relatively recent in human osteology, with the first comprehensive manual produced in 1978 by Fazekas and Kósa.[1100] Although the science has subsequently burgeoned and specialist manuals for the excavation and analyses of CIF skeletons are now readily available, [1101] it is impossible to ascertain the extent to which they are utilised in the field. It is equally impossible to quantify how many juvenile burials may have been accidentally overlooked, ignored or misappropriated during two centuries of archaeological endeavour in Egypt, with or without the aid of such heuristic measures. Moreover, we cannot attribute the loss of CIF burial data to accidents or ignorance alone. The deliberate choice to exclude certain socio-economic segments of the population from analyses will subsequently be explored further.[1102] Nevertheless, one can certainly state that the overall size of the current dataset is sufficient to be considered a representative sample of the general trends and practices resident in ancient Egypt during the Early Dynastic to Middle Kingdom Periods.

The extent to which incomplete recording practices have impacted on Early Dynastic to Middle Kingdom juvenile palaeodemographic profiles is perhaps more readily quantified. As stated in Chapter 4, of the 1,809 CIFs identified amongst published (and unpublished) excavation data, age-at-death was *not* reported for 1,111 individuals (61.42% TBs).[1103] Unfortunately, many additional individuals were not able to be included in the study as their reported age range was too ambiguous or broad (for example, simply presented *en masse* as ≤20 years).[1104] Further to this, biological sex was *not* reported for 1,729

[1098] Lewis (2007: 26).
[1099] Sundick (1978); Boddington (1987: 181); Henderson (1987); Waldron (1987; 2001: 45); Galloway *et al.* (1997); Saunders (2000); Paine & Boldsen (2002: 169); Lewis (2007: 26ff.).
[1100] Fazekas & Kósa (1978).
[1101] Rhine (1995); Scheuer & Black (2000b); Baker *et al.* (2005).
[1102] See §10.8.
[1103] See §4.1.2.
[1104] For example, see Mace (1909: 53); van Haarlem & Hikade (2006: 390). Amélineau (1904: 104) could not differentiate a skeleton as being either that of a "child or dwarf".

individuals (95.58% TBs).[1105] This represents a dramatic data loss and has significant implications for our abilities to accurately reconstruct Egyptian juvenile population profiles. This, in turn, impacts on our abilities to understand certain aspects of the lived experiences of CIFs during the timeframes canvassed by this research, including family structures, differential mortality and morbidity experiences, differential parental investment, competition for 'marriage' partners, composition of the labour force, *et cetera.* Further extensions of this project also hope to determine whether adult palaeodemographic profiles may have been similarly affected by incomplete recording.

### 10.3.3 The 'Osteological Paradox'

A controversial paper published by Wood *et al.*[1106] highlighted a paradox which must be addressed by anyone wishing to infer the health of past populations based on the analysis of skeletonised human remains. The central thesis of Wood and colleagues was that demographic data derived from palaeopathological research only reflects the mortality and morbidity of a group's 'non-survivors'. Furthermore, they disputed traditional notions that individuals displaying skeletal lesions were the frail members of a community, whilst non-pathological individuals were robust. This position was anticipated by Ortner, who stated in 1991 that skeletal lesions implied "a good immune response and a relatively healthy individual".[1107] He proposed that skeletal lesions were evidence that an individual had recovered from an episode of biological stress, while the absence of lesions testifies to an individual's failure to survive, or adapt to, a particular health crisis.

Although the effects of the "osteological paradox" can never be completely eliminated from skeletal research, Goodman demonstrated that its impact can be minimised by analysing skeletal samples according to age categories and utilising multiple indicators of stress, as well as the absence of stress, in order to identify any subgroups.[1108] In addition, Perry suggests that placing research outcomes within their bio-cultural context diminishes opportunities for palaeodemographic and palaeopathological misrepresentation.[1109] While this research has certainly followed Goodman and Perry's recommendations to mitigate issues of paradox, one should nonetheless be circumspect when attempting to use the results presented in Chapter 4 to infer the health of *all* children from the Egyptian Early

[1105] See §4.3.
[1106] Wood *et al.* (1992).
[1107] Ortner (1991: 10).
[1108] Goodman (1993).
[1109] Perry (2006: 92).

Dynastic to Middle Kingdom Periods. It is axiomatic that *all* CIFs contained within the dataset are *non-survivors*. Their presence among these published (and, in the case of Helwan, unpublished) assemblages indicates that for whatever reason, they failed to adapt to endogenous and/or exogenous pressures.[1110]

### 10.3.4 Intra- and Inter-Observer Error

The capacity for intra-observer error must be acknowledged for the osteological analyses undertaken in Chapter 4 of this thesis. As with all bioanthropological studies, the possibility remains that an observer may overlook or misjudge morphological characteristics associated with age, sex and/or health assessments, resulting in perturbations of palaeopathological and palaeodemographic results. In terms of the present study, the capacity for intra-observer error in the analysis of human skeletal remains derived from the ACE Helwan Project was ameliorated via cross-checking independent analyses undertaken by this author and Ms. C. Marshall. In cases of disagreement, data was re-checked until consensus was reached.

In the case of published data, the capacity for both intra- and inter-observer error is somewhat larger. This applies not only to the published palaeopathological and palaeodemographic data incorporated into Chapter 4 of this thesis, but also to all published archaeological data analysed by the survey and captured within the database. Here, the present study was reliant on the accuracy of excavators' accounts of all aspects of CIFBs, as represented within Chapters 3–9 of this thesis. While all excavators' best efforts to ensure accuracy in archaeological reporting are lauded, one must nonetheless acknowledge that errors may infiltrate published material and are subsequently unwittingly perpetuated by scholars and students alike. Moreover, although all care has been taken in the production of this research, one's human capacity to err when undertaking large amounts of data entry must also be acknowledged. It is hoped that careful proofreading has eliminated such errors.

### 10.3.5 Poor Reporting

The poor reporting described for palaeodemographic data in §10.3.2, above, only scratches the surface of the prevalence of this phenomenon within the published archaeological record. Overall, considering the amount of fieldwork undertaken in Egypt over the past

[1110] Lewis (2002: 51).

two centuries, it may be said that there is a dearth of published cemetery and settlement excavation reports *per se*. Therefore, while it is acknowledged that many more CIFBs have been excavated than those presented in this research, they cannot be included in studies if they have not been published.[1111] Furthermore, notwithstanding the acknowledgement that reporting standards are themselves culturally situated and subject to professional and technological evolution, the quality and/or comprehensiveness of many early reports are nonetheless disappointing.[1112] For example, many CIFBs were rendered ineligible for inclusion in the dataset due to several early (and modern) excavators' tendencies to omit explicit dates for individual interments[1113] or even entire cemeteries,[1114] or not to provide explicit grave or cemetery occupancy figures.[1115]

A further source of data loss stems from the mundane phenomenon of Petrie's illegible handwriting in his tomb cards and notes books, noted on several occasions throughout this thesis.[1116] It is acknowledged that these records were ostensibly only ever intended for Petrie's personal use and not as a primary data source. However, in the absence of comprehensive publication of sites including Dendara, Harageh, Hu, Kafr Ammar, Qau el-Kebir, Sedment and Kafr Tarkhan, these notes are the only remaining trace of the archaeological record. On many occasions, additional CIFBs were identified among the tomb cards and notebooks, but they were not able to be included in the database as they did not feature explicit dates (especially those burials without ceramic vessels) or they were indecipherable.[1117] Their illegibility is exacerbated by the poor resolution of the generic CD-ROM supplied by the Petrie Museum, London, where the original records are housed. This author hopes to conduct a physical examination of these records in the future and potentially harvest additional data to supplement the present research.[1118]

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[1111] Richards (2005: 170ff.); Baines & Lacovara (2002: 6, 14).

[1112] Kemp (1977: 186); Bourriau (1991: 8); Richards (1992: 68); Strouhal (1992: 6); Weeks (2008: 9).

[1113] For example, Gebelein: Marro (1929: 609); Kom el-Hisn: Hamada & Farid (1947: 104); Minshat Abu Omar: Kroeper (1988; 1994; 2004: 878); Naga ed-Deir: Mace (1909: 53); Saqqara: Quibell (1923: 24); Youssef (1996: 107); Thebes: Carnarvon (1912: 24, 26). *Cf.* Junker (1928: 35, 36, 42).

[1114] For example, Naville *et al.* (1914: 1-11, 24); Peet (1914a: 17-29, 54-75); Hamada & el-Amir (1947: 104, 197, 204); Bourriau & Millard (1971). *Cf.* Masali & Chiarelli (1972).

[1115] For example, see Naville (1921: 161); Brunner (1952-1953: 387); Hamada & el-Amir (1947: 110); Bernand (1970: 1047-1048); Yacoub (1983: 105).

[1116] See §§6.2.2; 6.3.2; 6.7.6; 9.1.

[1117] For example, see Petrie (2000: Abydos Sheet 2; Dendara Notebook 13; el-Ghurab Sheet 5; Harageh Sheets 7, 8; Hu Notebook 40; Kafr Ammar Sheet 236; Qau el-Kebir Sheets 10, 11, 12; Sedment Sheets 13, 14, 15; Kafr Tarkhan Sheets 16, 18, 19, 20, 21, 22). For further comments regarding the inconsistencies of the tomb cards and notebooks, see Picton & Pridden (2008).

[1118] Further research should also include examinations of other excavators' original, unpublished field diaries and journals. The articles of Gallorini (1998) and Orel (2000) highlight the value of such an exercise.

## 10.4 Authorial Bias

The present study argues that authorial bias presents the greatest obstacle to obtaining accurate representations of ancient Egyptian children's lived experiences and cultural capacities through the funerary nexus. Despite Western archaeology's pursuit of theoretical, methodological and practical innovation, it nonetheless remains deeply embedded in cultural conditioning.[1119] In Egyptology, such conditioning is exemplified by Petrie's statement: "so intimate may you now feel in walking in their streets, and sitting down in their dwellings, that I shall rather describe them as a living community than as historical abstractions".[1120] While on the one hand Petrie recognizes the need to transform the past by creating meaning and identity in the present,[1121] on the other, the archaeologist must consider the recognition of a past (or pasts) which may diverge from anything we can claim to know or experience in our contemporary realities. As a result, we must accept that any modern archaeological investigation will inevitably encounter many of these apparent contradictions, anachronisms and biases amongst the works of our predecessors,[1122] despite their undoubted best intentions to do otherwise.

Further to the present study's finding of ontological equity between the mortuary culture of children and adults, it is apparent that the current distorted perceptions of juvenile mortuary culture have been created and perpetuated by various forms of authorial bias. As a means to explore the nature, scope and effect of these biases, the present study will draw on archaeological evidence identified in Chapters 3–9 to build qualitative, historiographical analyses of 4 aspects of child, infant and foetal mortuary culture most frequently stereotyped and misconstrued among the discourse. These include 'toys', coffins, differential burial practices and status. While these case studies caution against the unequivocal use of published mortuary data in reconstructions of ancient Egyptian society, they also demonstrate that considered applications of archaeological, mortuary, ethnographic and social theories can mitigate the gaps and partialities inherent in our dataset, strengthen qualitative analyses, and establish new avenues for detailed, nuanced, ethically-balanced research.

[1119] Problematised in Meskell (1999c: 128).
[1120] Petrie (1890: 21).
[1121] Hodder (1996: 278).
[1122] Meskell (1999b: 7).

## 10.5 'Toys'

Perceptions of children, and the particular forms of material culture with which they may be observed, are deeply affected by the preconceptions of those interpreting the evidence. In a modern context, toys and children-specific artefacts were originally introduced by adults to suggest and enforce certain norms of behaviour for children based upon their gender, age, socio-economic class and even socio-cultural ideals of beauty and behaviour.[1123] For example, in the early 19th Century, dolls portraying adults were marketed to female children of wealthy classes to instil an aspirational sense of style, fashion and etiquette,[1124] while dolls portraying children and babies were intended to impart mothering and childcare values and skills.[1125] As end-users of toys during their own childhoods, and/or as adult purchasers of such items for children, it is understandable that the personal experiences of many early and recent excavators may have influenced their interpretations of outwardly similar archaeological artefacts. However, it is inappropriate to impose such modern conceptions onto societies temporally and culturally distinct from our own.

The most common theoretical and methodological approach employed by archaeologists towards CIF mortuary culture is referred to as 'miniaturisation'.[1126] In this approach, anything that is small, of inferior quality or design, of little practical use, or novel in nature may be assumed to belong to a child, either in the presence or absence of juvenile skeletal remains.[1127] For example, consider GGRN 1757, a copper seal, the superior aspect shaped in

[1123] Wilkie (2000: 101-102); Garwood (2007: 65).
[1124] See Pritchett & Pastron (1980); Goodfellow (1993).
[1125] Wilkie (2000: 102).
[1126] Crawford (2009: 60-61); Zillhardt (2009: 27).
[1127] Quirke (2005: 105). For example, see Petrie (1890: 30; 1893: 101); Ayrton *et al.* (1904: 38, 54); Carnarvon (1912: 32, pl. xxiii); Brunton (1937: 11); Strouhal (1992: 26); Crubézy *et al.* (2002a: 474; 2008: 304-305); Stevenson (2009b: 161, 176). This author also observed spatial miniaturisation; consider Caton-Thompson & Gardner (1934: 115, 118): "The Rock Shelters and Basins...BI was merely a shallow recess in the scarp, with a 20ft. frontage and maximum headroom of under 2ft. even when freed of the gypsum powder and sand mixture which filled it. It could hardly, therefore, have been a human habitation unless used by small children. Nevertheless, at the rear, twenty gypsum oblate spheroid rough-models had been left in a neat pile" ... "That the shelters themselves, in spite of their low roofs, were used as auxiliary workshops seems certain. The accumulation of gypsum debris, the collection of twenty rough-model vases, the flint drills, the smoke on the roof, combine to prove it. So cramped, however, are the dimensions of BI, BII and BIIIb that one may suspect the employment of children." Scholars also evoke miniaturisation principles when analysing artistic representations of children, describing them as "miniature adults"; see Janssen & Janssen (1990: 160); Harrington (2007: 52ff.). However, such interpretations appear not to consider the strict canon of proportion which applied to representations of human figures in Egyptian art. Taken literally, even the figures of adults are disproportionate and anatomically incorrect. Here, this author again cites the scholarship of Weeks (1979), Swinton (2010) and Marshall (*forthcoming*) to suggest that these representations are codified motifs of humans, excised within the confines of a strict canon of proportion, regardless of the subject's age.

the baboon-manifestation of Thoth, the inferior aspect incised with 2 hawks, an ankh and wadjet eyes. This object was found in the intact shaft grave of a 12 year old child in the First Intermediate Period cemetery of Qau el-Kebir on the East Bank of Upper Egypt.[1128] The excavator states "We may imagine that the father's worn-out seal had been given to the child as a plaything."[1129] Such observations are problematised, however, when similar objects are also found in adults' graves.[1130] Here, one is forced to question why identical objects should be considered ontologically different based purely on age associations.

It is also assumed that miniature items may have been manufactured by children, in an assumption that they imitate adults to their own scale, producing small items with their small hands. This perspective is transformed if we consider that children were imbricated in ancient Egyptian socio-economic frameworks. They served as employees and producers and created items to comply with societal norms.[1131] A further assumption is the equation of crude and poorly made objects with children, a hypothesis often evoked in attempts to identify children in apprentice or novice positions.[1132] Certainly, it is accepted that anyone acquiring new skills will experience a learning curve, and it is fair to assume that they may produce a range of errors. However, such items should bear no explicit connection to age, as one certainly does not have to be a child to be a novice.

The above interpretations are based on the morphological assumption that, since children are smaller and less developed than adults, only children will interact with small or 'inferior' objects. It also draws on the modern Western construction of children as passive – people who play rather than contribute socially or economically to society.[1133] In this way, when archaeologists identify miniature objects as 'toys'[1134] their archaeological value is minimised. The significance of the object is generally relegated to the level of curiosity, and it is rarely related to social significance or meaning. However the functional identification of an object as a purpose-built toy is actually a complex task,[1135] especially considering that the nature of play varies cross-culturally and is governed by prevailing mores, local environment and available materials.[1136] We often forget that being a child is

[1128] DRN 961; Brunton (1927a: 39).
[1129] Brunton (1927a: 39).
[1130] Meskell (1999a: 185).
[1131] See §2.4.1, fn. 184; Finlay (1997: 205).
[1132] Finlay (1997: 205).
[1133] See Lillehammer (1989: 89-105).
[1134] As does Petrie (1890: 30); Garstang (1907a: 10); Cole (1989: 33); Strouhal (1992: 21, 25-26); Feucht (2001a: 262).
[1135] Egan (1996); Derevenski (2000: 7); Lillehammer (2010: 32).
[1136] Kamp (2001: 18); Crawford (2009: 58).

not simply defined by age and power relations, but it is also experiential. Accordingly, children constantly interact with the everyday objects that surround them; any object/s within their grasp are potential 'toys'.[1137] We must also acknowledge that not everything a child engages with is a toy – children make and use other objects, too.[1138] Finally, we often forget (or perhaps, choose not to admit) that adults also own and use toys.[1139] It thus appears that the spectrum of children's material realities is just as broad and complex as those of adults.[1140]

### 10.5.1 'Toys' or Ritual Objects?

There is much debate in Egyptology surrounding the identification of human, animal and miniature figurines and objects (whether they are well-formed or crudely made) either as items for the amusement of children, or as objects used in ceremonies and rituals.[1141] A viable case study to illustrate this issue may be found in the controversial "dolls"[1142] or "concubines du mort"[1143] of the Middle Kingdom, 5 of which feature in the present study's database.[1144] Janssen and Janssen make the distinction between 'toys' and 'fertility figurines' by declaring that "A clear indication that the human figurine was indeed a toy is when it is found in a child's grave".[1145] The first point to note is the relative infrequency with which these objects have been published in children's graves. As detailed in Chapter 9, human figurines represent 0.44% of all Early Dynastic to Middle Kingdom CIF grave goods identified by this study (Σ=21).[1146] In the particular case of GGRN 75, a wooden female figurine found in the intact pit burial of a 'female' child of unspecified age in the Middle Kingdom cemetery of Hawara in the Faiyum,[1147] Janssen and Janssen state that its moveable arms and lack of overt genital representation reinforce its playful purpose.[1148] However, Tooley's examination of this object in the Petrie Museum at University College,

[1137] Wileman (2005: 28); Crawford (2009: 62, 64).
[1138] Baxter (2005: 114).
[1139] Quirke (2005: 105); Kamp (2006: 120). For example, see the "toys or games" described by Petrie (1896: 35) in adults tombs at Naqada.
[1140] See Schlereth (1990); Derevenski (1994: 7-20).
[1141] See Tooley (1991); Quirke (1998); *cf.* Meskell (1999b: 172ff.; 2002a: 84).
[1142] Petrie (1893: 101); Griffith (1900-1901: 1); Randall-MacIver (1901: 52); Ayrton *et al.* (1904: 38, 54); David (1979: 12); Janssen (1996: 231).
[1143] Posener-Kriéger (1983: 346); Castel *et al.* (1984: 51); Jeffreys *et al.* (1986: 7); Aufrère (1990: 11); Janssen & Janssen (1990: 7, 46); Robins (1990: 234; 1993: 75); Grimal (1991: 282); Pinch (1994: 126ff.); David (2002: 174).
[1144] See GGRNs 75, 102, 111, 112, 1640,
[1145] Janssen & Janssen (1990: 46); Jannsen (1996: 231). Problematised in Robins (1994: 234). *Cf.* Bruyère (1937: 170, 179, 271) who also interprets clay figures found in child burials at Deir el-Medina as toys.
[1146] See §9.3.9.
[1147] DRN 49.
[1148] Petrie (1927: 59; 1937: 12); Janssen & Janssen (1990: 7, 46).

London,[1149] reveals that there is actually very little movement in the arms.[1150] Tooley further states that any arm movement reported in such figures should perhaps be considered an unintentional by-product of wood desiccation following burial.[1151] Alternatively, joint mobility may also reflect the object's construction and assemblage, rather than its interactivity. Finally, the lack of painted definition in the genital area is not enough to confirm the object's use as a toy. The overall nakedness of the figure could also be interpreted as a connotation of sexuality.

The fertility figurine genre may be argued to encompass various forms, including the Middle Kingdom 'paddle dolls' and other footless figures made of ivory, faience, stone and wood. Many of these figures feature singular or combined elements which confirm their ritual use, for example, strongly emphasized pubic areas, tattoo markings and the general dress of ritual dancers. In order to understand the purpose of these objects, one must first consider the environment in which they were found. Contexts include tombs, towns, mining sites and temples.[1152] The appearance of these figures in adults' tombs (of both sexes)[1153] challenges Janssen and Janssen's assumption regarding their identification as 'dolls'. Furthermore, their presence at town sites raises at least two possibilities: that their use-life was not restricted to funerary contexts, and/or that settlements were their manufacture location. In settlements, these objects are often found in a ritual context, identified by their association with other ritual objects such as 'soul houses' and offering trays. Scholars suggest that their major function in ritual is associated with reproductive fertility. Their presence in both settlement and cemetery contexts therefore implies that concerns with fertility permeated the consciousness of both the living and the dead.[1154]

In the absence of an established archaeology of children in Egyptology, the evidence remains too ambiguous to assert with any certainty that these items were made exclusively as toys, either by or for children.[1155] Indeed, one may follow Pettitt in his assessment that such objects may have been polysemous,[1156] that is, engaged in both ritual and recreational

[1149] UC 16148.
[1150] Tooley (1991: 103).
[1151] Tooley (1991: 103, fn. 36).
[1152] See Posener-Kriéger (1983: 346; 1984: 349; 1985: 297-298; 1986: 381); Jeffreys *et al.* (1986: 7).
[1153] Meskell (2002a: 84). For example: a female figurine in an adult male's tomb at Badari; Castillos (2000: 254).
[1154] Meskell (2001: 34; 2002a: 84). Such figures have also been interpreted as symbols of 'rebirth' in funerary contexts; Milde (1994: 17).
[1155] Seidlmayer (1998: 14) expresses a similar lack of certainty regarding the overall purpose of these objects *per se*.
[1156] Pettitt (2006: 301-302); *cf.* Baxter (2005: 114).

activities at certain points (or possibly simultaneously) during their use-lives. Indeed, the cultural biographies discussed for humans in §10.2.4, above, may also be applied to objects. The capacity for identity and functional transformation exists as much for objects as it does for those that create, use and re-create them. These issues will be further discussed in the context of children's coffins in §10.6.5, below.

### 10.5.2 'Toys' or Weapons?

The appearance of weapons in children's graves provides a further opportunity to contrast diverging ontological approaches to objects dependent on age associations. Weapons have been found in children's graves since the beginning of the Predynastic Period in Egypt,[1157] as well as in those of other cultures.[1158] In terms of the present study, weapons were identified in Chapter 9 on 24 occasions in published Early Dynastic to Middle Kingdom CIFBs (including arrowheads, maceheads, spearheads, axeheads, slingshots, harpoons, and spears).[1159] When uncovered in adult graves, weapons are generally interpreted as symbols of power, status, wealth, profession and often masculinity.[1160] When uncovered in children's graves, however, weapons are often apportioned a different ontological status. Here, it is often stated that weapons either indicate inherited status, wealth and profession,[1161] as it is believed that children were too young to have attained such attributes (or used such objects) independently.[1162] Alternatively, they may be interpreted as 'toys'.[1163] Similar sentiments are also applied to tools,[1164] which were observed amongst the present study's sample on 294 occasions.[1165] These included flints, scrapers, chisels, diggers, knives (including ripple-flaked), grinders, scoops, needles, borers, blades, bladelets, adzes, weights, discs and pebbles/stones.

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[1157] el-Mostagedda: boomerangs (graves 2706 [child], 210 [child]); flint arrow head (grave 11706 [child]); mace-head (grave 1864 [female and child]). el-Amra: bone harpoon (grave B106 [child]). Naga ed-Deir: flint fish tail knife (grave 7016 [child]); 2 ivory arrow heads (grave 7419 [child]. Matmar: 4 arrow butts (grave 3117 [child]). Diospolis Parva/Abadiya: 2 stone mace heads and a double-pointed mace head (grave B102 [4 males and 1 child]). el-Hemmamiya: limestone conical mace head (grave 2064 [child]). Badari: flint fish tail knife (grave 3802 [female and child]). Hierakonpolis: conical porphyry mace head, 2 arrow heads (grave 3, Loc.6 [2 males and 1 child]). el-Mahasna: diorite conical mace head, copper fish-tail knife (H85 [child]). Ciałowicz (1985).

[1158] Child burials with tools and weapons have been observed in Upper Palaeolithic Kostenki XV and Sungir (Russia): Roveland (2000: 34); Late Mesolithic Zvejnieki (South East Baltic): Janik (2000: 124); Middle Neolithic Cerny culture (France): Thomas *et al.* (2011: 782-783); Anglo-Saxon (England): Crawford (2000: 176).

[1159] See §9.3.15.

[1160] David (2002: 62); Grajetzki (2003: 38, 61).

[1161] Peebles & Kus (1977); Lillie (1997); Welinder (1998); Janik (2000: 125); Roveland (2000: 34).

[1162] Pader (1982: 57); Derevenski (2000: 6); Baxter (2005: 96-97).

[1163] Crawford (2009: 63).

[1164] Lillehammer (2010: 32).

[1165] See §9.3.4.

These interpretations exemplify the divergent approaches towards material culture in mortuary archaeology, whereby children's objects are relationally defined to those of adults. Such approaches may be argued to be hegemonic insofar as they subsume the category of 'child' to that of 'adult'. Despite the fact that there are no overt ontological differences between weapons and tools placed in adults' and children's graves, the former are invested with all social identity, power and agency, the latter with none.[1166] In alignment with the present study's advocacy of the specific ritual context of burial, this author follows Gowland's interpretation that weapons should be considered as representative of broader aspects of social identity.[1167] As discussed in §10.2.2, above, the function of the Egyptian burial ritual was to 'perform' a cultural funerary identity on behalf of the deceased which facilitated and assured their transition into the afterlife, regardless of their age. Weaponry and tools are only two material components of the manifold Egyptian representational economy that might be called upon by those orchestrating the burial to construct a funerary identity on behalf of the deceased. In response to the tendency to diminish the meaning of model weapons and tools under the 'miniaturisation' approach (and indeed, all model object categories), Ciałowicz is careful to note that the criterion of size should *not* be considered relevant, as model objects were conceptualised as complete signifiers of the full-sized objects they represented.[1168] As such, the present study argues that in the specific Egyptian ritual context of burial, size did *not* matter – both in terms of the occupants themselves and the weapons, tools or other objects with which they were interred.

## 10.6 Coffins

Garstang's statement that "no coffin was ever made specially for a child"[1169] provides an apposite starting point to consider how authorial bias has shaped perceptions of children's coffins in Egyptian archaeological narratives. The present study's finding of 748 CIF coffins problematises Garstang's pronouncement and indicates that this aspect of Egyptian mortuary culture warrants further study. As an initial engagement, the present study will illustrate how authorial bias has impacted our understandings of children's coffins from two perspectives. Firstly, we shall consider the phenomenon of pot burials, followed by a discussion of the role of gift traditions in the ritual context of burial. These examples serve to demonstrate the

[1166] Derevenski (2000: 6).
[1167] Gowland (2006: 151).
[1168] Ciałowicz (1985: 157); *contra* Stevenson (2009b: 178).
[1169] Garstang (1907a: 82); see §6.7.

capacity of authorial bias to distort our reconstructions of Egyptian mortuary behaviour specifically, and wider socio-economic and political processes in general.

### 10.6.1 Pot Burials

Despite their ubiquity in the archaeological record, pot burials are yet to receive comprehensive analyses in Egyptology.[1170] In their seminal treatment of Egyptian funerary containers, Ikram and Dodson do not consider pot burials as "proper coffins",[1171] rather as 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,[1172] who "made do" with this type of receptacle while they "aspired to elaborately decorated wooden coffins".[1173] Only a few Egyptologists acknowledge the extensive cross-cultural attestations of this mode of burial, and there appear to be discontinuities within the discourse regarding their geographical, chronological and demographic incidence. Some scholars restrict the use of pot burials to certain regions and timeframes, while most agree that apart from direct interment into the earth, pot burials were the most common form of interment for CIFs in ancient Egypt.[1174] The prior domestic use of the burial vessel is often noted,[1175] with respective interpretations invariably attributing this as an act of rubbish disposal,[1176] 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 in/under any ceramic vessel/s. 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. To date, the earliest incidences of pot burial are attributed to the Neolithic

[1170] Hendrickx (1998: 115ff.) performs a preliminary analysis of "des inhumations en pots et en cerceuils de terre en Egypte, pendant la période pré- et protodynastique". Stevenson (2009b: 173-174) discusses the Predynastic pot burials at el-Gerzeh on the West Bank of Middle Egypt. *Cf.* Masali & Chiarelli (1972: 166); van Wetering & Tassie (2003: 124).

[1171] Ikram & Dodson (1998: 194-195).

[1172] Randall MacIver (1901: 53); Randall-MacIver & Mace (1902: 25); Garstang (1904: 51); Petrie (1905: 38); Brunton (1927a: 21; 1937: 104); Brunton & Engelbach (1927: 7); Myers & Fairman (1931:229); Donadoni Roveri (1969: 37, 38); Hendrickx (1998: 105, 126, 127, 128); Ikram & Dodson (1998: 223).

[1173] Ikram & Dodson (1998: 223); *cf.* Hendrickx (1998: 127); Zillhardt (2009: 42).

[1174] Brunton & Engelbach (1927: 7); Donadoni Roveri (1969: 35, 39); Masali & Chiarelli (1969: 166); Hendrickx (1998: 128).

[1175] Loat & Murray (1905: 2); Brunton (1927a: 21; 1948: 27); Brunton & Engelbach (1927a: 7); Donadoni Roveri (1969: 31, 36, 39); Kroeper (1994: 31, 32); (Robins 1994-1995: 26); Hendrickx (1998: 105, 127); Bacvarov (2008b: 64).

[1176] Brunton (1927a: 21, 22; 1948: 27).

Northern Levant in the 6th Millennium BP.[1177] 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.[1178] Pot burials may be traced from the Northern Levant across to the central Balkans, South-East Europe and Anatolia; down to the Southern Levant, Mesopotamia, Syria, Bahrain and Africa; and North to the Caucasus.[1179] Pot burials of CIFs have also been observed in South America,[1180] and in Nagaoka, Japan, during the Yayoi Period.[1181]

### 10.6.2 Incidence

Comparatively, Egypt was quite late to introduce this mode of interment into its funerary repertoire. Midant-Reynes cites the first incidences of pot burial as occurring during the Gerzean/Naqada II Period (*ca.* 3,500 BP),[1182] some 2,500 years after their appearance in the Near East. Midant-Reynes 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,[1183] thereby suggesting that the objective for these practices was the same: to contain the body and separate and protect it from the surrounding earth into which it was interred.[1184] While there is general agreement regarding the broad geographical attestation of this mode of burial in ancient Egypt (the present study has identified pot burials in 46 sites; **Table 10.1**), scholars are divided regarding its chronological continuity. Some limit the practice to the Predynastic to Old Kingdom periods,[1185] while others correctly identify its persistence through the entire pharaonic era and beyond.[1186] The practice was still observed among Coptic communities at the beginning of the 20th Century,[1187] and is even reported to endure in Egyptian rural

[1177] Bacvarov (2008b: 61); *cf.* Wileman (2005: 74).
[1178] Petrie (1896: 4, 9); Bacvarov (2008b: 65-66).
[1179] Bacvarov (2008b: 61, 62, fig.7.1, 67, fig.7.2, 68, fig.7.3); *cf.* Dzierżykray-Rogalski (1973: 242); Weinstein (1973: 400); Shepherd (2007: 93); Littleton (2011: 364).
[1180] *ca.* 100 BC; DeMarrais (2004: 15, 19).
[1181] 300BC–100BC; Mizoguchi (2000: 143, 145).
[1182] Midant-Reynes (2000: 187); *cf.* Castillos (1982a: 175).
[1183] Midant-Reynes (2000: 187); Hendrickx (1998: 127) states that wooden coffins were introduced at the end of Naqada I.
[1184] Minault-Gout (1992: 52); Rowland (2003: 66); Patch (2007: 248); Spieser (2008: 533). Donadoni Roveri (1969: 19-20, 39) argues that all forms of coffins 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.
[1185] Garstang (1904: 53); Peet & Loat (1913: 20-22); Brunton (1927a: 15); Zillhardt (2009: 89, 92).
[1186] Weinstein (1973: 413).
[1187] Blackman (1968: 101).

communities today.[1188] In agreement with Garstang, the present study argues that pot burials actually represent one of the most "unvarying and persevering" modes of burial in Egypt, with their utilisation before, during and after the pharaonic period spinning "but a single thread in the bond of continuity" which is "yet unbroken and without a flaw."[1189]

Despite the widely-held belief that pot burials were mainly used for CIF interments,[1190] many sites feature contemporaneous pot burials of both children and adults (**Table 10.1**).[1191] While Spieser agrees regarding the longevity of pot burial, she stipulates that it was only utilised for infants after the New Kingdom.[1192] However, published excavation data for the sites of Kom el-Hisn,[1193] el-Gerzeh,[1194] Tell el-Fara'in (Buto),[1195] and San el-Hagar (Tanis)[1196] refute this proposition, with each site variably featuring adult pot burials through the Third Intermediate and Greco-Roman Periods. In fact, it is worth noting that at some sites, such as Reqaqna,[1197] Kawamil,[1198] Nag el-Madamud (Roda),[1199] Beni Hasan[1200] and Gebel el-Silsila,[1201] only adult pot burials have been published thus far.[1202]

### 10.6.3 Interpretations

Several scholars have argued that the repetition of this form of burial over large geographical and temporal frames indicates spheres of cultural interaction with a common/similar belief system.[1203] In the European, African and Near Eastern contexts there is unanimous subscription to the proposal that the pot is analogous to the uterus, implying that a return to the womb in death will promote metaphorical rebirth in the afterlife.[1204] Such interpretations

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[1188] Zillhardt (2009: 70); following El-Shohoumi (2004: 56, 157). Pot burials also persist in Zimbabwe: Aschwanden (1982: 285); Barley (1994: 158, fn. 74); and the Sudan: Geus (1984); and were observed until the end of the 19th Century in Southern Europe; Mishina (2008: 141, 143).
[1189] Garstang (1904: 56); *cf.* Weinstein (1973: 437).
[1190] Zillhardt (2009: 42, 92).
[1191] Contemporaneous pot burials of adults and children are also observed in Lebanon in Chalcolithic Byblos: Artin (2008: 80ff.) and Middle Bronze Age Sidon: Dr. Claude Doumet-Serhal, British Museum, *pers. comm.*.
[1192] Spieser (2008: 502); *cf.* Brunton (1927a: 21); Donadoni Roveri (1969: 37).
[1193] Hamada & Farid (1950); Orel (2000: 45).
[1194] Petrie *et al.* (1912: 5).
[1195] Petrie (1905: 38).
[1196] Weinstein (1973: 406ff.).
[1197] Garstang (1902: 65-66; 1904: 55); Peet (1914b: 38); Engelbach (1923: pl. lvii).
[1198] de Morgan (1897); Forrer (1901: 50); Garstang (1904: 54); Hendrickx (1998: 119).
[1199] Hendrickx (1998: 119, 123).
[1200] Garstang (1904: 56; 1907a: 27-28).
[1201] de Morgan (1897: 137ff.).
[1202] Here, Egyptian data diverges from that of other regions: to date, there have been no observations of adult pot burials in South-Eastern Europe.
[1203] Bar-Yosef & Belfer-Cohen (1989); Cauvin (1989); Orrelle (2008: 75).
[1204] Aschwanden (1982: 285); Geus (1984); Evers & Huffman (1988: 739); Barley (1994: 158, fn. 74); Ilan (1995: 135); Kulemann-Ossen & Novák (2000: 121-128); Mishina (2008: 141, 143); Orrelle (2008: 71,

receive theoretical impetus from the writing of Hertz,[1205] Bloch and Parry,[1206] and Conkey[1207] who argue that womb metaphors link with sentimental burial associations, or rebirth following death.[1208] The present study suggests that it is possible that this symbolism may also have been applicable in the Egyptian context.[1209] An early attestation of the association between pots and the gravid uterus has been identified in the 6th Dynasty tomb chapel of Watetkhethor at Saqqara, where dancers appear to be engaged in a ritual performance aiming to remove impediments to birth. They say:

> "But see, the secret of birth! Oh pull! See the pot, remove what is in it! See, the secret of the *ḫnrt*, Oh Four! Come! Pull! It is today! Hurry! Hurry! See, .... it is the abomination of birth."[1210]

The use of the word *ḳḥt*, 'pot/vessel',[1211] in this situation indicates that it was a well-known metaphor, easily understood in the audience's context.[1212] Moreover, Assmann describes placement in the coffin as "*regressus ad uterum*",[1213] in alignment with Egyptian beliefs concerning posthumous transitions to the afterlife through the body of the sky-goddess.

It is also possible that further layers of symbolism may have been applicable in this context, particularly considering literal and metaphorical understandings of the egg. The ancient Egyptians had a profound, biologically accurate understanding that the origins of human life sprung forth from the egg after being fertilised by sperm.[1214] Here, the emphasis is placed on the individual *within* the egg, into whom Amun breathes the breath of life.[1215]

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76); Powell (2009:120-122); Budin (2011). Willems (1988) and Meskell (1999b: 121; 2001: 32) have also noted associations between coffins and afterlife 'rebirth' beliefs.

1205 Hertz (1960: 81).

1206 Bloch & Parry (1982).

1207 Conkey (1997).

1208 See Tarlow (1999: 38ff.) for further discussion of the role of metaphor in the construction, reproduction and transformation of meaning in archaeological funerary contexts.

1209 *Cf.* Donadoni Roveri (1969: 39); Zillhardt (2009: 50-51).

1210 North Wall, Room B3, Third register: Roth, A. (1992: 141); Kanawati (2008: 26, pl. 60).

1211 *WB* I, 1339; Hannig & Vomberg (2006: 934); also attested in the Middle Kingdom: *WB* V: 2528.

1212 When an anatomical approach was appropriate, for example, in the Kahun medical papyri (UC 32057, see Collier & Quirke (2004: 58ff.), the designated terminology for womb/uterus was *idt*: usually expressed by the ideogram for a well of water (Gardiner 1994: 492, sign-list N41), often using the determinative of the bicornuate uterus of a cow (Gardiner 1994: 466, sign-list F45).

1213 Assmann (1972: 115ff.; 1989: 139, 140). While tempting to forge a parallel between Khnum's act of creating humans on the potter's wheel (Frankfort (1975: 20); Hart (1986: 110-112); Dorman (1999: 83); Assmann (2001: 117) and the creative power of the uterus, such analogies cannot be supported at this stage. There is no continuous association of this symbolism in Egyptian religion, and the potter-manifestation of Khnum was formulated after the 4th -5th Dynasty introduction of the potter's wheel (Bourriau *et al.* (2000: 125-126), while pot burials had been occurring in Egypt since the Predynastic Period.

1214 Stoof (1978: 115); *cf.* Meskell (2002a: 68).

1215 *pCairo*, no. 87, l.15; Assmann (2001: 205).

The word *swḥt*, 'egg', was used to define the ova of birds and fish and to describe the ovoid form,[1216] but from as early as the Old Kingdom it was also used to designate the place where human life gestates in the female body.[1217] Moreover, Late Egyptian attestations of *swḥt* using the egg determinative are designations for the term "inner coffin".[1218] Thus, it is plausible that such textual references which analogise between coffins and eggs – as places of metaphorical/literal gestation and (re)birth – may demonstrate a well-known connection that had been established for some time, only appearing in textual form at a later date.[1219] It is also possible that earlier textual associations may have been made but are no longer extant. In the manifold cases of pot burials of adults and children in the Egyptian archaeological record, it is hard to dismiss the visual similarities between pots laden with human bodies in the so-called "foetal position"[1220] and embryo-bearing eggs.

Arguments which endorse interpretations of the pot as a womb may be equally applied to eggs, including the ability to serve as containers,[1221] to incubate,[1222] to be modified by temperature,[1223] and to be non-porous and watertight.[1224] As identified among the Egyptian examples,[1225] all regions featuring this mode of burial are noted to have intentionally damaged the vessel mouth and/or pierced the base. Apart from the pragmatic function of admitting the body to the vessel in the context of burial, such acts of breakage have been interpreted as symbolic means to facilitate ease of rebirth in the afterlife,[1226] an argument which could equally apply to eggs and wombs. In any case, it is clear that further study is required to untangle the symbolic meaning of this mode of burial which has clear associations with gestation and (re)birth. As highlighted by Conkey,[1227] it is possible that these burials may have different levels of meaning, nuanced according to the

[1216] *WB* IV, 73, I-III.
[1217] *WB* IV, 73, IV; *cf.* Meskell (2002a: 68). In the Middle Kingdom *pBerlin* 3024, *The Dispute Between a Man and His Ba*, the egg is used as a metaphor for young life, where the 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).
[1218] *WB* IV, 74.
[1219] I am grateful to A/Prof. Boyo Ockinga, Macquarie University, for bringing this possibility to my attention.
[1220] Scott (1999: 105).
[1221] Naumov (2007: 262ff.); Budin (2011).
[1222] Naumov (2007: 262ff.).
[1223] Naumov (2007: 262ff.).
[1224] Donadoni Roveri (1969: 32, 36); Boddy (1982); Orrelle (2008: 73).
[1225] Donadoni Roveri (1969: 34); Kroeper (1994: 31-32).
[1226] Bacvarov (2008b: 66); Orrelle (2008: 72); *cf.* Loat (1905: 2). For the Thonga of South Africa, a notch on the rim of a vessel used to convey food indicates to a mother that her son has died during the process of initiation; Barley (1994: 107).
[1227] Conkey (1997).

multiscalar components of their particular cultural, temporal and geographical contexts.[1228] In fact, such multiplicities of meaning may be described as characteristic of the "elusive entity"[1229] of Egyptian religion.

### 10.6.4 (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/community members in pots, as it is clear that they had many options at their disposal, including wrapping in linen, animal skins and/or reed matting; or placement in receptacles constructed from basketry, mud, ceramics, wood or stone. Many also appear to have been buried without any form of funerary container, their bodies being placed directly into the sand/earth. What is apparent here is that the final mode of interment was a product of choice.[1230]

As aforementioned, several scholars have stated that apart from direct interment in the sand/earth, pot burials were by far the most common mode of interment for deceased CIFs in ancient Egypt. However, results of the present study's archaeological survey question this hypothesis. As detailed in Chapter 6, of the 1,809 CIFBs identified by this study, a minimum of 746 individuals were reportedly buried within a funerary container of some description (see **Figure 6.2**).[1231] Of these, 338 were wooden coffins, followed by 329 pot burials (see **Figure 6.23**).[1232] The prevalence of wooden coffins over ceramic vessels for CIFBs is noteworthy, considering the high cost of wood as a construction material during these periods. At least for the periods canvassed by this study, it is clear that our understanding of the mortuary treatment of CIFs may require some recalibrations.

Precisely what motivated the choice of pots as funerary containers is what divides opinions on this subject. As aforementioned, most scholars who have commented on the subject believe 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 such destitution.[1233] In light of the preceding evidence regarding the preponderance of more-expensive wooden coffins among the dataset, the present study is not favourably disposed to

[1228] Orrelle (2008: 74).
[1229] Frankfort (1975: 21); *cf.* Assmann (1989: 137); Baines (1991: 123).
[1230] Kroeper (1994: 31).
[1231] See §6.1.
[1232] See §6.7.
[1233] Due to their supposed poverty, Castillos (1982a: 95) excludes pot burials from his statistical analyses of the Protodynastic tombs at Qau, Badari and Hemmamiya.

this interpretation and tends to agree with Garstang, who states that this mode of burial is "no proof of poverty",[1234] citing examples of pot burials from Elkab and Reqaqna which are "more elaborately furnished than those of other kinds which are more plentiful".[1235] To this evidence one may add data from Abydos,[1236] Adaima,[1237] Armant,[1238] Badari,[1239] Balat,[1240] Deir el-Ballas,[1241] el-Ghurab,[1242] Kom el-Hisn,[1243] el-Kubaniya,[1244] Matmar,[1245] el-Mostagedda,[1246] Naga ed-Deir,[1247] Qau el-Kebir,[1248] Riqqeh,[1249] and Sebaiya (East),[1250] all of which feature CIF pot burials furnished with an array of grave goods.[1251]

Other examples further refute scholars' appropriations of poverty to this mode of burial. Of particular note is the pot burial of a perinate, DRN 881, interred in a contemporary context alongside the body of Governor Ima-Pepi in the burial chamber of his elaborate late Old Kingdom/early First Intermediate Period mastaba tomb at Balat in Dakhla Oasis.[1252] Accompanying this baby was a quantity of beads, 7 of which were covered in gold foil.[1253] 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. Whatever their reason/s for choosing to inter the deceased perinate in a pot, it is difficult to argue that their choice was motivated by poverty. Additionally, one may cite further incidences of pot burials within Old Kingdom mastaba tombs at Abydos[1254] and Naga ed-Deir,[1255] each of which were accompanied by grave goods.[1256] Moreover, the discovery of a neonate buried in an imported ceramic vessel from Palestine at the Early Dynastic

[1234] Garstang (1904: 56); *cf.* Garstang (1907a: 27); Peet & Loat (1913: 20-22); also Orelle (2008: 76), who sees pots burials as possible indicators for high-status burial.
[1235] Garstang (1904: 51, *cf.* 56).
[1236] See DRNs 812-814.
[1237] See DRNs 708-709, 711, 717-718, 754-755, 759-760, 762.
[1238] See DRNs 612, 617.
[1239] See DRN 1025.
[1240] See DRN 881.
[1241] See DRN 688.
[1242] See DRNs 358-359.
[1243] See DRNs 7-33.
[1244] See DRN 538.
[1245] See DRNs 167, 169, 239.
[1246] See DRNs 420-421, 423, 426.
[1247] See DRN 673.
[1248] See DRNs 923-924, 931, 935-939, 941, 972, 977-979, 982, 984, 991.
[1249] See DRN 393.
[1250] See DRN 554.
[1251] *Contra* Donadoni Roveri (1969: 37).
[1252] See DRN 881; Minault-Gout (1992: 43).
[1253] See GRN 1632.
[1254] See DRNs 812 [associated GGRN 1531]; 813 [GGRN 1532]; 814 [GGRNs 1535-1537].
[1255] See DRN 673 [GGRN 1278].
[1256] Donadoni Roveri (1969: 39) also cites examples of pot burials from Nuierat that were placed in rock-cut tombs.

cemetery of Minshat Abu Omar in the Eastern Nile Delta casts further doubt on the notion that pot burials were the exclusive preserve of the poor.[1257]

### 10.6.5 (Re)Use

Many cite the reuse of domestic ceramic vessels as funerary containers as further signifiers of poverty,[1258] or of the diminished value of their occupants, particularly children, infants and foetuses.[1259] However, such interpretations do not acknowledge the 'cultural biographies' of objects – a well-recognised approach used in the archaeologies of other disciplines – which provides capacity for transitions in the function and/or symbolism of objects across the span of their use-lives.[1260] Theories of cultural biography stem from Appadurai and Kopytoff's economic models which allow for significant changes in the way an object is used and/or conceptualised by humans within specific cultural contexts.[1261] These changes both modify and are modified by humans, as such transformations form inextricable links between humans and the components of their material world.[1262] Such an approach endorses the role of literal and metaphorical 'recycling' of objects within cultures, in a manner which does not necessitate 'devaluing' as the object moves along its use-life, shifting and changing in function and/or meaning until its eventual accidental or deliberate entry into the archaeological record.[1263]

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.[1264] Firstly, ancient societies were not 'throw-away' societies.[1265] If an object was no longer viable for its initial function, it was not immediately disposed of, rather repaired, functionally or symbolically transformed, stored for future reuse, or broken down to be integrated into another

[1257] See DRN 1308. Kroeper (1994: 28); Kroeper & Wildung (2000: 80).
[1258] Zillhardt (2009: 52). Reused domestic vessels have also been noted in cross-cultural contexts; for example, Turkey: Hopwood (2008: 117).
[1259] Menghin & Amer (1936: 25). Szpakowska (2008: 33) apportions similar attitudes to the boxes used to bury infants at Kahun, stating that they had "previously been used for another purpose rather than specially built coffins".
[1260] Tringham (1994; 1995: 98); Gosden & Marshall (1999: 169); Strasser (1999: 22ff.); Crawford (2007: 89; 2009: 57-58); Stevenson (2009a: 190).
[1261] Appadurai (1986: 3); Kopytoff (1986: 66-67, 68). *Cf.* Meskell (2004: esp. 55ff.).
[1262] Gosden & Marshall (1999: 169).
[1263] Kamp (1991: 25-27); Giddy & Jeffreys (1993: 19); Gosden & Marshall (1999: 170).
[1264] Shanks & Tilley (1987: 98).
[1265] Rathje & Murphy (2001: 191-192); Schwartz (2006: 151).

object.[1266] Indeed, the very idea of 'rubbish' is culturally-situated[1267] – to view recycled objects as a 'zero-signifiers'[1268] is anachronistic and ethnocentric – especially considering that the practice of recycling appears to be a "fundamental characteristic of the human species".[1269] As long as objects continue to participate in a cultural system they remain constituted within that system.[1270] *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'.[1271]

Secondly, the durability and impermeability of pots made them excellent coffins. Scholars have noted that bodies buried in pots are often the best preserved amongst entire cemeteries;[1272] 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'[1273] between the dead and those burying them, whereby the accompaniment of familiar objects with the deceased may have provided means to assuage the grief of family/community members by facilitating enduring material and corporeal connections.[1274] Fourthly, as aforementioned, 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.

Regardless of the myriad of potential motivations (either in isolation or combination)[1275] 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"[1276] that in themselves would re-cycle the deceased[1277] into an *ꜣḫ*: a transfigured and effective spirit in the afterlife.[1278]

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[1266] Strasser (1999: 22ff.); Rathje & Murphy (2001: 33, 191-192). For ethnographic analogies, see Hayden & Cannon (1983: 131-139); Horne (1983); Kamp (2000: 91, 92); Schwartz (2006: 151).
[1267] Staski & Sutro (1991: 3); Strasser (1999: 111ff.); Rathje & Murphy (2001: 52).
[1268] Lucas (2002: 16).
[1269] Rathje & Murphy (2001: 191-192).
[1270] Lucas (2002: 16).
[1271] For ethnographic analogies, see Siegel & Roe (1986: 99, 100); Chang (1988: 152, 155).
[1272] Petrie (1905: 38); Donadoni Roveri (1969: 38); Dzierżykray-Rogalski (1973: 242); Kroeper (1994: 31).
[1273] Klass *et al.* (1996); Walter (1996); Klass & Walters (2001); *cf.* Kroeper (1994: 31); Renfrew (2004: 29-30). Similarly, Goedicke (1971: 1-7) argues that stones reused from older temples complexes may have been selected for their "numinous" capabilities, as the symbolic association of their original functional context carried forth into the new structure.
[1274] Stevenson (2009a: 190).
[1275] Gosden & Marshall (1999: 172).
[1276] Willems (1988: 239); *cf.* Bourriau (1991: 5).
[1277] Willems (1988; 1996); Hornung (1992: 169); (Meskell 1999b: 121; 2001: 32).
[1278] Meskell (2002a: 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.[1279] Theories which 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 Egyptology. In the particular case of pot burials, it calls for a reversal of understanding: from refuse to rebirth. Despite the reticence of some scholars to acknowledge pot burials as 'coffins', the present study calls for their legitimation as authentic, culturally-situated, enduring funerary containers and as such, their rightful integration into Egyptian coffin typologies.

### 10.6.6 Gift Traditions

While studies of reuse and recycling as normative practice are emerging in Egyptology,[1280] it appears that aspersions are only cast towards the behaviour when the instigators or recipients are children or the 'poor'.[1281] Similar ageist and elitist authorial biases may be observed when considering incidences of children buried in so-called 'adult' coffins. At best, such burials have been described by excavators as "erroneous",[1282] causing them to speculate that those orchestrating the burial made "mistakes"[1283] by placing children in coffins that were "intended for [someone else]".[1284] At worst, some have interpreted such coffins as being "usurped"[1285] to accommodate the child's burial, seemingly endorsing Garstang's proclamation that "no coffin was ever made specially for a child".[1286] As

[1279] Frankfort (1975: 21).

[1280] For the reuse of coffins and sarcophagi, see Dodson (1988; 1993); Baines & Lacovara (2002: 18); Manley & Dodson (2010: 41). For the reuse of tombs and construction materials, see Goedicke (1971: 1-7); Richards (1992: 56, 64); Meskell (2001: 35; 2002a: 206); Baines & Lacovara (2002: 6, 17-20); Grajetzki (2003: 103); Jeffreys (2003: 203); El-Khadragy (2006: 89-90); Ockinga (2007). For the reuse of domestic space, see Hope *et al.* (2010: 26, 29, 32, 38). For the reuse of objects, see Stevenson (2009a: 189-191). For the reuse of royal sculpture, see Tait (2003: 11-12); Wildung (2003: 64-65). For the recirculation of objects stolen from graves, see Griswold (1992: 222); Savage (1997: 253-254).

[1281] Apart from pots, scholars note that several of the wooden 'coffins' used for juvenile burials also had prior use in domestic contexts; see Petrie (1890: 24); Brunton (1927a: 27); Petrie (2000: Kafr Tarkhan Sheet 17, Grave 509D); Meskell (2002a: 82); Grajetzki (2004a: 47). Within the present study's dataset, see DRNs 50, 52, 236, 237, 357, 372, 461, 495, 513, 945, 1386 and 1387 for examples of wooden 'boxes' used as funerary containers for CIFBs. Spieser (2008: 502) also notes the reuse of domestic baskets and reed containers as 'coffins'.

[1282] See DRN 537; Kanawati (1993a: 86).

[1283] Kanawati (1993a: 86).

[1284] Picton & Pridden (2008: 123); see DRN 1427. *Cf.* Grajetzki (2004b: 40), who states that the coffin featured in DRN 60, the multiple burial of a child of unknown age and an adult female in the Middle Kingdom cemetery of Harageh on the West Bank of Middle Egypt, was "much too big for the child", so "it seems plausible that it was reused". Grajetzki does not identify this interment as a multiple burial.

[1285] Tooley (1991: 106).

[1286] Garstang (1907a: 183).

described in Chapter 9 of this thesis, within these configurations children are seen as cultural stowaways or parasites,[1287] not as individuals whose social position, value and agency would entitle them to 'own' such 'adult' possessions.

There are also manifold examples of adult bodies in the 'wrong coffins'.[1288] While there certainly may have been isolated incidences of misplacement, the practice is too widespread, and the implications too dire to dismiss it merely as error. Such interpretations do not appear to consider the concept of 'the gift', a subject of extensive anthropological, ethnographic and archaeological research since Mauss' seminal publication on the nature and motives for exchange in archaic societies.[1289] The specific context of CIFBs provides an apposite forum to consider gift traditions, as many individuals within this demographic segment (especially those at the younger end of the spectrum) would not have had the means to generate an independent income and would not have been in the position to fund or facilitate their own burials. Children may also have been recipients of heirlooms, another form of cultural gift.[1290]

It is appropriate to consider the role of gift traditions within this thesis' broader proposition that the purpose of funerary rituals was to transmit and transfer cultural knowledge, memory and collective identity within familial/community networks, while reconfiguring and reinforcing specific intersubjective relationships during the processes of individual and collective grieving for the deceased's physical removal from broader social networks. The essence of gift giving aligns with the purpose of the funerary ritual. It is actively concerned with the production of sociability and the maintenance of connections between giver/s and receiver/s, and establishes mutual identity configurations within social networks.[1291] Gosden and Marshall contrast the capacity of gifts to create and maintain bonds between givers and receivers in traditional societies, as opposed to the relative economic and social alienability of commodities in Western society.[1292] In this way, a gifted object, such as a coffin, can accumulate layers of meaning within the ritual context of burial. Not only does it facilitate the deceased's transition into an effective spirit, it is also imbued with social, economic and political agency and significance as it creates continuing bonds between the giver and the deceased which last beyond the grave. It further cements ties between the

[1287] See §9.1.1.
[1288] For example, see Andrews (1998: 55, fig.50).
[1289] Mauss (1990); *cf.* Stevenson (2009a: 181).
[1290] For discussion of heirlooms in Egypt, see Jeffreys (2003).
[1291] Mauss (1990: 5, 20); Walter (2007: 124); Stevenson (2009a: 181).
[1292] Gosden & Marshall (1999); *cf.* Appadurai (1986: 11-12); Wengrow (2006: 165, 187); Stevenson (2009b: 160-161).

giver and the deceased's family members, who are the effective cultural recipients of the gift. Even if a coffin was originally created for another individual, it is plausible to suggest that they may have been offered as gifts to bereaved family members. Especially in the context of the sudden death of a beloved child, what greater gift could one's friends or associates offer than their own coffin – the very means of transition to the afterlife.

Parker Pearson's[1293] suggestion that mourners of high office or wealth may have bestowed gifts in funerary contexts is met with inestimable evidence in Egyptian archaeology. *Ḥtp-di-nsw* , "an offering which the king gives", is perhaps the most widely-attested inscription in funerary contexts[1294] – frequently on coffins – at least two of which feature within this dataset.[1295] The location of the king as a literal or metaphorical benefactor in this mode of gift provision suggests that he, too, was imbricated in the purpose of the burial ritual:[1296] the transmission and transference of cultural knowledge, memory and collective identity, and the reconfiguration and reinforcement of relationships during the process of grief. Indeed, as the intermediary between humans and the gods, the key role of the pharaoh was to reinstate and maintain order – *ma'at* – when any form of disorder, including death, prevailed upon his subjects.[1297] Further to this, in alignment with arguments offered in Chapter 8, it is plausible that individuals from all socio-economic strata[1298] may have acted as benefactors in accordance with the social, political and religious obligations of the redistributive economy.[1299] Especially in the funerary context, the provision of food, clothing, burial, a boat and a landing place to those of lesser means were key elements in Egyptian morality and essential to the performance of *ma'at*.[1300] Considering the present study's finding of ontological equity between children and adults during the timeframes canvassed by this research, there seems little reason to doubt that children were also imbricated in these benefaction networks.

[1293] Parker Pearson (2003: 84, 90); *cf.* Griswold (1992: 222).
[1294] Strudwick (2005: 31).
[1295] See DRN 49, 537. Further incidences may include DRNs 42, 1397 and 1427, however the text is either not explicitly reported, or it is too degraded to decipher.
[1296] Baines (1991: 128-129); Strudwick (2005: 31).
[1297] Trigger (1979: 44); Baines (1991: 124, 128).
[1298] Griswold (1992: 222).
[1299] §8.5.2.2. *Cf.* Mauss (1990: 18).
[1300] Lichtheim (1988: 6-7); Baines (1991: 140); Strudwick (2005: 43, 45). For example, see the Old Kingdom inscriptions of Nefer-Seshem-Re called Sheshi and Harkhuf: Lichtheim (1975: 17, 23), and Qar: Simpson (2003: 413); the Middle Kingdom inscription of the butler Merer: Lichtheim (1975: 87)

## 10.7 Differential Burial Practices

As outlined in the literature review of Chapter 2, one of the most enduring assumptions regarding Egyptian CIFBs is that they are generally absent from cemeteries. This hypothesis precipitates from authors' assumptions that children were not considered embodied members of the community and were therefore subject to differential burial practices, namely interment in settlements as opposed to communal cemeteries. The present study now seeks to investigate whether such "differential modes of disposal"[1301] should be perceived as cultural exclusion, or whether alternative interpretative frameworks may be proffered for this facet of Egyptian mortuary behaviour. To explore these issues, data derived from the archaeological survey may be framed within the broader context of diachronic Egyptian mortuary practices, and tempered via perspectives gleaned from ethnographic evidence across temporal and geographical contexts. Further to this, the present study questions the extent to which stratigraphic evidence has been (mis)used to create apocryphal accounts of settlement burial phenomena and construct polarised notions of the Egyptian mortuary landscape. By investigating the aetiology of this enigmatic aspect of mortuary behaviour, the present study seeks to determine the extent to which authorial biases towards settlement burial may have contributed to current (mis)conceptions of CIFs as *personae non gratae* in ancient Egypt.

### 10.7.1 Settlement Burials

For the purposes of this study, an authentic 'settlement burial' is considered a primary inhumation of a deceased individual within an occupation layer of a domestic locus. Settlement burials have been observed amongst the archaeological record of various cultures across Europe and the Near East since the Palaeolithic era.[1302] In an attempt to explain this phenomenon, Binford states in his cross-cultural survey that age commonly determines grave location.[1303] Specifically, he reports that in many traditional societies, children are frequently buried outside communities' public life-spaces, either under the house in private familial space, or beyond settlement boundaries.[1304] In contrast, he states that adults tend to be buried within the realm of the public life-space, such as the communal cemetery. To explain this pattern, Binford suggests that in these societies a

[1301] Richards (2005: 66).
[1302] See § 2.3, fn. 112. Following El-Shohoumi (2004: 56, 157), Zillhardt (2009: 70) notes that settlement burial is still practised in Egypt today.
[1303] Binford (1971: 21-22); *cf.* Alekshin (1983: 140).
[1304] For example, the *cillini* of Ireland: separate burial grounds for unbaptised infants and children utilised from the Medieval period through to the 21st Century; Finlay (2000:408-409).

child has relatively few relationships outside of the immediate family. Consequently, a child's death does not affect the larger society or require its ritual involvement. By contrast, the death of an adult, who through life has accrued social relationships, rights and duties, requires wider community involvement, symbolised by their burial within the public life-space. Carr goes beyond these claims to suggest that these kinds of differential burials may even represent a difference in beliefs regarding the nature of the juvenile deceased's afterlife.[1305]

In agreement with Binford's and Carr's theories, Richards,[1306] Baines and Lacovara[1307] and Strouhal[1308] propose that CIFs interred in Egyptian settlement contexts are deliberately excluded from burial in communal cemeteries because they have not yet attained 'personhood'. The literature review of Chapter 2 suggested that Petrie's authoritative and derisive opinion towards infant settlement burials as evidence of foreign influence may have instigated these now-prevailing scholarly attitudes towards this facet of mortuary behaviour.[1309] This may have been fuelled by further assumptions that traditional societies with high levels of child and infant mortality might be expected to display a disassociated attitude towards children due to the improbability of their survival, with the small amount of time before their death not allowing them to become attached to their offspring.[1310] As a result, settlement burials are thought of as clandestine, perfunctory means to dispose of unviable progeny, or as foundation deposits.[1311] To date, however, there has been little research in Egyptology to explore the anthropological, philosophical or religious dimensions of this practice, with Kemp stating that "there seems to be no need to find some special religious theory to explain it".[1312]

### 10.7.2 Incidence

As detailed in §10.1.1, above, the present study's archaeological survey found that the clear majority of published CIFBs from the Early Dynastic to Middle Kingdom Periods pertain to communal cemetery contexts, problematising theories of spatial exclusion and indicating that settlement burial was the exception, rather than the rule. Moreover, the great

[1305] Carr (1995: 156, 184, 188-194).
[1306] Richards (2005).
[1307] Baines & Lacovara (2002).
[1308] Strouhal (1992).
[1309] See §2.3.
[1310] *cf.* Hertz (1960: 76); Heer (1968: 454).
[1311] Crawford (2008: 201).
[1312] Kemp (1968: 28).

similarity between CIF and adult mortuary culture suggests that there was ontological equity between these groups, refuting the aforementioned hypotheses of cultural ostracism and disembodiment, and determining that CIFs were indeed fully integrated members of their communities with equal cultural capacities to adults.

Notwithstanding these outcomes, the fact remains that some of the juveniles who died during the Early Dynastic to Middle Kingdom Periods do appear to have been treated 'differently'; but *how* differently? The archaeological survey identified 54 (3.00% TBs) incidences of juvenile settlement burial in 11 sites (4.60% total sites) during the timeframe canvassed by this research. While the under-representation of settlement archaeology is rightfully noted in Egyptology,[1313] the present study is disinclined to accept that this factor profoundly affects our understanding of the settlement burial phenomenon. As noted in Chapter 3, 28 settlement sites examined by the archaeological survey bore no published evidence of burials whatsoever,[1314] implying that intra-mural interment may not have been comprehensively practised during Early Dynastic to Middle Kingdom eras. *Ceteris paribus*, the sample obtained by the present study would thus appear to be representative of this aspect of Egyptian mortuary behaviour during these cultural phases. As detailed in Chapter 3, the majority of published settlement burials examined by this study were attributed to the Middle Kingdom Period, followed by the Old Kingdom, First Intermediate and Early Dynastic Periods.[1315] Infants were the most frequently observed age group in such contexts, followed by Foetuses and Young Children. No Older Children were identified amongst published settlement burials. The absence of Older Children may represent a legitimate finding. However, this author is reluctant to apportion it too much significance, particularly considering that adult settlement burials were anecdotally observed in 13 published sites,[1316] mirroring the broad demographic attestations of this phenomenon across cultures.[1317] Therefore, age does not appear to be the definitive point of 'difference' in selecting this form of burial.

As discussed in Chapter 9, of the 54 CIFs in the sample that were buried in settlements, 14 individuals were furnished with 143 grave goods. This produces a mean provision rate of 10.21 objects per furnished burial, almost double the mean provision rate for cemeteries ($\bar{x}$

[1313] See §1.1; *cf.* Lewis (2002: 32); Perry (2006: 90).
[1314] See §3.4.2.4.
[1315] See §3.4.2.5.
[1316] See §3.4.2.4.
[1317] See §3.4.2.4, fn. 354.

5.61/FB).[1318] While a narrower range of object categories were identified in settlement burials than those in cemeteries, this does not constitute an ontological difference; rather, it is a matter of scale. In the particular case of settlement burials, it has been suggested that the inclusion of grave goods was actually a symbol of effusive care, as the deceased already had everything required for the afterlife at their disposal within their earthly home.[1319] This theory has some credibility, considering that the Egyptian word for tomb or grave was *pr nḥḥ*, "house of eternity".

The evidence may also be considered in alignment with Hertz's middle-range theory, whereby the fate of the body is used as a metaphor for the fate of the soul.[1320] Each of the settlement burials encountered in this database appear to have been carried out with the greatest care,[1321] variably including wooden, ceramic vessel and basketry coffins,[1322] wrapping in reed matting and textile,[1323] and bedding in/on reeds and ash.[1324] The latter finding is particularly significant as ash is thought to have been used as an insecticide in ancient Egypt, suggesting that attempts were made to postpone the (inevitable) effects of decomposition.[1325] Each of the preceding points of evidence, in isolation and combination, infer that no overt cultural 'differences' exist between settlement and cemetery burials. Material remnants from both contexts indicate that either were eligible to host the burial ritual. Both cemetery and settlement burials bear all the hallmarks of the performance of Egyptian funerary identity, which served to facilitate deceased children's transition to the afterlife in exactly the same manner as it did for adults. These findings refute Binford's claims regarding the absence of ritual from children's burials,[1326] as well as Carr's speculations regarding the differential nature of children's afterlife entitlements.

### 10.7.3 Aetiology

In light of the present study's inability to attribute the 'difference' of settlement burials to either the age of occupants or funerary ritual, we now seek to explore the aetiology of the

[1318] See §9.2.5.
[1319] Midant-Reynes (2000: 116); *cf.* Naumov (2007: 267).
[1320] Hertz (1907); cited in Carr (1995: 193).
[1321] Kus (1992: 172); Szpakowska (2008: 33).
[1322] See §6.7.
[1323] See §6.2.
[1324] See §6.3.
[1325] Miller (1987: 14ff.). See DRNs 104, 106, 107, 348, 353. Meskell (1999b: 121) discusses how spells from the *Coffin Texts* and the *Book of the Dead* were invoked to maintain the transitional state of the body, as there was great concern over the corpse's loss of integrity through the invasion of maggots and other insects. For the use of ash as a disinfectant and protection against insects, see Miller (1987: 14ff).
[1326] Ucko (1969: 264).

practice to ascertain if the 'difference' lies therein. One of the major, over-arching theories of Egyptology is the claim to almost unwavering intra-cultural stability.[1327] Innumerable tombs, texts, artefacts and human remains confirm the enduring nature of this civilisation's social and mortuary practices over millennia. It appears that the practice of Egyptian settlement burial also conforms to this paradigm, and may even predate pharaonic civilisation itself.

Indeed, it is somewhat difficult to determine the precise chronological origin of this phenomenon, in light of the ethereal archaeological evidence for Egyptian prehistoric habitation patterns. Some excavators suggest that several of the earliest human burials in Egypt may be thought of as 'settlement burials', including the African Upper/Final Palaeolithic (*ca.* 30,000–20,000 BP) burials at Wadi Kubaniya,[1328] Wadi Halfa,[1329] Tushka[1330] and Esna,[1331] where it is reported that "bodies were placed in shallow pits in the occupation area[s]."[1332] In her comprehensive treatment of Egyptian pre-protohistoric culture, Midant-Reynes also describes a Mesolithic settlement burial at the site known as E29-G1 (between Qasr el-Sagha and Kom Ausim (Letopolis); *ca.* 9,000-8,000 BP).[1333] However, other scholars argue that these early sites are better interpreted as transitional 'camps', as opposed to permanent 'settlements'.[1334] As such, it becomes difficult to determine whether burials found in such locations were synchronic with ongoing habitation in these areas. They argue that permanent settlements are not attested in Egypt until the Neolithic Period (*ca.* 5,000–4,000 BC). Even if one defers to these more conservative chronological estimates, arguments regarding the antiquity of settlement burial as a cultural practice still stand, as intra-mural interments have been reported for the Neolithic to Predynastic sites of Merimde Beni Salame (*ca.* 5,000-4,400 BP),[1335] el-Omari (*ca.* 4,500-4,000),[1336] el-Badari (*ca.* 4,400-3,800 BP),[1337] Naqada (*ca.* 4,000-3,500 BP),[1338] Adaima (*ca.* 4,000-3,000 BP),[1339] and Maadi (*ca.* 3,800-3,500 BP).[1340] To this list, one may

[1327] Wenke (1997: 117).
[1328] Wendorf & Schild (1986: vii, 1, 74); Midant-Reynes (2000: 51).
[1329] Greene & Armelagos (1972); Wendorf & Schild (1986: 74).
[1330] Wendorf (1968); Wendorf & Schild (1986: 74).
[1331] Butler (1974); Wendorf & Schild (1986: 74); Midant-Reynes (2000: 65-66).
[1332] Wendorf & Schild (1986: 74).
[1333] Midant-Reynes (2000: 82); *cf.* Hendrickx & Vermeersch (2000: 36).
[1334] McDonald (2009: 5, 37-38).
[1335] Hendrickx & Vermeersch (2000: 38-39); Midant-Reynes (2000: 116-117).
[1336] Debono & Mortensen (1990: pl. 28.1); Midant-Reynes (2000: 116-117).
[1337] Brunton & Caton-Thompson (1928: 46); Holmes & Friedman (1994: 110); Hendrickx & Vermeersch (2000: 40); Midant-Reynes (2000: 152-153).
[1338] Petrie & Quibell (1896: 1-2); Midant-Reynes (2000: 187-199).
[1339] Midant-Reynes & Buchez (2002: 71ff.).

also add purported settlement burials in Predynastic el-Hemmamiya.[1341] It is important to note that communal cemeteries also emerged in during the Neolithic to Predynastic era. Following this line of evidence, it may be argued that Egyptian settlement and cemetery burials co-evolved.

Perhaps the most significant finding to arise from pre-protohistoric settlement burial data is its broad demographic profile. As noted in Chapters 2 and 3,[1342] adult males, females, children and infants were all interred in settlements since the Neolithic Period, indicating that the origins of this practice included all community members, not just its youngest constituents. Furthermore, grave goods were distributed amongst all population members, across all periods in both settlement and cemetery contexts. While some children were certainly interred without funerary offerings, it must be noted that this is equally the case for adults as well. The egalitarian nature of prehistoric mortuary data provides diachronic evidence that complements and extends the present study's finding that CIFs were fully integrated members of their communities, even in the most ancient times.

A crucial transition is nonetheless detected in the mortuary behaviour of the Egyptian Predynastic Period (*ca.* 4,000-3,300 BC).[1343] Here, the settlements of el-Badari, Naqada and Adaima began to almost exclusively feature CIFBs, with adults (and other CIFs) being interred in contemporary communal cemeteries. Adult skeletal remains continue to be recovered from prehistoric settlement contexts, albeit on a more infrequent basis.[1344] The fourth millennium BP was a cathartic period for ancient Egyptian civilisation,[1345] with social and ideological upheavals leading to the formation of the Egyptian state in approximately 3,300 BP. Scholars such as O'Connor have suggested that these burgeoning social processes were undoubtedly related to a population explosion.[1346] The present study suggests that the exponential population growth around this time may have provided impetus for shifts in social, economic, political and religious behaviour, including mortuary practices. Even from a pragmatic perspective, it is possible that communities simply outgrew the practice of interring both adults and children within the confines of the settlement, with space and hygiene restrictions limiting the practice, generally speaking, to

[1340] Menghin (1932: 109); Menghin & Amer (1936: 24-25); Midant-Reynes (2000: 187-199).
[1341] Brunton & Caton-Thompson (1928: 44).
[1342] See §§2.3, 3.4.2.4.
[1343] Chronology follows Hendrickx (2006: 92).
[1344] For example, Maadi, *ca.* 3,800–3,500 BP; Midant Reynes (2000: 210-216).
[1345] Midant-Reynes (2000: 256).
[1346] O'Connor (1995); *contra* Patch (1991: 359; 2004: 914).

the youngest (hence, the smallest) members of the group.[1347] This 'settlement-to-cemetery' burial shift has also been noted in other cultures, arguably for the same reasons, during the same chronological era.[1348] This is a radical modification of the current disciplinary position of child and infant exclusion from cemeteries. On the contrary, it appears that it was adults who began to be generally 'excluded' from the ancient practice of settlement burial from the Predynastic period onwards.

Following the Predynastic shift in mortuary behaviour, CIF settlement burials continued as a culturally-invested practice.[1349] The present study attests to their appearance up until the end of the Middle Kingdom, and anecdotal evidence indicates that they continued through the New Kingdom[1350] until the present day in unparalleled acts of cultural continuity that traverse deep time.[1351] From this perspective, CIF settlement burials can be mobilised as a rare opportunity to explore Egyptian socio-cultural reproduction, as well as socio-cultural continuity and change.[1352] Scholars such as Lillie have argued that diachronic burial practices should increase the visibility of archaeological cultures via the constancy of meaning over time and place.[1353] Ironically, in the case of Egyptian CIF settlement burials, misunderstandings of their duration and significance have relegated them to the realms of invisibility and insignificance.

### 10.7.4 Choice?

The aforementioned attestations of CIFBs in contemporary cemeteries and settlements during the Neolithic to Predynastic Periods can be extended by the present study. As described in Chapter 3, synchronic intra- and extra-mural interments were observed at Giza (Old Kingdom), Tell el-Rubʿa (Mendes) (First Intermediate Period), Tell Basta (Bubastis), Lahun/Kahun, el-Lisht and Abydos (Middle Kingdom).[1354] These findings suggest that there may have been an element of choice for parents/carers regarding the interment

[1347] *Contra* Parker Pearson (2003: 140), who argues that the placement of the dead is not a matter of functional expediency; *cf.* Panelli (2004) who argues that spatial shifts in interment locations reflect shifting perceptions of social geography from personal to communal and from family to group; Hopwood (2008: 113, 118-120).
[1348] Chapman (2000: 189); Andrews & Bello (2006: 15); Kogălniceanu (2008: 107).
[1349] Midant-Reynes (2000: 217-218).
[1350] Examples of New Kingdom settlement burials include el-Amarna: Peet & Woolley (1923: 17); Deir el-Medina: Bruyère (1937: 271), Hermopolis: Roeder (1959: 209, a 'mother and child' were also buried in this context), and Tell Basta (Bubastis): Farid (1964: 95ff.).
[1351] Cowgill (2000: 52); DeMarrais (2004: 20).
[1352] van Rossenberg (2008: 170).
[1353] Lillie (2008: 35); *cf.* Orelle (2008: 72).
[1354] See §3.4.5.2.

location of their deceased offspring.[1355] As aforementioned, there appears to be little differentiation in terms of bodily treatment and grave good provision between settlement and cemetery burials. Unfortunately, the present study is unable to comment regarding skeletal data at this stage, as detailed reports are absent from all settlement burial publications with the notable exception of von Pilgrim's work at Elephantine.[1356] Although von Pilgrim presents intriguing male mortality sex-ratios, interpretations of sex-based practice in the absence of comparative data would only amount to an *argumentum e silentio*.[1357] Therefore, as location is the only tangible difference between these burials, it can only be said that hitherto unknown factors must have led parents/carers to choose either settlement or cemetery as a preferred place of interment.

Theoretical archaeologists have wrangled with the concepts of "choice" and "agency" since the introduction of New Archaeological epistemologies in the 1960s. A review of the vast corpus of literature pertaining to agency in archaeology is beyond the scope of this thesis and has been achieved elsewhere.[1358] However, the present study acknowledges the importance of including analyses of 'variation' in any encounter with the archaeological record, such as that which exists between settlement and cemetery burials. As observed by Shackel, variation indicates the existence of viable choices for individual social actors,[1359] or as phrased by Clark, "the ability to have done otherwise".[1360] Variation also provides archaeologists with an opportunity to gauge the degree of social conformity observed by past societies.[1361]

In light of ethnographic parallels, the present study suggests that Early Dynastic to Middle Kingdom parents/carers may have chosen to bury their children either within the confines of their home or settlement for several reasons. Being small and shallow in structure, CIF graves are especially susceptible to exploitation by scavengers.[1362] To witness the exhumation of a child's grave by carnivores, such as common Egyptian jackals and foxes, would have been traumatic for parents/carers and indeed, the greater community. In some cultures, such posthumous re-emergences have led to superstitions associating recently deceased CIFs with

[1355] Lucy (1994: 24).
[1356] von Pilgrim (1996); skeletal analysis was carried out by Prof. Michael Schultz, Zentrum Anatomie, Georg-August-Universität, Göttingen.
[1357] Contra Szpakowska (2008: 42, fn. 79), who interprets this data as indicative that male infants were specifically selected to be buried close to home.
[1358] See Shanks & Tilley (1987); Brumfiel (2000); Dobres & Robb (2000); Trigger (2006: 468-470).
[1359] Shackel (2000: 234).
[1360] Clark (2000: 107).
[1361] Brumfiel (2000: 253).
[1362] Barber (1988); Crawford (1993; 1999: 85).

revenantism.[1363] Interring the child close to or within the home would have enabled the parents/carers and community to safeguard the burial against animal intervention.

Some scholars consider that settlement burial may have provided a less-expensive option to cemetery interment for families of lower socio-economic status.[1364] However, ethnographic evidence indicates that burials in domestic contexts are not necessarily economically motivated, rather indicating that the parents were reluctant to be separated from their deceased child.[1365] This theory is supported by the appearance of grave markers in some settlement burials,[1366] indicating a desire to return to the grave for commemoration and to maintain bonds between the deceased child and members of the household.[1367] Moreover, the higher mean provision rate of grave goods in settlement burials *versus* those in cemeteries suggests that economic factors were not the key impetus for these interments. The child burials under the floor of the Middle Kingdom Palace at Tell Basta (Bubastis),[1368] as well as those in the palatial 'elite' Middle Kingdom houses at Kahun further indicate that settlement burials were not the preserve of the poor.[1369] The find context and pharaonic insignia associated with the Tell Basta palace burials provide strong evidence that they were utilised by both royal and non-royal individuals.[1370] Pinch has suggested that settlement burials may be interpreted as a specific cultural practice irrespective of socio-economic status, whereby the interment represents the mother's desire for the soul of the deceased child to return to her in the form of another pregnancy.[1371] Extending the present study's claims regarding cultural continuity, Bowen notes that the "pharaonic"[1372] practice of settlement burial continued into the Christian era, with the burial of a 2 year old child observed in the wall of a house at Kellis in the Dakhla Oasis. It has even been proposed that this tradition has survived into modern times, as an expression

[1363] Barber (1988); Crawford (1993; 1999: 84ff.).
[1364] Gobeil (2009: 169); Zillhardt (2009: 92). For Anglo-Saxon Britain: Crawford (2008: 198).
[1365] Golden (1990); Marlow (2001: 107). Parker Pearson (2003: 89) argues that in some cultures, settlement burial is a marker of elite status. Naumov (2007: 257) also argues that settlement burials were markers of "privileged individuals" in the Neolithic Balkans.
[1366] See DRNs 107, 110; §7.2.3. Grave markers were also noted in infant settlement burials in Early Bronze Age Tell Yunatsite, Bulgaria; Mishina (2008: 141).
[1367] Hopwood (2008: 116); Tibbetts (2008: 193).
[1368] See DRN 1420; §3.4.2.4.
[1369] See DRNs 52, 53; *cf.* O'Connor (1997b); Quirke (2005: 102); Richards (2005: 170); Szpakowska (2008: 33).
[1370] See GGRNs 2861-2862.
[1371] Pinch (1994: 132); *cf.* Tibbetts (2008: 193).
[1372] Bowen (2003: 85); *cf.* Marlow (2001: 108). Hope (1999: 62) states that an exact date for this burial cannot be determined, but estimates that it may have taken place during the Second Century AD.

of Egyptian women's beliefs that the practice facilitates future births.[1373] At Çatalhöyük, the Anatolian Neolithic settlement site in Turkey, settlement burials are interpreted as indications of the importance of ancestry and kinship lineages, with children especially selected to play an integral role in maintaining connections to the ancestors, creating sacred spaces and facilitating communication with the supernatural world.[1374]

One should not speculate as to which of the preceding factors were most influential for ancient Egyptian parents/carers when choosing a burial location for their child. Indeed, it is highly probable that there may have been other factors at play than those proposed here. Nevertheless, the present study is steadfast in its refutation of Binford's thesis that mortuary behaviour is merely a passive, mindless, mechanical reflection of social organisation. Following Carr, the variety observed in ancient mortuary practices, such as settlement burial, should be viewed as the manifestation of active social and philosophical choices and strategies, which comprise the dynamics of social relations and organisation and are made relative to beliefs.[1375] Carr explains that there is no such thing as a comprehensive mortuary practice in any society,[1376] including Egypt.[1377] Variations, such as CIF (and adult) burials under house floors or within the bounds of settlements, are completely 'normal', and should be viewed in context as a singular element within an overall spectrum of mortuary culture.

While these individuals may have been afforded 'differential' mortuary treatment from the rest of the community, here, 'different' need not necessarily imply 'better' or 'worse', only 'different'. As stated, variability is 'normative' within funerary culture, and should not indicate a divorce from communal afterlife beliefs or entitlements.[1378] Settlement burials are not cases of careless or shamed people dumping their unwanted, unembodied children into clandestine holes in the ground. The evidence suggests that these are powerful manifestations of care and grief, situating the participants in acts of cultural continuity that span millennia. Familial memory is constructed as parents/carers display their reluctance

[1373] Menghin & Amer (1936: 25); Blackman (1968: 101); Watterson (1991: 92); Meskell (1994: 40); *cf.* Wileman (2005: 79). Also observed in ethnographic studies in Cameroon: David (1992: 188-189).
[1374] Moses (2008: 47); Hodder & Cessford (2004). Szpakowska (2008: 34) suggest that this belief may have also been applicable in ancient Egypt.
[1375] Carr (1995: 111); *cf.* Willems *et al.* (2004: 244) regarding the capacity for the residents of el-Ashmunein (Hermopolis Magna) during the First Intermediate Period-Middle Kingdom to 'choose' their burial location: in the town, desert plain, or high in the cliffs.
[1376] See Robb (2007: 287).
[1377] Meskell (1999a: 199; 2002a: 82); Willems (2001b: vii).
[1378] Ucko (1969: 273-274); Meskell (1999b: 159).

to be separated from cherished children.[1379] Cultural memory is perpetuated as the diachronic practice of settlement burial articulates domestic and funerary spheres within the broader mortuary landscape.[1380] The deep antiquity of intra-mural burial calls for a recalibration of current sensibilities which spatially and philosophically construct settlements as categorically secular and domestic in nature.[1381] If we hope to detect more complex patterns of ritual and ideology in Egyptian mortuary behaviour, we must move beyond Petrie's perpetuated Victorian sensibilities of abhorrence regarding this category of burial[1382] which echo in our discipline,[1383] towards the inclusion of modern social and mortuary theories which seek to identify, interpret and integrate mortuary variability. Only then will we be able to include all mortuary evidence and obtain a deeper, richer, more contextualised understanding of the spectrum of ancient Egyptian social, familial and funerary practices.

### 10.7.5 Stratigraphy

Accessing the true incidence rate of settlement burial is by no means straightforward. It is frequently reported that some of the most widely-publicised intra-mural interments – including Merimde Beni Salame and el-Omari – were actually not 'authentic' settlement burials at all, insofar as they were interred into pre-existing occupation layers after they had been abandoned.[1384] Certainly, identification of each burial's accurate depositional context is paramount in archaeological praxes. Should such interments be determined as having been placed in antecedent domestic stratigraphy, their interpretation may subtlety differ from those interred within the confines of an inhabited community. Here, the present study may turn to the arguments posed in Chapter 8 of this thesis, whereby individuals may

[1379] Scott (1999: 107-108). Retaining deceased children in familial space is given increased temporal significance according to Kóthay's (2002: 354) argument that houses were part of inheritance structures, passed down through the family over time.

[1380] Weinstein (1973: 437); Chapman (2000: 189); van Rossenberg (2008).

[1381] Crawford (2008: 200). Harrington (2005: 79) writes persuasively about the evidence for religious activities in the form of ancestor cults in the New Kingdom settlement at Deir el-Medina. Following Pinch (1993: 219), Harrington argues that the ancestor busts found in domestic contexts may have had apotropaic qualities and served to protect women and children during pregnancy in a manner similar to the iconography of Bes. She further argues that ancestor busts may have helped ensure that children would continue to be born into the family. *Cf.* Fahlander & Oestigaard (2008: 5).

[1382] Petrie (1890: 24).

[1383] Carr (1995: 7).

[1384] Kemp (1968: 26); Bard (1994:22); Baines & Lacovara (2002: 14); *cf.* Arnold (1996: 17, fn. 24, 19) for comments regarding the stratigraphy of the settlement burials at Lisht-North; Petrie (1905: 3) for comments regarding interments in deserted houses at Ehnasya el-Medina; and Quirke (2005: 102) and Szpakowska (2008: 42, fn. 78) for comments regarding the Elephantine juvenile interments as a post-abandonment context. On the other hand, Quirke also tables evidence which suggests that the town of Kahun was occupied at the time that the New Kingdom adult burials described by Petrie (1890: 44) occurred.

have sought to inter their deceased family/community members within a systemic context of particular meaning or relevance to their group.[1385]

Nevertheless, these 'pseudo-settlement' burials serve as an excellent heuristic device: firstly, to illustrate the vast spectrum of Egyptian mortuary behaviour; and secondly, to highlight yet another example of authorial bias. They demonstrate a common tendency within archaeology to only include cemetery populations in ancient demographic and cultural profiles, excluding all those who, for whatever reason, were interred in other ways and places,[1386] thereby semantically relegating them as 'deviant' burials.[1387] Considering these burials bear all the hallmarks of Egyptian funerary identity, the present study questions why they should be perceived as evidence of 'exclusion'. To do so appears to be forcing the archaeological record to conform to our modern Western notions of 'appropriate' mortuary behaviour.[1388] It is apocryphal to infer that only cemetery burials were important, when we have no evidence to suggest that those buried outside such contexts were not equally as 'important' in other respects.[1389] By assuming only one inhumation type – for example, cemetery burial – was culturally sanctioned in ancient Egypt,[1390] we may be seriously compromising the accuracy of our reconstructions of the past.[1391] Moreover, it must be re-emphasised that children were not the only demographic category to be interred in extra-mural contexts. The evidence cited above, as well as reported under-representations of adults from some cemetery contexts[1392] indicates that factors other than age may have determined one's final burial place. In this way, perhaps we should think of pseudo-

[1385] See §8.5.2.2.

[1386] The under-representation of adults in cemeteries such as Predynastic Armant has caused Bard (1994: 69, *cf.* 77, 97-98) to acknowledge that Egyptian mortuary practices must have included interments in a variety of locations.

[1387] Laneri (2007: 9).

[1388] Weiss-Krejci (2011: 68).

[1389] Garwood (2007: 65).

[1390] For example, see Anderson (1992: 51-52); Richards (1992: 77); Seeher (1992).

[1391] Roth (1993: 33-34); Weiss-Krejci (2011: 68).

[1392] For example, see Kaiser (1985: 52) for the under-representation of adult females in the Early Dynastic cult district of King Den at Saqqara. Kemp (1968: 26) suggests that adult males were under-represented in the Predynastic cemetery of Merimde Beni Salame. Mortensen (1991: 19) relays the under-representation of adult females in the Protodynastic cemeteries of Abydos, Saqqara and Nazlet Kafr Batran. Morris (2007: 26) describes the under-representation of adult women in the Early Dynastic cemetery of Wadi Abusir, West of the Djoser complex at Saqqara. Patch (2007: 250) describes the under-representation of adult males in the Third Intermediate Period Site 8 cemetery of Abydos. Rose *et al.* (2008: 983-984) state that children are under-represented ($\Sigma$=7; 35.00% TBs) in the First Intermediate-Middle Kingdom Period cemeteries at Tell Ibrahim Awad, citing this as evidence that children "were buried elsewhere". However, their claims are based on an extremely small cemetery sample ($N$=20). Taken at face value, the sample published by Rose *et al.* actually comfortably falls within the 'normal' child mortality range of 20–56 percent for pre-industrial societies, described by Hewlett (1991: 8). Moreover, they do not apply the same under-representation logic to the small adult population ($\Sigma$=13; 65.00%), demonstrating how ontological approaches to archaeological evidence often diverge according to age.

settlement burials less as examples of 'exclusion', rather as evidence for 'inclusion' within yet another facet of the broader Egyptian mortuary landscape.

There is increasing awareness among archaeologists and anthropologists of other disciplines that interment possibilities were not restricted to cemeteries. Symbolic locations for the interment of the dead may have equally occurred across the landscape.[1393] Even apart from symbolism, one may also consider the pragmatic aspects of living and dying within a geographically-restricted space. For a variety of reasons, a community's functional landscape requirements may change over time. Due to population growth or shrinkage, modifications of subsistence strategies, disrepair, ecological or climate changes, *et cetera*, there may be synchronic and diachronic flux in the articulation of spaces respectively occupied by the living and the dead.[1394] In a similar manner to Appadurai and Kopytoff's cultural biographies of objects, Kamp acknowledges that the landscape may also experience functional and/or conceptual transformation processes during its use-life.[1395] In this way, understanding the oft-attested shift from settlement-to-cemetery becomes much clearer in Egyptian archaeological contexts.[1396] To illustrate this point, Holmes and Friedman suggest that settlement-to-cemetery shifts may have occurred at the Predynastic sites of Badari and el-Hemmamiya,[1397] and Quirke discusses the conversion of a Middle Kingdom rock-cut domestic cellar into a New Kingdom tomb in the town of Kahun.[1398] It must be noted, however, that the reverse may also be true. Meskell notes the transformation of some of the Southern tombs at Deir el-Medina into domestic space during the Ramesside expansion: here, we go from sepulchres to cellars![1399]

The problematisation of settlement and pseudo-settlement burials again highlights the capacity of authorial bias to colour our perceptions of Egyptian mortuary behaviour. It underscores the need for comprehensive research to be carried out before making generalisations regarding mortuary practices, particularly when considering that it is normal for past communities to have exercised a range of alternative burial customs within the schema of a larger national funerary culture.[1400] This finding should also demonstrate

[1393] Parker Pearson (2003); Crawford (2008: 199).
[1394] See Midant-Reynes (2000: 198-199) for her description of the gradual movement of settlements at Naqada, Hierakonpolis and Adaima from the desert towards the river.
[1395] Kamp (2000: 91); *cf.* Mortensen (1991: 27, 28).
[1396] For example, see Grajetzki (2003: 70); *cf.* Petrie (1905: 3).
[1397] Holmes & Friedman (1994:116-117).
[1398] Quirke (2005: 113).
[1399] Meskell (1999b: 143). The same phenomenon was observed in New Kingdom burials at the Middle Kingdom town of Kahun; Quirke (2005: 113).
[1400] Feucht (1995: 124; 2001b: 193); Ucko (1969: 273-274).

that while each type of archaeological context should be analysed on its own merits, only considerations of *all* categories of mortuary deposit across the landscape are likely to provide accurate representations of archaeological populations.[1401]

## 10.8 Status

Status prejudice may be argued to have been the most detrimental form of authorial bias to Egyptian cultural heritage. As noted in Chapter 9,[1402] the tendency of excavators to only publish – or only publish in explicit detail – 'exceptional' burials (those of great size, content, quantity, quality, interest or contrast) has dramatically inhibited our capacity to accurately reconstruct the 'true' nature and scope of every evidence category within the archaeological record, including CIF mortuary culture. While it is acknowledged that this practice was most common in early excavation reports, vestiges of these inclinations still linger in contemporary Egyptian archaeology. Many reports only feature the finest burials in cemeteries, as excavators state that the remainder were 'poor', and therefore not worthy of comment.[1403] Alternatively, while some excavators may provide arbitrary categorical descriptions of 'poorer' burials, they do not quantify these categories,[1404] nor do they explicate categorical variations.[1405] A similar attitude extends to exclude the material remnants of tomb robbery from description and recording, most commonly human remains, mundane ceramics and architectural features.[1406] Many early excavators believed these 'impoverished' or disturbed contexts had little or no contribution to make to scholarly knowledge.[1407] As a result, countless datasets have been rendered forever inaccessible to study. We have also seen in the preceding discussion that excavators' and authors' interpretations of CIF mortuary culture is biased towards elite data, with burials in pots and settlements ostracised to the realms of material and cultural 'poverty'.

This author acknowledges that the comprehensiveness of the present study's database is diminished as a result of this practice. Furthermore, it may also be biased towards wealthier CIFBs of the Early Dynastic to Middle Kingdom Periods.[1408] As such, one's ability to reconstruct local, regional and national population and behavioural profiles is inexorably

[1401] Chamberlain (2000: 211); *cf.* Hodder (1986: 140); Parker Pearson (1993: 207, 227); David (1992: 184).
[1402] See §9.1, *cf.* fn. 801.
[1403] Petrie (1898: 2; 1901: 42); Peet & Loat (1913: 23); Naville *et al.* (1914: 19); Peet (1914: 48); Hamada & Farid (1947: 201); Weeks (2008: 9).
[1404] Garstang (1907b); Peet & Loat (1913: 23); Peet (1914a: 54); El-Khouli (1968).
[1405] Meskell (1999b: 148).
[1406] For example, Naville *et al.* (1914: 15-17).
[1407] Engelbach (1915: 10).
[1408] Richards (1992: 65); Meskell (1999a: 198; 1999b: 173); Baines & Lacovara (2002: 6, 12ff.).

inhibited.[1409] However, all is not lost. The present study seeks to demonstrate how engagements with historiographical and theoretical apparatus can serve to identify the cause of authorial bias in Egyptology, as well as to mitigate its effect. In this way, despite its shortcomings, the archaeological record can still be used to draw meaningful, ethical, balanced interpretations of all demographic and socio-economic facets of ancient Egyptian society.

### 10.8.1 Status Anxiety?

The literature review of Chapter 2 explored the possibility that a certain level of cultural relativity may have been exercised towards CIF mortuary culture on behalf of the founders of our discipline. Petrie was profoundly aware of the implications of such subjectivity, stating: "It is not too much to say that the discoverer is the maker of society."[1410] It may be argued, however, that despite their undoubted best intentions, the society created by Petrie and his colleagues perhaps more closely resembled the world of the white, middle-upper class English, French or American gentleman scholar than it did 'ancient Egypt'.[1411] Society of the late 19th to early 20th Centuries was rife with socio-economic issues, particularly in England and France.[1412] Exponential population growth, high unemployment and housing shortages lead to unprecedented levels of poverty.[1413] Deplorable sanitary conditions, overcrowded ghettos, homelessness and rising crime rates led to an anathematisation of the poor and commensurate status anxiety of the middle and upper classes.[1414] As stated in Chapter 2, poverty was associated with immorality, alcoholism, insanity, disease and disorder.[1415] The middle-upper classes justified their marginalization of 'the poor' not only as punitive, but as maintenance of God's 'natural order'.[1416]

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[1409] Ciałowicz (1985: 157) notes that only 100 of *ca.* 500 excavated graves have been published from Abydos; and only 150 out of *ca.* 1,000 at el-Amra. Patch (2007: 246) makes similar lamentations regarding the publication status of Matmar. Crubézy *et al.* (2008: 293) state that only 20 out of 580 excavated graves have been published from Adaima. de Morgan (1912: 43) states that he excavated approximately 100 grave at el-Qara, but only publishes 7 burials because the contexts appeared disturbed. *Cf.* Richards (2005: 68); Crubézy *et al.* (2008: 289); Sowada (2010: 220).

[1410] Petrie (1923: 1).

[1411] For the continuity of this phenomenon, see Redford (2008: 25).

[1412] Himmelfarb (1984: 392ff.).

[1413] Himmelfarb (1984: 6, 18, 398).

[1414] Frankfort & Pendlebury (1933: 3, 14-20) even described part of the North Suburb of the New Kingdom settlement of el-Amarna as a "slum", saying that "certain estates, such as U.36.17, 22, 39, 48 were never inhabited on the scale originally planned; and into these open spaces there crowded a population of poor people, who, for some reason, wanted to live there". Kemp (1972: 674-675) challenges this classification, suggesting instead that these areas should be considered "organic neighbourhood units" which represent "a probably very effective and acceptable type of urban layout", providing unique insight into the "New Kingdom Egyptians' own sense of urban aesthetics".

[1415] See§2.4. *Cf.* Himmelfarb (1984: 327, 372, 375-376, 381, 385, 397). The marginalisation of the poor by the middle-upper classes is nowhere more poignantly illustrated than in the passing of the *Anatomy Act* by British Parliament in 1832. The *Act to regulate schools of anatomy* sought to address the demand for human corpses by medical schools for the purpose of dissection. Prior to 1932, schools had obtained

In alignment with recent research into status anxiety in cultural theory, the present study suggests that prevailing dire socio-economic circumstances of the mid 19th to early 20th Centuries may have lead early excavators to perpetrate a form of "cultural identity-protective cognition".[1417] Identity-protective cognition is a recognised social phenomenon which sees traditionally dominant status groups attempt to reinforce their visions of how society should be organised[1418] by consciously or subconsciously mobilising action which "glorifies the values of one group and demeans those of another", effectively "enhancing the social status of ... the affirmed culture" while simultaneously diminishing the opposing group as "deviant",[1419] even in the face of contrary factual information.[1420] As a mechanism of "identity self-defense", individuals manipulate outside stimuli and information to conform to their own world view and reinforce their membership of the dominant status group.[1421] As a result, the probability that they will learn from and apply the potentially important outside stimuli and information is diminished.[1422]

Bourdieu's concept of *habitus* explores the nature of the status anxieties and power relations that exist between social classes. He argues that class inequalities and dominance of one class over another arise covertly. We again witness a concordance between the theories of Bourdieu and Butler, as Bourdieu defines social class as "the unity hidden under the

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corpses under the auspices of the 1752 *Act for better preventing the horrid crime of murder*, whereby dissection was made a punitive measure imposed on those found guilty of homicide. However, supply of such subjects could not meet demand, so to address the requirements of science (and circumvent the increasing phenomenon of 'body-snatching') the *Anatomy Act* authorised those governing institutions in which significant numbers of poor people died – including workhouses, hospitals, prisons and mental asylums – to dispose of their bodies to a medical school, thereby turning them into "useful things". The *Act* was passed notwithstanding the outcries of the "destitute" who, according to Lord Tenterden in a speech in parliament in 1829, felt "the most unconquerable objection to the dissection of their bodies"; see MacDonald (*forthcoming*); Richardson (2000: 30ff., 52ff., 102); *cf.* Laqueur (1983: 122ff.); and Hurren (2004), who describes a similar situation in France. Aligning with historiographical insights offered in §2.4 of this thesis regarding early excavators' sensibilities towards juvenile death and burial, the only other social categories subject to involuntary dissection were those of foetuses and stillborn infants. They were subjected to such practices because they were considered "non-persons" by the law until 1832 and as such were treated as waste (MacDonald (*forthcoming*). The present study is at pains to note the same terminology is used by some Egyptologists to describe the status of juveniles in ancient Egypt (see §2.3) and again argues that the prevailing social sensibilities of the founders of our discipline appear to have influenced their perceptions of the archaeological record and been perpetrated by subsequent generations of scholars as History.

[1416] Himmelfarb (1984: 3, 18).

[1417] Kahan *et al.* (2007); Kahan (*in press:* 21ff.); *cf.* DiMaggio (1997).

[1418] Douglas & Wildavsky (1982: 36); *cf.* Kahan *et.al* (2007: 468).

[1419] Gusfield (1968: 57-59).

[1420] Also known as 'biased assimilation'; Sherman & Cohen (2006: 186, 190); Kahan *et.al* (2007: 470, 496, 500); Kahan (*in press:* 24); *cf.* Lord *et al.* (1979).

[1421] Baumeister & Leary (1995: 504); Sherman & Cohen (2006: 205); Kahan *et.al* (2007: 470); Kahan (*in press:* 37).

[1422] Sherman & Cohen (2006: 186).

diversity and multiplicity of the set of practices performed."[1423] Here, one's access to economic capital not only has fiscal exchange value, but its possession and manner of deployment attain symbolic value as 'cultural capital'. As described for identity-protective cognition, cultural capital is deployed to perpetrate and maintain power relations, class distinctions and social inequality under the appearance of their ideological 'naturalness'. In this configuration, economic capital and cultural capital are analogised, and the material symbols of economic capacity serve as markers of cultural capacity, including status. Here, it is argued that early excavators may have consciously or unconsciously undertaken "motivated distortions of social perception",[1424] and projected their own sense of *habitus* and its concordant status anxieties onto the archaeological record.[1425]

This is especially pertinent when considering the culturally-situated fear and disdain of 'pauper burials' in mid 18th to early 20th Century England. Laqueur writes that pauper burials (that is, burials carried out by the church or state on behalf of those too poor to pay funeral costs) were a source of "life-long stigma" for families, with one mother stating in *ca.* 1811 that "she would rather have her dead child picked up by a dust-cart than have it carted through the neighbourhood by the 'Black Mariar' of the parish".[1426] Laqueur argues that the pauper funeral thus became a powerful symbol of "social worthlessness, earthly failure, and profound anonymity", even striking fear into those of middle-upper class status who were "in no danger of ever being subject to it".[1427] The "spectacle, display and magnitude of numbers" exhibited at funerals were seen to directly reflect the deceased's "respectability".[1428] The present study argues that contemporary sensibilities towards 'poor' burials further fuelled the identity-protective cognition and status anxiety of early excavators,[1429] causing them to relegate meagre ancient Egyptian interments to the realms of ignominy and insignificance. By pursuing selective archaeologies which promoted the funereal narratives of 'the rich' and eradicated the material testimonies of 'the poor', they re-constructed an idealised world in the past which validated and assured their own status –

[1423] Bourdieu (1984: 101).
[1424] Sherman & Cohen (2006: 202-203).
[1425] In agreement with Meskell (1999b: 28), the present study only engages Bourdieu's *habitus* theory in a circumscribed manner. It addresses a specific social category whose documented personal responses to archaeological data have explicitly 'performed' a duplication of their own cultural ideologies.
[1426] Laqueur (1983: 109).
[1427] Laqueur (1983: 109); *cf.* Richardson (2000: xvi-xvii; 274-275, 279ff.), who states that fear of the pauper funeral even persisted into the late 20th Century in England.
[1428] Richardson (2000: 275).
[1429] See Laqueur (1983: 117, 126), who states that "in the funeral of others one could contemplate the meaning of one's own life".

as well as that of their wealthier benefactors – of power and dominance in the present.[1430] In this way, the foundations of Egyptian archaeology were established with a profound epistemological bias towards the elite.[1431]

The legacy of early excavators' *habitus* projection is not restricted to the immeasurable loss of archaeological data during the late 19th to early 20th Centuries. Rather, its effect has compounded via its looming spectre in contemporary disciplinary praxes. As argued in Chapter 2, the authoritative doctrines and professional protocols established in the burgeoning years of Egyptology have been perpetuated largely unquestioned by subsequent generations of scholars.[1432] 'Wealth' and 'poverty' assessments are observed *writ large* in both primary and secondary sources without consideration of the cultural relativity of such concepts.[1433] But what did it actually mean to be 'rich' or 'poor' in ancient Egypt? Did such concepts even exist? Was poverty conjunctural, structural, or both?[1434] While a handful of authors have considered the evidence for poverty in written texts,[1435] there has been little to no research undertaken on archaeological manifestations of the lived experience and cultural sensibilities of (and towards) notions of wealth and poverty in Egypt. Although quantitative studies of funerary assemblages and architecture are certainly of merit in their own right, we must extend our research questions beyond Binford's model of the mere socio-economic structure of mortuary remains, towards the reconstruction of social identities and experiences across *all* demographic spectra.[1436]

While CIFs are particularly susceptible to archaeological ostracism via 'exceptional' publication practices,[1437] it must be said that individuals of *all* ages and sexes were at risk of being judged as too 'normal', 'unexceptional', 'poor' or 'insignificant' to warrant publication. By excluding such 'unexceptional' evidence after the destructive processes of

[1430] *Cf.* Robb (2007: 287).
[1431] Baines (1991: 124).
[1432] See §2.3.
[1433] For example, Naville *et al.* (1914: 7; 1921: 161); Brunton (1927a: 21; 1937: 104); Myers & Fairman (1931: 229); Rizkana (1952: 121); Castillos (1977; 1977-1978; 1981; 1982a; 1982b; 1983; 2000); Bard (1988); Baines (1991: 136); Anderson (1992: 55ff., 62-63); Ellis (1992; 1996); Richards (1992: 79, 283, 285; 1997); Strouhal (1992: *passim*); Savage (1995; 1997); Redford (2000: 18); Grajetzki (2003: esp. 74ff.; 2004a: 13; 2004b; 2005: 5); Zeid (2004: 205, 209); Chłodnicki & Ciałowicz (2005: 140-145); Picton & Pridden (2008); *cf.* Delrue (2001: 27), §2.3, fn. 126 of this thesis.
[1434] Iliffe (1987); Amis & Rakodi (1994); Amis (1995); Sabry (2010).
[1435] Washington (1994); Bolkenstein & Hermann (2002).
[1436] Stevenson (2009a: 180).
[1437] Spieser (2008: 501).

excavation, the majority of exhumed Egyptian material testimonies have been rendered inadmissible.[1438]

### 10.8.2 Thin Sample, Thick Description

The greater part of this chapter has sought to (re)view the inherent challenges to the representativeness of the present study's dataset. It is acknowledged that this dataset only represents a small portion of the 'true' Early Dynastic to Middle Kingdom CIFB profile. It is further acknowledged that the dataset may be biased towards the higher end of the Egyptian socio-economic spectrum. Nevertheless, the outlook remains optimistic. This author believes that it is better to think of what we *can* do with what we *have* rather than abandon all attempts at meaning. Egyptology is not the only discipline to be affected by problems of 'exceptional evidence'. Due to equally manifold and diverse natural and cultural transformation processes, other disciplines are also faced with the challenge of constructing cultural narratives from small samples or exceptional examples. For instance, scholars such as Sherman have turned to the field of microhistory to place unique Medieval and Renaissance manuscripts within a scale of cultural observation.[1439] Here, it is argued that exceptional evidence can be used to complement superabundant stereotypical data.[1440] As has been demonstrated by the present study, marginal cases have the capacity to problematise prevailing paradigms, refresh them as a focus of disciplinary attention, and produce revised paradigms which are more inclusive, balanced and complex.[1441] Sherman argues that this is the simultaneous challenge and benefit of working with singular examples or small samples, as opposed to starting with a well-trodden concept and looking for illustrative data.[1442]

In alignment with Geertz's "thick description",[1443] the present study argues that even though we may never know an object's or sample's true representativeness, provided that practitioners place data in appropriate cultural and chronological contexts,[1444] underpin

[1438] Grajetzki (2004b: 21; 2005: 18).
[1439] Sherman (2008: 108-109); *cf.* Grendi (1977: 512); Ginzburg & Poni (1991: 8); Burke (1992: 38-43); Levi (1992: 99). Fahlander & Oestigaard (2008: 11) also argue that microhistorical principles can be applied to archaeological data as "microarchaeology", using detailed analyses of small datasets to illuminate differences between local "microtraditions" and overarching regional structures. See Chapman (2000: 175ff., 187, 192) for a working example of how such principles may be applied to cemetery analyses.
[1440] *Contra* Crawford (2000: 177).
[1441] Ginzburg & Poni (1991: 8).
[1442] Sherman (2008: 109).
[1443] Geertz (1973: 6ff.).
[1444] Levi (1992: 102).

interpretations with appropriate theoretical apparatus, and demonstrate links between datasets and macrohistorical processes, small samples can still illuminate larger social, structural and symbolic logics of their respective culture/s.[1445] As seen in the present study, by operating from a small scale of observations, phenomena previously thought to be adequately described and understood – such as CIFBs – can assume entirely new and different meanings.[1446] These results may then be mobilised to draw much wider cultural narratives – such as the ontological equity of ancient Egyptian children and adults – that dwarf seemingly narrow initial observations.[1447]

Anyone wishing to utilise archaeological evidence in their re-constructions of ancient cultures must enter the engagement with a firm understanding of our disciplinary *fait accompli*. Inasmuch as it is a human construct which exists in tension between the present and the past, it is axiomatic that the archaeological record can never, and will never, provide a comprehensive cultural account. We must not restrict our pursuit of the past to only research questions for which there is a surfeit of evidence, leaving more ethereal people and processes to fade into invisibility. Meskell reminds us of the role we play and the responsibility we hold as cultural mediators to celebrate the disjunctures and heterogeneity of archaeological evidence. She delivers an apposite reminder of the "supreme unknowability of the past, the constant linear narratives we construct and the multiplicity of accounts we could reasonably offer."[1448] After all, this author suggests that it is precisely such multiplicities and lacunae that make the study of CIFBs, in particular, and history, in general, so infinitely intriguing.

## 10.9 Summary

This chapter has addressed the central aims of this thesis. It has compared the quantitative results of the archaeological survey detailed in Chapters 3–9 with the current perceptions of CIF mortuary culture in Egyptological discourse, as outlined in the literature review of Chapter 2. In so doing, the study has identified a discontinuity between current understandings of juvenile mortuary culture and its actual nature and scope during the Early Dynastic to Middle Kingdom Periods. Contrary to prevailing assumptions, significant numbers of CIFBs are included in published (and in the case of Helwan, unpublished) archaeological data. A minimum of 1,809 individuals were identified with

[1445] Burke (1992: 43); Wengrow & Baines (2004: 1094-1095); Sherman (2008: 109).
[1446] Levi (1992: 99).
[1447] Levi (1992: 102).
[1448] Meskell (2002a: 208). *cf.* Levi (1992: 107).

4,749 grave goods during the timeframes canvassed by this research. Further to this, the present study has demonstrated that current opinions which suggest CIFs were subject to differential burial practices because they were not embodied community members are unsubstantiated. To the contrary, the overwhelming majority of CIFBs were interred in communal cemeteries in a completely culturally-invested manner. Certainly, some children were interred within the confines of settlements, but the present study also observed adult settlement burials before, during and after the chronological parameters this research. Of crucial importance, however, was the observation that settlement interments bore all the hallmarks of cultural investment. With the exception of obvious architectural limitations, the only major way settlement burials differed from cemetery burials was their location. Moreover, CIFBs in both settlements and cemeteries bore resounding material similarities to those of contemporary adults in every category of evidence examined by this study. This finding indicates that CIFs were given access to the same range of mortuary treatment, at the same time, as that afforded to adults.

Qualitative analyses of quantitative survey data were enabled via engagement with archaeological, mortuary, ethnographic and social theories. These endeavours bore significant outcomes. By honouring the survey data's situation within the specific ritual context of burial, the study determined that the lack of distinction between the type, quantity and quality of child and adult mortuary culture is indicative of ontological equity between individuals across the demographic spectrum in ancient Egypt during the timeframes canvassed by this research. This finding was buttressed by considering what the representational economy of both child and adult mortuary culture revealed about the function and purpose of the burial ritual. Here, social and mortuary theories elucidated that the specific function of the burial ritual was to perform a cultural funerary identity on behalf of the deceased which facilitated and assured their transition into the afterlife, regardless of age. The overarching purpose of the burial ritual was to transmit and transfer cultural knowledge, memory and collective identity within familial/community networks, while reconfiguring and reinforcing specific intersubjective relationships during the processes of individual and collective grieving for the deceased's physical removal from broader social networks. In this way, the ontological equity between child and adult mortuary culture is explained: biographical distinctions of attained age-at-death were not involved in the representational economy of the burial ritual because that was not its function, nor its purpose.

Children's inclusion in fully-vested burial rituals therefore indicates the totality of their cultural capacity, their complete social embodiment and integration into familial/community networks, and a social position, value and agency equal to that of adults. These findings indicate that the prevailing disciplinary sensibilities which construct children as 'nonpersons' and exclude them from communal burial practices require revision.

While these findings determine that the ritual context of burial is an apposite forum to assess children's cultural capacities, it appears that this context is less forthcoming regarding their lived experiences. Children's bodies and material culture are manipulated by adults within the funerary context to address its specific ritual function and purpose. As such, CIF mortuary culture does not seem to accurately reflect children's worldviews or experiences *per se*, rather the experiences of adults attempting to negotiate the broad-ranging implications of their deaths. Going forward, detailed biocultural analyses of children's (and adults') physical remains appear to hold the greatest potential to access reflections of their lived experiences throughout the life course, including such aspects as diet, lifestyle, health, therapy, relationships, environment and geographical location.

This chapter also sought to determine the extent to which its foundational dataset could be considered representative of the original population/s from which it was derived. In this way, considerations of differential preservation, incomplete excavation, the 'osteological paradox', intra- and inter-observer error, poor reporting and authorial bias determined that the study sample was somewhat diminished from the 'true' CIFB population of Early Dynastic to Middle Kingdom Egypt. In accordance with another of this thesis' key aims, an examination of the historiographical underpinnings of Egyptian archaeology determined that of all the aforementioned challenges to the dataset, authorial bias has had the greatest impact on Egyptian cultural heritage. These impacts take the shape of selective excavation praxes which characterised the early years of the discipline, as well as subsequent interpretations of this partial archaeological record which have precipitated through generations of scholars.

The impact of authorial bias was illustrated via historiographical case studies of the most frequently stereotyped aspects of CIF mortuary culture, including 'toys', coffins, differential burial practices and status. These studies revealed the profound misunderstandings that authorial bias has generated within the discourse, including divergent ontological approaches towards miniature objects or objects associated with children; a jettisoning of the ubiquitous and enduring funerary phenomenon of pot burials;

a cultural ostracism of settlement burials, arguably the oldest mode of interment in the Egyptian funerary repertoire; and an exclusion of the material testimonies of the majority of the ancient population due to status discrimination. Of all these misunderstandings, perhaps the last offers the greatest revelation within the present study's epistemological brief. Generally speaking, the marginalisation of children in Egyptian archaeological narratives does not appear to be an overt strategy of entrenched disciplinary ageism. Rather, it is a by-product of elitist excavation and publication practices, the outcomes of which have distorted our empirical dataset, biased our reconstructions of Egyptian society towards that of the elite adult male, and caused the loss of greater proportions of the extant archaeological record than all other transformation processes combined. It is not the young who have been marginalised in Egyptian archaeological narratives, rather the 'poor' or less-wealthy members of society whose material testimonies were deemed of insufficient worth to record for posterity. In the fullness of time, in our realisation that we can only access a fraction of Egypt's 'true' cultural heritage, it is we who are the poorer.

In light of these findings, inasmuch as the present study sought to demonstrate that engagements with archaeological, mortuary, ethnographic and social theories serve to identify the cause of authorial bias within the sample, they also function to mitigate its effect. Theoretical apparatus alleviate the dataset's inherent gaps and partialities, and enable detailed, nuanced, ethically-balanced interpretations of mortuary data. In terms of the featured case studies, such interpretations may eventuate in a recalibration of some of the central doctrines of Egyptology, including the promotion of ontological equity in engagements with all manner and forms of material culture, regardless of age associations; the integration of pot burials into Egyptian coffin typologies, as a recognition of their status as authentic funerary containers that are imbued with myriad cultural, philosophical, religious and economic meanings; the reintegration of settlement burial into normative mortuary behaviour, reflecting its deep antiquity, cultural investment and continuity; and a reconsideration of notions of wealth and poverty in archaeological narratives, in a manner which pares back modern sensibilities and reveals their authentic cultural situation. It can thus be seen that not only are CIFBs visible and viable in the Egyptian archaeological record, they represent a rich and varied source of archaeological data which provides fertile ground for contemporary research.

# CHAPTER 11: CONCLUSION

This chapter will reflect on the extent to which this thesis has fulfilled the research aims and purpose established in Chapter 1. The chapter will then look beyond the present study to propose opportunities where further research may expand, enrich and elucidate interpretations of child, infant and foetal mortuary culture, as well as that of all individuals in ancient Egyptian society.

## 11.1 Research Aims

This research has found that current perceptions of CIF mortuary culture do not correspond with its actual nature and scope in published literature. The present study's archaeological survey identified significant numbers of CIFBs in published and, in the case of Helwan, unpublished Early Dynastic to Middle Kingdom cemetery contexts. These findings contrast prevailing disciplinary sensibilities which espouse the absence of juvenile mortuary culture from published cemetery records.

The archaeological survey consistently produced data of resounding similarity to contemporary adult burials in every category of evidence, including bodily position, orientation and treatment, tomb architecture, associated features and grave goods. These similarities were observed in every age and socio-economic group, geographical region and chronological period canvassed by this research. Children, infants and foetuses appear to have been afforded access to the same range of mortuary treatment, at the same time, as that afforded to adults. These findings challenge current disciplinary paradigms which reconstruct children's lived experiences and cultural capacities as passive in social processes and ontologically subordinate to adults.

The outcomes of the archaeological survey were appraised via consultation of archaeological, mortuary, ethnographic and social theories to deliver qualitative analyses of CIF mortuary culture during the Early Dynastic to Middle Kingdom Periods. At base, the very existence of juvenile burials – most often in independent graves – attests to their inclusion in communal afterlife beliefs, their importance in family/community networks and their status as individuals. When viewed through theoretical lenses, the lack of differentiation between child and adult mortuary culture infers that these groups were

perceived with ontological equity within their community/ies. The present study's finding that children were fully manifested social beings with equal cultural capacities to adults suggests that current disciplinary sensibilities require recalibration. Our perceptions of children need to shift from a position of 'nonpersonhood' to 'identity', from a value of 'worthless' to 'precious', and from an agency of 'passive' to 'active'.

Notwithstanding these findings, the present study discovered that the ritual context of burial does not appear to be a forum where children's lived experiences were articulated to the same extent as their cultural capacities. The burial ritual was orchestrated for the explicit function of facilitating the deceased's transition to the afterlife, with an underlying purpose of reconfiguring and reinforcing relationships during the process of grieving the deceased's physical removal from society. As such, it does not appear that the funerary nexus is overly forthcoming regarding the expression of children's lived experiences and worldviews. While the determination of equitable cultural capacity goes some way to illuminating aspects of children's social lives, perhaps children's bodies may provide more apposite means to access elements of their lived experiences through the funerary nexus. By embedding children's (and adults') osteobiographies within broader biocultural contexts, we can glean detailed insights into their diet, lifestyle, health, therapies, relationships, environment and geographical location across the life course.

By examining the historiographical underpinnings of Egyptian funerary archaeology, the present study sought to demonstrate that authorial bias has had a significant impact on researchers' abilities to generate accurate qualitative and quantitative analyses of CIF mortuary culture, and of ancient Egyptian mortuary culture at large. The cultural sensibilities of some authors and excavators led them to select and interpret their evidence in a manner which constructed archaeological narratives that more closely resembled their present than it did Egypt's ancient past. In terms of CIF mortuary culture, authorial bias has had profound effects on our understanding of several phenomena. Divergent ontological approaches towards miniature objects or objects associated with children have led to the cultural diminution of certain artefacts or artefact groups merely as 'toys' or indices of ascribed status, despite the appearance of identical items in adults' tombs. Modern, elite sensibilities regarding waste management and 'appropriate' funerary behaviour have discarded the ubiquitous category of pot burials – and their occupants – as cultural refuse, used only for 'children', by the 'poor'. Such sentiments have been perpetuated despite widespread published evidence that pot burials were utilised for all age

groups, across all socio-economic strata, in all chronological periods of pre-pharaonic, pharaonic and post-pharaonic Egypt. Sensibilities regarding 'appropriate' funerary behaviour have also ostracised and disparaged the practice of settlement burials, particularly as pertains to CIF interments. This is despite the fact that as a mortuary tradition settlement burials are at least equal in age, if not older than, cemetery burials and bear the same hallmarks of cultural investment and inclusion. Finally, prevailing status anxieties in early excavators' contemporary cultural contexts prompted them to pursue excavation, recording and publication agendas focused on 'wealth'. Such praxes excluded the material testimonies of the 'poor', despite the fact that 'less wealthy' individuals would have comprised the overwhelming majority of the Egyptian burial population. In isolation and combination, these misunderstandings, precipitated from authorial bias, have relegated children to the margins of archaeological narratives and rendered them invisible and unviable in current reconstructions of life and death in ancient Egypt.

## 11.2 Research Purpose

By demonstrating how engagements with CIF mortuary data in all depositional contexts can enrich understandings of ancient Egyptian culture, the present study has advocated for more equitable approaches to funerary archaeology. It appeals to excavators, authors and scholars to honour the cultural specificity, agency and variability of Egyptian mortuary data in all stages of disciplinary praxes. By applying such methodologies, we exponentially enhance the likelihood that our datasets will more accurately represent the material testimonies of all demographic and socio-economic categories across the diverse cultural topography of the Egyptian mortuary landscape.

## 11.3 Opportunities for Future Research

This thesis represents the first comprehensive research into ancient Egyptian CIF mortuary culture. It has sought to initiate scholarly engagement with the juvenile demographic in Egyptian archaeology and reveal the broader benefits such engagements may bring to our understandings of mortuary behaviour. It also seeks to forge connections with the vast international research community devoted to the archaeology of children and childhood. Through its' representation of CIF death, burial and cultural capacity in ancient Egypt, it is hoped that this thesis may contribute to international knowledge of the expression of these phenomena across cultures. As a primary foray into this subject, this thesis has by no means extinguished all the questions to be posed of CIF mortuary culture in the Egyptian

archaeological record. A plethora of opportunities for future research exist within this topic area, including (but not limited to) the following:

- The chronological parameters of the research may be extended to encompass the Predynastic Period and the remainder of the pharaonic era. Such research would promote further understanding of the nature and scope of Egyptian CIF mortuary culture, and refine the interpretations levelled herein.

- The biological parameters of the research may be extended to encompass adolescents (individuals of *ca.* 13–16 years). Such research would complement the present study's dataset, refine its interpretations, and shed light on the materiality of another demographic group that has been somewhat neglected within Egyptian archaeology. The adolescent age category most likely represents the life course stage which encompasses physical and social transitions into adulthood. Biocultural data derived from mortuary contexts offers great promise to shed light on the experience of living and dying during this liminal phase.

- While the present study has anecdotally identified equity between child and adult mortuary culture during the Early Dynastic to Middle Kingdom Periods, it nonetheless recognises the need to carry out a comprehensive comparative study of adult burial data to explore these observations in greater detail.

- The present study offers an overarching regional perspective of CIF mortuary culture during the Early Dynastic to Middle Kingdom Periods. As is the case for all forms of funerary behaviour, it is accepted that no single interpretation of CIF mortuary data can represent every individual experience across the temporal and geographical expanses of Predynastic and Dynastic Egyptian culture. Detailed studies of specific sites may therefore enhance our understanding of the extent to which the trends described at national level may (or may not) have been locally expressed.[1449]

- The high Young-to-Older Child mortality profile described by the present study contrasts expectations of high Infant mortality usually expected in pre-industrial populations. Considering that similar observations have been tabled by other studies,[1450] it is apparent that further research is required to clarify the status and experience of mortality and morbidity in ancient Egypt. Such a study would enhance understandings of manifold facets of ancient Egyptian life- and death-ways, including

[1449] For example, see Harrington (2007: 61). Cf. Stevenson's findings at el-Gerzeh, §10.2, fn. 984.
[1450] See §4.1.1, fn. 367; §10.1.2, fn. 974.

(but not restricted to) pre- and post-natal maternal and infant health, feeding and weaning practices, ambient living conditions and local socio-ecologies, family size, birth spacing, and projections of fertility, fecundity and life expectancy. From a broader perspective, data derived from such a study would elucidate Egypt's position in relation to cross-cultural expressions of child and infant mortality, and contribute to global palaeodemographic research agendas.

- The present study has not focused on the spatial distribution of CIFBs in individual cemetery contexts. Such analyses may ascertain if the clustering phenomenon noted in cemeteries such as Adaima, Ain el-Labakha, Douch, Elkab, Nag el-Hai, Naga ed-Deir, Sebaiya (East), el-Ghurab and Deir el-Medina were geographically/chronologically widespread. Such research may also situate this practice within the broader cultural framework of ontological equity across the demographic spectrum.[1451]

- A detailed study of the attestation, typology, decoration and context of pot burials would refine our understanding of this phenomenon.

- The present study's finding of ontological equity between children and adults has far-reaching implications for Egyptology. If we accept that children had a social position, value and agency equal to adults, we must also accept their equal capacity to make deliberate or inadvertent contributions to the formation of the archaeological record. It is often said that children contribute to the archaeological record "whether we are able to recognise them or not".[1452] To date, archaeological processes exhibit low levels of "practical consciousness"[1453] of children's materiality, especially considering the difficulties in identifying material traces of their *acts*, rather than the children themselves.[1454] As such, opportunities exist to develop 'child-friendly' research programs in Egyptology which hone our ability to identify children's agency, as opposed to that of other agents in the archaeological record.

- Notwithstanding the above, it is important to integrate disciplinary praxes which acknowledge the presence and agency of children into broad, interactive social processes of 'being' within ancient communities specifically, and within culture as a whole. To study children in isolation from adolescents and adults is as culturally

[1451] For comparative purposes, see Krzyżaniak (1984); Prominska (1984).
[1452] Lillehammer (2010: 29); *cf.* Chamberlain (1997: 249); Derevenski (1997); Scott (1999); Baxter (2006b: 77).
[1453] Giddens (1984: xxiii).
[1454] Baxter (2005: 114).

unrealistic and ethically unbalanced as studies which exclude children from analyses. Future studies may therefore follow the 'life course' model, which considers the interrelatedness and symbiosis of humans' biological, social and cultural situation from conception through to old age and death.[1455] Rather than focusing on differences between life stages, life course studies endorse that each phase can only be understood in relation to the others within a broader biocultural system.

Considerations of the life course allow us to conclude, as we began, under *The Instruction of Any's* counsel that life in ancient Egypt existed in a constant state of tension: between longevity and brevity.[1456] As we move beyond this thesis towards archaeological praxes which seek to explore the lived experiences and cultural capacities of *all* members of ancient Egyptian communities, it would seem that the life course approach may provide an apposite means to engage both modern *and* ancient sensibilities regarding matters of life and death: from the cradle to the grave.

[1455] Hockey & James (2003); Gowland (2006: 145); Kamp (2006: 120); Harlow & Laurence (2007).
[1456] See epigram, page xxi of this thesis.

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The following bibliography refers to the text of the present study only. References pertaining to the sample of child, infant and foetal burials are listed within their respective database entries. The database is included on a CD-ROM, attached as an Appendix to the inside back cover of this volume.

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"Parmi ces cadavres était celui d'une petite fille que ses parents n'avaient pas voulu laisser partir pour l'autre monde sans la munir au moins d'un scarabée et d'une autre amulette, voulant préserver leur petite enfant des dangers du grand voyage. Pauvres gens!"

"Among these bodies was that of a small girl whose parents had not wanted to let go to the next world without at least providing her with a scarab and one other amulet, wanting to keep their small child safe from the dangers of the great journey. Poor people!"

— Amélineau (1899: 31).