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Transformations in Death: The Archaeology of Funerary Practices and Personhood in the Bronze Age Levant

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Transformations in Death: The Archaeology of Funerary Practices and Personhood in the Bronze Age Levant

by

Melissa Sarah Cradic

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of the

University of California, Berkeley

Committee in charge:

Professor Benjamin W. Porter, Chair
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Abstract

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Burials in the Middle and Late Bronze Age Levant (ca. 2000-1200 B.C.E.) exhibit a high degree of mortuary diversity and experimentation with body disposal methods in primary, secondary, and co-mingled inhumations. Previous research has explained the process of multiple-successive burial as a result of the functional need to make room inside of a re-used burial space such as a chamber tomb. This explanation misses the opportunity to investigate the social and ritual meaning of repeated, close contact with the corporeal remains of the deceased after death and burial. Indeed, written sources from the ancient Near East attest to the existence of posthumous persons such as ancestors, ghosts, and the deified dead. Therefore, this dissertation poses four research questions to investigate the roles of the dead body and person in funerary rituals of the second millennium B.C.E. Levant: (1) What is the status of the dead after burial? (2) What roles do the corpse play in the funerary sequence? (3) What do textual sources and mortuary practices reveal about relationships between the post-mortem body and person? (4) Under what circumstances does personhood continue or transform after death?

The treatment of the dead body determines the posthumous social roles of the deceased after burial and explains the high degree of burial diversity of the Middle and Late Bronze Age Levant. This work combines theoretical frameworks of personhood and embodiment with methods derived from mortuary archaeology, specifically funerary taphonomy, biological profiles of age and sex, and distributions of burial type, architecture, context, and grave goods. Drawing from a broad mortuary dataset from across the Levant, including three mortuary case studies from Tel Megiddo (Israel), patterns of deposition and corpse modification in residential burials are identified. These results are compared with contemporaneous textual evidence drawn from a variety of sources across the Levant and Mesopotamia which address the dead body and person. This study presents a new model of the extended funerary sequence in residential burials of the second millennium B.C.E., asserting that the bodies of the dead were treated differently according to their membership within the household. It is also argued that repeated fragmentation and intermixing of skeletal remains in residential burials was the primary pathway to achieving ancestor status after death and burial. The results provide new insight into the society of the Bronze Age Levant, a context in which the household encompassed the living and the dead and served as the primary social unit.

TABLE OF CONTENTS

Appendix

LIST OF FIGURES

LIST OF TABLES

LIST OF ABBREVIATIONS

ARM Archives Royale de Mari

BE Babylonian Expedition of the University of Pennsylvania, Series A: Cuneiform Texts

BM British Museum

CAD The Assyrian Dictionary of the University of Chicago

CAT *The Cuneiform Alphabetic Texts from Ugarit, Ras Ibn Hani and Other Places* (Dietrich, Loretz and Sanmartín 1995; *KTU*: second enlarged edition)

KTU *Die Keilalphabetischen Texte aus Ugarit. Teil 1 Transkription* (Dietrich, Loretz and Sanmartín 1976)

OIM The Oriental Institute Museum

RS Ras Shamra

UoC The University of Chicago Megiddo Expedition (1925-1939)

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CHAPTER 1 – INTRODUCTION

This interdisciplinary study addresses embodied personhood after death and burial in the second millennium B.C.E. Levant, the periods of the Middle Bronze Age (MB; ca. 2000-1600/1550 B.C.E.) and Late Bronze Age (LB; ca. 1600/1550-1125 B.C.E.). This work combines methods derived from the field of funerary taphonomy with the theoretical framework of personhood-embodiment. I present a new model of Bronze Age funerary rituals that focuses on body disposal methods as a meaningful variable of mortuary practice. Using mortuary data from Tel Megiddo (Israel), I identify the transformative roles of the body and person at different temporal intervals after burial. This work provides new insight into the society of the Bronze Age Levant, a context in which the household served as the primary social unit (Schloen 2001). I argue that ongoing relationships between the living and the dead members of the household were mediated through ritualized interactions with human remains which were buried underneath the floors of occupied residences.

In the ancient Near East, not all who died were mortal. The textual records of ancient Mesopotamia and the Levant document not only different ways of dying but also a range of social outcomes of death, such as transformation into an ancestor, ghost, or deified dead (Lewis 1989; Schmidt 1994; van der Toorn 1996; Teinz 2012; Sanders 2013: 36). In other words, the personhoods of selected persons continued to exist long after biological death, and this posthumous social status is expressed through special commemoration rituals and through specific body disposal methods. Although ancient Near Eastern textual sources allude to the existence of afterlives, the documentary evidence does not provide clear answers about the nature of death and ontological status of the dead: what does it mean to be a deceased person in the ancient Near East? What is the status of the dead after burial? Who becomes an ancestor and who does not? The textual record enriches understanding of these questions but cannot fully address issues related to posthumous personhood. Despite the sustained scholarly interest in issues of ancestor veneration, commemoration, and ghosts in the context of the ancient Near East (cf. Scurlock 2016; Pardee 1996; van der Toorn 1996, 2014; Lewis 2014), the status of the dead *after* burial has yet to be addressed through mortuary archaeology, specifically the relationships between corporeal remains of the dead and ancestorhood.

By bridging the gap between ancient bodies and burial practices, mortuary archaeology is particularly relevant for the study of personhoods in the second millennium B.C.E. Burials throughout the region varied widely in terms of architecture, location and context; individuality; and body preparation and disposal methods. The diversity of the mortuary record is an indicator of social variation in death (Girella 2015: 117). I focus on a corpus of diverse intramural burials from the site of Tel Megiddo, a major Bronze Age urban settlement, as a case study to inform on the possible range of broader regional mortuary practices. Specifically, I apply new taphonomic methods to create a model of funerary ritual and personhood after burial that applies to other mortuary contexts of the Bronze Age Levant, particularly shared and re-used burial loci. The funerary taphonomy method, which has been applied to contexts such as Neolithic Europe, provides rich datasets on mortuary practices and is used here for the first time in the context of the Bronze Age Levant. Funerary taphonomy is particularly useful for reconstructing the depositional sequences of co-mingled and disarticulated skeletal remains, the main mortuary contexts under consideration in this study. I argue that the wide variation in burials of the Bronze Age Levant broadly, and at Megiddo specifically, suggests a connection between body disposal methods and personhood roles after death and burial, which are traceable archaeologically through careful reconstruction of the depositional sequences of human burials.

Archaeological studies have overlooked diversity of the mortuary record and have not yet addressed the status of the dead after burial in the Bronze Age Near East. Questions concerning death and burial in the Middle and Late Bronze Age Levant have been approached chiefly through culture history and functionalist perspectives that focus on parameters of wealth, rank, and identity. For example, seminal studies by Bloch-Smith (1992, 2003, 2013), Gonen (1992a, 1992b), and Hallote (1994, 1995, 2001a, 2001b) have presented the archaeology of death and burial in the Levant through broad lenses of culture history and identity, providing indispensable data and insight into the patterns of what, when, and where certain burial practices occurred. Yet, these approaches tend to privilege major trends rather than dealing with inconsistencies in the mortuary record of the Bronze Age Levant. Problematically, functionalist explanations of secondary and co-mingled burials have described the widespread practice of pushing aside previously interred skeletal remains as a way to “make room” for additional inhumations (Bloch-Smith 1992: 48; Blau 2006: 14; Doumet-Serhal 2014: 34-35). This interpretation overlooks the deeper social and ritual implications of these repeated burial treatments on both living and deceased persons within the context of the house and household (Fowler 2003; Osborne 2011: 36-37; Gramsch 2013: 464). Moreover, functionalist and culture historical approaches focus on what burials can communicate about the status of living, rather than the status of the dead as persons. To remedy these lacunae, this study turns attention to the complex relationships between the living and the dead as mediated through material remains of the body.

Research Questions

The main goal of this study is to address questions about embodiments of death, disposal of the human body, and the status of the dead after burial in the second millennium B.C.E. Levant. Mortuary evidence is framed in terms of embodiment and personhood to reveal how ontological beliefs about death and afterlives relate to body disposal methods (Robb 2013: 442). I aim to elucidate connections between death, embodiment, and posthumous personhood through investigating how the corporeal remains of a dead body—initially as a corpse, and later as a skeleton or collection of disarticulated bones—are handled in different ways. My research questions are as follows:

(1) What is the status of the dead after burial?
(2) What roles do the corpse play in the funerary sequence?
(3) What do textual sources and mortuary practices reveal about relationships between the post-mortem body and person?
(4) Under what circumstances does personhood continue or transform after death?

Evidence and Methodology

The primary means of addressing the status of the dead after burial is through archaeological evidence. This project uses excavation data to reconstruct the natural and anthropogenic processes of deposition, a method known as funerary taphonomy (Bello and Andrews 2006; Knüsel and Robb 2016). Recognizing how the archaeological record can affect the conditions of burial is key to interpreting the sequence of funerary activities (for discussion, see Chapter 2). Treatment of the corpse therefore forms the main focus of archaeological inquiry. I investigate transformation and materiality of the body after death, specifically: (1) afterlives of persons and bodies through examining the role of the corpse in funerary ritual; (2) the status of the dead after burial at different intervals of time; and (3) the relationships between the post-mortem body, processes of decay, and (de)construction of posthumous personhood.

I take a multi-scalar approach, drawing from a comprehensive corpus of Levantine burials, which provide the context for interpreting three detailed taphonomic case studies from the project's principal research site of Megiddo. Using published sources, I incorporate 104 masonry-constructed chamber tombs from 12 sites across the Levant and Cyprus (Figures 1, 4; Tables 32-33, 36). In order to provide datasets with both depth and breadth in mortuary practices, these sites meet four criteria: (1) each site contained at least one masonry-constructed chamber tomb; (2) mortuary contexts date to the second millennium B.C.E.; (3) burials were excavated in intramural contexts; (4) burial data are adequately recorded with at least basic architectural and osteological information.

As far as the published evidence allows, I integrate four main mortuary archaeology datasets from this set of burials: (1) burial architecture; (2) human osteology, including body disposal methods, individuality, age, and sex; (3) burial assemblages and related deposits; and (4) spatial and stratigraphic context of burials. Taken together, these variables reveal the significance of burial diversity in the second millennium B.C.E., specifically in terms of the degree of elaboration of the burial space and contents, as well as the sequence of funerary activities and episodes of disturbance to human remains.

This broad Levantine dataset contextualizes the main case study of the project: Tel Megiddo in the Jezreel Valley of modern-day northern Israel (Figure 2). This major Bronze Age urban settlement contained a high density of intramural burials, including: jar burials; primary pit inhumations; and secondary and co-mingled inhumations in pits and masonry-constructed chamber tombs. I utilize published, unpublished, and archival datasets from three teams of excavators whose field, recording, and publication methods differed (Cradic 2016): (1) Gottlieb Schumacher, who excavated at the site from 1903-1905 (Schumacher 1908); (2) The Oriental Institute of the University of Chicago which excavated the site extensively from 1925-1939 (Loud 1948); and (3) The Megiddo Expedition, which has run under the auspices of Tel Aviv University from 1992 to the present.

The newly uncovered burials and legacy data from the Schumacher and Oriental Institute expeditions comprise a combined Megiddo dataset of 331 intramural burials. Of these burials, 271 are included in the study; due to limitations in osteological and contextual data, 60 burials were excluded, as were the site's extramural burials in the Eastern Slope cemetery (Guy and

Engberg 1937). Narrowing the focus further, I conduct taphonomic analysis of three recently uncovered burials. These mortuary loci are concentrated in two areas of the site: Area K, a residential neighborhood in the southeast of the site (supervised by Dr. Mario A.S. Martin) and Area H, the palatial precinct in the northwest of the city (supervised by the author).

From Area K, I focus on Tomb 10/K/100 (Tomb 100), a multi-use masonry-constructed chamber tomb located inside of a courtyard house, Building 12/K/15. This building dates to the Middle Bronze III/Late Bronze I period and contained the burials of at least 43 individuals, 23 of whom were inhumed in Tomb 100. I compare the results with two contemporaneous burial contexts from Area H, masonry-constructed chamber Tomb 16/H/50 (Tomb 50) and simple pit Burial 16/H/45. These closely contextualized case studies make use of taphonomic observations, osteological data, and burial architecture and contents. This suite of mortuary evidence from Megiddo is used to reconstruct the sequence of funerary activities, accounting for pre-interment preparations, inhumation, and post-interment commemoration activities at each of these three burial sites. These reconstructions contribute to the project's objectives of introducing new mortuary analyses that shift the focus from identities of the living to funerary dynamics, differences, and transformations of the dead after burial.

Textual Sources

To complement the archaeological evidence, I incorporate a broad range of documents from the ancient Near East that reference funerary procedures, mourning, and commemoration as well as sources that describe ancestors, ghosts, and the deified dead. I examine Old Babylonian *kispum* rituals; liturgical and literary texts from Late Bronze Age Ugarit; and the KTMW stele, a funerary inscription from eighth century Zincirli. Although removed in time from the Bronze Age by several hundred years, the KTMW stele is a well contextualized source that underscores the continuity of Bronze Age practices such as commemoration of the named dead through the provision of a dedicated space, a standing stone, and offerings.

I utilize these liturgical, literary, and epigraphic texts in translation to illuminate ancient Near Eastern thought concerning the dead as persons and as physical remains in a broad sense. Textual references to ancestors, ghosts, and deities allow inferences about what kinds of posthumous persons existed, as well as the relationships between posthumous persons and their post-mortem bodies. These sources should be considered cautiously, particularly literary texts which may not represent realities of mortuary practice. I take a comparative approach between the archaeological evidence and textual representations of mortuary practice to minimize potential distortions. It should also be noted that these sources derive mainly from elite palace and temple contexts and therefore represent populations of the highest status.

Background

This project focuses on the Bronze Age Levant during second millennium B.C.E., the periods of the Middle Bronze Age and Late Bronze Age (Table 1). The majority of the burials in this project's dataset falls within the mid-second millennium B.C.E., which encompasses the MB

II through LB I periods (ca. 1700-1450 B.C.E.). The second millennium B.C.E. witnessed several pivotal periods of change, innovation, and social transformation related to major developments in urbanization, architecture, material culture, and burial practices. Several trends stand out in current archaeological research on the Bronze Age Near East such as topics on ethnicity and identity (cf. Kamp and Yoffee 1980; Emberling 1997; Killebrew 2005; Bahrani 2006; Lönnqvist 2009; Burke 2014a, 2014b, 2017; Homsher and Cradic 2017); climate and environment (cf. Courty and Weiss 1997; Eastwood et al. 2007; Rosen 2007; Wossink 2009; Finkelstein and Langgut 2014; Langgut, Adams, and Finkelstein 2016; Burke 2017; Höflmayer 2017; Riehl 2017; Weiss 2017); and urbanization (cf. Kempinski 1992; Herzog 1997; Greenberg 2002, 2017; Burke 2008, 2014a, 2017; Cohen 2009, 2014, 2016, 2017; Kennedy 2016; Homsher 2012, 2013; Homsher and Cradic 2017; Schwartz 2017). Burials serve as a source of evidence for each of these topics due to their direct access to the skeletal remains of the ancient population. Skeletal remains serve as rich datasets for population demographics and genetics, health status, pathologies, diet, mobility, and environment. As discussed in Chapter 2, recent studies that address mortuary practices of the second millennium B.C.E. have begun to cover new ground such as social memory, funerary beliefs, and ritual practices (Laneri 2007, 2010; Andreou 2016). This study builds on these foundations, exploring new avenues of research in regard to the place of the dead within the social unit of the household.

Chronological Scheme

Levantine chronology of the Neolithic through Iron Age is defined broadly by two main factors: (1) macro-scale changes in social organization; and (2) ceramic seriation (Sharon 2014). This project's chronological scheme of the second millennium B.C.E. Levant is derived from recent proposals by a number of researchers who employ a variety of absolute and relative dating methods (Table 1).[1] Relative chronologies of the Levant have been based on two major datasets: (1) synchronization of material culture and stratigraphy from key sites such as Aphek, Tell Beit Mirsim, and Megiddo; and (2) Egyptian historical chronologies, which serve as a "tool for deriving absolute calendrical dates for relative chronological periods all over the eastern Mediterranean" (Höflmayer and Cohen 2017: 1-2; Sharon 2014). These schemes may occasionally conflict, which contributes to the dual challenges of creating a consensus for a consistent chronology and broad synthesis of the period (Cohen 2017: 34-35).

The Middle Bronze Age is divided into four main subperiods: MB I, MB II, MB III, and MB III/LB I transitional period (Table 1).[2] In Egyptian historical terms, these subperiods broadly correlate with the Middle Kingdom, Second Intermediate Period, and the beginning of the Eighteenth Dynasty of the New Kingdom, respectively (Sharon 2014). In the southern Levant, the MB I (ca. 2000-1825 B.C.E.) witnessed the re-emergence of complex society and renewed urbanism following a period of dispersed settlement and small-scale subsistence economies of the Early Bronze IV/Intermediate Bronze Age (ca. 2500-2000 B.C.E.) (Burke 2014a; Prag 2014; Kennedy 2015a). In the northern Levant, the MB I is marked by revitalization of urban centers

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[1] See Morandi Bonacossi (2008: 61-63); Höflmayer (2017); Pfälzner 2017; Schwartz 2017.

[2] Chronologies of Middle Bronze Age in the northern Levant follow a different scheme than those of the southern Levant (see Table 1; Charaf 2014; Morandi Bonacossi 2014; Kennedy 2015a: 201).

and the establishment of settlement hierarchies (Akkermans and Schwartz 2003: 288-332; Morandi Bonacossi 2014). The transition from the MB I to MB II periods has been traditionally understood as the zenith of Middle Bronze Age Canaanite society, with phenomena such as earthen ramparts, fortifications, and monumental architecture such as palaces and temples appearing in localized forms throughout the region (Homsher 2013: 69-84; Cohen 2014; Homsher and Cradic 2018). The MB II (ca. 1825-1700 B.C.E.) and MB III periods (1700-1600/1550 B.C.E) continued the fluorescence of Canaanite urban society in which fortified settlements with hinterlands were organized into regional hierarchies. Hallmarks of the MB II and MB III periods include stability and centralization of political and economic systems; establishment of new settlements and expansions of existing cities; and standardization of technology and material culture (Ilan 1995a; Yasur-Landau, Cline, and Pierce 2008; Homsher 2012, 2013; Cohen 2014). The MB III/LB I transitional period (ca. 1600/1550-1450 B.C.E.) gradually marked the beginning of the Late Bronze Age, which introduced changes in political organization and widened the scope of interregional interaction (see Chapter 2).

The Late Bronze Age correlates with Eighteenth through Twentieth Dynasties of New Kingdom Egypt (Panitz-Cohen 2014). The transition from the Middle Bronze Age to Late Bronze Age is characterized by punctuated decline in settlement and population density that occurred throughout the southern Levant. This same period witnessed the rise of Egyptian hegemony of the Eighteenth Dynasty over the southern Levant, and Mittani and Hittite control in the northern Levant (Sharon 2014). The Late Bronze Age is defined in relation to these political entities, beginning in the LB IB (ca. 1450-1390 B.C.E.) when Egypt solidified its political and economic control over the region, which remained strong through the Amarna Period of the LB IIA (ca. 1390-1300 B.C.E.). These empires integrated the Levant more firmly into the interregional political and exchange networks of the Near East and eastern Mediterranean (Panitz-Cohen 2014). The LB IIB (ca. 1300-1200 B.C.E.) and LB III periods (ca. 1200-1125 B.C.E.), which correlate with the Nineteenth and Twentieth Dynasties, witnessed widespread destructions, migration, and military conflicts involving the Sea Peoples that ushered in decline and the transition to the new era of the Iron Age (Klengel 2014; Sharon 2014; Sherratt 2014; Panitz-Cohen 2014).

In terms of mortuary practices, as I elaborate in Chapter 2, the rules governing burial were flexible during the Middle Bronze Age, a period during which a wide variety of new types of burial architecture, inhumation, and mortuary contexts were introduced. At the site of Megiddo, continuity in settlement and material culture types during the Middle to Late Bronze Age transition stands in contrast to changes in burial practices. Intramural burial at the settlement begins to decline sharply after the Late Bronze I, Strata X-IX, after having been relatively stable and widely attested throughout the site during the Middle Bronze Age, Strata XIV-X (Table 1). In the Levant more broadly during these periods, two major factors were in play in the mortuary realm that are of particular relevance to this study: (1) the widespread diversity of burial practices and body disposal methods within and between sites; and (2) distribution of multiple-use masonry-constructed chamber tombs inside settlements reached a peak. These trends are discussed in detail in Chapters 5 and 6, and I address the ritual implications and social meaning of the household as a mortuary context in Chapter 8.

In addition to the problems of chronology described above, assigning relative or absolute dates to mortuary contexts is challenging when the burial space is re-used over a long period of time from decades to centuries. Radiocarbon dating techniques, pottery seriation, and careful stratigraphic considerations have contributed to this project’s local chronological scheme for Megiddo, which can be contextualized within broader regional trends of the Levant (Table 1).

Geographical Boundaries

Geographically, this study encompasses the Levant (southern Turkey, Syria, Lebanon, Israel, Palestine, Jordan, and northern Egypt) from the Nile Delta site of Tell el-Dab'a in modern-day Egypt in the south to the site of Alalakh in the Amuq Valley of Turkey in the north (Suriano 2014a). The easternmost site is Tell es-Sa'idiyeh in the Jordan Valley (Figure 1). Within the wider regional scale of the eastern Mediterranean and Aegean, I discuss burials on Cyprus (Enkomi) and in southern mainland Greece. Although I prefer to refer to the Levant as a single region, the terms Transjordan and Cisjordan are used occasionally as more precise regional terms for areas in the southern Levant which are east and west of the Jordan Valley, respectively, following recent trends (cf. Steiner and Killebrew 2014; Suriano 2014a; B. Porter 2016).

<table>
<tr><th>Dates (B.C.E.)</th><th>Southern Levant</th><th>Northern Levant</th><th>Megiddo Strata</th></tr>
<tr><td>3000 – 2900</td><td>Early Bronze II</td><td>Early Bronze II
(3000 – 2700)</td><td>Not identified</td></tr>
<tr><td>2900 – 2500</td><td>Early Bronze III</td><td>Early Bronze III
(2700 – 2500)</td><td>XVII-XVI</td></tr>
<tr><td rowspan="2">2500 – 2000</td><td rowspan="2">Early Bronze IV
(Intermediate Bronze)</td><td>Early Bronze IVA
(2500 – 2300)</td><td rowspan="2">XV</td></tr>
<tr><td>Early Bronze IVB
(2300 – 2000)</td></tr>
<tr><td>2000 – 1825</td><td>Middle Bronze I</td><td>Middle Bronze I
(2100 – 1850)</td><td>XIV-XIII</td></tr>
<tr><td>1825 – 1700</td><td>Middle Bronze II</td><td rowspan="2">Middle Bronze II
(1850 – 1600)</td><td rowspan="2">XII-XI</td></tr>
<tr><td>1700 – 1600/1550</td><td>Middle Bronze III</td></tr>
<tr><td>1600/1550-1450</td><td>Middle Bronze III/
Late Bronze I A</td><td>Middle Bronze III/
Late Bronze I A</td><td>X-IX</td></tr>
<tr><td>1450-1390</td><td>Late Bronze I B</td><td>Late Bronze I B</td><td>IX</td></tr>
<tr><td>1390-1300</td><td>Late Bronze II A</td><td>Late Bronze II A</td><td>VIII</td></tr>
<tr><td>1300-1200</td><td>Late Bronze II B</td><td>Late Bronze II B</td><td>VIIB</td></tr>
<tr><td>1200-1125</td><td>Late Bronze III</td><td>Late Bronze III</td><td>VIIA</td></tr>
</table>

Table 1. Approximate chronology of dates and regions mentioned in the text, with emphasis on dates for the southern Levant and stratigraphy of Tel Megiddo (adapted from Homsher and Cradic 2018). Terminology here follows MB I, II, III.

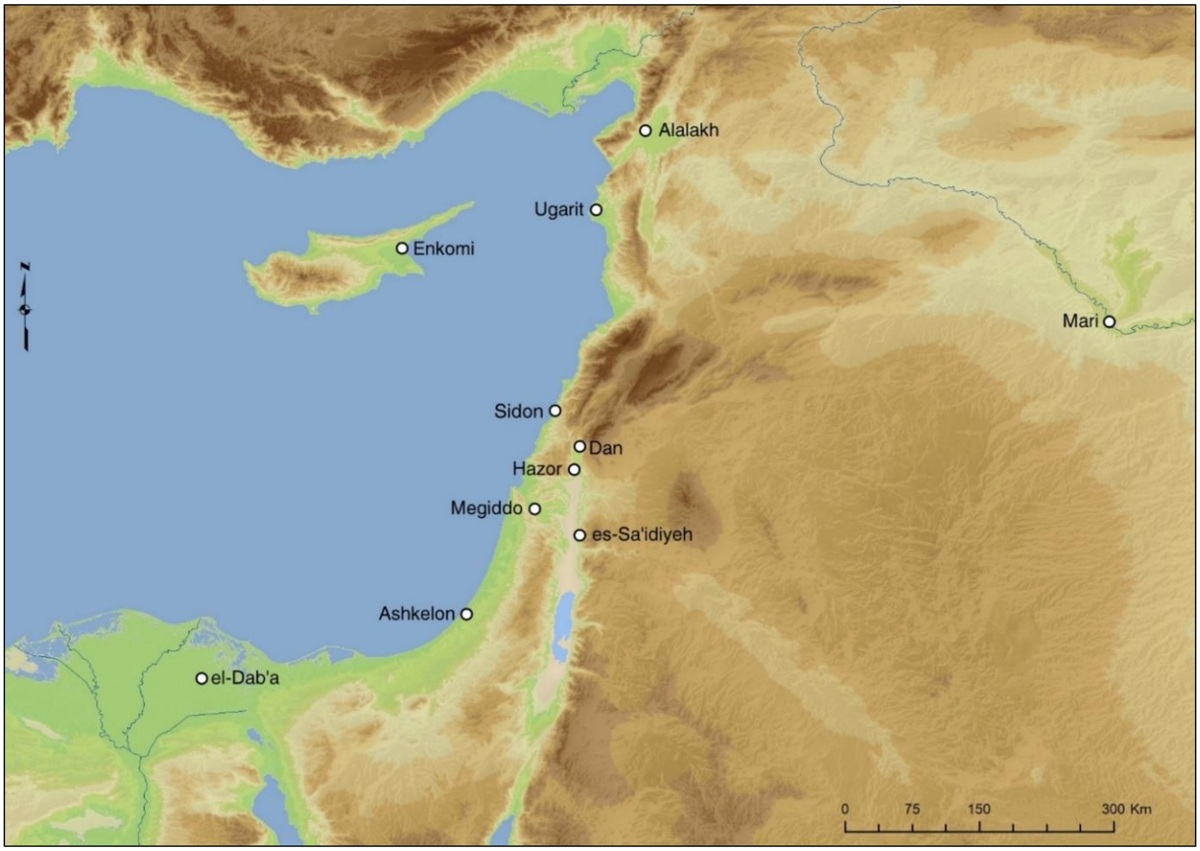

Figure 1. Map of the eastern Mediterranean and Levant with major sites of the second millennium B.C.E. mentioned in the text. Figure prepared by R. Homsher.

Figure 2. Aerial view of Tel Megiddo, facing south (photograph by A. Prins; courtesy Megiddo Expedition).

Results

The findings of this study reveal the complexity and diversity of embodiment after death, and the plurality of afterlives in the second millennium B.C.E. The conclusions are based on identification of patterns related to burial diversity and treatment of corporeal remains in residential burials. The observable differences between and within contemporaneous human burials from the Middle and Late Bronze Age Levant demonstrate that funerary complexity, context, and body treatment were significant and internally meaningful variables of Canaanite mortuary practice. Body disposal method specifically is the operative factor that directly relates to the degree of complexity of an individual's funerary ritual, which could range from a single episode to multi-staged ritual sequences. The materiality of the body itself plays an important role in the ongoing personhood of certain deceased persons. With the multi-staged intervention of survivors, personhood could transform after death and burial, and beyond the living body. I demonstrate that treatment of the dead body determines the posthumous social roles of the deceased after burial, which in part explains the high degree of burial diversity of the Middle and Late Bronze Age Levant.

These results provide answers to the project's research questions concerning the status of the dead after burial; the role of the corpse in the funerary sequence; relationships between the post-mortem body and personhood; and the circumstances under which personhood transformed after death. Different methods and places of disposal resulted in different embodiments of death. In a related sense, varied means of commemoration—whether or not involving corporeal remains directly—produced diverse iterations of the extended life course. As revealed through both archaeology and text, the ongoing personhood status of the dead after burial depended on factors of visible commemoration, such as visitation to the burial locus involving deposition or disturbance to the original inhumation. Evidence of post-interment offering deposits, grave marking, or another locus of commemoration—such as a stele—also point to personhood roles of the dead long after burial. Burial and commemoration within the house specifically created strong physical and social links between surviving inhabitants and deceased household members, possibly predicated on lines of kinship or lineage.

The temporal aspect of the funerary sequence is also significant; in some cases, long-term commemoration extended and transformed the decedent's personhood for generations. In other cases, such as an unmarked primary inhumation, personhood ceased shortly after burial. Together, body disposal methods and the time scale involved in the funerary sequence played especially important roles in determining who was commemorated, how, and for how long. These criteria are measurable in the mortuary archaeology record through close taphonomic analysis. The corporeal remains that were subjected to continual disturbance, particularly in shared and re-used burial spaces, were more likely to have been commemorated as household ancestors. The manipulation of the skeletal remains of long-deceased persons facilitated the transformation of their status from living persons to collective ancestors in a multi-stage ritual process. Ritualized interactions with human remains over long intervals of time was the primary pathway to achieving ancestorhood status after death and burial.

In summary, my findings demonstrate that long-term commemoration could result in the transformation of person from a living entity, to a recently dead person, to a long dead person. Transformation into an ancestor specifically involved close and continual physical interaction with the corporeal remains of the dead. As time after death increased, so too did the objectification of the body and the separation of the corporeal remains from the personhood of the dead. In certain cases, the recently dead maintained a continuing presence among the surviving social network, while the long dead were transformed into entirely new forms of persons. For this latter group, active memorialization of an individual or group of persons extended the personhood of the dead up to several generations. The re-use of burial space required close interactions between living and dead, as well as among the growing community of the dead inside a tomb. This community of the dead was connected through lineages derived from their residential communities of the house and household (*sensu* Levi-Strauss 1982; Blanton 1994; Gillespie 2001; Joyce and Gillespie 2000; Hendon 2010; Thomas 2016).

Intellectual Contributions

My research makes original contributions to mortuary archaeology, archaeology of personhood and embodiment, and study of the Bronze Age Levant. This work applies the innovative methodology of funerary taphonomy and new theoretical framework of personhood-embodiment to a broad range of archaeological evidence. In addition to providing an updated and critical synthesis of second millennium B.C.E. mortuary practices, my study presents a new corpus of unpublished burial data from Tel Megiddo, a major "type site" that is representative of urban settlements of the second millennium B.C.E. I identify meaningful variables of burial practice and offer fresh interpretations of the role of the body in the processes of death, burial, and afterlives. My conclusions have site-specific and regional implications for understanding funerary sequences and the status of the dead after burial in the ancient Near East.

The most significant aspect of my research is its integrative methodological approach to mortuary contexts and the funerary sequence, employing a combination of funerary taphonomy, osteoarchaeology, and textual sources, which is novel for Near Eastern and Mediterranean archaeology. My project connects the mortuary corpus of the Levant to the emerging global body of work on funerary taphonomy. Building on the foundations of funerary taphonomy in prehistoric contexts, I combine detailed evidence of preparation and deposition(s) of the corpse with evidence from ancient textual sources to examine the transformative roles of corporeal remains after burial. My innovative approach is original for the context of the Bronze Age Levant and directly contributes to the development of the field of funerary taphonomy, an established method that has primarily been employed in prehistoric contexts (see Chapter 2; cf. Bocquentin and Garrard 2016; Crozier 2016; Grosman and Munro 2016; Knüsel and Robb 2016; Pilloud et al. 2016). I demonstrate how this approach refines understanding of tangible and intangible aspects of death and burial and contributes to deciphering the complexities of posthumous personhood and embodiment, even in a context in which textual sources are available. My conclusions are firmly rooted in archaeological and textual evidence and lend nuanced insight into the world of the ancient Near East while applying the principles and methods of funerary taphonomy to this context for the first time.

This study complements recent trends in anthropological theory, specifically constructionist and feminist thought that questions universal experiences of the human condition (Fowler 2002; Hamilakis, Pluciennik, and Tarlow 2002; Robb 2002, 2007, 2013; Thomas 2002; Tarlow 2011: 7-8; Geller 2012a; Harris and Robb 2012). My project's focus on embodied personhood after death builds on these critical approaches, which are under-utilized in Near Eastern archaeology, and presents an archaeological model for the transformative role of death in the extended life course. I introduce a new kind of multivocality: the voices of deceased persons, as understood and mediated by survivors. Beyond addressing embodied personhoods of the deceased, I consider multiple ontologies of posthumous embodiment and personhood, which could involve different kinds of relationships between persons and bodies. Persons could be corporeal, in wholes and/or parts, or non-corporeal in the sense that they were not directly attached to their physical remains.

This novel research perspective has not yet been considered in archaeology of the Bronze Age Levant. However, the wide availability and richness of mortuary archaeology datasets in the Levant creates high potential for research engagement with burial evidence, which already has a long history in the discipline. The combined personhood-embodiment approach to mortuary archaeology applied here provides renewed insight on emic understandings of the extended human life course, particularly the role of the body and its relationship to posthumous personhood. I bring this research perspective of embodied personhood to Bronze Age Levantine archaeology, which has traditionally dealt with skeletal remains as biological organisms rather than as persons. The comparative approach of this study, which considers textual and archaeological evidence together, will also make a lasting impact in Near Eastern Studies. Issues concerning ancestorhood and the status of the dead have been debated without consensus primarily from a textual, rather than material, perspective. My approach contributes to resolving these long-standing questions about ancestorhood, such as who was selected to become an ancestor and who was not.

Beyond ancestors and ancestorhood, my archaeological model of sequential funerary rituals builds a useful paradigm for other researchers to apply to their datasets, especially when dealing with the variation in the burial record of the Bronze Age Levant. The diversity of Levantine mortuary data has been under-recognized in favor of homogeneity, which did not exist to the degree that has framed traditional understandings (cf. Hallote 1995; Doumet-Serhal 2014). Differences in burial treatments point to dynamic post-mortem personhood transformations rather than marking hierarchical status, as they are conventionally interpreted. My project's contextually rich case studies will lay the groundwork for future investigations of personhoods throughout the life course in early complex societies across and beyond the ancient Levant.

More broadly, this project contributes to a more nuanced understanding of Bronze Age society, specifically the place of death within the cultural milieu of the second millennium B.C.E. Despite the sustained interest in what human burials reveal about social organization in the second millennium B.C.E. Levant, the human body—particularly skeletal remains of the dead—has not featured prominently in discussion of Bronze Age society. This study provides new insights into the dynamic and ongoing relationships between the living and the dead at the scale of the household, the primary social unit of the Bronze Age Levant (Schloen 2001). Household membership was comprised of the dead and the living. The latter group performed specific sequences of rituals that were intended to transform the bodies and personhoods of the dead at multiple intervals after burial. This study reveals the criteria and practices related to becoming an ancestor, changing the traditional view of Bronze Age burials as static and hidden, particularly in regard to co-mingled inhumations in subfloor household contexts. These intramural burials were active ritual loci in which continual manipulation of the bodies of the dead contributed to the organization of the intergenerational household. The prolonged transformation of the corpse in extended sequences of funerary rituals mirrored the transformation of the dead person. The literal incorporation of the bodies belonging to multiple individuals occurred in tandem with the social incorporation of the dead into a collective group of ancestors who shared bodies and social roles.

Organization of the Study

Overview

The project is organized into nine chapters and one appendix. Chapters 1-3 provide necessary contextual, methodological, and theoretical background to situate this project. In order to address major lacunae in the mortuary archaeology of the ancient Near East, I have structured this study in such a way as to devote nearly as much space to investigating theories and methods of personhood, embodiment, and corporeality as I have to discussing the mortuary context of the Bronze Age Levant. In Chapters 4 and 5, I present a broad body of mortuary data and textual perspectives on death and dying in the ancient Near East. Chapters 6-8 concentrate on Middle and Late Bronze Age burials uncovered at the project's principal research site of Megiddo. In Chapter 8, I analyze three taphonomic case studies from Megiddo in which I reconstruct the sequence of funerary activities, depositions, and disturbances in each burial context. I summarize the study's results, contributions, and conclusions in Chapter 9. The appendix provides the mortuary data that is relevant to this study from across the Levant. This material will provide a useful source of Middle and Late Bronze Age mortuary data for other scholars, particularly the catalogues of newly uncovered burials from Areas K and H. The database also presents previously unpublished legacy evidence from the excavations at Megiddo conducted by the Oriental Institute of the University of Chicago, which significantly changes the picture of the urban mortuary landscape at major tell sites in the second millennium B.C.E.

Chapter Summaries

Chapter 2 presents the background of the study, including the context of the second millennium B.C.E. and a critical review of previous research into the topic of death and burial during the Middle and Late Bronze Age. This cultural and intellectual context frames the argument that a holistic approach to burials, with a focus on taphonomy and human osteology, reveals social outcomes after death in the context of the second millennium B.C.E. Levant. I detail the method of funerary taphonomy and explain how a forensics-driven approach to human burials facilitates the reconstruction of the funerary sequence, particularly for complex burial contexts that have been disturbed. I argue that funerary taphonomy addresses many lacunae of previous studies of the mortuary archaeology of the Bronze Age Levant. Funerary taphonomy moves the field forward through deep engagement with context, specifically processes of decay and deposition.

Chapter 3 presents the major theoretical perspectives that drive this research: personhood, embodiment, and corporeality. The chapter discusses the recent research trends and how to operationalize these theories in mortuary archaeology. Despite the availability of rich documentary sources and scholarly attention to ancestors in the ancient Near East, few researchers have focused on tangible relationships between death and dying—corporeal remains and ways of (re-)burying the body and skeletal remains—and the potential personhood outcomes after death. Moreover, personhood approaches have been largely overlooked in the Mediterranean and Near East despite successful applications elsewhere, such as pre-Hispanic Mesoamerica (Gillespie 2001; Geller 2012a), the American Southwest (Cerezo-Román 2014, 2015), Neolithic Europe (Brück 2001; Fowler 2004; Robb 2007), and Medieval Europe (Gilchrist 2012). The chapter reviews how these contributions have enhanced understanding of personhood in prehistoric and historical contexts around the globe, especially practices of body curation, fragmentation, and partibility. In drawing from such a wide and disparate dataset, I aim to draw attention to the diversities of corporeality and embodiment after death and burial using examples of practices that relate conceptually, if not contextually, to the Bronze Age Levant. I demonstrate how these perspectives can be applied productively to the context of the second millennium B.C.E. Levant.

Chapter 4 discusses ancient Near Eastern textual sources on deathways and the treatment and status of the dead. I focus on excerpts from the Ugaritic *Tale of Aqhat* as well as texts involving the dead. I also discuss the eighth century B.C.E. KTMW funerary stele. This later text and its accompanying iconography is particularly intriguing because it provides a first-person account of last wishes of the named dead who is providing for his own perpetual commemoration. I contend that these textual sources frame the views of death, burial, and afterlives in the world of the second millennium B.C.E. Levant. The texts name certain social outcomes of death—e.g., ancestor, deified dead, and ghosts—and provide a framework for rituals of commemoration of named persons. To a degree, the written sources also provide a standard against which to measure the archaeological evidence.

Chapter 5 synthesizes a large body of mortuary data from the eastern Mediterranean and Near East. The chapter is divided into two parts. First, I define commonly used terms in mortuary archaeology and provide a detailed overview of death and burial practices of the second millennium B.C.E. Second, I provide an analysis of burials by type and architecture, patterns of age and sex, individuality, and body disposal, with comprehensive discussions of comparanda as well as frequent references to the exceptions to normative mortuary practices. I focus on the wide variation in burials, and how practices changed throughout time and space. I argue that there is a direct connection between mortuary practices and the social outcomes of death that are not related to traditional categories of identity such as wealth, rank, sex, or age, with the occasional exception of infants and young children.

Chapter 6 presents the 271 intramural burials from the Middle and Late Bronze periods that have been excavated at this project's case study site of Tel Megiddo. These data come from published and unpublished sources of varying quality. I explain my method for deriving useful taphonomic and osteological evidence from informal and archival sources such as field diaries and photographic negatives, which comprise a large part of the Oriental Institute legacy dataset. Due to the inconsistency of the data, the evidence is not always comparable, so I discuss the findings of each excavation separately and synthesize this information as far as the evidence allows. I make a case for a significant degree of diversity in death at second millennium B.C.E. Megiddo, which impacted the status of the dead after burial.

Chapter 7 analyzes the Megiddo burial data in depth, focusing on patterns of burial type, body disposal method, age, individuality, and grave goods. The second part of the chapter identifies meaningful patterns and interprets the high degree of variability focusing on parameters of context, age cohorts, and biological sex. I apply concepts of post-mortem personhood to a brief case study that highlights the impact of age-at-death as a factor for determining posthumous personhood status.

Chapter 8 applies theories of personhood, embodiment, corporeality, and the extended human life course to three detailed taphonomic case studies. The first deals with Tomb 100, a masonry-constructed chamber tomb that exhibits long-term use. I parse the tomb's multiple episodes of disturbance that transformed complete skeletons into bone dust. I reconstruct the extended funerary sequence of this tomb context and argue that the decedents' personhoods transformed through a complex series of ritualized activities that closely involved the dissolution of individual human bodies. I compare these results with two additional mortuary contexts, masonry-constructed chamber Tomb 50 and simple pit Burial 16/H/45. Although Tomb 50 is similar in architecture to the contemporaneous Tomb 100, the tomb otherwise differs markedly in terms of mortuary practice, its taphonomic signatures, and body disposal methods; these differences carry significant implications for post-mortem personhood outcomes in these disparate contexts.

Chapter 9 presents the project's conclusions. I contextualize the results of Chapters 7-8 within the broader dataset of burials from the second millennium B.C.E. Levant. I link the patterns from Megiddo to concepts of post-mortem persons and bodies in ancient Near Eastern thought. I also discuss the implications of my findings for the understanding of Bronze Age society, which was organized around the living and dead members of the household. My findings bring the dead to the forefront of the social organization of the Levantine household, with particular focus on the process of becoming an ancestor. The results of my study explain the diversity of deathways in the Middle and Late Bronze Age. Embodiments of death varied because body disposal was closely linked to posthumous personhood. Finally, I discuss the impacts and future directions of my research for the fields of funerary taphonomy and Near Eastern archaeology.

Appendix

The Appendix includes tables of comparative data on burials from the second millennium B.C.E. Levant and eastern Mediterranean that are included in this study, as well as a database of burials from Tel Megiddo, combining the three main datasets derived from the excavations conducted by Schumacher, the Oriental Institute, and Tel Aviv University. I have also presented a catalogue of burials from those uncovered between 2010-2014 in Area K and Area H, which are used for the taphonomic case studies in Chapter 8. I include textual descriptions according to the fullest available information on stratigraphy and dating; context; burial architecture; burial assemblages; osteological observations; and taphonomic scores. The catalogue of burials from Area J, and the stratigraphic reports from Area K and Area J will appear in the forthcoming *Megiddo VI* excavation report (in press; Martin, Cradic, and Kalisher 2018; Martin and Cradic 2018; Adams and Cradic 2018).

CHAPTER 2 – FUNERARY TAPHONOMY IN THE BRONZE AGE NEAR EAST

This chapter contextualizes the historical and scholarly setting of this study, the second millennium B.C.E. Levant. In the first section, I introduce the archaeological and historical background of the Middle Bronze Age and Late Bronze from a regional perspective, emphasizing chronology, settlement patterns, and urbanization as well as major trends in trade, technology, and burial practices. Following this contextualization, I critically review previous and current scholarship on mortuary archaeology in the Levant. I explain how scholars have approached death and burial in the Bronze Age Levant using cultural history perspectives as well as approaches informed by bioarchaeology and identity.

Building on these foundations, I propose a methodology that is new to the context of the Bronze Age Levant: funerary taphonomy, a forensics-driven method that focuses on the order of deposition and explains disturbances to mortuary contexts through analysis of skeletal, stratigraphic, and contextual data. This fine-grained approach, which has been applied successfully in prehistoric contexts such as Paleolithic and Neolithic Europe and Near East (cf. Crozier 2016; Grosman and Munro 2016; Pilloud et al. 2016), necessitates close readings of specific and individual mortuary contexts instead of synthesizing broad patterns. Funerary taphonomy is a valuable and innovative method that pushes the field forward into new methodological territory, providing the tools for detailed quantitative and qualitative analysis that is grounded in archaeological data. Taphonomy emphasizes deliberate and detailed field and lab recording methods for analysis of human burials, and in the case of legacy material, allows for new insights into old data. Specifically, I apply archaeothanatology, a method developed by Duday (2006, 2009) that focuses on skeletal element disposition and how decomposition impacts disarticulation (Duday 2006, 2009; Knüsel and Robb 2016). This data-rich approach informs how the role of the body changed through time, providing direct answers to this project's research questions concerning the status of the dead after burial, the role of the dead body in the funerary sequence, and relationships between the post-mortem body and posthumous personhood.

The Middle and Late Bronze Age Levant

Archaeological evidence such as settlement patterns and population demographics, systems of exchange, political organization, material culture, and technological innovation reveal the social complexity of the second millennium B.C.E. Levant (Table 1). The diversity of practices and social identities of the Middle and Late Bronze Age can be identified and measured through variation within these categories of phenomena. The burial record in particular indicates the degree to which practices and identities varied after death throughout the second millennium B.C.E. Funerary and commemorative activities create a specific social context in which the identity and nature of the deceased as an embodied person could be contested, re-imagined, perpetuated, or transformed. The array of funerary practices that were in use during the Middle and Late Bronze Age produced a range of social outcomes related to posthumous personhood. I argue that some persons were transformed into ancestors after death, while others were not, and that different ways of treating the dead body after death and burial is closely related to these outcomes. Below, I review the setting of the Middle and Late Bronze Age from an archaeological perspective and provide an overview of major burial patterns of the second millennium B.C.E. Levant, which are addressed further in Chapter 5.

Middle Bronze Age (ca. 2000-1600/1550 B.C.E.)

Beginning in the second millennium B.C.E., the Levant witnessed the rise of complex societies that scholars have defined as “Canaanite” over the past century of research (Rainey 1996; Killebrew 2005; Coogan and Smith 2012). The Middle Bronze Age is a period characterized by rapid re-urbanization, major technological innovations, and development of far-reaching interregional connections that linked the Levant with Cyprus and the Aegean, Egypt, and Mesopotamia (Bunimovitz 1995; Ilan 1995a; van Koppen 2007; Homsher 2012; Burke 2014a; Bourke 2014; Cohen 2014; Fischer 2014; Morandi Bonacossi 2014; Panitz-Cohen 2014; Sherratt 2014; Höflmayer and Cohen 2017). The settlement and technological trajectories of the Middle Bronze Age in the northern Levant, which experienced a smooth transition from the preceding Early Bronze IV period (Charaf 2014; Morandi Bonacossi 2014), differed from those of the southern Levant, where the Early Bronze urban system had collapsed into small, dispersed, unfortified settlements by the Early Bronze IV period. This period has been characterized as sparsely settled and dominated by pastoral-nomadic subsistence strategies (e.g., Dever 1992). However, networks of settlements in the natural corridors of the Jordan and Jezreel Valleys attest to the sedentary as well as pastoral-nomadic elements that are challenging this long-standing view of a total break from the Early Bronze Age (Mazar 2012: 28; Kennedy 2016: 10; Homsher and Cradic 2018). In Transjordan, the fortified site of Khirbet Iskander was continually occupied, and in Cisjordan the Syrian-style temple *in antis* at Megiddo in the Jezreel Valley demonstrates continuity through the transition to the MB I (Homsher and Cradic 2018; Adams 2013: 95-100, 2017). In the north, major urban centers continued to flourish from the third-second millennia B.C.E., for example at Afis, Nebi Mend, Ebla, and Qatna, while settlements in the arid eastern steppe and marginal zones experienced abandonment (Porter 2007; Schwartz 2017; Homsher and Cradic 2018). Shared material culture, such as Early Bronze IV “caliciform” pottery, attests to continuing interactions between the north and south even during this period of regionalized decline, although this exchange operated without the existence of an integrated settlement or cultural system unifying the broader region (Bunimowitz and Greenberg 2004; Kennedy 2016: 2; Cohen 2016; Homsher and Cradic 2018).

Settlement density and population increased over the Middle Bronze Age, following regionalized trajectories. By the end of the MB I, the settlement landscape of the southern Levant expanded from the Coastal Plain and inland valleys into the peripheral zones of the central hills (Kempinski 1992: 183; Cohen 2002, 2009, 2017; Maeir 2010; Homsher and Cradic 2018). At least 44 new fortified sites appeared in the southern coastal plain by the MB II (Ilan 1995a: 303). More broadly, the total number of settlements of all sizes grew significantly from the MB I (ca. 185 settlements) to the MB II period (ca. 345 settlements) (Cohen 2016: 86). Many of these settlements were surrounded by earthen ramparts, which comprised a major aspect of the emerging architectural standardization and innovation of the period (Homsher 2013). The dispersed settlements in the hills that were established in the MB II became more nucleated in the MB III, with ten major occupational zones controlling the hinterlands (Broshi and Gophna 1986). The expanded system of urban centers with aggregated populations produced a hierarchical system of centralized palatial economies (Ilan 1995a: 298). Developments in settlement, technology, and exchange were facilitated through "peer polity" interactions and inter-regional trade between these palatial centers (Ilan 1995a; Yasur-Landau, Cline, and Pierce 2008). Tel Kabri, for example, contained massive fortifications and a monumental palace by the MB II period. The orthostats and Aegean-style frescoes that adorned the walls and floors of the MB II palace emerged out of an environment of rivalry among palace elites who were competing for prestige through conspicuous display of monumental architecture, exotic art, and far-flung trade ties (Cline and Yasur-Landau 2007; Yasur-Landau, Cline, and Goshen 2014). Out of these exchanges emerged the hallmarks of Bronze Age social complexity including standardized forms of monumental architecture; long-distance trade; pottery produced on a fast wheel; and other technological innovations such as the warp-weighted loom and complex metal alloying (Homsher and Cradic 2018).

MB III/LB IA Transitional Horizon (ca. 1600/1550-1450 B.C.E.)

The transition between the Middle Bronze Age and Late Bronze Age occurred gradually ca. 1600/1550-1450 B.C.E. and is termed the "transitional MB III/LB IA horizon" (Dever 1992:14). The perspective on the transition adopted here follows scholars who contend that no single event definitively marked the end of the Middle Bronze Age, which formed a continuum with the Late Bronze Age (cf. Dever 1992; Ilan 2003: 341-342; Leonard 2003: 349; Panitz-Cohen 2014; Sharon 2014). The end of the period came rapidly at some sites and gradually at others (Cradic 2011: 8). Yet, to a considerable degree, this culture-historical periodization scheme is based on Egyptian historical chronology, namely the end of the Second Intermediate Period in Egypt (Dever 1992; Leonard 2003: 349; Burke 2014; Höflmayer and Cohen 2017). Likewise, the beginning of the Late Bronze Age in the Levant loosely corresponds with the beginning of the New Kingdom dynasties (Dever 1992; Panitz-Cohen 2014). This historical and political shift is arguably visible in the supposed Egyptian invasions of the southern Levant, which may correspond to MB III destruction levels at over twenty sites including Tell el-'Ajjul and Shechem.[3] The urban settlement at Megiddo did not experience site-wide destruction but may have experienced isolated disruptions, such as abandonment of buildings at the interval between Strata X-IX, which are possibly linked of the Battle of Megiddo led by Pharaoh Thutmosis III. The shift has also been supported by the presence of Egyptian material culture in the Levant, such as Egyptian pottery and inscribed objects at Ashkelon, Tel Ifshar, and Sidon (Höflmayer and Cohen 2017: 3). However, this evidence can be problematic due to over-reliance on high-value and heirloom imports, which provide misleading *terminus post quem* chronologies (Ilan 1995a: 299; Cradic 2011: 8; Sharon 2014).

[3] There is no consensus on the cause of the destruction levels, which may not share a single explanation. Bienkowski (1989), for example, cites internal conflicts such as inter-polity warfare as responsible for stratigraphic breaks and destructions, while Na'aman (1994: 175) sees the Egyptian conquest of Canaan under Thutmosis III (ca. 1479 B.C.E.) as the culmination of a long period of decline throughout the region. Hoffmeier (1989: 190) likewise argues that the Egyptian historical record is insufficient evidence to explain the widespread changes at the end of the MB III (Cradic 2011: 9).

The nuanced view advocated here is that important changes were caused by multiple factors that are most readily visible through Egyptian historical documents. The increased Egyptian presence in the region eventually ushered in archaeologically observable changes in local settlement, trade, and political systems over a prolonged phase lasting at least a century (Ilan 2003: 342). The transition from the Middle Bronze to Late Bronze Age therefore can be characterized as smooth from a material culture perspective. Compared with the transformations to the political, economic, and social landscapes, changes to material culture were slow and minimal, reflecting a high degree of continuity. For example, some new forms of pottery were introduced at this juncture, such as Base Ring Ware and Bichrome Wares, but the changes to the general ceramic repertoire were minimal (Cradic 2011: 8).

Late Bronze Age (ca. 1450-1125 B.C.E.)

The Late Bronze Age is defined as an age of internationalism, prosperity, and imperial hegemony as well as of decline and fragmentation (Killebrew 2005: 32). On the one hand, in the beginning of the period settlement density and population declined in the hill zones, and to an extent, even on the coastal plain of the southern Levant (Gonen 1992b: 212; Savage and Falconer 2003; Panitz-Cohen 2014). These changes were possibly due to overextended and over-specialized economic systems and extensive investment in elite monumental building projects (Ilan 1995a: 314). Regional dichotomies reinforced the long-standing lowland-highland divide (see below; Gonen 1992a; Finkelstein 1995). On the other hand, under the influences of Egyptian, Mitanni, and Hittite empires, cities recovered during the Late Bronze II period, with monumental palaces and temples attested at sites such as Megiddo, Aphek, Hazor, Lachish, Sidon, Qatna, and Ugarit (Luciani 2014; Panitz-Cohen 2014). Archives from Amarna, Ugarit, and Alalakh reveal complex and integrated political and economic relationships between centralized Levantine city-states, concentrated into ca. 20 urban centers led by semi-autonomous “small kings,” vassals who owed tribute to the “great kings” (Killebrew 2005: 25; Panitz-Cohen 2014; Sherratt 2014).

During the Late Bronze II period, particularly the peaceful Amarna period of the fourteenth century B.C.E., material culture and long-distance trade flourished. Exchange routes linked the Levant with Egypt and the eastern Mediterranean, particularly Cyprus and Greece. Cypriot, Mycenaean, and Minoan imports appeared in Levantine urban centers, particularly in port cities like Minet al-Beida, Ras Ibn-Hani, and Tell Abu Hawam and other major centers in the north-south corridor such as Alalakh, Qatna, Hazor, and Beth Shean, and vice versa, with “orientalia” appearing in the Aegean (McKeough 2007; Cline 2009; Monroe 2009, 2010; Sherratt 2014). The east-west routes linked the southern coast with inland valleys—including the Jezreel Valley—to the Euphrates, passing through cities such as Tell el-Far'ah (S), Megiddo, Damascus, and Aleppo (Sherratt 2014). Maritime and land exchange networks specializing in high-value goods such as metal ingots flowed between palatial centers via official envoys and private enterprises (Monroe 2009), as exemplified in the large quantity of luxury goods and raw materials found on the fourteenth century B.C.E. Uluburun shipwreck (Pulak 2010). Much of this elite material culture fit a new international *koine*, fashioned as a shared elite style that emphasized symbols of rulership (Feldman 2006). In summary, the Late Bronze Age witnessed the fluorescence of interregional connections and economic prosperity facilitated by long-distance trade in luxury goods and relative political and economic stability of the Amarna period.

However, a combination of interrelated factors including external environmental stresses such as drought, and internal issues such as economic collapse and warfare, caused serious instability throughout the region that culminated in famines, weakened imperial control, and mass migrations across the eastern Mediterranean (Killebrew and Lehmann 2013; Cline 2014).

Death and Burial in the Second Millennium B.C.E.

Given this background, it is relevant to ask if changes in deathways correlated with the broader culture-historical trends traced over the course of the second millennium B.C.E.? Burial patterns demonstrate both continuity and change. The latter is most visible in the increased regionalization of burial architecture and the marked decrease in intramural burial from the Middle to Late Bronze Age in the southern Levant (Gonen 1992a; Cradic 2011: 12-14). Middle Bronze Age burials exhibited greater diversity in terms of burial architecture, inhumation methods, and context than Late Bronze Age burials, which were restricted to two major burial types that occurred almost exclusively in extramural contexts, usually cemeteries (see Chapter 5). Single interments became the predominant practice across the region during the Late Bronze Age (Cradic 2011: 12). By the end of the LB I period, as Egyptian hegemony in Canaan intensified, funerary practices became increasingly conservative, homogeneous, and regionalized across the southern Levant (Gonen 1992a; DiPietro 2012: 71).

In the Middle Bronze Age, a range of burial types were used including simple and masonry-lined pits, rock-cut and shaft chamber tombs, masonry-constructed chamber tombs, and jar burials. Although primary inhumation was the predominant disposal method, secondary and compound burials were not uncommon, nor were burials that contained multiple individuals (see Chapter 5). Burials of all types and disposal methods are attested below floors in occupied houses as well as outside of settlement boundaries. The rules for burial in the Middle Bronze Age fell within a wide range of parameters and were not rigid, particularly in regard to individuality and body disposal methods. Unlike the Middle Bronze burials, which showed little regional differentiation, the Late Bronze Age burials show direct relationships between three variables: (1) burial type; (2) regional distribution; and (3) disposal methods and individuality. Simple pits were popular in the lowlands and coastal plain contained single individuals, and rock-cut chamber tombs with multiple individuals were prevalent in the highlands (Gonen 1992a). The overall density of known burials also decreased significantly during the Late Bronze Age compared to the preceding period (Cradic 2011:Table 2.2).

Based on these distributions, intramural burial appears to be a phenomenon associated with major urban settlements of the Middle Bronze Age, a period in which secondary, compound, and co-mingled inhumations were more common. Burial inside of occupied houses signaled a connection to the inhabitants of the household, and the practice of shared and re-used burial spaces created a community of deceased persons. Together, these two characteristics indicate emphasis on household community in the Middle Bronze Age. In contrast, the predominately single inhumations in extramural cemeteries in the Late Bronze Age point to two new identity strategies in death: a shift away from the community of the household and family toward an affiliation with the wider urban community, and emphasis on individual identity in self-contained, single-use burial spaces (Cradic 2011: 14).

Several conclusions can be drawn from this evidence of burials practices in the Middle and Late Bronze Age. Funerary practices during the Late Bronze Age exhibited more predictability in terms of body disposal methods, context, and type of burial compared with the variation within each of these categories that is evidenced during the Middle Bronze Age. Compared to the high degree of heterogeneity of Middle Bronze Age burials, the relative degree of homogeneity in burials in the Late Bronze Age indicates a leveling out of posthumous social diversity. The changing context of burial throughout the second millennium B.C.E. also shows a shift away from the household as the locus of identity production. During the Late Bronze Age, the predominance of burial in extramural cemeteries indicated that expressing belonging with the settlement community at large was of primary importance after death. This contrasted with the Middle Bronze Age practice of intramural burial under the floors of occupied houses, which fostered close and prolonged interactions between the living and the dead members of a relatively closed social group, the household. The higher quantity of single primary inhumations in the Late Bronze Age, in contrast with Middle Bronze Age burials of multiple individuals in primary, secondary, and compound disposals, likewise demonstrates a shift in posthumous identity in the latter half of the second millennium B.C.E. I will argue later that the sharing and re-use of burial space and body parts, which involved multi-staged funerary activities, are hallmarks of Bronze Age ancestorhood (see Chapters 4 and 5). The individual inhumations of the Late Bronze Age did not share burial space, nor did body parts of multiple individuals intermix. These practices produced fewer ancestors than the preceding period. The absence of such incorporation of bodies and burial space in the Late Bronze Age signals a profound shift in the concepts and practices of posthumous personhood, embodiment, and corporeality. These changes may be related to the social complexity and political networks of the Late Bronze Age. The rise of foreign hegemony of Egypt and Hatti may have influenced burial practices, particularly the increase of extramural burial, which was a typical New Kingdom Egyptian practice (Gonen 1992a). The rise of interconnected polities and networks of exchange that prioritized the international *koine* style of material culture may have had a bearing on other cultural practices, which likewise communicated a shared, mutually intelligible burial *koine*. In the realm of death and burial, the outcome was a loss of diversity and a gain of culturally cohesive deathways.

Previous Research

Human burials and the material culture found within mortuary contexts have shaped the development of archaeology as a discipline (Tarlow 2011: 3-4; Williams and Williams 2007). The high impact of burials is due to factors of good preservation of material from such contexts and because burials continue to be high profile finds that generate attention in and beyond the academic world. This is particularly true in the archaeology of the Near East and eastern Mediterranean, where some of the most important early finds were tombs such as Tutankhamen’s tomb in Egypt and the Royal Cemetery of Ur in southern Mesopotamia (Porter and Boutin 2014: 4). This legacy lives on for good reason. For example, the 2016 find of the richly outfitted “Griffin Warrior” burial from Pylos in southwestern Greece has garnered intense media attention due to its spectacular finds, excellent preservation, and its potential to re-shape understanding of pre-palatial Mycenaean Greece (Stocker and Davis 2016). Monumental burials in the Near East have also been important points of entry for addressing political authority, memory, conspicuous consumption, and rulership (cf. Porter 2002; Cohen 2005; Schwartz et al. 2006; Schwartz 2007; Ristvet 2015; Pfälzner 2012, 2014). Although the materiality of death is an exciting and seminal topic in Near Eastern archaeology, until recently mortuary archaeology has proceeded with serious limitations that favor the study of static material culture—e.g., burial assemblage and funerary architecture—over dynamic practices. Below, I review the strengths and shortcomings of current approaches to mortuary archaeology in the Levant. I propose applying the established method of funerary taphonomy as a framework that maximizes context and considers the long-term impacts of death and burial on bodies, memory, and posthumous social identities.

Culture History. Over the past several decades of research, culture history has been the primary means of developing an understanding of Bronze Age mortuary practices in the Levant and eastern Mediterranean (cf. Philip 1989, 1995; Bloch-Smith 1992; Gonen 1992a, 1992b; Hallote 1994, 1995, 2002; Ilan 1995a, 1995b, 1996; Gilmour 2002; Greener 2012; Cohen 2012; D'Andrea 2013; Kennedy 2015b). This descriptive approach, although valuable for addressing major trends using wide-ranging datasets, can be reductive and essentializing. The search for broad regional patterns produces a homogenous perspective, neglecting the heterogeneity that defines the mortuary corpus of the Middle Bronze Age and which can be drawn out at both macro- and micro-scales of analysis (Andreous 2016; see also Chapter 4). For example, in order to define shared Levantine burial practices, recent studies have overlooked significant differences in the mortuary record. For instance, Hallote's synthetic study (2002: 105) illustrates incongruities between "ideal" status as expressed in death and "real" lived experiences. Despite her nuanced consideration of differences between identities in life and after death, Hallote's macroscale analysis reduces highly diverse mortuary practices to fit a homogenous Middle Bronze Age funerary program (2002: 106).

Although useful for broadly characterizing Bronze Age mortuary practices, these studies have minimized burial variability. Indeed, the mortuary evidence exhibits wide variation in body preparation and disposal methods, individuality, burial location and architecture, and grave goods. Differences from a single site or time period are considered especially significant when funerals are contextualized as community performances expressing belonging, difference, or resistance (Laneri 2007). Given the important diversity across the mortuary evidence, this project examines how Bronze Age communities disposed of the dead in diverse ways to mark, transform, or eliminate personhoods after death.

Researchers have traditionally focused on two variables of expenditure: burial assemblages, and funerary architecture or "tomb type" (Andreou 2016: 187-188). These types of evidence tend to be presented as isolated archaeological categories rather than as part of a complex funerary milieu (Porter and Boutin 2014: 2-4). One result of the culture history paradigm has been a failure to connect the high visibility evidence of "above-ground commemoration" and other indicators of "elite material consumption" (Andreou 2016: 187), such as funerary monuments, architecture, and high-value grave goods, with "below-ground archaeology" of the skeletal remains and depositional history (Tarlow 2011: 5). For example at Sidon, Doumet-Serhal's site-specific analyses (2004, 2014) claim that differences in burial architecture and grave goods reflect social structure, specifically rank and gender (2014: 35). As a result, Doumet-Serhal interprets Sidon's burials as mere reflections of social hierarchies, falling short of deeper contextualization.

Culture historical studies have also prioritized regionalized patterns of distribution, especially burials rich in elite material culture, over those without high-value goods. This research perspective also comes at the expense of context and inter-regional comparison (Porter and Boutin 2014: 2-3; Andreou 2016: 186). In Levantine archaeology, this problem has historically manifested as a north-south divide in which the elite burials from major urban sites of Byblos, Sidon, Qatna, Ugarit, and Ebla in Lebanon, Syria, and southern Turkey are contrasted with the "egalitarian" and homogenous burials of the southern Levant in Israel/Palestine and Jordan (Andreou 2016: 187). This search for normativity not only glosses over significant heterogeneity within and between these regions but also misrepresents Levantine burials in terms of disparities between southern simplicity and conservatism versus northern complexity and innovation:

> In the past a great deal of attention in North/South comparisons was directed toward the sumptuous material expenditure in northern elite burials, which hardly finds an equivalent in areas of the Southern Levant where burials are thought of as being more distinguished by austerity and homogeneity. The discrepancy in material consumption evidenced in elite burial contexts may perhaps constitute the best-known disconnection or disparity in Middle Bronze Age funerary ritual between North and South. Commenting on southern homogeneity R. Hallote—in exaggeration—went even as far as to state that southern "MBA tombs mostly look alike" (Hallote 2002: 105) and on a very macroscopic level of comparative inquiry she is absolutely right! But if interregional comparisons of funerary ritual are confined to differences in elite representation, they only convey the misleading impression of two utterly disconnected regions with distinct models of social organisation, which then fail to explain why burials lower down the social scale look so much alike, irrespective of their geographic position on the Levantine map [Andreou 2016: 187].

Andreou (2016: 186) further points out that the differences in site density as well as the intensity of excavation between the two regions—the south, specifically Israel/Palestine, having received more attention in the past fifty years—have misleadingly created a bias in publication that misrepresents actual funerary practice.

In addition to his critique of north/south dichotomies, Andreou's (2016) review of tomb architecture has brought attention to the problem of fuzzy definitions and false comparisons between schematic types of funerary architecture used in culture-history approaches. As a solution to the problem, he introduces "tomb concepts" which is a call for new ways to conceptualize and compare tombs that emphasizes ritual and ideological practice over a search for a "common denominator" in funerary architecture and assemblages (Andreou 2016: 188-189). His tomb concepts of chamber, shaft, and jar burials focus on performative criteria of functionality and methods of access for the analytic purpose of inter-comparability of traditionally different tomb types (Andreou 2016: 188-190).

Critiques aside, study of burial architecture has formed an important basis for comparing differences in burial from inter-regional as well as synchronic and diachronic perspectives. Gonen's (1992a, 1992b) synthetic studies on the Late Bronze tombs in the southern Levant highlighted distribution patterns of pit and chamber tombs that may be tied to regional identities. Marchegay's (1999, 2000) comprehensive research of burial architecture from the sites of Ugarit (Ras Shamra), Ras Ibn-Hani, and Menet al-Beida on the northern coast of Syria has changed the picture of second millennium B.C.E. Levantine mortuary landscape. In Cyprus, Keswani's volume (2004) similarly advanced the field of mortuary studies through detailed analysis of chamber tomb architecture, focusing on measurable aspects of the architectural and osteological records.

Social Persona. The processual turn in archaeological thought introduced "social persona" to the archaeology of death and burial. This perspective narrowly focuses on material evidence of wealth and biological traits such as age and sex as indicators of social status (Binford 1971; Saxe 1971; Brown 1995; Tainter 1978; Yasur-Landau 1992; Hallote 1995; Schwartz 2007).[4] The so-called Binford-Saxe hypothesis uses these variables to evaluate rank, hierarchy, and social organization. Although the social persona paradigm places the deceased person at the center of analysis, the focus on the individual's social status may be misleading. This model may distort realities because of the attendant assumptions that biological categories of age and sex were universally significant and static pre- and post-mortem status markers.

While questions of normative social rank and organization are important to consider when encountering the physical remains of an ancient population, the approach can limit the interpretative value and richness of burial contexts. The hypothesis is based on several flawed assumptions: (1) that the degree of richness of burial architecture and grave goods correlates with the degree of richness and social status in life; (2) the expression of differences in social status was a primary and universal goal of burial practice; (3) burials reflect social organization. Yet, burials were symbolic and dynamic ritual performances (Parker Pearson 1999: 5-6; Williams 2003: 4) that may not have faithfully mirrored conditions experienced in life (Ucko 1969; Parker Pearson 1999: 32). Social persona fails to consider how status changes after death and burial, and the dynamics of funerary contexts as settings for negotiation and re-configuration of bodies, social identities, and personhoods. Below, I explain the strengths of contemporary approaches of osteobiography and identity. Further developing these contextual methods, I offer novel methodological and theoretical approaches of taphonomy, personhood, and embodiment to redress the problems of social persona in Levantine mortuary archaeology.

Osteobiography, Identity, and Contextual Approaches. Post-processual research has improved upon the shortcomings of processual approaches to social status and organization. Individual biological profiles and osteobiography, as two examples, are useful empirical methods of reconstructing the habitus of an individual's life. These approaches scale down the study of human remains from population-level questions of demographics and evolution to a "socially oriented bioarchaeology" of individual skeletons to address issues of identity and life history (Stodder and Palkovich 2012: 2; Porter and Boutin 2014: 6-7).

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[4] Schwartz (2007) examines several important aspects of status, identity, and ideology at Umm el-Marra (Syria). He re-frames social persona in newer terms of "social identity" (Schwartz 2007: 42-44) but retains the traditional social persona perspective to evaluate relationships between wealth and the status of the deceased.

Using bioarchaeological methods, Boutin and Porter's (2014) innovative study on Early Dilmun (Bahrain) brings to light the challenges of disability in the ancient world. The skeletal pathologies and morphological abnormalities observed in an adult female individual, specimen 12-10146, are connected to her embodied experiences of disease during life. Results point to a high level of care during her life and, compared to her peers, the individual's extensive and high-value funerary kit suggests special and positive commemoration after her death (Boutin and Porter 2014: 116-122). This osteobiographical research has produced novel understandings of social and medical treatments of disability and valuable insights of diverse—rather than normative—experiences of embodiment in the ancient Near East.

Another popular framework for death and burial studies is "identity" based on factors such as age, sex and gender, sexuality, economic status, health, occupation, kinship, religion, and ethnicity (Porter and Boutin 2014: 3-4). Mortuary archaeology is uniquely suited to address identity due to its direct access to the physical remains of the subject. Skeletal morphology, DNA, and isotopes, for instance, provide empirical data on an individual's health, diet, genetic relationships, biological sex, and mobility. Material culture, bodily adornment, positioning, and mortuary context can also be used to infer identities of the deceased. For example, Banou and Hitchcock (2011) examine "social identity" of the Late Helladic II-III Lord of Vapheio tomb in Greece on the basis of grave goods—consisting of scale pans, weights, and an impressive collection of seal stones—and the architectural "symbolism" of the monumental *tholos* tomb, which was monumental in scale and constructed with ashlar masonry. The tomb's occupant was "a person of high religious, economic and social authority" (Banou and Hitchcock 2011: 9) whose grave goods referenced Minoan ritual (Banou and Hitchcock 2011: 10-13). The study is convincing because it focuses on identity of the deceased within a single mortuary context, includes a close analysis of multiple archaeological categories, and critically considers the emerging social and political background of Mycenean Greece.

The search for ancient identity has its pitfalls. As a widely-employed concept over several decades of anthropological scholarship, identity has been used as a vague catch-all explanation to encompass a generalized range of characteristics which are culturally specific and socially constituted. Identity's analytic value has become diluted in the process. Another issue is the problem of uncritically applying identity labels, particularly related to gender and sexuality, particularly if the sex of a skeleton cannot be determined. The problematic equation between the presence of jewelry with female gender identity and the presence of weaponry with male gender identity persists, even in recent osteological reports on Middle Bronze Levantine burials (Więckowski 2007: 7; Faerman 2018). Another example comes from Early Bronze Age Spain, where double burials containing two opposite sex adults presumably indicated a heterosexual conjugal relationship between the decedents (Lull et al. 2013: 4626-4628). On the contrary, recent chronometric dating methods applied to the skeletal remains demonstrate that in almost all cases individuals were inhumed with a major chronological and generational gap of several decades and therefore more likely shared descent rather than marriage relationships (Lull et al. 2013: 4633).

Despite the flaws, these foundations have supported sophisticated contextual studies that integrate biological, stratigraphic, material, and historical datasets into a holistic interpretation of death and burial practices (cf. Ebeling 2002; Hallote 2002; Green 2006; Chesson 2007; Garfinkel and Cohen 2007; Brody 2008, 2010; Andreou 2012, 2016; Felli 2012; Pfälzner 2012; Boutin and Porter 2014; Pestle, Torres-Rouff, and Daverman 2014; Sheridan *et al*. 2014). Brody's (2010: 124) "cognitive-interpretive approach" to two intramural burials from LB I Ashkelon exemplifies the renewed interest of post-processual studies in mortuary ritual and context. This contribution builds on the robust foundations of mortuary studies that address commemoration, tomb and hero cults, and ancestor veneration in the eastern Mediterranean and Near East.[5] Likewise, Laneri's (2007, 2010) research on death and burial in third-second millennia B.C.E. Mesopotamia successfully bridges the gap between culture history's concern with tracing change through time on the one hand and post-processual questions of identity, memory, and context on the other hand. These studies explicitly address death and burial as social, ritual, or ideological performances.

A small but growing body of studies in the archaeology of the Near East and eastern Mediterranean have pushed beyond issues of identity to theories of corporeality, embodiment, and personhood. For example, Boutin's osteobiographical narratives (2010, 2011, 2012) "investigate embodied personhood throughout *and beyond* the life course" (Boutin 2011: 109; emphasis in original). Her phenomenological take on bioarchaeological findings from Late Bronze Age Alalakh (Boutin 2012) examines relational identities that may span the life-death continuum in ways that have not been previously considered. Her original research has inspired this project's deep engagement with personhood and embodiment after death, as well as the fine-grained taphonomic approach to individuals in the mortuary record. However, her studies primarily address embodied personhood during, rather than beyond, the life course, leaving room for this study to fill in the gap: what was the nature of embodied personhood *after* death?

Another case that links body disposal and personhoods comes from the mortuary archaeology record of the Early Bronze Age in the Dead Sea Plain. Prolonged funerary and post-interment activities, including long-term curation of human bodies achieved through secondary burial, transformed the deceased from living persons into non-living, semi-corporeal social beings (Chesson 2007: 122-123). Similarly, in the context of the Iron Age, Osborne (2011) investigates the relationships between secondary disposal of skeletal remains in bench tombs with Judahite social structure and religion. He argues that re-positioning of bones constituted a meaningful, rather than practical, phenomenon, and concludes that secondary disposal contributed to "ritual veneration of the deceased" that reinforced the kin-oriented social structures of the Iron II period (Osborne 2011: 53).

In summary, this literature review demonstrates that there is much potential remaining in the mortuary archaeology of the eastern Mediterranean and Near East. Until now, the diversity of Bronze Age deathways and the implications of such variation for posthumous social identities have not been topics of substantive research. Further, research concerning the status of the corpse, as opposed to the body as a biological organism, has been lacking despite the richness of the region's burial record and recent archaeological works focusing on the corpse in related fields of prehistoric and historical archaeology (see Chapter 3). I propose that greater attention be paid to funerary and commemorative activities as contexts of social transformation, particularly

[5] For Cyprus and Greece, see Hatzaki and Keswani 2012.

with regard to the treatment of the deceased body over long spans of time. There is much room for new contributions that pay close attention to the roles of the body in funerary rituals. In the following section, I introduce two taphonomic methods, archaeothanatology and funerary taphonomy, as a methodological solution to these problems. Taphonomic methods enrich understanding of context and the role of human remains at multiple stages of the funerary sequence.

Methodology: Funerary Taphonomy and the Funerary Sequence

As discussed above, research on death and burial in the ancient Levant can be moved forward through new methodological and theoretical approaches to burial practices, funerary ritual, and the role of the body. This study's innovative approach to ancient deathways advances archaeological research of the Levant by utilizing up-to-date methods of funerary taphonomy, ritual sequences, and by taking a comparative perspective on a large body of archaeological and textual evidence.

This study primarily employs archaeological evidence, specifically funerary taphonomy, to understand step-by-step practices of body disposal methods and long-term modification to human remains and the locus of burial. I also draw from the related method of "archaeothanatology" or *anthropologie de terrain* (Nilsson 1998; Duday 2006, 2009). This forensics-driven methodology focuses explicitly on empirical evidence of treatment of human bodies at multiple time scales after death, such as disarticulation and skeletal element dispositions, in order to decode the processes of deposition, decay, and disturbance (Nilsson 1998: 6; Andrews and Bello 2006; Beckett and Robb 2008; Duday 2006, 2009; Bocquentin and Garrard 2016; Knüsel and Robb 2016). Although the study is informed by osteological analysis, I do not deal with traditional lines of inquiry of bioarchaeology concerning the body as a biological organism. Setting aside issues of population demographics, pathology, and genetics, I examine the materiality of death and the dead body (corporeality), following Tarlow (2011: 5).

Funerary Taphonomy

Archaeothanatology is a refined method of funerary taphonomy that encompasses the study of funerary deposits through close examination of the dynamics of "interaction between funerary practices and the distorting influences of taphonomic factors precipitated by the initial construction of the grave" (Duday 2006: 33). The intentionality of a given deposit has to be established through identification of human-aided positioning of the body and accompanying materials (Duday 2006: 32-33). Identification of an intact burial structure such as a coffin, cave, chamber, or pit can indicate intentionality as well as the location of human remains in a funerary or ritualized context such as a cemetery (Duday 2006: 32-33).

A major goal of funerary taphonomy is to differentiate intentional practices from "taphonomic effects that occur during the decomposition of the corpse and through the intervention of natural agents (erosion, water action, compaction, physio-chemical alteration, the action of micro-organisms and burrowing animals)" (Duday 2006: 33). These processes are complex and dependent on the specific conditions of burial. Bone movement, for instance, can result from scavengers, bioturbation, or erosion rather than from human intervention. Therefore, the method demands a bottom-up approach that is based on close observations of discrete graves and bodies rather than a top-down or comparative search for broad patterns.

This method accounts for the funerary context of a burial deposit as a whole and is based on contextual observations that allow reconstruction of the sequence of funerary activities:

A. **Burial Space**: (1) Construction or container of burial space; (2) presence or absence of fill or other seal covering the burial, and the nature of the fill or seal; (3) depth of burial, if underground; (4) volume of the burial space
B. **Body**: (1) Position of the corpse(s) and grave goods relative to each other and to the burial space; (2) spatial distribution and proportional representation of skeletal elements, including anatomical order, (dis)articulations, and co-mingled of bones belonging to one or more individuals; (3) condition of bones, such as surface modifications and completeness; (4) disposal method (i.e., inhumation, cremation mummification); (5) Minimum Number of Indiviudals (MNI) and Minimum Number of Elements (MNE); (6) sex, age, and pathologies of individuals
C. **Context**: (1) Presence or absence of an entrance to the burial space; (2) stratigraphic location; (3) relative chronology; (4) placement of burial relative to other loci of human activity; (5) evidence of disturbance

Based on fundamentals of archaeological practice, a major strength of funerary taphonomy is its universal applicability across sites of different periods worldwide (Duday 2006: 33). Nilsson (1998: 7) explains that "*anthropologie de terrain* is not only an analytical tool. It is an excavation method…Even a slight rotation of a single bone can be very informative about…the chronology of disintegration of the ligaments relative the infilling of an open space." Field observations of body positioning and whether decomposition occurred in a sealed space or a void are crucial for interpreting disposal method (Duday 2006).

Skeletal Element Distribution. Osteological analysis is fundamental to funerary taphonomy and identification of corporeal manipulation. Tightly flexed skeletons or overlapping bones could indicate wrapping or binding of the cadaver, and bone stacks or clusters could indicate bundling. The presence or absence of specific articulations and bones is key to interpreting if, how, and when disturbance to human remains occurred. Patterns of missing bones provide evidence of bone removal, circulation, and excarnation and are significant for identifying preservation conditions as well as differentiating between anthropogenic versus non-anthropogenic disturbance (Andrews and Bello 2006; Beckett and Robb 2006).

Broadly speaking, primary inhumation is identifiable archaeologically through the presence of *in situ* articulated skeletal remains in anatomical position and skeletal completeness, both of which demonstrate that at the time of burial bodily tissues were "sufficiently intact to prevent the disarticulation of two contiguous bones" (Duday 2006: 33; Andrews and Bello 2006: 17). Joints of the hands, toes, and neck disarticulate the most quickly and therefore are useful for identifying primary inhumations (Andrews and Bello 2006: 17). Other criteria include the presence of “floating” bones, such as the patella, hyoid, and terminal phalanges (Andrews and Bello 2006: 17).

Secondary and compound inhumations are indicated by the degree of bone movement and disarticulation, as well as the representation of skeletal elements, particularly presence of persistent joints but absence of labile (unstable) joints and small distal elements such as phalanges (Bello and Andrews 2006: 9; Knüsel and Robb 2016: 3-4). Secondary and compound disposals involve components of time (delay) and space (movement of bones) (Andrews and Bello 2006: 17).

The over- or under-representation of certain skeletal elements, such as the cranium and phalanges, respectively, does not constitute sufficient evidence to distinguish secondary and compound burials from disturbed primary inhumations (Bello and Andrews 2006: 9; Duday 2006: 34). Rather, a detailed recording of the first-order relationships between skeletal elements, original positioning of the body, taphonomic data, and details about the burial context, is key to differentiating these disposal methods, as environment and corpse treatment affect cadaver decomposition (Carter and Tibbett 2008; Knüsel and Robb 2016: 3-5). Documenting the position of bones commonly displaced during composition aids these identifications; these include, for example, flattening of the rib cage, collapse of the pelvic girdle, rotation of the mandible, and dislocation of the vertebral column (Nawrocki 1995: 52; Duday 2006: 34-35; Knüsel and Robb 2016: 4).

Taphonomic Index. Skeletal element representation and distribution in relation to MNI can be used to differentiate disposal types. Following Andrews and Bello (2006: 18), a “Taphonomic Index” measures differences in preservation using four osteological indicators: (1) skeletal completeness, (2) breakage of bones, (3) disarticulation, and (4) surface modification. Each category is scored on a scale of 1-10 from poor (score =1) to excellent (score =10). The Index’s maximum score is 40 and its minimum output is 4. Generally, compound disposals score 10 or lower; secondary disposals score 11-30, and primary disposals score 30-40. However, these expected ranges may vary according to the specific circumstances of each burial. Evaluating disposal method requires close reading of the archaeological context together with the taphonomic index.

A complete skeleton scores 10 while a single bone gets a grade of 1; partially complete skeletons are ranked as bone counts in units of 20 bones or partial bones. Breakage is measured by proportion of breaks; if all bones are broken, the score is 1 and if all are complete, the score is 10. Likewise, a disarticulated skeleton gets a score of 1 and an articulated skeleton is scored as a 10. Finally, surface modification is the degree of staining, weathering, gnaw marks, punctures, root marks, cut marks, and burning (Andrews and Bello 2006; Crozier 2016; Knüsel and Robb 2016; Pilloud et al. 2016). Heavy modification scores 1 and no modification is graded 10.

The index can differentiate primary and secondary inhumations in collective burials and can be used as an indicator of funerary complexity. For example, at Neolithic Çatalhöyük, disposal types were identified using the Taphonomic Index and then analyzed according to age groups and the spatial distribution of burials at the site (Andrews and Bello 2006: 18-28). Moutafi and Voutsaki (2016) applied this method to 21 burials from Mycenaean Greece and found that primary and secondary disposals occurred in nearly equal frequencies but that much more variation in MNI and the number of funerary episodes occurred in secondary burials.

When dealing with poorly preserved skeletons, the proportional representation of the zone or skeletal region is a useful indicator of disposal and disturbance particularly for co-mingled and fragmented remains (Knüsel and Outram 2004; Knüsel and Robb 2016: 6; Crozier 2016; Triantaphyllou 2016). Zones of the body can be broken into eight categories: cranial, teeth, upper skeleton, lower skeleton, flat bones, foot bones, hand bones, and vertebrae and ribs (Triantaphyllou 2016). Hand and foot bone should be weighed more heavily due to their importance in determining the degree of bone movement, which is an indicator of disturbance and body disposal method. The representation of these zones compared to actual MNI and expected MNI provides outputs such as degree of articulation, degree of preservation, and degree of disturbance (Triantaphyllou 2016).

The Funerary Sequence

The taphonomic results are interpreted through a related method: the funerary sequence model. The funerary sequence reconstructs the relative order of activity using methods derived from funerary taphonomy to distinguish anthropogenic and non-anthropogenic processes that affected a deceased body at multiple temporal phases after death: (1) pre-interment (preparation of the body and grave), (2) interment (deposition of the body and materials), and (3) post-interment practices (intentional disturbance to the grave, materials, and body) (Nilsson 1998: 6; Duday 2006: 33; Bello and Andrews 2006; Knüsel and Robb 2016).

The funerary sequence model has gained traction in Mediterranean archaeology over the last decade (Keswani 2004; Green 2006; Voutsaki 2010; Pfälzner 2012, 2014; Schwartz 2012; Boyd 2014, 2015a; Moutafi and Voutsaki 2016; A. Porter 2016). This study adapts Green's (2006, 2014) usage of the term "ritual sequence" to denote the activities that directly involved corporeal remains and/or grave-site from death through long-term care and treatment of the dead. For consistency, "funerary sequence" is used here to refer to treatment of the dead at all stages.

One of the goals of the combined funerary taphonomy and funerary sequences approach is to estimate two factors of time related to the sequences of death and burial: (1) the post-mortem interval, and (2) post-burial interval. The former focuses on the "immediate processes surrounding death and are concerned with the events that occurred in the ante-, peri- or post-mortem period. The post-mortem interval can span a period of days, weeks, months, or years" (Forbes 2008: 226). The post-mortem interval generally correlates with the pre-interment and interment activities of the funerary sequence. The post-burial interval concerns the time after which a cadaver has been disposed in a burial site, and specifically "refers to the period that has elapsed between the time of deposition in a burial site and the time of recovery" in an archaeological context (Forbes 2008: 226). The post-burial interval corresponds to the interment and post-interment stages of the funerary sequence.

General principles pertaining to changes in the body following death and rates of decomposition may guide taphonomic interpretations. According to Forbes (2008: 227-228,

Table 9.1), several stages of observable chemical and physical changes follow death at different intervals:

> (1) The **minutes and hours** after death is the immediate post-mortem interval. Changes involve enzymes and are observed at the micro level and through chemical analysis on recently deposited cadavers.
> (2) The **hours and days** after death result in a "triad of pathological phenomena, namely algor mortis, livor mortis, and rigor mortis" which are observable in recently deposited cadavers through forensic pathology (Forbes 2008: 227).
> (3) **One day to one week** after death involves "gross post-mortem decomposition" such as autolysis and putrefaction (Forbes 2008: 227-228). This stage is generally not observable in the ancient remains, which have surpassed this level of decomposition.
> (4) **Weeks to months** following death involves decomposition and skeletonization. This interval represents the stage after death at which forensic taphonomy and archaeological investigation becomes most useful.
> (5) **Months to years** after death involves weathering and pedoturbation and can be evaluated using taphonomic methods.
> (6) **Years to "eons"** after death is the stage at which most archaeological studies are concerned and involves processes such as fossilization, diagenesis, and change in trace elements (Forbes 2008:Table 9.1).

The post-mortem and post-burial intervals aid in evaluating processes of decomposition related to soft tissues and skeletonized remains, providing insight into the sensorial experiences of the funerary sequence, which I discuss further in Chapter 8. However, the precision with which time estimates can be determined is highly variable, dependent on environmental conditions, and may be "elusive" when dealing with ancient remains (Forbes 2008: 227-228; Bell, Skinner, and Jones 1996). For example, observable post-mortem changes to skeletal structure occur variously between three months and seventy years after burial, depending on local soil conditions and depositional environment, which changes with the introduction of a cadaver (Bell, Skinner, and Jones 1996; Carter and Tibbett 2007; Wilson et al. 2007). Variation can occur within sites and well as between regions (Wilson et al. 2007). The environmental and preservation conditions in the southern Levant vary regionally. The Middle Bronze Age rock-cut chamber tombs at Jericho, for example, have yielded preserved organic materials such as human skin and hair as well as textiles, wood artifacts, and food remains (Kenyon 1960, 1965). In contrast, the humid conditions at Megiddo are not ideal for preservation of organic materials. The presence of textiles for shrouding or wrapping a corpse, for instance, have to be inferred based on the presence and placements of associated materials such as pins (see Chapter 8). Likewise, skeletal remains at Megiddo fall within a range of preservation conditions, some of which are poor. For example, the skeletal remains of a subadult individual, Individual 3 in Tomb 50, were soft and spongey upon excavation, had taken on an orange hue from the surrounding sediment, and disintegrated further upon removal from the burial environment (see Chapter 8). No preserved soft or connective tissues such as skin, hair, muscles, ligaments, tendons, and cartilage, have been encountered in any of the recently uncovered burials in Areas K, J, and H, and none have been documented among the burials excavated by Schumacher or the Oriental Institute. The preservation conditions at Megiddo limit the degree of precision that can be reached when employing taphonomic methods, both for determining different intervals of time after death and burial, and determining the causes of conditions such as partial articulations (see Chapter 8).

Methodological Challenges

Beyond the challenges of preservation and interpretation of time intervals following death and burial, another methodological challenge is to connect the ephemeral world of beliefs with the concrete world of practices. Even in historical contexts with rich written records, the "difficulties of dealing with interiority in the past are legion" (Tarlow 2011: 15). This is particularly true in cases where written beliefs contradict practices on the ground. One solution to this problem is to frame research questions in terms of the relationships between different types of evidence—contextual, osteological, and textual.

Another way forward is to expand our understanding of embodiment as an externalized as well as internalized experience. An assumption is that experience of the embodied self is channeled through the medium of the body and therefore becomes inaccessible once the body is no longer an active living subject but a passive deceased object (Tarlow 2011: 8). In other words, death "occurs after the subject is not capable of embodiment in the conventional sense" (Robb 2013: 445; Tarlow 2011). Yet death, dying, and embodiment are recorded in bone and in writing (Boutin 2012). I argue that in the context of the ancient Near East, the challenge of embodiment theory is surmountable through a combined personhood-embodiment approach that critically and expansively considers posthumous personhood; disembodied persons; the extended life course; and intersubjectivity and experiences beyond the internalized self (Tarlow 2011: 9).

On top of this issue is the analytical problem of archaeological study of human remains, which reinforces this assumption about embodiment after death and necessarily objectifies the dead body as a material (skeleton) rather than as an experiential entity (person) (Tarlow 2011: 8). Mortuary archaeology can continue to innovate by "theoriz[ing] death itself as an event or process" instead of treating death "as a straightforward, self-evident biological fact of little interest whose main archaeological significance is that it creates a specific class of fixture we can dig up and study" (Robb 2013: 441).

Another strategy that addresses the issues raised above—the problems of reconciling conflicting evidence and accessing post-mortem embodiments—is to bring attention to plurality of beliefs and practices concerning the body, personhood, and mortality that co-existed not only within a given context but "*even in the same minds*" (Tarlow 2011: 15; emphasis in original). Human beliefs and practices are complex, contradictory, and unpredictable in the face of mortality.

Conclusions

This chapter has presented the context of the second millennium B.C.E. Levant and previous archaeological scholarship that has framed the setting of this research. In summary, the Middle and Late Bronze Age are characterized as prosperous and technologically innovative periods in which interregional exchange networks connected polities throughout the eastern Mediterranean and Near East. These developments provided momentum for urbanization, nucleation of settlements, and investment in monumental architecture in the Middle Bronze Age, and facilitated political and diplomatic correspondence between rulers of polities and empires that peaked during the Late Bronze Age. Through the early thirteenth century B.C.E., relative political stability prevailed in the Late Bronze Age Levant under the reign of Egyptian and Hittite empires. Interconnected and competitive networks of rulers supported stable palatial economies and stimulated long-distance overland and maritime exchange of a coherent repertoire of elite luxury goods, which were rendered in the international *koine* style.

In terms of death and burial, previous research in the mortuary archaeology of the Levant has primarily addressed mortuary patterns from culture historical, social persona, and identity approaches. Each of these approaches trends to treat burials as evidence for the world of the living, rather than the world of the dead. Indeed, burials are valuable sources that inform us about the social status and identity of the buried person, and much potential remains from this research perspective. However, few studies have specifically focused on what mortuary contexts reveal about the status of the dead *after* burial, and how burial contexts and human remains mediate ongoing relationships between the living and the dead. I argue that one path forward to addressing these questions is through a focused taphonomic approach, which considers the role of the body and social status of the dead at multiple temporal intervals after death and burial. This methodological approach frames this project’s theoretical perspectives on personhood, the human life course, and embodiment, which are explored in-depth in the following chapter.

CHAPTER 3 – PERSONHOOD AND EMBODIMENT IN MORTUARY ARCHAEOLOGY

This chapter argues that theories of personhood and embodiment expand understanding of the status of the dead after burial. A personhood-embodiment approach to mortuary evidence evaluates ways in which human and non-human persons are composed in relation to their bodies at different stages of the life course. The life course contains transitional and liminal phases of humans' biological span that may be vague and difficult to define such as conception, pregnancy, early childhood, old age, and death (Janzen 2002: 116-117, 138; Appleby 2010).

These combined perspectives contribute to this project's model of transformations of personhood after death and burial, providing the framework to address questions in mortuary archaeology concerning the role of the corpse in the funerary sequence, and relationships between the post-mortem bodies and posthumous persons. In the Bronze Age Levant, the personhood status of the dead could be transformed through sequential ritual performances that involved close, ritualized interactions between the bodies of the living and the bodies of the dead. These activities could be performed in variety of ways, over short or long spans of time, and produced a range of posthumous social outcomes.

Mortuary archaeology's direct contact with human remains enables access to embodied practices of past persons. Previous contributions on the body in archaeology have tended to focus on the inscribed and "lived experience" of bodies (Joyce 2005: 152). Such approaches examine habitual practices of individuals in specific historical contexts (e.g., Meskell 2002; Joyce and Meskell 2003; Gilchrist 2012). Issues concerning bodily practices can be addressed through bioarchaeology, mortuary archaeology, and art history, providing insight into past performances of sex and gender (e.g., Gero and Conkey 1991; Montserrat 1998; Rautman 1999), as well as ornamentation and dress of the body surface (e.g., Joyce and Meskell 2003; Joyce 2005) and art historical representations of bodies (e.g., Joyce and Meskell 2003; Bailey 2005; Borić and Robb 2008: 1-3).

In this project I tackle a new problem, addressing the transformation of the body and person after death in the Bronze Age Levant. I examine processes of bodily treatment and decay at multiple temporal phases after death using methods of funerary taphonomy and archaeothanatology (Duday 2006, 2009; Knüsel and Robb 2016). My approach builds on the growing literature on embodiment in mortuary archaeology that deals explicitly with issues of corporeal fragmentation and preservation, the relationship of dead human bodies and post-mortem personhood, and the phenomenology of the deceased human body (Chapman 2000; Thomas 2002; Fowler 2004; Chapman and Gaydarksa 2007; Robb 2007, 2013; Croucher 2012; Gilchrist 2012; Gramsch 2013; Weiss-Krejci 2013; Cerezo-Román 2014, 2015; Nilsson-Stutz 2015: 2-5, 2016; Knüsel and Robb 2016).

In applying theories of personhood and embodiment to the mortuary archaeology of the Bronze Age Levant, I challenge traditional "social persona" and identity interpretations of ancient death and burial practices that largely focus on individual biographies and the roles that deceased persons would have performed during their lifetimes. Instead, personhood theory addresses the social roles of the dead as embodied, disembodied, or “alternatively bodied” persons (Robb 2013: 455). This approach considers persons who exist beyond the human body and beyond the grave, which is particularly relevant for the context of the ancient Near East in which the dead were a distinct social group conceptualized variously as ghosts, deities, and ancestors. Personhood theory re-frames the status of the dead in these emic terms. In many cases, body disposal method as a variable of burial practice played a significant role in determining these posthumous social outcomes.

This chapter is organized into four major sections: personhood, ontologies of the corpse, body-object relationships in burials of the second millennium B.C.E. Levant, and limitations of personhood in mortuary archaeology. Each addresses a different aspect of personhood, embodiment, and corporeality in mortuary archaeology in order to answer this project’s research questions concerning the status of the dead after burial and who counted as a “person” after death; the role of the corpse in the funerary sequence; and the circumstances under which personhood transformed posthumously.

Personhood-embodiment approaches have not been previously considered in Levantine archaeology of the Bronze Age or historical periods. Therefore, I draw from global mortuary contexts such as Neolithic Europe and Near East, Medieval Europe, and the American Southwest. I explain these concepts, review their usage in archaeological and anthropological literature, and tie these notions to deathways in the ancient Near East. The goal of utilizing such a broad and disparate dataset is to demonstrate the many iterations of embodiment after death and burial in order to open new avenues of research for the context of the Bronze Age Levant. In Chapter 5, I argue that diversity in death was the rule rather than the exception during the second millennium B.C.E. Therefore, the many examples that I employ in this chapter illustrate corporeality and embodiment after death in ways that are directly relevant conceptually to the Bronze Age. In addition to drawing from the global literature, I utilize several examples from different regions and time periods of the ancient Near East and eastern Mediterranean, from Neolithic Anatolia to Bronze Age Greece, to demonstrate similarities and differences in comparable places and contexts. With the support of this broad set of evidence, I argue that the composition of personhood and its relationship to the body is contextual and fluid, which in part explains why different body disposal methods occurred contemporaneously at a single site or within a single house. I demonstrate that a high degree of skeletal fragmentation correlates with a high degree of post-mortem interaction with the body, which is an indicator of commemoration and extended personhood.

Background

The Role of the Body in Death and Burial

The universality of death makes it a subject that is applicable and relevant to any human context, particularly one as rich in mortuary evidence as the ancient Near East. All humans must cope with mortality, and the ways in which people conceal, expose, or subvert the corporeal, embodied, and social realities of death vary widely across cultures (Ucko 1969; Parker Pearson 1999; Williams 2003; Robb 2007). Mortuary archaeology reveals these social mechanisms through variables of context, monumentality, and body disposal methods. The body is the medium of biological death and its proper disposal is the impetus of funerary ritual. The role of the corpse in funerary ritual is therefore of central concern to both the mourners and archaeologists.

Death is also transformative, initiating an unavoidable biological transition that ends the functionality of a body as a living organism. In this way, death exposes contradictions between person and body, eliciting new social and biological tensions that must be reconciled (Robb 2013: 453). By unraveling ontologies and beliefs of mortality in the Bronze Age Levant, we gain access to the relationships between the post-mortem body (embodiment; corporeality) and the posthumous person (personhood; social status; identity). These relationships open new avenues of inquiry related to what happens after death and burial in a given context, and how and when transformations of the body and personhood took place (Fowler 2004).

In contrast with the finality of biological death, dying is a (sometimes prolonged) social process of transition that transforms the body and personhood of the deceased from one state of being into another state of being (Bloch and Parry 1982; Janzen 2002; Fowler 2004; Robb 2013). This transformation can take multiple forms. Dying can alter an active social person into a passive object (objectification). Death and dying can also fundamentally alter the person/body relationship in other ways, such as allowing for embodied, disembodied, and "alternatively bodied" (Robb 2013: 455) persons to exist *within* decaying corpses as active, passive, or potential persons. The corpse itself is not necessarily an inert object; its materiality can be used to create new relationships (Tarlow 2011: 10). This is the case, for example, with certain iterations of resurrection and reincarnation which could invest the dead body or person with supernatural or legal powers (Tarlow 2011: 11). Another outcome of death is that it may allow persons to exist *beyond* their physical bodies. In other words, death of a body does not necessarily terminate the life course or social presence of a person; in certain contexts, persons may continue to exist beyond death and beyond bodies (Janzen 2002; Fowler 2002, 2003, 2004; Fowler and Scarre 2014). Such ontologies go beyond dichotomous categories of living and dead in order to account for the myriad ways in which embodiment and personhood were understood, experienced, and performed in the ancient Near East.

The body serves as a valuable source of information about ancient deathways, embodiment, and the sequence of funerary activities. The body signifies more than just itself: it embodies the person, and relationships between persons who are linked and/or separated through time and space (e.g., processes of ageing, ancestorhood, death) (Appleby 2010: 47). Bodies represent social constructs upon which social meaning can be inscribed in different ways and on different anatomical parts (Blomster and Ponce de León 2017: 2). Living bodies record habitual practices and health, which may be visible archaeologically in pathologies and skeletal morphology, and can serve as a medium for communicating social status and personhood, for example through ornamentation, hairstyle, dress, and tattoos or other skin surface decoration (Hofmann and Orschiedt 2015: 988).

Treatment of a dead body mitigates the bewildering effects of death and decay on a recognizable body which was alive within very recent memory. The survivors who handle the corpse must confront the biological realities of death by performing certain actions upon the body such as washing, wrapping, dismemberment, and embalming. These direct actions on the body of the deceased allow survivors to regain their agency, at least to an extent, over an otherwise uncontrollable and inevitable force. Certain ways of handling the corpse may disrupt, alter, or accelerate processes of corporeal decay, decomposition, and degradation. Some actions may mitigate the unpleasant visual and olfactory results of soft tissue decay while others promote fast degradation of the mortal remains. Decomposition may be reconciled through a number of options. Various means of corporeal preservation include environmental, chemical, or manual mummification such as desiccation, cryogenics and cold storage, and curation of the internal organs and external tissues. In contrast, treatments such as exposure and inhumation allow the natural processes of decay to erode the whole body. Intentional bodily fragmentation and destruction presents yet another way of dealing with the corpse through burning and cremation; secondary and compound disposals of corpses and skeletal remains; and excarnation, which involves dismemberment and dissection of a corpse and its bodily tissues.

These ways of handling the body through preservation, natural decay, and corpse destruction are not necessarily mutually exclusive but can be considered as discursive practices (Tarlow 2011: 15), particularly for cases in which two contradictory practices appear to be co-occurring within a discrete context. Tarlow (2010, 2012), for example, demonstrates multiple ontologies of the dead and the dead body in Early Modern Britain based around and intersecting categories of belief: religious, scientific, social, and magical (Harris and Robb 2012: 671). She contrasts seemingly incompatible practices, such as public display of the rotting bodies as punishment alongside a growing interest in embalming as a means to minimize exposure to the "horror of decaying flesh" (Tarlow 2011: 3). These practices relate to the role of the body as a tangible index of a person that represents social or personhood status after death (Tarlow 2015: 402). In Medieval and post-Medieval Europe, for example, the way in which the body decayed reflected the moral state of its soul, which may explain the dramatic reactions to the sight of a decomposing corpse. A criminal body or those who died by violence, suicide, or execution, could be stigmatized or even fetishized as a curative source of medicinal power (Tarlow 2015: 402-404, 407). Bodies that showed visible and audible signs of decomposition before or soon after burial, such as bloating and emitting sounds, were deemed to be dangerous (Barber 2010). In contrast, a saintly body was expected to be exceptional in body and soul; although the body was no longer necessary to house the soul, the saint's "holiness of spirit" (Robb 2013: 447) miraculously preserved the integrity of the body, which was "immune" to decay, long after death (Barber 2010: 108).

In the Bronze Age Levant, the corpse was the focal point of multi-staged funerary sequences, but its role in the sequence could differ from one stage to another and from one context to another. Certain body parts, such as the cranium, were sometimes treated differently than other skeletal elements, such as long bones, or bodies of specific individuals may be subject to more complex rituals than other individuals buried in the same grave. These issues are explored in depth below, as well as in Chapters 5 and 8, which treat ancient Near Eastern funerary evidence from textual and taphonomic perspectives, respectively. The point is that conflicting practices pertaining to the dead body co-existed. The complexities of death, burial, and their impacts on the human body and person mean that there are no simple answers to why such contradictions emerged, but these are questions of universal relevance that are worthy of answering.

Personhood

Persons may embody different states of personhood throughout the life course, during life as well as after biological death (Fowler 2004: 7; 2013). Any human or non-human person who is conceptualized as having a body, mind, and spirit can be considered a person, although all of these features need not be present (Fowler 2004: 7); persons can exist socially without the presence of a living human body (Croucher 2012: 205), which allows for the existence of non-corporeal personhoods such as supernatural entities and post-mortem persons. Therefore, a human body itself is neither a necessary nor sufficient condition for personhood.

"Personhood" is broadly defined as the state of being a person, usually in the sense of being a fully participatory member of adult society (Appell-Warren 2007: 91). Persons may be composed of different constituent elements, physical or non-physical, that may be connected to or separate from the human body (Robb 2013: 446). The substances that contribute to the composition of a person may derive from the bodies of other persons. For example, persons may be constituted through social relationships involving living or dead humans and animals as well as objects and supernatural entities such as spirits, deities, ancestors, or ghosts (Hofmann and Orschiedt 2015: 987). Personhood in archaeology considers the socially constructed person and interactions that have left material traces between persons and materials, places, bodies, and supernatural entities (Fowler 2004: 7).

Personhood can be informed by sex, gender, and age; parentage and parenthood status; mental and physical (dis)abilities; and circumstances surrounding conception, birth, and death (Appell-Warren 2007). Personhoods, like identities, are performed social constructs that are mutable, accumulative and subtractive, and can be attained throughout the life course (Appell-Warren 2007: 87-88). Status may be marked visually in specific, culturally recognized ways (Appell-Warren 2007: 87-88, 91) such as through certain body modifications such as tattoos, jewelry, clothing, hairstyles, or other adornments. In certain circumstances, personhood may be punctuated by developmental stages that are marked as rites of passage. Moreover, specific roles and responsibilities may accompany each level of personhood status reached at various thresholds the life course, such as jural entitlements and parental responsibilities. However, not all persons within a given society reach full personhood. Personhood rights and duties can be systematically denied to disenfranchised groups. By definition, slaves are deprived of full personhood status because slaves are commodities that are owned by other persons. As a group, slaves usually do not possess citizenship, voting rights, or legal representation. In certain contexts, similar statuses may apply to criminals, those vulnerable to physical violence, those without families, and even the very young such as neonates and infants (Appell-Warren 2007: 89; Lemos 2013). This notion will be examined in depth in Chapter 7.

Modes of Personhood: Individuality, Dividuality, and Fractal Persons

Modes of personhood include individuality, dividuality, partibility, permeability, and fractality (Mauss 1985; Strathern 1988; Busby 1997; Brück 2001; Fowler 2004). In non-Western societies past and present, including the ancient Near East, experiences of personhood fundamentally differed from those of modern individualism. This relatively recent philosophy of individualism is predicated on the fundamental distinction between body, mind, and soul that emerged from humanist and Cartesian thought of the Enlightenment period (Thomas 2002: 29-31). In this ontology, these three features are bound together in a single, fixed unit: the individual, who is a unique, rational, autonomous actor able to exercise free will (Thomas 2002: 29-31). For an individual, personhood resides fully within him/herself and cannot be shared with others. Other important aspects of Western individualism include the concrete boundaries between persons, objects, and animals (Thomas 2002: 30).

In contrast to individual personhood, dividual (relational) personhood is a practice of shared, divisible, or distributed personhood in which status is derived from and can be shared with multiple other persons (Strathern 1988; Busby 1997; Fowler 2004: 8-9). Dividualities include fractal, partible, and permeable personhoods. Drawing on an ethnographic example, the Wari' of western Brazil practice permeable dividual personhood in which persons are constituted through exchanges of bodily fluids such as blood, semen, breastmilk, and sweat. These substances are transferred between persons through ingestion or skin contact (Conklin and Morgan 1996: 666). Permeable dividuality is also practiced in death; until the 1960s, flesh and organs belonging to dismembered corpses were roasted and consumed, even down to the ground bones (Conklin 1993: 65). This highly ritualized funerary cannibalism was conducted to enable the ancestral "sprits [to] return to earth as living animals" (Conklin 1993: 65). Now, as a substitute for consuming the corpse, today's Wari' consume wild pigs or fish, which incarnate the recently dead ancestors (Conklin 1993: 65-66). In life and in death, Wari' personhoods are inextricably linked to, and shared among, multiple human and animal bodies.

Strathern's (1988) seminal ethnographic study on dividuality in Melanesia found that fractal personhood is reproduced through exchange of gifts (mostly famously, kula shells) and substances that pay for debts owed to other persons. Bodies are composed of such debt relationships, and in this context personhood is inseparable from the body. The relationships of indebtedness and exchange are expressed through fractal personhood in Melanesia:

> Each body is owed to others for the food that sustains it, the bloodlines that produced it and so on. Debts like these are repayed by producing gift objects from bodily labour. These gifts are parts of the composite body which are extracted like cuttings from a plant, and given to others who absorb them and consequently grow. A Melanesian person is therefore potentially *partible*. This means that personal essence can transferred between bodies through media like objects or pigs or taro which are externalized parts—or fragments—of the body. The Melanesian body is also *inseparable* from the life force that animates it so that the state of the body and the person are mutually affective—e.g., poor moral conduct is reflected in poor skin, poor health, poor products. Gifts therefore equally reflect

> the character of the person—they are *pars pro toto* [Fowler 2008: 50; emphasis in original].

Another mode of dividuality is partibility, in which boundaries between persons, bodies, and objects are flexible. Partibility allows for personhood to be broken down into discrete objects that can be exchanged. Counter-intuitively, contemporary American society provides an example of partible personhood in present-day death and burial practices. Cremated human remains can be turned into synthetic "memorial diamonds" or glass beads (Sprague 2005: 61; Gilchrist 2012: 218). The newly minted gem, worn by the mourner, stands as a material index of the deceased person (Gilchrist 2012: 218). This practice of body partibility—whereby the decedent's body is fragmented, broken down into separable parts, and then reconstituted into a new object—is at odds with Western individualism, which is concerned with wholeness of the body because of the body's role as home to the "mind" and "soul". Therefore, this current memorialization practice has significant implications for how personhood can, and does, transform in unexpected ways after death. One result is the blurring of person-object boundaries, which contradicts individualism as practiced in life.

Permeable personhood is yet another aspect of dividuality and relates closely to the partibility in the sense that substances and persons to be exchanged. In permeable personhood the body may act as a porous entity that can absorb and secrete authorship and personhood through interaction with other bodies, substances, and bodily substances (Fowler 2004: 9). After death, corpses can also be the source or medium of such ascribed social meanings and personhood, and can receive or exchange flows of substances. Signifiers of personhood, identity, and social status may change as the body and person transforms after death.

Partibility and permeability are arguably the most recognizable modes of personhood in the archaeological record due to the nature of transactions and exchanges that occur within these practices (Fowler 2004: 37). Meaningful corpse treatments relating to partibility—the breaking down of bodies and persons into its constituent parts—may include preservation of whole or parts of bodies, such as in ancient Egyptian mummification and separation of meaningful organs into canopic jars; corpse fragmentation and destruction; exhumation; and practices of secondary and compound burial, particularly when resulting in intermixing of multiple human and/or human and non-human bodies. Co-mingled body parts, particularly as a way to incorporate individual bodies into a collective ancestral and/or foundational body, serve such a purpose in the context of the second millennium B.C.E. Levant. In this setting, the body's role as a marker of individual biography and discrete biology in life and during peri-mortem stages of death becomes gradually erased in a prolonged process of transformation of personhood after death. This topic is at the core of this project's argument on deathways in the second millennium B.C.E. Levant and is explored in depth in Chapters 8 and 9. I return to the issues of fragmentation and partiality in the section on bodily ontologies below.

These categories of dividual and individual personhood represent a number of possibilities. Although individuality and dividuality are on two poles of the personhood spectrum, these philosophies of personhood are not mutually exclusive (Fowler 2004: 8, 36). Dividual persons possess senses of self and others as individual persons, and relational identities may include aspects individuality as a component of a multiply-authored person (Fowler 2004: 8, 2010: 384; Croucher 2012: 206-207). Individuality, as it emerged from trends of modernism in

Europe, interacts with notions of dividuality in implicit ways, particularly surrounding issues of corporeality. Although these categories "may be heuristically useful…the classification of societies according to personhood 'types' is not the end goal" (Creese 2012: 367). Rather, this etic framework allows us to consider "how such ontologies were ultimately produced…in people's intersubjective experiences" (Creese 2012: 367). In other words, personhood ontologies are of vital importance to understanding different ways of being human across cultural and historical contexts and allows for insight into dynamic "transactions" between persons, animals, and the material world (Croucher 2012: 211; Fowler 2010: 366-367). A personhood perspective opens new interpretations of emic experiences of death and dying; burial and commemoration practices; and post-mortem and non-human agency. In the following section, I apply these concepts to the context of the ancient Near East, arguing that a model of fractal personhood formed the basis for personhood during life and after death in the Bronze Age Levant.

Personhood and Embodiment in the Ancient Near East

This overview of personhood theories and modes prompts the question of how personhood unfolded during the life course in the second millennium B.C.E. Levant. The answers that I discuss provide a framework for understanding how personhood after death operated in this same context. According to current understandings, largely based on documentary evidence, Levantine social structure was organized according to a nested hierarchy of patrimonial and patrilineal households and sub-households, a model that Schloen (2001) has described as the *bêt ʾāb*, or "house of the father." Similarly, in Akkadian sources the nuclear or extended family could be named in these same patrilineal terms: *bît abim* (lit. "house of the father") (MacDougal 2014: 112). The more generic terms for the wider family group included the terms for the clan (*kimtum*), family/clan (*salātu*), and relatives or in-laws (*nîšūtu*) (MacDougal 2014: 112-115). Lineage was expressed in terms of brother (*aḫum*) and brotherhood (*aḫḫūtum*), following this patrilineal model (MacDougal 2014: 112-114). Although problematic in its scope and uniform application to the Bronze and Iron Ages, the *bêt ʾāb* model has been tested successfully in household contexts from Late Bronze Age Ugarit and Iron Age Israel (Schloen 2001).

From a personhood perspective, the *bêt ʾāb* structure suggests that Bronze Age communities practiced a form of dividual personhood, specifically fractal personhood. In this framework, the household operates as a corporate person (Fowler 2004: 48-52). Relations among households were mediated through a central person, the elder male, who represented his household to other households. The patrimonial household model implies that male heads-of-household achieved full personhood. In death, full personhood could mean ancestorhood, achieved through two main means: (1) communal feasting among the living and the dead (Lewis 1989, 2014; van der Toorn 1996, 2014; Suriano 2014b); and (2) location of the burial within the family house. In Mesopotamia, the dead had a literal and figurative place in the "steadfast house of the family" (*bīt kimti šuršudu*): the dead were located "below" and the living "above" (MacDougal 2014: 114).

Expanding this perspective, conceptualizations of personhood in life and death can be traced in the ancient Near East using textual sources. For example, the category of "person" in Mesopotamian thought that emerged in Sumerian and Akkadian literature can be understood in several ways: comparisons of human and animals; cosmological writings outlining the origins of humankind; and, deriving from these etiological texts, contrasts between humans and gods. The Old Babylonian period (ca. nineteenth-sixteenth centuries B.C.E.) provides the richest illustrations. For instance, in the most well-known example Old Babylonian poetry, the *Epic of Gilgameš*, a human is contrasted with a feral animal to demonstrate how human beings are distinct from other creatures (Foster 2011: 118). According to this literary text, to be a human person one must conform to behavioral standards such as personal grooming, wearing woven garments, and consumption of processed foods and fermented beverages (Foster 2011: 118) as well as have certain conceptual awareness like knowledge of mortality.

From a socio-economic-legal perspective, hierarchies of personhood were potentially operationalized in the Old Babylonian period according to the Law Code of Hammurabi. These statuses included the *awīlum* and *muškēnum*. The hierarchy was organized as follows: *awīlum* > *muškēnum* > son of *awīlum* > son of *muškēnum* > slave of *awīlum* > slave of *muškēnum* (Roth 2014). A common Sumerian literary motif is to contrast the "civilized human being," the superior urban dweller, against inferior transhumant groups (Foster 2011: 118). These legal and literary texts created a social hierarchy of existence in which the place of humans is clear, both in relation to other humans and in relation to animals and supernatural beings.

Levantine mortuary evidence indicates that personhood may have begun and ended at different stages of the life course. Most often, personhood began during childhood. For some persons, death terminated personhood while for others, personhood continued for decades. I return to these topics of personhood in the life course in Chapters 7 and 8, building on the theoretical foundations of this chapter. Below, I address how partible modes of ancient Near Eastern personhood could continue after death through the existence of a "soul" that was detached from the body.

Body and Soul. The fractal model of partible personhood in the ancient Near East allows for the separation and exchange of constituent parts of personhood. In other words, personhood can operate through non-corporeal entities such as objects, as well as through immaterial elements of the "mind" and "soul". As discussed above, personhood as an essential component of humanness can exist beyond physical bodies, whether living or dead. As I demonstrate in this section, personhood after death was not necessarily confined to a bodily vessel in the ancient Near East. I begin by providing an example from ancient Egyptian deathways, which frames my argument that posthumous personhood could take multiple forms of real and representative embodiment in the ancient Near East. I support this claim with visual and textual evidence from the first millennium B.C.E. Levant, and I pull in mortuary examples from Medieval Europe to show how historical and archaeological evidence can elucidate personhood-embodiment relationships.

Conceptualizations of the life course, body, and personhood in New Kingdom Egypt exemplify the complexities of body-person relationships in the mortuary realm. This context is relevant to the second millennium B.C.E. Levant due to its geographical and chronological proximity, particularly during the Late Bronze Age when New Kingdom Egypt maintained a strong cultural, political, and economic influence over the Levant. In this context, corporeality and personhood were inextricably linked. Cycles of life, death, and rebirth continued into the afterlife through the "*ka*, the individual's twin self or vital force, [which] lived on, as did other components of the person's identity" such as the person's name (*rn*), shadow (*s wt*), and "personal magic (*h k3*)" (Meskell 2002: 178-179). Death was understood to be a transitional period during which the deceased retained the ability to participate in the world of the living, without loss of their *ka*. The continued existence of these non-corporeal aspects of personhood depended on the integrity of the dead body, which underwent mummification as a preservation method. The necessity of retaining the wholeness of the corpse was due to the indivisibility of physical and non-physical aspects of the body and soul, which together were manifested as "*kheperu*…and may be described as…modes of human existence" (Meskell 2002: 184; Joyce and Meskell 2003: 67). Decay of the body would erode its "social force," and the body would become devoid of its personal and biographical qualities, effectively rendering the corpse as an object rather than as a person (Joyce and Meskell 2003: 129). However, within this same belief system of indivisibility, the dead body was also considered to be partible and "plastic" in ways that differed from a living body. For example, whole organs were removed from the corpse, and could "act metonymically for the entire person" (Joyce and Meskell 2003: 128). Outcomes of personhood in death in ancient Egypt were rooted in practices of embodiment that emphasized wholeness and integrity of the body but which operated within a complicated system of corporeal partibility.

Similarly, metaphysical conceptualizations of posthumous persons were in play in the second and first millennia B.C.E. Levant. I illustrate these issues in terms of the textual sources in Chapter 4, where I explain several different categories of the unseen dead—namely, ancestors, deified dead, and ghosts—who existed in extra-corporeal forms, and had the power to help or to harm the bodies and property of the living. These entities could consume offerings of food and drink, indicating that they were thought to have a "real" existence in the physical world, even though they did not usually manifest in corporeal forms. As I demonstrate in this chapter, anthropomorphic representations of bodies in the form of figurines and reliefs could act as stand-ins. Furthermore, as I detail in Chapter 8, the deposition of consumable offerings at the locus of inhumation suggests that there was a relationship between these substances and the actual human remains below. The relationships between the body and deceased entities are predictably complex in the ancient Levant.

Like the Egyptian *ka*, a conceptualization of a spirit or "soul" also existed in the ancient Levant. As discussed further in Chapter 4, the KTMW stele from a mortuary chapel at eighth century B.C.E. Zincirli contains an inscription that mentions the "soul" of the deceased KTMW (the stele takes its title from the name of the deceased) (Herrmann and Schloen 2014). This reference indicates that some idea of a life-force that was external to the body could continue to exist after death. In addition to the reference to the soul of the deceased in text, the stele contained a banquet scene with a figurative representation of the dead KTMW that appeared alongside the inscription. The scene mirrors the text; both the composition and the text of the stele refer to specific foods that are to be offered to the soul of KTMW for his subsistence. He is depicted as seated in a chair, holding a drinking vessel and gazing toward a platter of bread and portion of meat, which are set on a table in front of him (see Chapter 4; Herrmann and Schloen 2014:Figure C1; Bonatz 2014). This pose draws attention to the food and sets up the expectations for how he is to receive his offerings. Within the visual culture of the ninth-eighth centuries B.C.E., the particular combination of a seated pose and gesture "functions as a proper invitation for offerings the image is expecting to receive" (Bonatz 2014: 42). A sun-disk crowns the top of the scene, a representation of the sun deity *Šamaš*, who is associated with the Netherworld (see Chapter 4) and who is referenced as a recipient of the banquet offerings (Herrmann and Schloen 2014: Figure C1; Pardee 2014; Bonatz 2014: 39).

As Bonatz (2014: 39) points out, the arched shape and defined borders of the basalt stele not only frame KTMW as the clear subject of the banquet scene—he is the only anthropomorphic figure and his body takes up nearly half of the stele surface—but the composition also bounds him in terms of finite space. KTMW is confined by the borders, with the exception of the tip of his pointed cap, which encroaches slightly beyond the frame. The inscription fills the blank space around his body and the offering table, creating a close spatial and visual relationship between the text, KTMW, and the offerings. These features of composition, pose, scale, and framing portray KTMW as the focal point of the composition. The mimesis between the text and composition, in terms of its iterative portrayal of KTMW, *Šamaš*, and the offerings, emphasizes these specific elements and participants of the ritual, which are to be realized in physical form in the mortuary shrine. The multiple references on the stele to the offering of food to the soul of KTMW, in text and in figurative art, implies that the stele with his likeness and inscribed name served as the real physical locus of KTMW's soul, at least when it was summoned for the purpose of receiving the offerings. Therefore, the figure of KTMW on the mortuary stele can be considered to be an embodiment of KTMW's soul.

The iconography of the KTMW fits into broader ancient Near Eastern representations of mortuary banquet scenes (Bonatz 2014). Similar scenes of seated elite figures receiving offerings appear in Luwian and Aramean contexts in the ninth-eighth centuries B.C.E. in two-dimensional reliefs and on sculptures in the round (Bonatz 2014). KTMW therefore utilized a familiar composition to memorialize himself in a way that would have been visually recognizable, potentially prompting the kind of commemoration he desired without needing to read the text. A final point is that the anthropomorphic representations of the dead within this sculptural repertoire were usually generic rather than personalized, indicating that the form was more important than a realistic depiction of the deceased. Personalized attributes could be added to communicate the status or vocation during life, such as a spindle, writing utensil, weights and balances, and musical instruments (Bonatz 2014: 43). Overall, the shared characteristics of these stela indicate that the KTMW stele was not an exception, but the rule: when summoned from the Netherworld to consume offerings, the soul of the dead inhabited specific, real-world locations that were connected to their generically depicted bodies. A representation constituted a perfectly acceptable physical form of the body.

Personhood in Medieval Life and Death

Beyond these examples of text and iconography, burial practices may reveal how person-body ontologies were operationalized in different settings. Early and Medieval Christian eschatology, although far removed from the ancient Near East, provides instructive examples of the tensions between the body as human, material, and mortal on the one hand, and the soul as divine, immaterial, and immortal on the other hand (Robb 2013: 447; O'Sullivan 2013: 260). These opposing forces were both necessary for a living person and thus necessitate a composite conceptualization of personhood in which the body and the soul are the necessary and sufficient components (Robb 2013: 447; O'Sullivan 2013: 260). For a dead person, the body is no longer needed to support the soul, which could exist beyond the body until resurrection; the dead body or skeleton need not be preserved in order to be divinely reconstituted on Judgement Day (O'Sullivan 2013: 260).

Indeed, Medieval Christian burials in Europe largely uphold this perspective and demonstrate how personhood beyond the grave can be accessible through mortuary practices, particularly through comparison of inhumation and burial context. Most non-elite burials, regardless of age and sex, conform to the straightforward pattern of single, primary inhumation in an extended supine position, with bodies facing east (O'Sullivan 2013: 261). Minor elaborations on this basic form of burial included a stone pillow for the head; graves lined with stone, gravel, or tile or mortar; and burial pits filled with ash or charcoal (O'Sullivan 2013: 261-263). Corpses were usually placed in simple earth pits (with or without a coffin) with little or no signs processing or ornamentation and without grave goods (O'Sullivan 2013: 261, 264). Elite burials, however, even more clearly underscored the negated role of the body after death. Carved or sculpted effigies of decaying corpses and "emaciated skeletons" adorned the highly visible tombs of elites such as bishops and members of the nobility (O'Sullivan 2013: 266-269).

In addition to these stylized representations of the materiality of the body after death, actual body parts belonging to dead elite persons could be removed and re-buried in separate locations, such as the parish cemetery or with family members. The circulation of human remains belonging to elite persons served as a way to mediate competing claims to status, family and lineage, occupation, and religion (O'Sullivan 2013: 265). The idea behind the practice is that the presence of the actual body or body parts can support claims over disputes, even within this broader cultural-religious context in which the body was seen usually as a passive corpse. These exceptions applied to the elite class, whose deceased bodies carried special meaning due to the authority of the person during life, and the continued high status of the associated family. Burial context varied more widely than inhumation practice among all classes. Burials could be placed intramurally, usually inside church buildings; in extramural church burial grounds; or beyond the boundaries of the churchyard and may relate to the status of the dead person in the eyes of the church (Gilchrist 2012: 200-206; O'Sullivan 2013: 265, 270-274).

The Medieval view of a supra-corporeal, immortal soul—an aspect of dividual personhood—applied to contexts other than death, for example in conceptualizations of prenatal personhood and ideologies surrounding saints and divine intercessors. In Medieval Christianity, the belief that the life course begins at conception, and that a soul follows shortly thereafter, implies that personhood forms even before the human body has developed *in utero* and certainly before it is recognizable as such (Gilchrist 2012: 134, 219-220). Likewise, belief in non-corporeal beings such as ghosts and saints who retain essential qualities of their personhood and agency after biological death is another example of personhood—distilled to the form of a soul or spirit that is separable from the body—that is more consistent with dividuality than individuality. Although ghosts were considered to be threatening to living humans, members of the clergy could engage in necromancy as a legitimate form of religious practice which involved summoning spirits in exchange for favors such as intercession with the divine realm (Gilchrist 2012: 167; O'Sullivan 2013: 260). In this sense, the spirit was instrumental in communicating with the divine realm for humans bound by the material world and their earthly bodies. In the context of such eschatological beliefs, death of the body “broke the bond” between body and soul, allowing the spirit to separate from the corruption of the decaying corpse, which was subsequently spiritless and thus deprived of its personhood (Robb 2013: 447).

This section has demonstrated the rich complexities of personhood-embodiment relationships within specific historical contexts of Medieval Europe, first millennium B.C.E. Levant, and ancient Egypt. In each of the settings discussed, some form of partible personhood existed that could be separated from the body. These examples illustrate how conceptualizations of personhood operated during life and after death, and the (sometimes inconsistent) roles of the body or body parts in mediating interactions between the living and the dead. In the first millennium B.C.E. Levant, sculptural representations embodied the dead during commemorative meals with descendants. In ancient Egypt, although the integrity of the body was essential, removal of internal organs did not pose a philosophical problem. Even in contexts such as Medieval Europe in which the corpse played a passive role, the dead body of certain persons was imbued with special power and could be utilized to justify a political claim.

Human and Animal Persons in the Ancient Near East

Just as personhood can exist without or beyond a human body, so too can human persons be permeable or partible with the bodies of non-human persons such as animals. In this section, I discuss intersections between human and animal persons that involved intermixing of bodies and body parts in the mortuary sphere, a practice that is widely attested to the Bronze Age Levant and may be rooted in the mortuary practices attested to earlier periods. I focus here on death, burial, and body disposal in three different contexts of the ancient Near East: Natufian Levant (Hilazon Tachtit, Israel), Neolithic Anatolia (Domuztepe), and Neolithic Levant (Kfar HaHoresh, Israel). I compare the findings on human-animal relationships from these prehistoric mortuary contexts to burials of the second millennium B.C.E. Levant.

Natufian Cave Site of Hilazon Tachtit. The involvement of non-human animals in mortuary contexts, whether for feasting events or for the purpose of combining human and animal bodies, is a practice with a long and varied history in the ancient Near East from the Natufian period onward (ca. 15,000-11,500 cal BP) (Grosman and Munro 2016). During this period, human burial practice underwent significant changes with the introduction of designated burial sites in cemeteries, caves, and abandoned dwellings as well as the continued innovation of existing symbolic behaviors such as the inclusion of material culture and non-human animal remains in inhumations (Bar-Yosef 1998: 164, 2002: 368-369; Grosman, Munro, and Belfer-Cohen 2008: 17665). These practices are exemplified in the Late Natufian site of Hilazon Tachtit Cave (ca. 12,000 BP, which is located in the western Galilee, the same region as Megiddo (Grosman, Munro, and Belfer-Cohen 2008: 17665, Figure 1; also see Chapter 6:Figure 7).

The cave contained the burials of at least 28 individuals who were inhumed in three shallow pits (Pits I, II, and III), which were located next to two structures (Grosman, Munro, and Belfer-Cohen 2008: 17665). The pits contained disarticulated and incomplete skeletons of 25 individuals, many of whom were missing specific skeletal elements such as long bones and cranial elements; the state of disarticulation and missing bones suggests that the human remains were primary disturbed inhumations. The pits served as the initial locus of decomposition and were re-opened for the purpose of collecting and re-depositing these bones secondarily (Grosman, Munro, and Belfer-Cohen 2008: 17665).

Three complete, primary inhumations were uncovered outside of the pits. Among these individuals was the primary inhumation of an adult female individual ca. 45 years old whose burial pit included whole bodies and body parts of more than 90 individuals of six different species including over 85 tortoise shells and skeletal elements of other species such as wild boar, eagle, cow, leopard, and martens that were deposited on or near the human skeleton (Grosman, Munro, and Belfer-Cohen 2008). Evidence of fracturing of the tortoise shells indicates that the meat was extracted for consumption, likely in a graveside funerary feast, that provided ca. 20 kg of meat for a large group of participants (Grosman and Munro 2016: 322). Many of the other faunal bones found in the grave were not suitable for consumption (Grosman and Munro 2016: 318-319). In fact, several of these taxa and their specific body parts were unusual for the period, particularly the inclusion of unbroken bones that would otherwise be highly processed for fat. Rather, specific body parts of particular species were chosen for symbolic and aesthetic reasons, such as the wing tip of a golden eagle, which may have been included for its colorful feathers, as well as the tail of an aurochs and the crania of two martens, possibly with fur attached (Grosman, Munro, and Belfer-Cohen 2008: 17667-17668; Grosman and Munro 2016: 322). The acquisition of such a quantity and variety of animals for consumption and ritualized deposition indicates that the pre-interment phase of the individual’s funerary sequence was elaborate and required considerable investment in time and material resources (Grosman and Munro 2016). Due to the unique characteristics of the burial assemblage’s faunal remains, the excavators have identified the individual as a “shaman” who occupied a privileged status within the community in part due to her “close relationship with…animal spirits” in life and in death (Grosman, Munro, and Belfer-Cohen 2008: 17668). Such an explanation implies that there was a symbolic connection between human and animal embodiment in life and in death during the Natufian period. This relationship was expressed through the specific selection of rare animals, consumption of tortoises in a large-scale feast, and ritualized deposition of symbolically meaningful animal body parts with a human person of high standing in the community. The mortuary activities at the prehistoric cave site demonstrate mutable relationships between human and animal bodies at different stages of the extended funerary sequence, providing new insights into the performance ritual activities and embodiment in death that may have carried over into the transition between the Natufian and Neolithic periods (Kuijt 1996).

Neolithic Kfar HaHoresh and Domuztepe. The Neolithic Near East also provides exceptional evidence on the relationships of bodies and persons after death and burial, some of which may have carried over conceptually into the Bronze Age Levant. Later in this chapter, I go into the details of Neolithic skull cults in the context of treatment of specific body parts. In this section, I focus on what body disposal methods of the Neolithic era communicate in terms of human-animal relationships using the examples of Kfar HaHoresh and Domuztepe in southeastern Anatolia. Although this latter site is removed in time and space from the Bronze Age Levant, it provides a nuanced illustration of diversities of post-mortem corporeality in ways that have not been considered in later contexts, particularly in terms of fragmentation, curation, and intermixing of human and faunal remains. The goal here is to consider the many permutations of corporeality after burial and how these outcomes inform on the context of the Bronze Age Levant. Indeed, several practices and conceptual frameworks of the post-mortem body can be traced in the later Levantine contexts, where they are subject to different interpretations based on the world of the second millennium B.C.E., as I discuss later in reference to Tomb 100 at Megiddo (see Chapter 8).

The Pre-Pottery Neolithic B (PPNB; ca. 8000-6800 B.C.E.) mortuary and cultic site of Kfar HaHoresh is located in the Jezreel Valley, ca. 23 km northeast of Megiddo (Goring-Morris and Horwitz 2007: 903-904). The funerary area of the site contained the primary and secondary inhumations of at least 60 individuals who were buried in single and shared burial spaces (Goring-Morris and Horwitz 2007: 904). The site demonstrates considerable diversity in the treatment of deceased bodies at different intervals after death with evidence of secondary disposals, curation and decoration of skulls, and the combination of human and animal body parts in ways that created new, composite beings. For example, the burial of a lime-plastered and modeled skull of an adult male ca. 20-25 years old was accompanied by the headless, but otherwise articulated, skeleton of a mountain gazelle, located ca. 15-20 cm below the human skeletal remains. These individuals were placed in a lime-plastered basin that was specially marked with a posthole (Goring-Morris and Hortwitz 2007: 905-906). The inverse situation was also observed in another burial, termed the "*Bos* pit" (Goring-Morris and Horwitz 2007: 906). In this case, the primary inhumation of a headless young adult male was placed in a pit above the joints of at least eight aurochs. The burial pit was marked aboveground with plaster, facilitating the later removal of the human skull from the pit (Goring-Morris and Horwitz 2007: 906). The excavators interpret the animal remains as residues of funerary feasts that would have provided at least 500 kg of meat, suggesting a large-scale funerary event involving some 2500 participants (Goring-Morris and Horwitz 2007: 911-915). Unlike gazelles and goats, aurochs were not part of the staple diet but were reserved for symbolic and ritual uses, including in figural art (Goring-Morris and Horwitz 2007: 915).

It is clear from the context of the site and depositional sequence of the burials that the inclusion of specific animals and skeletal elements relates to ritual activities performed in relation to the interment phase of the funerary sequence. This explanation can be furthered to consider the relationship between the animal and human crania in the context of the PPNB, a period during which ritualized removal and curation of human and animal skulls—specifically *Bos*—has precedence, most notably in even earlier contexts in Anatolia and northern Syria (Kuijt and Goring-Morris 2002: 394-396; Goring-Morris and Horwitz 2007: 915). Likewise, skull removal during the post-interment phase may have involved the public community in a large-scale ritual event (Kuijt 1996). Kuijt (2008) argues that the de-fleshing and decoration of removed skulls facilitated complex processes of memorialization as well as erasure and de-personification (see below). These early experiments with combined human and animal bodies, focusing on the symbolism of the skull, may have served as the conceptual foundation for the intermixing of human and animal bodies seen later at Domuztepe. At this site, further innovations involved unusual treatment of entire bodies that transformed and de-personified the dead.

Intermixing of human and animal bodies in mortuary contexts are attested to Neolithic Anatolia. At the sixth millennium B.C.E. settlement of Domuztepe the so-called "Death Pit" contained a large quantity of intermixed fragments of human and animal bones belonging to at least 36 human corpses and 46 non-human animal carcasses, which exhibited signs of similar post-mortem treatments (Kansa et al. 2009). Regardless of species, the same specific postcranial bones of humans and non-human mammals were highly processed for consumption within a short span of days to weeks (Kansa et al. 2009: 163, 167, 169-170). In contrast with the postcranial elements, crania belonging to humans and dogs were disproportionately untouched among the wider assemblage of sheep/goat, pig and cattle bones. However, even among these exceptions to humans and dogs, the occasional evidence of blunt force trauma in both species exposes the violent end that befell both populations (Kansa et al. 2009: 167-169).

In addition to the intriguing evidence of trauma and processing of human bones, mortality patterns hint at targeting of specific persons and animals who were selected for death and burial in the Death Pit. The mortality of humans in the population of the Death Pit deviated from the norm at the settlement (Kansa et al. 2009: 167); mortality was highest among adolescents and adults between ten and forty years old, and lowest among infants, juveniles, and the elderly (Kansa et al. 2009: 167). These patterns indicate a “catastrophic” mortality profile, prompting the excavators to hypothesize a single mass death (execution?) event (Kansa et al. 2009). This conjecture is supported stratigraphically by several short-lived phases of ritual deposits that culminated in the dumping of most human remains in one layer (Kansa et al. 2009: 161-165, 167). The mass human burial was bookended with deposits of feasting residues of animals, filled in with refuse and typical occupational debris, and the pit was sealed with a layer of ash and an articulated burial of a child (Kansa et al. 2009: 161-165; Campbell and Healey 2011: 338-340).

Together, the osteological and demographic evidence indicates analogous processing of fresh corpses of humans and non-human animals who were of prime age for consumption (Kansa et al. 2009: 167, 171). This evidence hints that age, rather than species, played a selective role in the inclusion of certain human and animal individuals in this feasting and funerary event (Kansa et al. 2009: 167, 171). Due to the high number of human corpses and non-human carcasses, which exceeded the settlement population’s nutritional requirements, the large-scale cannibalistic activities and feasting on animals likely represents a practice that was carried out for ritualistic, rather than nutritional, needs (Kansa et al. 2009: 170). This burial context reveals a case in which dead humans and animals—both of which were subject to similar peri- and post-mortem carcass processing, consumption, intermixing, dumping, and cranial preservation—were considered to be of similar personhood status, in this case perhaps devoid of personhood as it applied to the surviving community of ca. 1500 inhabitants (Kansa et al. 2009: 161, 169). The processing patterns and mortality profiles at the Death Pit suggest that the prime age individuals, regardless of species, were considered fit for human consumption; since cannibalism is not a typical practice in the ancient Near East, this context may be deviant or exceptional in its implied equivalence of human and non-human persons. Although the processing appears to be indiscriminate at first glance, humans and dogs were not processed to the same degree as sheep/goat, cows, and pigs. Prime age humans and dogs in this ritualistic mass death context may have been of equivalent status with each other, as identified through similar treatment of cranial and post-cranial elements.

Second Millennium B.C.E. Megiddo. In the Bronze Age Levant, faunal remains are frequently found in association with human burials. These most frequently occurring taxa are sheep and goat, which comprise ca. 90% of faunal remains in Middle Bronze Age tombs (Horwitz 2001: 81). Cattle, donkey, pig, fish, reptiles, rodents, and birds are found in lower frequencies, as are wild game such as gazelle and red deer (Horwitz 2001: 81-83, Figure 2b; Lev-Tov and Maher 2001: 94, Table 1; Sapir-Hen, Martin, and Finkelstein 2017). These faunal remains have been traditionally interpreted as ritual offerings and/or residues of funerary feasts (see Chapter 5 for discussion of criteria for ritual deposits of faunal remains). For example, in the Royal Hypogeum of Qatna, bones of sheep, cattle, and birds were found in several zones of activity in the antechamber leading to the subterranean burial complex, as well as within the burial chambers (Lange 2014). According to Lange (2014), the bones comprised offerings to several groups of persons: the dead, the royal ancestors, and an unknown group, perhaps deities. Some of the bones inside the burial chamber may have been residues of funerary feasts or a "commemorative banquet" (Lange 2014: 255). Based on the processing of the bones, the sheep were likely butchered inside the burial chamber while only parts of already butchered cattle were included (Lange 2014: 254). The disarticulated human bones did not show evidence of butchery, but some exhibited evidence of burning at high temperatures; this is not sufficient evidence to suggest consumption in the sense of the Death Pit.

At Megiddo, parts of animals were intentionally deposited in human burials of the second millennium B.C.E., as I detail in Chapter 8. The selection of certain species and ages for "sacrifice" in human burials is related to the symbolic and economic value of specific animals (Sapir-Hen, Martin, and Finkelstein 2017). For example, bones of young sheep make up an overwhelming majority of the faunal assemblage in the burial contexts of Building 12/K/15 (Sapir-Hen, Martin, and Finkelstein 2017). In contrast, cattle, sheep, and goat were distributed in relative even ratios in the domestic assemblages of the same building, where these livestock played an important role in the economy and subsistence of daily life (see Chapter 8 for discussion; Sapir-Hen, Martin, and Finkelstein 2017). The faunal remains in the intramural pit and jar burials in Building 12/K/15 were found in partial articulation, regardless of the disposal method of the associated human remains (see Chapter 6; Sapir-Hen, Martin, and Finkelstein 2017).

Generally speaking, the patterns of selection and butchery demonstrate that the faunal remains were deposited as traditionally interpreted: as offerings to the dead and/or remnants of feasts held at or near the grave-site. However, unexpectedly, the faunal bones deposited in masonry-constructed chamber Tomb 100 in Building 12/K/15 were completely intermixed with human remains, with no spatial separation whatsoever (see Chapters 6 and 8). These faunal remains were also largely devoid of processing of any kind (Sapir-Hen, Martin, and Finkelstein 2017). Likewise, the human bones also do not show evidence of butchery or cooking. The intermixing of human and faunal remains, and their similar treatments overall, might suggest an intent to equate or incorporate the human and non-human bodies after death and burial in the context of Tomb 100, like in the Death Pit. However, in this case the similarities in post-mortem bodily processing—in this case, a lack thereof—do not necessarily indicate equivalence of human-animal personhood in death. In contrast to the mortality profiles of the faunal assemblages in Tomb 100, which selected for young sheep, the human burials demonstrate expected mortality profiles. This demographic evidence indicates patterns of natural death rather than mass death as was evident in the Death Pit. The intermixing of human and animal bones may have been a consequence of the general mixing and moving around of all of the tomb's contents, osteological and material. However, this explanation does not remove the ritual and social implications of combining human and animal bodies, which may have been the result of a ritualized procedure to erase individual human bodies and identities over a prolonged process of years to decades (see Chapter 8). Due to the evidence of selection of certain animals (but not humans) by age and sex, it is likely that the fauna played multiple supporting roles in the ritual funerary sequence, first as fleshed food offerings to the newly dead, and later, as skeletonized remains that facilitated the processing of forgetting biographical human persons on their journey to ancestorhood.

Ontologies of the Corpse

In the previous sections, I introduced personhood and presented examples of relationships between persons and bodies. I argued that personhood is closely linked to the status of the body, and that this connection is mutable and variable during different stages of the life course. Links between personhood and the body may take different shapes during life than after death. In ancient Egypt and the Levant, the disembodied *ka* and soul, respectively, could live on after biological death through various means, such as corpse preservation through mummification, and through figural depictions of the dead. These relationships could change through interaction between humans and animals, as practiced in the Neolithic Near East, or through creating representations of the dead body as loci for commemoration, as was the case in the Levant during the ninth to eighth centuries B.C.E.

In the following section, I connect practices of posthumous embodiment with ontologies of the corpse, termed here as corporeality. Corporeality considers the material nature of the body and the body's role as a medium for social interaction and cultural practices. I focus on archaeologically visible practices related to corporeal wholeness, fragmentation, cremation, and destruction. I utilize examples from contexts throughout time and space, such as Medieval Europe, Bronze Age Greece, and the American Southwest, to build a model for linking the burial record with theories of personhood and embodiment in mortuary contexts.

Corporeality

Recent work on corporeality has shed light on the meaningful distinctions between corporeal wholeness and fragmentation in mortuary settings that adds further nuance to acts of destruction to the human body and its relationship to posthumous personhood. The corpse is tangible and like an object can be inscribed in various ways through habitual practices and surface decoration; the body both acts as a medium for material culture and constitutes an essential component of material culture (Gramsch 2013). It is therefore not surprising that the separable, component parts of corpses such as hair and bones can indeed be treated as material culture after death (Gramsch 2013). Interaction with bodies, and particularly the circulation of body parts, creates new relationships between the living and the dead (Rebay-Salisbury, Stig Sørensen and Hughes 2010: 2). Personhood is a major aspect of this new relationship; personhood can be lost or transformed in profound ways: re-configuration of the body could result in re-configuration of personhood. Below, I investigate how transformative acts of destruction of human remains impact posthumous personhood.

Cremation and Destruction. The re-configuration of dead bodies can involve full or partial destruction by mechanical and chemical means. Destruction by fire is a practice that occurs widely across time and space and has been a popular mortuary archaeology topic for synchronic and site-specific studies (e.g., Chapman 2000; Graham 2009; Voutsaki 2010; Rebay-Salisbury, Stig Sørensen, and Hughes 2010; Rebay-Salisbury 2010; Croucher 2010, 2012; Cerezo-Román 2014, 2015; Boyd 2015b; Moutafi and Voutsaki 2016) as well as comparative and diachronic approaches (e.g., Stig Sørensen 2010; Oestigaard 2013; Tarlow 2015). Cremation destroys the body more quickly and with a higher level of control than inhumation or dismemberment. However, the processes involved may be protracted and complex, encompassing multiple degrees of transformation of bodies and personhoods. For example in the context of the Preclassic Hohokam in the American Southwest (ca. 700-1150 C.E.), cremated bodies were removed from the pyre site for secondary deposition elsewhere. Only at this post-cremation stage in the mortuary sequence did the fragmented and burnt human remains take on new, partible personhood roles (Cerezo-Román 2014). Transformation by fire and the subsequent re-deposition of the remains objectified the human remains, which could be distributed and transported to multiple communities and be buried as multiple deposits even within a single courtyard (Cerezo-Román 2014: 162-163). Cremation disrupted the wholeness of the body as an indivisible unit, enabling a new personhood—composed of part-person, part-object entity—to emerge (Cerezo-Román 2014: 163-164). Such treatments applied nearly exclusively to adults, adolescents, and juveniles while infants were inhumed under the floors of houses, demonstrating an age-based differentiation of post-mortem body treatment and, by extension, personhood (Cerezo-Román 2014). In contrast, during the Classic Hohokam period (ca. 1150-1450/1500 C.E.), the cremains were deposited secondarily as an entire unit, rather than being divided into separate deposits. This change in practices may show a deceasing emphasis in the treatment of the body as an inalienable object. Although the body was fragmented, the constituent parts were kept together as a unit and not distributed to others (Cerezo-Román 2015).

In the context of Mycenaean Greece, Boyd (2015b) asserts that physical transformation of human remains and burial assemblages is linked to social transformation of the dead. He argues that chamber and cist tombs were intended from the beginning to be re-used and that patterned destruction of its contents formed a core component of complex, multi-staged funerary rituals. Acts of destruction included fragmentation as well as other ways of nullifying an object in its ability for use, for example through fire, warping, isolation, and dispersal. While bodies were moved, dispersed, and re-interred, material culture was likewise manipulated: metal blades were bent and crushed and pottery, most often forms associated with drinking, was occasionally smashed (Boyd 2015b: 159-160). Items that may have decorated the body, beads from necklaces and bracelets in particular, were dispersed as a way of disrupting the whole and reducing it to its component parts (Boyd 2015b: 161-162).

The obliteration of bodies and objects was linked to social transformations of death in Mycenaean Greece (Boyd 2015b: 155-159). The reduction and destruction of whole objects "mirror[ed] the reduction of the skeleton" (Boyd 2015b: 162). This act demonstrated an enchained metaphorical and analogic relationship between bodies and objects in Mycenaean deathways; a certain parity existed between both categories of material remains, which were considered to be partible to a comparable degree.

Similar observations have been made in disparate contexts, the most relevant being Middle and Late Bronze Age Britain, where bones were ground down alongside the ritualized killing of pottery, quern stones, and houses through crushing and burning (Brück 2001, 2006; Croucher 2012: 210). Destruction resulted in reducing different media into their raw components such as bone meal and ceramic temper. Brück (2006) argues that this process likened bodies and objects (including domestic architecture), which were all viewed within a framework of technological process of production and the lifecycle: sourcing and manufacture, followed by use, repair, death, discard/abandonment, and then recycling and rebirth; here, then, burials operated as "technologies of remembrance" (Williams 2013). Special household closing deposits dually marked the death of a member and the subsequent abandonment of the structure; these pits included small amounts of cremated human bone as well as specialized "grave goods" for the house, such as bronze blades and smashed pottery, that were analogous to those interred with human burials (Brück 2006: 299-301). This process homogenized various sources into indistinguishable materials that blurred boundaries of persons, bodies, and objects (Croucher 2012: 210) and enabled the transformation from death to rebirth (Brück 2006). I will explore destruction and movement of skeletal remains and burial assemblages in the context of re-used and shared burial spaces in the Bronze Age Levant in Chapter 8, arguing that reductive transformation of human remains and their associated materials was closely related to transformations of personhood.

Objectification and Personification

Destruction of human remains, in part or whole, changes the role of the body and may produce new iterations of the body as a person, object, or combination of both. The human body exists within dynamic social-material contexts and "is always ontologically multimodal" (Harris and Robb 2012: 676). In other words, the nature of the body as it exists and relates to others in a given context is not fixed within that setting and may change depending on external factors, such as the surrounding environment, persons, and materials, as well as internal factors involving the body's characteristics, activities, processes, and state of being (Harris and Robb 2012: 668). States of being can encompass a huge variety of conditions and are culturally situated. A limited set of examples could include: alive, dead, sick, healthy, young, middle age, old, clean, dirty, nude, clothed, etc.

Like all materials, bodies are mediated by the physical world through complex intersections of human actions, interactions, experiences, beliefs, and ontologies (Casella and Croucher 2011; Harris and Robb 2012). The boundaries between bodies, persons, and objects are neither clear-cut nor discrete (Gilchrist 2012: 218). The treatment of corpses can also be viewed as a form of enchainment that links persons, bodies, and objects within the entangled relationships of the material world that is expressed through bodily curation, display, circulation, exchange, and even recycling and reconstitution (Gilchrist 2012: 218). In many cases, these boundaries may be more permeable than assumed in modern thought. The ontology of the body can be contested on the basis of age, sex, gender, legal status, race and ethnicity, and many other factors including its state of being as living or dead (Gilchrist 2012: 218). Some of these circumstances change throughout the life course, resulting in incompatibilities between personhood and embodiment. Death brings to the fore dynamic transformations of body and personhood that have to be resolved through means such as mortuary ritual.

Diversity of Corporeality

To demonstrate the contextual variability of bodily ontologies of the dead, I draw from disparate examples of relics in Medieval Europe, death and dying in the prehistoric Caribbean, and burial practices in Neolithic Europe and Near East. Each case demonstrates that practices of corporeality varied according to specific historical contingencies, such as legal and religious practices, conditions of death and dying, and methods of inhumation. These examples provide models for interpreting diversity in mortuary archaeology in terms of corporeality. I apply these findings to the second millennium B.C.E. Levant, where diverse deathways were the rule rather than the exception.

Saints' Relics in Medieval Europe. In Medieval Europe, saints' relics expose circumstances under which person-object lines overlapped. The relics were often body parts such as bones, blood, or hair taken from the dead body, or even clothes, personal objects, ashes, and "dust from the tomb" (Gilchrist 2012: 218; Klein 2010: 56). Although initially concealed, by the 12th century C.E. such vestiges were sometimes exhibited in special cases that were shaped like the body part that they contained (Gilchrist 2012: 218). On the one hand, the relics were venerated and personified for their holy attributes and, on the other hand, were displayed and treated as objects (Gilchrist 2012: 218-219). The practice of collecting relics from the bodies of saints and martyrs began in Late Antiquity, when the exhumation became problematic due to the frequent disturbance to graves (Klein 2010: 56). A law from 386 C.E. attests to the scale of the problem; the ordinance prohibited the transfer, sale, and trafficking of the mortal remains of martyrs, which were bound for basilicas in Europe (Klein 2010: 56) to protect the bodies of the dead. However, prominent bishops continued to acquire and curate the specimens (Klein 2010: 56) despite the concerns raised over exhumation. These practices of public bone display in sanctified ground such as cemeteries and chapels became more widespread among the non-saintly population through charnel houses and reliquaries that similarly displayed human bones and blurred boundaries between person and object (Gilchrist 2012: 219). This emerging practice of bone display functioned as a form of interaction with the dead that gained widespread acceptance in the Medieval world for saintly and profane bodies alike. Increased interest in the practice over time demonstrates the fluidity of personhood and embodiment within a specific historical context.

Diversity of Deathways and Corporeality. Another issue to consider is that body disposal may be contingent upon the specific circumstances of death (Robb 2013: 448). Contingencies of death may explain the variability of mortuary practices in a given context, particularly for societies characterized by burial diversity rather than normativity. For example, the prehistoric Carib site of Bloody Point on the island of St. Kitts demonstrates intimate interactions between the living and dead that were not predicated on status in life but on death as the operative variable:

> The dying at Bloody Point died among the living, and were buried directly among their houses; this was only one segment of a prolonged programme of interaction with the dead, which involved leaving some bodies 'lying in state' in the grave before burial and disturbing others to remove skulls, which appear to have circulated among the living for some time before being buried in the village. The

> great variety of burials found archaeologically, which do no correlate in any obvious way with age, sex, or status, suggests a certain amount of contingency in determining burial pathways [Robb 2013: 454].

The Bloody Point case is a reminder that unseen factors of death, dying, and commemoration may play a role in eventual burial outcomes. The ways in which bodies are disposed are not necessarily predictable based on visible characteristics of demographics or status. This example parallels the diversity of burial practices in the Levant, particularly in shared and re-used burial spaces which intermixed the fragmented bones of young and old, male and female who experienced various states of disease, health, and wealth during their lifetimes (see Chapter 8). Circulation and curation of bones may also have been involved in the funerary sequence of the Bronze Age Levant but are difficult to isolate archaeologically.

Building on these two case studies, I turn to Neolithic Europe and Near East, where mortuary studies have advanced our methodological and interpretative toolkits for interpreting diversity of deathways within a given context as well as practices of corpse and skeletal modification. Contexts involving a high degree of variation of burial practices within and between sites are particularly instructive and can advance understanding of diversity of deathways in the Bronze Age Levant. I begin with the example of diachronic and synchronic mortuary diversity that stands out in *Linearbandkeramik* culture in central and western Europe (LBK; ca. 5500-4950 B.C.E.), where burials varied in terms of context—settlement and cemetery—as well as body disposal methods, which encompassed secondary and partial inhumations in the early Neolithic and changed through time (Hofmann and Orschiedt 2015: 988). In the Mesolithic period, LBK burials were situated as isolated graves or in cemeteries, with scattered finds of isolated human bones in settlement contexts, and could include single, double, or multiple inhumations in a number of body positions; these primary inhumations co-occurred within the same mortuary contexts with secondary inhumations and cremations (Hofmann and Orschiedt 2015: 988).

Occasionally, signs of processing the body shortly after death, perhaps for ritualistic cannibalism, have been identified, including cutmarks, peri-mortem breakage patterns, and indications of burning, for example within the Michelsberg culture (ca. 4200-3500 B.C.E.) of eastern France and western and central Germany (Hofmann and Orschiedt 2015: 989). The multiple authorship of persons within these contexts in life and in death is indicated in several ways. In life, gifts and bodily ornamentation in the form of shell armbands, found in burials of different age groups, were bestowed in early childhood and replaced as the body grew. The jewelry marked identity as well as ties and obligations to the wider community. In death, persons took these ties and obligations to the grave, which served as a locus for breaking and removing parts of objects and as a site for protracted ritual visitation that perpetuated the network of relationships beyond biological death (Hofmann and Orschiedt 2015: 990-991). On the other end of the spectrum, occasional dissolution of bodies through breakage, combining human, animal, and material remains, cremation, and curation of specific body parts such as skulls, indicates that "two aspects of the body exist in tension" (Hofmann and Orschiedt 2015: 993). Therefore, the authors conclude that primary or whole bodies do not necessarily equal individuality, just as fragmented or secondary bodies do not necessarily equal dividuality.

Beyond the LBK setting, widespread practices of bodily processing involving skeletal re-organizing and processing, sometimes comprising specialized cranial modifications, has been documented across the European continent (e.g., British Isles, Mediterranean and southern Europe, Scandinavia, southeast Europe, and northwest Europe) (Borić 2014; Fowler and Scarre 2014; Sjögren 2014; Robb et al. 2015; Wallin 2015: 55-58; Thomas 2016). For example, in Neolithic Italy of the sixth millennium B.C.E., skeletal de-fleshing through "nick and strip" cutting method occurred rarely and was one of many options for burial. Other burial practices included primary inhumation with or without grave goods, single and multiple burials, cranium deposition and retrieval, and, most commonly, secondary/co-mingled inhumations (Robb et al. 2015: 41-42, 47-48). Within this highly variable funerary program, cleaning and breakage of the bones may have signaled the transition from "entirely living to entirely dead" persons which usually occurred during the first year after death (Robb et al. 2015: 49). This process therefore indicates close connections between bodies, process of dying, and posthumous personhood. Moreover, plausible—if debated—evidence for cannibalism at Neolithic sites such Fontbrégoua in southeastern France (*ca*. 4750-3150 B.C.E.), has been interpreted not as deviant mortuary behavior but as an indicator of specialized mortuary processing (Robb et al. 2015: 40; Villa et al. 1986).

In summary, the variations of body disposal involving patterned modification and destruction in the Neolithic period provide a model for evaluating diversity of corporeality as well as for interpreting relationships between persons and bodies after death and burial. I turn to examples of cranial modification in the Neolithic Near East, in which relationships between bodies and persons were re-configured in precise ways that focused on the skull as the medium of transformation.

Neolithic "Skull Cults". Like in Neolithic Europe, similar practices of special treatment of certain body parts occurred in the Neolithic era of the Near East. A corpus of over 90 plastered crania have been documented across the Neolithic Near East at Jericho, 'Ain Gazal, Kfar HaHoresh, Yiftahel, Beisamoun, Nahal Hemar, and Ramad in the southern Levant, Tell Aswad in northern Mesopotamia, and at Çatalhöyük and Köşk Höyük in Anatolia (Croucher 2012: 94; Schulting 2014: 20). The crania, which belonged to adult and subadult males and females, would be retrieved after decomposition, likely within several years of primary inhumation (Croucher 2012: 94, 97). Plaster and other decoration, such as pigmentation to represent skin tone and "eyeliner", shell inlays placed in eye sockets, and modeled facial features such as cheeks, noses, and lips, would be applied, usually after the mandible was removed (or left behind in the primary burial) and the skull was clean and dry (Croucher 2012: 94-95; Schulting 2014: 21-22). Although the skulls share a general repertoire of decorative features, such as the use of plaster (mud, lime, or gypsum), modeled bone structure, and particular emphasis on the eyes, several of the crania exhibit individualized decoration like painted stripes or patterns that may indicate tattoos (Croucher 2012: 94-95, 100). Several skulls also show evidence of wear, indicating use during a prolonged phase of curation, circulation, and display before reburial (Croucher 2012: 94, 104-106). Sets of two or three crania (decorated and undecorated) were often redeposited together in a pit ("cache") dug below the floors or courtyards of houses, for instance at Tell Aswad, Yiftahel, Beisamoun, Tell Ramad, and 'Ain

Ghazal (Croucher 2012: 100-106, 147-148).[6] The household context of cranium reburial, grouping together of specific skulls, prolonged phase of curation in some cases, and the plastered skulls' repetitive decorative schema—which could range from generic and idealized to focused and personal—indicates a special and long-term emphasis on certain members of the extended household lineage long after death (Croucher 2012: 111-113). The roles of these deceased persons were impermanent and in flux, with transformations in status occurring in multiple phases after death: liminality at death and primary inhumation; "recreation of the identity of the deceased" through selection, retrieval, cleaning, and decoration of the skull; re-incorporation into the community of the living through display, curation, and circulation of the skull; and a return to liminality through reburial, which once again removed the dead from the realm of the living (Croucher 2012: 132).

Beyond the widespread practice of plastering skulls and the exceptional attestation of cannibalism at Neolithic Domuztepe discussed above, a variety of other bodily modifications occurred in a diverse array of temporal and spatial settings of the Neolithic Near East. For example, at mid-eighth millennium B.C.E. Kfar HaHoresh in the southern Levant, patterned intermixing of human and animal bones in funerary contexts of adults and children highlights the ambiguity of post-mortem personhood and the status of the dead after burial (Casella and Croucher 2011: 214). Practices of cranial retrieval, curation, and decoration of human and gazelle skulls further blurred the human/animal/object/person/spirit divide—if any material distinctions of these categories existed prior to death and burial—to the point that "such entities can be seen as occupying a place which is neither body nor object, but an ambiguous category incorporating the two" (Casella and Croucher 2011: 214). The breaking down of such barriers may have been an important and transformational sequence in the mortuary ritual toward re-defining the relationship between the living and the dead. The dual practice of intermixing and objectifying of human and animal bones constituted an important transition of death that reconfigured the relationship between humans and animal, as living beings, with objects, as non-living entities, within the network of the material world of the living. Thus, a new cultural category emerges in this deep past context that differs from the "natural" distinction between human and animal that is made in our contemporary context (Casella and Croucher 2011: 215).

Practices of cranial modification, selection, retrieval, curation, and reburial in the Neolithic Near East demonstrate an array of complex practices concerning embodiment and personhood after death that crossed boundaries of sex, gender, age, and species. With a clear and sustained emphasis on skulls, the decorated crania stood as a mnemonic representation of the dead, who were preserved in part physically and, thus, memorialized. At the same time, the dead were increasingly distant temporally and perhaps existed in an ancestral or spiritual domain that could be entered after death and in which humans and animals shared space and status (Casella and Croucher 2011: 214-215). Moreover, the de-fleshing of skulls and re-constitution of the face may have represented idealized or generic persons, rather than perpetuating individual identities (Kuijt 2008).

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[6] Several cases of reburial in trash deposits should also be noted (e.g., Jericho), which demonstrates variable attitudes toward the cranium upon secondary burial (Croucher 2012: 147-148). Croucher (2012: 148) further notes a distinction between cranium burials from interior and exterior (courtyard) residential contexts.

The diversity of burials from various Neolithic contexts closely parallels the diversity of deathways in the Bronze Age Levant, as I discuss in depth in Chapter 5. Funerary activities drew attention to the links between context, body disposal, and modes of personhood and embodiment after death. The LBK example, along with the cases of Medieval relics and the burials from Bloody Point, provides a framework with which to interpret the high degree of burial diversity in the second millennium B.C.E. Levant. Neolithic "skull cults" of the ancient Near East inform about practices of curation, circulation, and decoration of specific body parts. In Chapter 5, I make the case for wide variation in body disposal, context, and burial architecture in the Middle and Late Bronze Age at large, and in Chapter 7 I demonstrate how this diversity operated at multiple scales: within a single site, single neighborhood, and single house at Megiddo. I apply this model of diversity of deathways and corporeality to interpretations of personhood and embodiment in the Bronze Age Levant in Chapter 8.

Bodily Processing: "Deviant" Deathways. Mortuary practices involving mutilation or destruction to bodies can be the exception rather than the norm. I provide a few examples to demonstrate the importance of evaluating the degree of diversity in a given context in order to identify cases of deviant deathways. In certain cases, variability may indicate cases of deviant deathways that depart from more consistent burial and post-mortem personhood norms. Such "non-normative" burials may be the result of a "bad" or unnatural death that was the outcome of violence, murder, or execution; large-scale massacres; warfare; suicide; accidental injury or drowning; violation of certain taboos, such as use of magic and witchcraft; death that occurs away from home; or death by natural causes such as childbirth or particularly horrific diseases, such as the Black Death (Weiss-Krejci 2013: 281, 284-285; O'Sullivan 2013: 274-275). Deviant disposal involving stakes, decapitation, or leaving a body unburied may also be implemented due to necrophobia, as in the widespread global phenomenon of vampirism (Barber 2010: 34-38, 175-177). In Medieval and post-Medieval Europe, fear of such revenants manifested in prone burials, decapitated corpses, burial with apotropaic objects, and weighting the body down with stones, stakes, or metal sickles and scythes (Gardela and Kajkowski 2013: 781-782; Gregorika et al. 2014: 3). Although deviant burials do not have universal archaeological markers across cultures (Weiss-Krejci 2013: 284-285), variability can be measured within contexts to determine cases of abnormal deathways.

When considered to be abnormal for the given contexts, such deviance may involve burial in a prone position, unburied or abandoned corpses, and evidence of pre- or peri-mortem violence, mutilation, or even cannibalism, among other possibilities (Weiss-Krejci 2013: 281). For example, at the Neolithic site of Herxheim in southwestern Germany (ca. 5300-4950 B.C.E.) evidence of ritualized—but perhaps non-funerary—cannibalism of at least ten individuals stands out from other burials within the same context (Boulestin et al. 2009). Human corpses were butchered in same ways as faunal carcasses meant for consumption, as indicated through prevalent cut-marks, scraping, and de-fleshing identified on a large proportion of the human remains from Deposit 9, a burial pit that contained the remnants of the processed corpses. Compelling evidence for extraction of nutritional elements from the human corpses, such as targeted butchering of fleshy areas demonstrate that the processing was intended to provide meat for consumption and may have been sacrificial rather than funerary in nature (Boulestin et al. 2009: 975-980). The excavators suggest that violence at end of the LBK period in this region may have spurred such extremes of human sacrifice and cannibalism, resulting in the unceremonious burial of the remains in a refuse pit.

Fragmentation, Wholeness, and Enchainment

Continuing the discussion of corporeality, I focus on theories of corporeal fragmentation, wholeness, and enchainment and then demonstrate how these concepts apply to burials and bodies of the Bronze Age Levant. I start with a discussion of corporeal fragmentation, which is a particularly relevant concept that was operationalized in death in a variety of ways in the Bronze Age Levant. Breakage—ritual or accidental, partial or entire—reduces the whole and creates new parts. This transformative act changes the nature and function of the original object or body, disrupting natural joins/joints in ceramics and osteological articulations, often splintered intentionally beyond repair. Scattering the broken pieces of the whole further isolates each piece from its original corpus, irrecoverably fragmenting and separating what was once a coherent object, or person, into unrecognizable bits and pieces, which, in some cases, are further reduced to meal or dust due to anthropogenic and natural taphonomic processes.

Theories of fragmentation and completeness can explain the complex intersections between human bodies, non-human bodies, and objects when parsed in terms of personhood: what counted as a person? It is assumed that "human bone concentrations are culturally and socially significant deposits, which preserve the value of the deceased persons from whose bodies they have been selected" (Chapman 2000: 145). Therefore, we can look to two sets of burial materials that serve as examples of synecdoche: (1) the bones, which were "literally once parts of persons" but have changed through the natural and anthropogenic processes of death (Casella and Croucher 2011: 213); and (2) grave goods, those whole and broken objects in close association with dead human bodies. The treatment of these two categories of remains are linked through metaphorical and spatial relationships of "fragment enchainment" (Chapman and Gaydarska 2007: 6). These links are particularly relevant for study in the closed, ritualized contexts of burials in which fragments in graves can be re-fitted with their missing parts that were not deposited there in order to "establish enchained relations between domains" such as the mortuary and domestic realms (Chapman and Gaydarska 2007: 96). For example, studies of sherd dispersal, weight, and re-fitting in Neolithic Northern Europe has demonstrated spatial and temporal connections between megaliths and courtyards in which vessels were deliberately smashed. In a case involving Bronze and Iron Age settlements and barrow cemeteries in Germany (Heuneburg and Speckhau), dispersed sherds were identified inside burials, in barrow fills, and in settlement deposits (Chapman and Gaydarska 2007: 99). Most often, sherd re-fits were connected from two contexts: inside burials and the barrow fill, which indicated not only a deliberate practice of vessel fragmentation related to mortuary rites, but also the curation and "storage of sherds conjoining with buried sherds for later deposition" (Chapman and Gaydarska 2007: 99).

Whole or broken objects deposited in the funerary assemblage constitute a form of exchange and caching. Grave goods had their own object biographies that were independent of the deceased but took on new, interdependent meanings after burial with a corpse. Objects placed with the dead *after* primary deposition especially may have served to reference specific persons, places, events, technologies, etc. within networks of memory and enchainment. According to

Williams (2013), these objects could be “catalytic” for commemoration and be intended to create new memories of the deceased after death rather than to relate directly to the deceased’s identity in life. This perspective can be operationalized in the context of multiple-successive interment, wherein new bodies and objects were continually accumulating within a shared burial space and thus serving multiple purposes. The bodies and objects served multiple functions as they were used for a primary inhumation that occurred in a context of compound disposals. The process of accumulation contributed to creating new, and increasingly complex, references—to the past (long dead), the present (recently dead), and the future (the future dead to be interred within the same burial chamber).

Chapman (2000, 2010) understands parts and wholes to operate within the framework of enchainment, in which fragments mnemonically represent the original whole. Unlike the single, unified whole, multiple fragments can be distributed within networks of exchange and are products of, or contribute to, social reproduction. A human cranium or long bones removed from a burial for display, for example, can symbolize the entire, albeit absent, body (Rebay-Salisbury, Stig Sørensen, and Hughes 2010: 1-2). Crania, in particular, may stand for the personhood of the deceased due to the personalized, emotive, and recognizable nature of the human head (Croucher 2012; Schulting 2014).

Breakage does not necessarily symbolize loss. The coherence of the whole is lost, but fragments “can become independently meaningful and play a role in a variety of contexts” (Rebay-Salisbury, Stig Sørensen, and Hughes 2010: 2). The new component parts may stand independently, be re-combined in novel ways, and take on new meanings in concrete ways while metaphorically referencing the original unit in the abstract. Selection of certain body parts for fragmentation or curation is a structured rather than random act (Chapman 2000: 145). Thus, the fragments become more than dislocated parts and the whole represents more than sum of those parts. The more portable and dispersible nature of fragments as opposed to the whole means that the broken objects can be scattered or distributed. Dispersal, therefore, becomes a vector of transmitting and spreading the object’s meaning to multiple actors (Chapman 2000; Rebay-Salisbury, Stig Sørensen, and Hughes 2010: 2.).

Relationships of human-object enchainment may be particularly relevant when objects show signs of wear, indicating circulation during the object’s use-life. Relationships of enchainment are also communicated through placing grave goods in spatially patterned ways around or on the body (Croucher 2012: 213-214). Grave goods may therefore symbolize indexical relationships of personhood, identity, and/or exchange between the living and dead (Croucher 2012: 210-211).

Analogous to objects, bodies are also subject to breakage and exchange (Croucher 2012: 209). In death, the body becomes newly portable and separable in ways that are not possible in life. To disarticulate bones, to transform a corpse into ash, or to deflesh a human body expresses an acceptance of death as a major transformation in the status of the deceased. The ability of others to transform and fragment individual corpses shows two major aspects of the corporeality of death and burial: (1) change in the function of the body, which no longer supports biological life; and (2) introduction of new meanings of bodies, in part and in whole (Rebay-Salisbury, Stig Sørensen, and Hughes 2010: 2). Indeed, human bodies—particularly once skeletonized—may be treated as objects rather than as person; the articulated skeleton resembles “a collection of pieces” that creates the coherent whole (Rebay-Salisbury, Stig Sørensen, and Hughes 2010: 2). In other cases, fractality and partibility become emphasized over other aspects of personhood (Fowler 2008). It is this complex nexus that makes mortuary archaeology and the archaeology of personhood such rich and nuanced topics of methodological and theoretical inquiry. Such an understanding opens new avenues of research on the deceased human body as a whole unit and as a partible, exchangeable entity. Disarticulated individual bones may represent the entire body, however bones can also be fragmented into smaller parts and further dispersed.

Body-Object Relationships in Burials of Second Millennium B.C.E. Levant

The discussion of corporeal fragmentation, wholeness, and enchainment is of significance to human burials of Middle and Late Bronze Age Levant, a context in which bodies could be subjected to repeated destruction or could be left completely intact. I return to the topic of corporeal fragmentation in Chapter 8. I turn my attention here to the specific issue of body-object relationships, which may illuminate aspects of circulation and enchainment in the mortuary realm of the second millennium B.C.E. I argue that a specific repertoire of objects was associated with dead bodies and that the placement of objects in relation to bodies created new body-object relationships in death and burial. In contrast with human remains, which could be broken down into constituent parts, or even into bone meal, grave goods tended to be buried as complete object and to remain whole through the funerary sequence. Utilizing theories of corporeality, fragmentation, and objectification discussed throughout this chapter, I demonstrate that the dead body took on new roles as a medium for interaction. As time after death increased, particularly in re-used and shared burial spaces, certain bodies were transformed through processes of objectification. Bodies could take on new roles as objects, and objects could take on new roles as bodies.

Repetitive patterns of body-object placement in primary burials may indicate practices of enchainment between mundane grave goods, usually household ceramics, and the deceased human body. The composition and placement of the “funerary kit” was relatively stable and well-defined across the region over a long period of time (*ca*. 400 years). As I discuss in more detail in Chapter 5, the Levantine funeral kit of the Middle and Late Bronze Age was comprised of ceramic vessels including food-service wares (platters, large bowls, and jugs), table wares (plates, bowls, cups), and commodities packaging (juglets, storage jars). Grave goods were primarily sourced from ordinary household assemblages, as was the case elsewhere in the region such as third millennium B.C.E. Syria and Mesopotamia (see Chapter 5; Baker 2012: 91-100; Cradic 2017: 233; Nishimura 2015). The domestic nature of the majority of the burial objects, which carried quotidian connotations, reinforced the existing spatial relationships of enchainment between the subfloor burials and the household, and added a material dimension to this exchange. The ceramic and non-ceramic objects were typically interred as whole, unbroken items. Although some breakage could occur during subsequent movement of human remains, in certain contexts (see below), objects were not subjected to the same high degree of breakage as were human remains in secondary and compound disposals.

As I explain in Chapter 8, these vessels sometimes contained food remains, such as animal bones from cuts of meat, indicating that their function in the grave may have mirrored their function in the household to serve and store food. The placement of the objects in relation to the cadaver, however, indicates a change in the meaning of the vessels, which became ritualized objects utilized in the funerary sequence. For example, ceramic objects were positioned in particular ways around the corpse at the feet, hips, shoulders, and head in patterned distributions, with the cranium (*ca*. 27%) and torso (*ca*. 25%) as the most frequented corporeal loci (Baker 2012: 57-87, 66:Figure 3.3., Table 3.1; Cradic 2011). These spatial relationships indicate that the head and upper body carried special significance in Levantine mortuary practice (Baker 2012: 83-84). In addition to the ceramic vessels, personal and decorative items such as scarabs, toggle pins, and other jewelry were placed directly on the body, also often in these upper body zones such as on the shoulder, torso, neck, and cranium (Baker 2012: 84-86). The placement of objects drew attention to these regions of the body, creating particular emphasis on the cranium and torso.

In contrast to placement of grave goods in relation to the body, positioning of bodies themselves in burials shows greater variability; however, neither variable is dependent on demographic factors of age or sex (Baker 2012: 84; Martin, Cradic, and Kalisher 2018). There are few identifiable patterns of body orientation, which evidently was not an important consideration but was rather subordinate to the burial context. Particularly when burials are intramural, the corpses tend to be aligned with existing architecture and do not adhere to any cardinal direction (Baker 2012: 68; Cradic 2017: 225-227, 240; Martin, Cradic, and Kalisher 2018). Within a closed repertoire ranging from supine extended (body on the back with legs straight) to lateral flexed (body on one side with legs bent), body positions included right or left lateral flexed, and supine extended or flexed (Baker 2012: 66-69; Martin, Cradic, and Kalisher 2018). Arms could be at the sides, extended away from the body, or one or both hands could be resting on the pelvis or torso. Therefore, even though body positioning and orientation show little patterning, the placement of specific household objects in relation to the body demonstrates consistency among the different body positions.

Spatial and temporal relationships between deceased bodies and grave goods created new relationships between bodies and objects because the meaning and usage of these materials took on new significance in the mortuary realm. Ceramic objects transformed from ordinary household objects, such as a plate, into a grave good that communicated relationships with the dead. The vessel was removed from its mundane use in the world of the living, and its function was translated to the world of the dead. The body itself also acted as a material medium. A sustained emphasis on specific corporeal regions of the head and upper body indicates that these body parts were considered of special importance in death and burial. The head and upper body carry important meaning as the most easily recognizable parts of the body that allow for identification of specific persons. As I discuss in Chapter 8, grave goods were placed around the body during the interment stage of the funerary sequence, when the corpse was recently dead and therefore still recognizable as the living biographical and biological person. These meanings differed depending on body disposal method. In specific contexts of re-used and shared burial chambers, in which secondary and compound disposals these meanings and positioning changed over time as the burial site was re-visited. As time after death passed, and the corpse decayed and became less identifiable, the placement of objects in patterned ways lost meaning, and the spatial relationships between bodies and objects were broken through the process of fragmenting and re-positioning of skeletal remains.

The body and grave goods served in specific ways as media for interaction between the living and the dead. Body-object relationships in the mortuary realm of the second millennium B.C.E. created new spatial, symbolic, and material links between these groups through the composition and placement of the funeral kit in relation to the corpse. These relationships changed as time after death passed in certain mortuary contexts. As I elaborate below, for the newly dead, the body represented the person in life; bodies and objects remained whole. For the long dead, the body-object relationships could be broken and re-imagined as the significance of the body as a mnemonic representation of the person diminished.

Corporeal Fragmentation: Mostly Dead, All Dead, and The Undead

As discussed above, both spatial and temporal relationships were important variables in mediating body-object relationships in death and burial. Time stands out as an especially important factor in death and embodiment in the Bronze Age Near East and, for some, transformed the bodies of the dead from persons to objects. For example, in the case of shared burial space such as multiple-successive chamber tombs, the intensity of corporeal and bone fragmentation increased as a direct correlate of time and the number of inhumation events. The longer an individual had been dead, the more fragmented and dispersed his or her body, which lost virtually all coherence as an identifiable unit. Therefore, time played a vital role in corporeal transformation. The long dead took on new and different ancestral roles than the recently dead (see Chapters 4 and 8). Miracle Max had a point: you can be mostly dead, or all dead.

Ritualized time could also play a role in transforming the personhood status of the deceased, beyond their body, through periodic care and commemoration of the dead through special *kipsum* rituals. These commemorative rituals brought the dead ancestors to the fore of family life during specific times of the month and year. Individuals could be mentioned by name up to four or five generations after death at the maximum, after which they were commemorated collectively as part of a group of unnamed dead (see Chapter 4).

Below, I discuss a different kind of body-object transformation that was mediated through ritualized temporal and spatial relationships. I address how body-object relationships could be externalized to represent the most temporally remote, the ancestral dead, who were reprinted as corporeal beings through anthropomorphic figurines. Focusing on a mortuary case study from the Middle and Late Bronze Age palace of Qatna, I argue that these objects personified the generic dead in the same context that bodies were objectified through processes of fragmentation and re-burial. These competing practices demonstrate a complex duality of body-object relationships in the context of death and burial in the Bronze Age Levant, and how these relationships changed depending on factors of time and space.

Bodily Representations and Manipulation of Skeletal Remains at Qatna. Archaeological and textual evidence, explored in Chapters 4 and 5, attests to the high degree of importance of the corpse during and after funerary rituals, as well as the changing roles of the deceased body over time. Using a case study from Middle and Late Bronze Age Qatna (Syria), I argue that the physical remains of the dead, both the newly deceased and the long-dead ancestors, played visible and central roles in burial and commemoration that "ensured their presence and protected the dynasty" (Archi 2012: 28). The presence of the deceased body, particularly in this intramural palatial context, was related to the preservation and memory of the royal lineage of Qatna. The corpse and disarticulated skeletal remains had to be kept below the floors in two subterranean chamber complexes beneath the elite administrative wing of the palace. The bodies were not suitable for display or visitation within the habitation areas. In contrast, perhaps as a substitute, anthropomorphic figurines that represented the dead in their living, whole forms were placed in a corridor behind the throne room at the access point to one of the burial chambers, the Royal Hypogeum. These figurines represented the dead, receiving offerings in their place as stand-ins for the real deal, who were decomposing in the Royal Hypogeum below.

In some cases, the physical remains of the dead were not directly involved in commemorative activities. The corpse itself may not have always been available or necessary for mourning and commemoration, prompting the use of various bodily representations as stand-ins to receive offerings on behalf of the dead. According to van der Toorn (1996: 61), in cases where the corpse could not be recovered, or if the fate of a person who was presumed dead could not be ascertained, their names could still be included in *kispum* recitations as a form of afterlife insurance. The representation of the dead could include anthropomorphic figurines, standing stones, iconography of the deceased, or a combination of these factors, to differing degrees of personalization.[7] For example, Ugaritic literary texts describe setting up a stela of the father's deity, a "votive" of the clan, and dedication of incense and grain offerings in the temple of Ba'lu as essential components of a son's filial duties (*KTU* I: 26-33, 44-47, II: 1-8; Kim 2011: 122-127). In two such cases, one from Middle and Late Bronze Age Qatna and the other from the KTMW stele, evidence points to bodily representations operating as mnemonics of the dead and as the actual deceased person, respectively.

The Middle and Late Bronze Age royal palace of Qatna incorporated the dead into the living space of the inhabitants in the same way as contemporaneous subfloor burials attested elsewhere throughout the region. In this context, a complex combination of concepts regarding the dead body were in play: bodily representations, mnemonic devices, and manipulation of the human remains at multiple stages after death and burial occurred within the same elite mortuary contexts. The royal inhabitants of the palace experimented with different combinations of wholeness and fragmentation as well as with different forms of personification and generic objectification of deceased bodies. This unique archaeological case reveals new insights into the relationships between royal persons, objects, and bodies and sheds light on how these relationships changed over the course of the second millennium B.C.E.

The expansive Qatna palace contained two related underground rock-cut burial chamber complexes within the palace walls: the Royal Hypogeum, which contained the remains of 19-24 individuals in a combination of primary, secondary, and compound disposals, and Tomb VII,

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[7] The dedication of an honorary stele was not restricted to the dead. The "offering/festival of the stele" *(nidba/hul na-ru*) at Ebla could occur during a person's lifetime for reasons other than funerary commemoration (Archi 2012: 28).

which contained an assemblage of over one thousand grave goods as well as human remains of at least 79 individuals in secondary and compound disposals (Pfälzner 2014: 144). Both of the chambers were located in significant areas within the northwest wing of the palace, a strong indication of the royal status of the decedents. The extensive Hypogeum burial complex was comprised of a four-room rock-cut chamber that was entered through a ladder from an antechamber. The antechamber connected to the "official wing of the palace" via a corridor that gave direct access to Hall A, a "ceremonial room" behind the main throne room (Pfälzner 2007: 49-50; Lange 2014: 243-244). The burial chamber was likely cut during the palace construction in the early second millennium B.C.E. and was in use continuously for ca. 400-500 years, until the destruction of the palace ca. 1340 B.C.E. (Pfälzner 2014: 147; Lange 2014: 244).

A second and related subterranean complex, Tomb VII, was accessed from the largest room of the northwest wing, Room DA (Pfälzner 2014: 142). This twelve-room complex may have been added to the palace around the eighteenth-seventeenth centuries B.C.E. and also remained in use until the LB IIA period (Pfälzner 2014: 142). Radiocarbon dates derived from a charred wick of an oil lamp place the last use of the tomb between 1514-1436 B.C.E. (Pfälzner 2014: 143). These dates match the pottery found inside the chamber, although the bulk of the pottery dates to the MB II period, indicating that the heaviest use of the tomb occurred during the Middle Bronze Age (Pfälzner 2014: 144).

In Tomb VII, cranial remains of at least 50 individuals were recovered in excellent condition, having been carefully stacked on top of postcranial remains, placed inside ceramic platters, or "surrounded by long bones in a rectangular arrangement" (Pfälzner 2014: 144). Grave goods were deposited in groups next to the bone boxes (Pfälzner 2014: 145). Postcranial remains were deposited in 16 wooden boxes, which have since decomposed, leaving box-shaped stacks of bones 0.3-0.4 m high in their wake (Pfälzner 2014: 144-145). The separation of body elements, with the cranium placed on top of the neatly stacked post-cranial bones, indicates an emphasis on organization of the bones in a way that loosely mimicked the complete human body, but with an awareness that the bones were being boxed in a way that could not accommodate a full, complete skeleton. The skeletal elements were broken down into constituent parts but were handled with care and with an intent to maintain an internally consistent organizational scheme that had some basis in biological reality. The excellent preservation of the cranium and its placement on top of the postcranial bones shows an emphasis on the head, which is consistent with the body-object spatial relationships demonstrated in the section above. The head contains the most easily recognizable features of an identifiable individual, even in de-fleshed form, and may have been placed on top for the preservation of memory of the person's face and identity, even as the body transformed completely into a decarnated, disarticulated skeleton. The crania at the apex of the bone stacks may have been positioned as visual indicators used to identify a person's specific grave-site.

In contrast to the high density of disarticulated skeletal remains, only three articulated skeletons were recovered inside Tomb VII (Pfälzner 2014: 145-146, Figures 9-11). The exceptional state of articulation of these individuals indicates that three corpses were likely inhumed primarily in Tomb VII. A less plausible scenario is that the corpses were moved into the chamber shortly after death, prior to the decomposition of muscles and tendons. It is not clear why these corpses were selected for primary inhumation in Tomb VII, a context otherwise reserved for secondary disposals. For unknown reasons, these primary inhumations may have bypassed the Hypogeum entirely, missing out on the funerary feasts held in that chamber.

Because of the careful arrangement of the cranial and postcranial bones, Tomb VII has been interpreted as repository that was used as a secondary, and final, burial site for the majority of the royal dead (Pfälzner 2014). The bodies of the dead were originally prepared, interred, and commemorated through feasts held in and around the Hypogeum, which served as the primary locus of inhumation and decomposition (Pfälzner 2014; Lange 2014). The bones were then systemically collected after disarticulation and moved with the original burial assemblage into Tomb VII, where they were re-buried in boxes. This process likely occurred as a final stage of the transformation of the dead into ancestors who continued to be commemorated through mnemonic proxies, represented in the complete, life-like physical form of anthropomorphic figurines.

In addition to the direct treatment of the corpses evident in Tomb VII and the Royal Hypogeum, generic representations of ancestral bodies were created in the form of stone statue proxies, in a similar way as the KTMW stele and other Levantine mortuary statues. At Qatna, two figurines were uncovered *in situ*, flanking the entrance to the Royal Hypogeum. These nearly identical figures are sculpted in the round from granite and echo each other’s pose, gesture, and iconography. The stiffly rendered figures are seated and frontward facing, gazing toward the approaching mourner. Each holds a vessel in the outstretched right hand while the left arm is folded inward at the mid-torso (Lange 2014:Figure 4; Herrmann and Schloen 2014:Figure C9). The faces were not personalized but were similar to the features of other statuary of the Bronze and Iron Ages, with oval faces, prominent chins, large and deep-set almond-shaped eyes, thin arched eyebrows, and neutral expressions (cf. Herrmann and Schoen (eds.) 2014: 120-139). Both statues were wearing long garments with fringe or trim, a cap, and a snake draped around the shoulders.

In front of the statues, the excavators uncovered ceramic bowls and remains of faunal bones, indicating that the tomb entrance and statues served as a locus for offerings. Lange (2014: 247) speculates that “since the statues were flanking the entrance, these offerings probably took place right before the [funerary] procession entered the tomb.” This area constituted a major zone of continuous ritual activity that is closely related spatially and temporally to the burials in the Royal Hypogeum below. Evidence of multiple repairs to the statues indicates that they were in use for nearly half a century, covering the duration of the tomb use from beginning to end (Lange 2014: 244).

The figurines recall the style and composition of the later mortuary banquet statues from ninth-eighth centuries. These three-dimensional statues in the round differed from the relief of the KTMW stele but closely resemble the mortuary iconography of a “male or female person seated alone at the feasting table” (Bonatz 2014: 43). When depicted alone and in statuary, the figure likely represents the deceased, although figures on reliefs that contained the image of more than one person may represent the descendent who was responsible for providing the offering (Bonatz 2014: 42-43). The statues do not depict the feasting table. Rather, the “tectonic model of the statues” were shaped so as to create a flat horizontal surface at the thigh to serve as the table (Bonatz 2014: 42). The similarities in composition and function of generic anthropomorphic representations of the bodies of the dead in reliefs and statues shows continuity of this traditional genre over several hundred years.

Beyond mortuary stele and statuary, the depiction of seated figures holding cups is widespread throughout the ancient Near East and could be used to represent an array of subjects, such as rulers and deities (cf. Herrmann and Schloen 2014). The representation of the dead within this repertoire adds another dimension to how representations of embodiment could be understood and rendered. The banquet motif occurs in a variety of media, such as sealing stones, statues, reliefs, and inlays. This genre is even found at Late Bronze Age Megiddo, in the form of ivory furniture inlays in an Egyptianizing style. These inlays, which were found in the Late Bronze Age palace adjacent to Tomb 50 in Area H, depict scenes of figures—presumably rulers—who are seated in chairs, holding cups, and receiving offerings (Herrmann and Schloen 2014: 137-138, Figures C15-C16).

Interaction with the dead as embodied persons was a complicated matter at second millennium B.C.E. Qatna and involved human remains at multiple stages after death, as well as anthropomorphic representations of ancestors. On the one hand, the anthropomorphic statues embody the dead as inanimate objects and may represent the long-dead, ancestral group of the dead. This hypothesis is supported by the long duration of use of the shared burial spaces of the Royal Hypogeum and Tomb VII, which contained human remains spanning hundreds of years. Since Tomb VII contained mostly secondary inhumation, this tomb was the more likely location of the actual bones of the ancestors, who were objectified as statues in order to receive offerings outside of the entrance to the Royal Hypogeum. Although these ancestor statues were generically rendered, they were likely considered to be a “real” locus for encounters with the dead. Like the KTMW stele, the statues received actual food offerings. The ancestors were therefore sustained through this feeding and care of the dead through the statues, which were located at the entrance to the Royal Hypogeum. This close spatial proximity between the ancestor statues and the skeletal remains interred in the burial chamber reinforced the connections between these bodies, which represented the long dead and the newly dead, respectively. The presence of both the statues and the skeletal remains demonstrates that dual practices of embodiment of death existed at Middle and Late Bronze Age Qatna.

Mourners were confronted with the reality of the decomposing flesh and may have taken step to mitigate the process of decomposition through corpse treatments aimed at preservation. Preparation of several corpses—which took place either on the wooden table inside the Royal Hypogeum’s southern chamber or outside of the chamber prior to interment (Lange 2014: 251)—may have involved a multi-staged sequence involving substances and heat. Evidence of burning on skeletal remains show sustained exposure of corpses to high temperatures following treatment of the body with a paste composed of oils, resins, and pigments (Witzel and Kreutz 2007: 178-179; Lange 2014: 251). Corpses may also have been wrapped in textiles prior to inhumation (James et al. 2009; Lange 2014: 250).

Short of mummification, corpse treatment could only do so much to slow down the effects of death on the body. Primary inhumation and its attendant preservation techniques therefore comprised only the first step of a multi-staged funerary sequence for Qatna’s royal dead. Secondary and compound disposals have been found in both of the palace’s burial complexes, indicating that at a certain point after death and burial, the bones could be collected and treated again in ways that demonstrate an acceptance of the realities of death, rather than an attempt to decelerate physical degradation. I argue that new, composite bodies of the royal dead were created through processes of compound disposal and intermixing of skeletal elements from multiple individuals. Like burials elsewhere in the Levant during this period, Qatna's royal burials exhibited strong evidence of co-mingled and re-arranged human remains in secondary and compound disposals. As argued elsewhere in this work, in the Levant the deliberate process of moving and fragmenting human remains at various stages of decomposition indicates a respectful process of transformation of these important royal persons. The disarticulation and intermixing of biologically discrete individuals incorporated the bodies and persons into a single physical entity. The process was initiated after burial and continued until the bones were transported to Tomb VII, where they were re-buried in wood boxes. This complex and multi-staged sequence goes far beyond the "pushing aside" of human skeletal material in order to create additional space within the shared subterranean tomb. Here it is clear that the process altered and re-imagined relationships with the deceased and the dead body, rather than representing a practical necessity of making room within these spacious burial complexes. The continual manipulation and intermixing of skeletal remains facilitated the transformation of the deceased into a collective royal ancestor after burial.

In this context, the transformation of personhood after death for these royal dead incorporated both real bodies and bodily representations. In the Qatna palace, the practice of commemoration of the royal dead involved marking the tomb entrance at the ground level of the palace, as well as prolonged manipulated of the corpses and skeletal remains below the floors. The assemblage of anthropomorphic figurines found *in situ* at the entrance to the underground Hypogeum not only marked the spot of the burials in a physical way but may have metaphorically stood for the deceased by representing their fleshed, whole bodies. The figurines were depicted as life-like and within the recognizable genre of banqueting iconography to indicate that the statues could receive consumable offerings. Indeed, the deposition of serving bowls and faunal bones around the statues supports this interpretation. Together, the *in situ* skeletal remains in both burial chambers and the above-ground figurines attest to the simultaneous use of real bodies below and substitute bodies above to represent and commemorate the deceased persons. Embodiments of death for the royal dead at Qatna involved a complex combination of whole bodies, fragmented bones, and corporeal representations that may have served as mnemonic devices of the dead as they were in life, or the dead imagined in an ideal way as ancestors who existed beyond their decomposed remains.

Limitations of Personhood in Mortuary Archaeology

As a final point to this chapter, I discuss the limitations of personhood in mortuary archaeology. Burials constitute a limited, if often rich, dataset for evaluating ancient personhood. A critical approach is essential for disentangling the relationships between burial practice and post-mortem personhood outcomes in order to account for a variety of possibilities. Particularly in the absence of contemporaneous textual sources, the framework of personhood provides a valuable snapshot of the end result of a complex series of transformations, but it does not provide the complete picture. It is therefore critical to contextualize deathways within the modes of personhood that were operationalized during life. In the Bronze Age Levant, this model is one of fractal dividuality.

First and foremost, there are not necessarily direct or clear-cut relationships between body treatment and personhood ideologies in the sense that an individual primary inhumation equates to individuality, or that fragmentation of a corpse(s) results in dividual personhood (Chapman 2010: 30-31; Croucher 2012: 207; Fowler 2004: 83-92; Hofmann and Orschiedt 2015: 988; Voutsaki 2010; Moutafi and Voutsaki 2016). As Chapman (2010: 31) cogently notes, "if…an individual corpse does not necessarily indicate the prevalence of an ideology of individuality, then we should be able to accept its converse, *i.e.* that partial burials are not always and necessarily concerned with the denial of in-dividual identity!" For example, individual primary inhumation may represent only the first step of a multi-staged, protracted mortuary sequence (Chapman 2010: 30). Another valid critique is that a whole-body inhumation could represent the sum total of dividual relationships of exchange of substances and objects (e.g., permeability), or could represent the corporate relations of an entire group (e.g., fractality) (Chapman 2010: 31). Presentation of the body through specific decoration and placement of objects may not stand for "individual identity" but could represent relationships of body-object enchainment (Fowler and Scarre 2014: 1023-1024).

Along these lines, Moutafi and Voutsaki (2016: 781) offer an acute critique of the hazards of vagueness and imprecision of a personhood framework as it is operationalized in archaeology: that by an overreliance on ethnography and under-representation of historical specificity and empirical evidence, "we run the risk that the whole of prehistory will be populated by timeless and generic Melanesian 'dividuals' (Jones, 2005: 15)—in which case, the notion of a relational personhood loses its explanatory value." Following from this observation, it is paramount to accept that internal understandings of the mind, body, and soul, are complex and may not correspond to expected treatments in death (Croucher 2012: 206-212). Specificity of context and use of positive empirical data, particularly funerary taphonomy, archaeothanatology, forensics, and the mortuary sequence address these problems with ancient personhood (Moutafi and Voutsaki 2016: 781). This study, for example, deals directly with these critiques of personhood in archaeology by integrating these empirical methods within a "theoretically informed analysis of human remains" (Moutafi and Voutsaki 2016: 781), which are framed within specific and contextualized case studies.

It is instructive to look at two different interpretations of the same practice of Neolithic cannibalism to illustrate this point. From a materialist perspective of the mind-body-soul relationship, the dead body may be understood as an "empty shell" that transforms into a person-less material (Croucher 2012: 207). On the one hand, cannibalism of a human corpse "could demonstrate that the body is meaningless" or otherwise objectified to the extreme in death. The act of consumption could therefore nullify the body as a source of personhood, rendering it a "suitable source of nourishment" like any other kind of meat (Croucher 2012: 207). On the other hand, consumption of a dead human body by members of the deceased's family or extended social network "could express deep respect for the dead, and an understanding that by consuming the dead body the living person acquires part of that person's essence or identity" (Croucher 2012: 207).

Moreover, the diversity of body treatments that co-occur within single context must be explained. In Neolithic Europe and the Levant, practices of inhumation of single individuals occurred alongside a variety of fragmentation practices which could range from cremation and excarnation to dismemberment, de-fleshing, skull curation, and co-mingled bodies in shared tombs. This variety of body treatments could indicate a corresponding variety in co-existing post-mortem personhoods on the spectrum of individualizing to relational (Croucher 2012; Gramsch 2013: 464-465; Fowler and Scarre 2014; Hofmann and Orschiedt 2015: 988).

Summary and Conclusions

This chapter has introduced theories of personhood and embodiment to evaluate the status of the dead after burial in the ancient Near East. Beyond the lived experience, embodiment in mortuary archaeology opens avenues to investigate the culturally-situated experiences of death and dying (Robb 2013). Rather than investigating embodied lives (*sensu* Joyce and Meskell 2003), I focus on embodiments of death. This approach has potential to shed new light on mortuary archaeology in a variety of contexts worldwide as an innovative anthropological framework that enriches understanding of death and burial practices and prompts new ways of understanding ancient persons from a material perspective.

Personhood studies in archaeology have tackled the challenges of the merged and relational identities of whole and fragmented persons, bodies, and objects through concepts of corporeality, as well as through the exchange, circulation, hoarding, and breakage of materials (Casella and Croucher 2011: 211). Fragmentation of a whole is understood as an act of radical transformation that changes the relationship between the (new) part and the (old) "original whole" by breaking up the "bounded integrity of the body" or object (Casella and Croucher 2011: 213; Chapman and Gaydarska 2007: 6). Fragmentation of bodies and objects can also symbolize relationships of personhood, particularly fractality, permeability, and partibility which allow for the divisibility and exchange of bodies, objects, and substances within personhood networks. For example, persons can be enchained through their lineages, which are reproduced through bodies and involve transfer and transformation of substances (permeability); as a result, the bodies of living and deceased ancestors may take on special significance (Appleby 2010: 47).

I have drawn from archaeological cases across time and space to demonstrate different frameworks for interpreting diversity in death and burial. Evaluating the degree of diversity is an important step to evaluating when certain practices are within the realm of acceptability and when they may be deviant, particularly in regard to destruction and mutilation of human remains. I have demonstrated that models of corporeality and embodiment advance understanding of destructive bodily practices, which served as means of transformation in contexts as widespread and incongruent as Medieval Europe, Neolithic Near East, prehistoric Caribbean, and the American Southwest. Not all burials involving intense modification or even destruction of human bodies necessarily represent a form of punishment, violence, or a remedy for a bad death (Weiss-Krejci 2013: 285). Manipulation of human corpses and skeletons in Neolithic Europe and Near East, for example, serves as a counterpoint to the notion of disturbance as an inherently negative mortuary activity, opening new understandings of corpse mutilation across time and space. Many of the models that I have considered in this chapter are applicable in some way to the Bronze Age Levant, where variation in body disposal, context, and burial architecture were intentional practices of transformation and re-configuration of bodies and persons.

Personhood, embodiment, and the human life course are particularly relevant theoretical approaches for the ancient Near East, a setting in which embodiments of death varied according to personhood outcomes. Personhood did not necessarily terminate after death and burial. Rather, personhood could extend beyond the biological death of the body. Death and burial are processes of physical and social transfiguration of living, corporeal persons, who turned into socially deceased persons. For some, posthumous personhood extended the life course of a particular person or group of persons, as I explain in the following chapter in reference to the textual sources of the ancient Near East.

As I explain in the following chapters, my model creates a framework for understanding how and why bodies and persons transformed in various ways after death and burial in the Bronze Age Levant. The treatments of deceased bodies ranged from objectification and fragmentation of human remains to preservation and wholeness of the deceased human body. New relationships were forged using objects and anthropomorphic representations of the dead. I argue that the higher the degree of interaction with human bodies (in whatever form), the higher the degree of personhood transformation. The manipulation of the corpse at different intervals after death and burial contributed to processes of remembering and forgetting, preservation and erasure, as well as processes of social transformation. I contend that three closely related factors—the human body, personhood, and time after death and burial—played major roles in facilitating these posthumous transformations. The body itself was the primary mechanism of physical and social transformation after death and burial. Therefore, the status of the dead after death and burial is accessible through the status of the post-mortem body.

CHAPTER 4 – GODS, GHOSTS, AND ANCESTORS IN THE ANCIENT NEAR EAST

In the end a man gets what?
A man gets what as his fate?
Glaze is poured on the head,
Lye all over the skull.
[ ] the death of all I shall die,
I too shall die and be dead.
[*KTU* 1.17:vi:35-38; trans. Parker 1997: 61-62]

Rituals surrounding death and burial in the ancient Near East were rarely inscribed for specific persons and remain elusive for most of the population. As a result, the transformation of personhood after death, such as the process of becoming an ancestor, is not well understood. Fortunately, documents from Mesopotamia and the Levant shed light on practices that complement the archaeological record, occasionally at the scale of the family and the individual. This chapter investigates a variety of textual sources from the ancient Levant and Mesopotamia that address practices of burial and commemoration as well as afterlives of the person and body. First, I focus on evidence of posthumous persons, specifically ancestors, ghosts, and the deified dead. I address the nature of these posthumous entities and the process of becoming an ancestor, ghost, or member of the deified dead, including who was selected for these roles. I argue that ritualized commemoration, which could take a variety of forms such as *kispum* ritual, was the primary pathway to personhood after death and burial.

As discussed below in Chapter 5, the diversity of second millennium B.C.E. mortuary treatments—ranging from single, primary inhumation in simple pits below house floors to co-mingled compound disposals in shared chamber tombs—attests to the broad range of corporeal outcomes after death. The nature of an undisturbed, primary inhumation differed significantly from the fragmented and dispersed bones inside re-used burial spaces. I investigate the connection between body disposal methods and personhoods after death by turning attention to textual sources on practices of burial and commemoration in the ancient Near East. I demonstrate that inhumation was the preferred method of body disposal, and that proper burial was usually a necessary condition for commemoration. Improper care of a body or a lapse of commemoration produced potentially harmful ghosts. Therefore, the combination of burial by inhumation and continuing commemoration of the dead were the dual mechanisms that perpetuated personhood in the afterlife. Taken together, the textual sources and archaeological evidence build a model of ancient Near Eastern thought on posthumous embodiment and personhood, contributing to this project's main research questions concerning the status of the dead after burial, particularly as mediated through the body.

The documents included here mainly originate from elite and royal contexts in the second millennium and early first millennium B.C.E. Levant and Mesopotamia, including Middle and Late Bronze Age Ugarit; Old Babylonian period Mesopotamia (ca. 2000-1600 B.C.E.); and eighth century B.C.E. Zincirli. The available textual evidence is vast and cannot be dealt with in depth in this study. The literary corpus in particular is rich and broad; I select passages from the

Tale of Aqhat, a mythological text from second millennium B.C.E. Ugarit, to provide a window into Canaanite deathways in a context that is comparable and contemporaneous with Middle and Late Bronze Age Megiddo. It is worth noting that *Gilgameš Epic* also contains many relevant passages on death, burial, mourning, and afterlives (see Cavigneaux 2000). A fragment of a Late Bronze Age cuneiform tablet containing the *Gilgameš Epic* was found at Megiddo, with petrographic evidence indicating that the tablet was produced in southern Levant, not in Mesopotamia (Goren et al. 2009). The presence of the tablet at the site demonstrates that this myth was circulating at Megiddo and across the southern Levant during the Late Bronze Age. However, treatment of this text is beyond the scope of the present study. I draw from writings that are most relevant to issues of embodiment and commemoration in the second millennium B.C.E., specifically choosing texts from a variety of genres that deal directly with the dead body and discuss what these sources communicate about becoming and being an ancestor, ghost, and a member of the deified dead. I also address how these states of being are related to the status of the body at different intervals after death and burial. I demonstrate that embodiments of death operated within a spectrum; deceased persons in the ancient Near East could be embodied, disembodied, or alternatively bodied depending on the manner of the burial and commemoration.

This disparate set of funerary documents reveals certain criteria for the transformation of personhood after death for each potential outcome. Liturgical and epigraphic sources, such as the *kispum* texts and KTMW stele, provide a framework for *how* personhood transformations were enacted through rituals of commemoration involving regular care and feeding of the dead. The sources communicate whose afterlives continued after burial, under what circumstances, and in what form. I demonstrate that for non-royal persons, the status of the dead after burial was related to the degree of ritualized care and commemoration that was carried out by living descendants and heirs, who selected certain persons for ancestorhood based on their relative status within the extended kin group. Those who lacked a surviving social network suffered the fate of an afterlife without the necessities of life after death, forcing them to transform into dangerous ghostly entities who preyed upon strangers. For royalty, such as the rulers of Middle and Late Bronze Age Qatna who were buried in the palace, life after death included sumptuous grave goods and, for a select few, commemoration could promote the dead to deified status.

Background

Ugaritic and Akkadian textual sources from the second millennium B.C.E. provide clues that the performance of specific funerary and commemorative rituals could result in a variety of post-mortem status outcomes, such as transforming the deceased into a ghost, ancestor, or deity (Lewis 1989, 2014; Schmidt 1994; van der Toorn 1996, 2014; del Olmo Lete 2004; Pardee 2009).[8] A review of the textual evidence below outlines the mechanisms behind these outcomes, such as who was selected for ancestorhood and how long after death such transformations of

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[8] For example, Ugaritic texts *KTU* 1.113:13-26, 1.161, 1.17-19, 1.20-1.22, 1.39, 1.6 VI, 6.13, 6.14 (del Olmo Lete 2004: 184-207, 213-19; Lewis 1989: 53-71, 2014; Lange 2012). For Akkadian sources see van der Toorn 1996: 42-65.

status took place. Below, I provide a brief background on the main textual sources under study in this chapter: literary and liturgical texts from second millennium B.C.E. Ugarit, Old Babylonian *kispum* texts, and the KTWM stele from eighth century B.C.E. Zincirli.

Ugarit

The northern Levantine city of Ugarit (Ras Shamra) falls within the broad sphere of Canaanite culture. Much of what has been identified as Canaanite religious thought and practice is indebted to the abundant record of liturgical, literary, and mythological texts found in the LB II destruction level of the city, which dates to ca. 1185 B.C.E. (Calvet and Castel 2008: 220). Scholars have reconstructed the basic tenets of Ugaritic religion and ritual practice such as the pantheon, ritual calendar, and organization of temple personnel using mythological texts and lists of sacrifices and deities from the city's two temples in the northeast sector of the acropolis, which were dedicated to the gods Baal and Dagan (Curtis 1985: 83). These temples were constructed during the eighteenth-seventeenth centuries B.C.E. and provide evidence of the continuity of religious practice, inferred from the texts, from the Middle Bronze Age through the end of the Late Bronze Age (Gates 2003: 160-162; Curtis 1985: 38).

Ugarit stands out from other Canaanite cities in both the density of its written sources and its cosmopolitan and trade-oriented character; this coastal city functioned as an interregional trade hub, facilitating exchange of goods and ideas between the eastern Mediterranean, Levant, Anatolia, Mesopotamia, and Egypt (Klengel 2014). Correspondence from the King of Byblos, a famously opulent city with elaborate Middle Bronze Age royal tombs, illustrates this point. The king mentions that only the palace of Tyre could rival the splendor of the palace of Ugarit (Curtis 1985: 52-53). The monumental royal palace of Ugarit was built at the end of the seventeenth century B.C.E. (Curtis 1985: 39). Its impressive size and building materials, made of ashlar masonry, dominated the northwest quadrant of the city, where it occupies an area ca. 120 m x 85 m., similar in size to the huge royal palaces at Qatna and Mari (Curtis 1985: 49; Pfälzner 2007). The architecture at Ugarit fits within the Middle Bronze Age repertoire of massive and elaborately decorated palaces complete with ashlar masonry, orthostates, cedar wood, and in some cases Aegean-style wall and floor frescoes—features attested to palaces elsewhere in the region at Alalakh, Qatna, Tel Sakka, Ebla, Mari, Kabri, and Tell el-Dab'a (Feldman 2007; Pfälzner 2007: 33-35; Burke 2014). Like its counterparts, the 22-ha. city of Ugarit is surrounded by earthen ramparts (Calvet and Castel 2008: 220). The city also resembles its contemporaries in terms of its residential architecture. Beyond the palace, other elite residences include the House of Yabninou, Southern Palace, and House of the Queen Mother (Calvet and Castel 2008: 220). The city also contains densely built residences to house its 6000-8000 non-elite inhabitants in six different neighborhoods: Ville Sud, Sud-Acropole, Sud-Centre, Centre de la Ville, Quartier Residential, and Ville Basse (Calvet and Castel 2008: 220). Beginning in the eighteenth century B.C.E., many of these houses contained subfloor burials, both pits and elaborate masonry-constructed chamber tombs (Marchegay 2004: 240). Indeed, Ugarit contains the largest corpus of Middle and Late Bronze Age masonry-constructed chamber tombs in the Levant; along with several tombs excavated at its ports of Ras Ibn-Hani and Minet al-Beida, these tombs number at least 214 (Marchegay 1999, 2004: 240; Curtis 1985: 49). The rich mortuary landscape of Ugarit, evident in archaeological finds and abundant textual attestations, provides an ideal setting in which to discuss Levantine thought and practices surrounding death, burial, and afterlives.

Kispum *Texts*

In the context of the ancient Near East, the deceased were considered to be part of the wider community of the living, possibly due to ritualized commemoration that may have taken the form of ancestor veneration (van der Toorn 1996: 48). So-called *kispum* texts are not a coherent set of documents but comprise a collection of Akkadian texts that outline proper care and feeding of the dead through ongoing dedication of provisions (Tsukimoto 1985; MacDougal 2014: 3). The texts were written on tablets in cuneiform that derive from a variety of sources, places, and genres, including "mythological and religious literary works, magic and divination texts, legal and everyday practical documents" (MacDougal 2014: 8). Letters referencing such ritual procedures originate mainly from a royal archive from the Middle Bronze Age palace at Mari (MacDougal 2014: 9).

The terms *kispu ginu*, meaning "regular funerary offering" and *kispum* appear during the Middle and Old Babylonian periods respectively (van der Toorn 1996: 49; MacDougal 2014: 3). The term *kispum* may be derived from the verb *kasāpu* meaning "to break apart," which refers to the ritualized offering of consumables, such as flour and water, to the deceased (MacDougal 2014: 5; *CAD* K: 425-427). These offerings occurred on a daily basis with fuller meals offered monthly (van der Toorn 1996: 49-50). MacDougal (2014) claims that the *kispum* rituals were intended to keep dead family members close to the world of the living, which implies a form of ongoing and active personhood for those selected for these rites.

These texts provide a framework for regular commemoration of the deceased at multiple time scales after death and burial but are not a "how-to manual for family *kispum*" (MacDougal 2014: 8). It is important to note that the texts derive from disparate sources and genres and were not written as a coherent set of documents in antiquity; the documents have been grouped together by scholars of the ancient Near East based on the themes of their content that pertain to commemoration (MacDougal 2014). The dataset is broad and beyond the scope of this study, so I focus mainly on a second millennium B.C.E. prayer, *BE* 6/2, which exemplifies the roles and expectations of living and the dead members of an extended lineage group. This prayer names decedents in a genealogical system up to three to five generations, according to a generational list in a prayer to the moon-god *Sîn* which contains the paternal family tree of the paterfamilias *Sîn-naṣir* (*BE* 6/2; MacDougal 2014: 128-130). The named dead were usually limited to as far back as the living memory of the eldest living generation (van der Torn 1996: 54). This evidence indicates that the process of becoming an ancestor could be prolonged and multi-staged but occurred only while living memory of the deceased persisted among their descendants. The generic group of the dead, who were also considered to be ancestors, were unnamed and referred to in vague terms as family, kin, and relatives (van der torn 1996: 54).

Eighth Century B.C.E. Zincirli

The KTMW stele is a commemorative stele found in a "mortuary chapel" at the 40 ha. mound of Zincirli. During the ninth-seventh centuries B.C.E., the city was the capital of the Iron Age kingdom of Sam'al (Schloen 2014: 27; Herrmann 2014a: 49). The setting of eighth century B.C.E. Zincirli, which is located near the southeast border of modern-day Turkey in the northern fringes of the Levant (Schloen 2014: 27-28), may seem remote from this study's research on the second millennium B.C.E. Levant. The time and cultural distance of ca. 500 years between the end of the Canaanite world in Late Bronze Age and the context of Iron Age Sam'al, however, do not pose serious issues given the continuity in linguistic and cultural practices at the site at large (Schloen 2014: 35-38), and the continuity in commemorative practices that the inscription specifically reveals.

The language of the inscription is a previously unknown northwest Semitic dialect called Sam'alian. The eponymous KTMW stele is a unique find written from the first-person perspective of KTMW, who stated in no uncertain terms his expectations and wishes for his continual care, feeding, and memorialization after death. KTMW identifies himself as "the servant of Panamuwa—a Sam'alian official with a Luwian name in the service of Sam'alian king with a Luwian name, a king whose predecessor and successor both had Semitic names" (Schloen 2014: 37). The inscribed stone includes an anthropomorphic representation of KTMW, serving as a mnemonic for his body. The stele provides new insight into how commemoration operated in this context, including stipulations of location, timing and duration. The inscription also specifies which food offerings were to be presented to which persons, such as the "soul" of the deceased KTMW and a cadre of deities. Below, I explain that none of the persons or divine entities specified as recipients of these offerings inhabited physical bodies; rather, the dead KTMW and the gods were disembodied persons who still required physical sustenance in order to survive in the realm of the Netherworld. The stele not only reveals continuities in mortuary treatment among the wider Semitic world of the Bronze and Iron Ages but serves as a rare exemplar of commemoration instructions that illustrates embodiments of death.

Embodiments of Death

I argue that long-term commemoration of the deceased over several generations is one way in which the personhood of the dead could be prolonged after biological death. Interaction with the deceased can take various forms, such as multi-staged funerary rituals and place-making of the grave-site or burial monument for visitation (Robb 2013; Sjögren 2014). Manipulation of the corpse through various means such as positioning, movement, decoration, furnishing with grave goods, and even destruction "are different ways by which material culture mediates commemoration" (Williams 2013: 195). Through spatial context, architecture, and grave goods, burials may cite the past and present in ways that create a link between the long dead, the recently dead, and the living (Williams 2013: 195-196). However, citation is necessarily selective. Mortuary practices encompass processes of remembering and forgetting (Chesson 2007; Campbell et al. 2014). In the next section, I define terms related to commemoration and then turn the discussion to three main categories of posthumous persons: ancestors, ghosts, and the deified dead.

Ancestor Veneration and Commemoration: Terminology and Definitions

Before addressing ancestorhood, I define here terms commonly used in the scholarship of the ancient Near East that is related to ancestors, veneration, and commemoration. Ancestor veneration, as opposed to commemoration of the dead, encompasses a specialized set of ritual practices that transforms the personhood status of certain persons after burial. Ancestor veneration differs from the generic practice of funerary ritual that was widely performed across burial types, and it differs from the "cult of the dead" (Teinz 2012). Throughout the literature, "funerary" rite is generally reserved for those activities specifically related to mourning and burial of the corpse, while the terms "mortuary" rite and "death cult" or cult of the dead have often been used in reference to post-interment activities such as ritualized commemoration that occur long after burial (Lewis 1989; Schmidt 1994: 7-21; del Olmo Lete 2004; Teinz 2012: 236-39). Ancestor commemoration and cult of the dead are understood here as separate but related phenomena. The former involves the ritual commemoration of specific persons or groups of persons while the latter encompasses the care and feeding of the dead at large (Schmidt 1994: 5, 13; Pardee 1996; Teinz 2012: 236-39).

A plurality of contexts existed in which someone became, and was venerated as, an ancestor in the ancient Near East. As a result, there is no clear scholarly consensus about the ontological status of the dead. A few elusive clues on the status of the ancestors only muddy the waters; for example, inheritance texts from Old Babylonian Emar mention the "gods and the dead" (*ilī u mētē*), which van der Toorn (1996: 55-56) interprets as a reference to the ancestors who are called gods due to their "privileged position" as honored members of the household. Some texts do not distinguish between gods and ancestors at all, and by the first millennium B.C.E. in Mesopotamia, ancestors were considered to be part of the Annunaki, the "gods of the world below" (van der Toorn 1996: 55). Otherwise, deceased persons in different Semitic traditions could be imagined variously as: (1) deities (*ʻlm* in Ugaritic, and in Biblical Hebrew, *ʼĕlōhîm*) (Lewis 2014: 73); (2) ghosts (Akkadian *eṭemmu*) (Bottéro 1992: 271; Scurlock 2006); (3) deceased ancestors (Biblical Hebrew *r^{e}pāîm;* Ugaritic *rapi'ūma*; Akkadian *eṭemmu*) (Tsukimoto 1985; van der Toorn 1996; Fleming 2008: 41-42); or (4) some combination of the above, such as a divine ancestor (Ugaritic *ilib*) (Lewis 1989: 171; van der Toorn 2008: 24- 28; Fleming 2008: 40-42; del Olmo Lete 2004: 161-172). Ugaritic royal funerary texts differentiate between two categories of the royal dead, the long dead (*rp'm*), and the recently dead (*mlkm*) (Lewis 1989: 171). Together, this evidence indicates that being an ancestor was a contextually variable, dynamic, and accumulative process, rather than a static condition.

Gods, Ghosts, Ancestors

These many permutations of the status of the dead demonstrate that, at the very least, personhood could extend beyond the biological life course of a given individual. As I explain below, these personhood transformations—whereby a living corporeal person became a dead, non-corporeal person—were achieved through special commemoration activities that involved communal feasting among the living and the dead (Lewis 1989, 2014; van der Toorn 1996). Beginning with the category of ancestors, in the next section I review textual sources on ancestors, ghosts, and the deified dead with reference to the ritualized transformations of the dead that extended the life course.

Ancestors. Who became an ancestor? Those selected for such transformations were given special funerary treatment that extended their personhood beyond death. I will demonstrate that the documents consistently convey that males with heirs were selected for ancestorhood. Women without heirs could be included if they fit certain occupational criteria. The process of transformation into an ancestor could be prolonged and had to be facilitated within the lifetime of surviving descendants who achieved this aim through the practice of regular commemorative rituals involving food, drink, and invocation of deities and the named dead.

The Old Babylonian prayers involving ancestors and Ugaritic liturgical and literary documents shed light on the status of the dead after burial, specifically how one could become an ancestor (Tsukimoto 1985: 51-56; van der Toorn 1996: 48-53). The texts that reference the *kispum* rituals related to care and feeding of the dead provide a framework for post-interment commemoration. For example, the prayer text *BE* 6/2 demonstrates that the ritual involved two main parts: (1) recitation of the personal names of the dead, up to five generations back, and (2) providing the dead with sustenance. Led by the *zakir šumi* (he "who invokes the name"), usually the eldest son, surviving family members performed *kispum* rituals for ghost or soul of the dead at the grave-site or in ritual space such as a mortuary, family, or neighborhood shrine (van der Toorn 2014: 84; MacDougal 2014: 5). The named persons were cared for regularly in a ritual during which food and drink (water, oil, wine, bread) were offered (van der Toorn 1996: 60). The text reads as follows:

> [S]în, you are the god of heaven and earth.
> [In the mo]rning I am pouring water to you
> [for the f]amily (*kimtum*) of Sîn-nāṣir, the son of Ipqu-Annunītum.
> Release the family (*kimtum*) of Sîn-nāṣir, the son of Ipqu-Annunītum,
> that they may eat his bread and drink his water:
> Išme-Ea son of Šamaš-nāṣir, his wife and his family (*kimtum*);
>   [Il]tani, *nadītum* of Šamaš, his daughter;
>   [Sîn]-nāṣir, son of Išme-Ea;
>   ˹Kasap˺-Aya, *nadītum* of Šamaš, his daughter;
>   Sîn-iddinam, son of Sîn-nāṣir;
>   Iddin-Ea, son of Išme-Ea;
>   Amat-Aya, *nadītum* of Šamaš, his daughter;
>   Di-Utu-binduga, his son;
>   Ebabbar-nu-u'ulše-ḫegal, his son;
>   Eḫursag-mušallim, his son;
>   Ipqu-Ea, son of Išme-Ea;
>   Amat-Mamu, *nadītum* of Šamaš, his daughter;
>   Nidnuša his son;
>   Ibni-Ea his son
>   Iqīš-Ea son of Išme-[Ea], his wife and [his] family;
>   Ipqu-Aya son of Išme-Ea, Abī-mattum his wife [and his family (?)];
>   Lamassani, *nadītum* of Šamaš, his daughter;
>   Ilšu-ibnišu his son;
>   Sîn-nādin-šumi his son;
>   Sîn-kabit-biltum, son of Sîn-nādin-šumi;

Ikūn-pî-Sîn son of Ipqu-Aya, whom…have struck to death;
Sîn-erībam son of Ipqu-Aya, who sleeps (*ṣallu*) in Maškan-Adad;
Ipqu-Annunītum son of Ipqu-Aya, Bēlessunu his wife.

[Release] the family (*kimtum*) Sîn-nāṣir, the son of Ipqu-Annunītum,
that they may eat [h]is [br]ead and drink his water!
[trans. van der Toorn 1996: 53]

The daily and monthly food offerings to the named dead ensured the continuation of their memory as ancestors among their descendants (van der Toorn 2014: 82-84). The physical presence of the dead, in a non-corporeal form, was implied through the setting up of a chair for the ghost (*kussû eṭimmē*) (van der Toorn 1996: 52). The chair may have been set up alongside a "ceremonial table" for daily *kispum* in the house sanctuary (*ishertum*), which was also furnished with a lamp and fireplace (van der Toorn 2014: 82). The location of the *kispum* ritual in the house is further supported by Sumerian incantations to Utu, the Sumerian sun-god, in which the deity refers to the ancestor as "eating, drinking, and sleeping in his own house":

Let the dead man eat in front of his house,
let him drink water in his house,
let him sleep in the shade of his house
[van der Toorn 1996: 60].

As these texts demonstrate, the time and place of *kispum* were prescribed, as were the divine and human participants. Certain deities played a role in the *kispum* rituals, particularly *Sîn* and *Šamaš*/*Utu*. The role of *Sîn*, the moon-god, as an intercessor between the living and the dead mirrors that of *Šamaš*, the Akkadian sun-god (see below), both of whom had the power to "mediate between the dead and the living. He can 'release' (*wuššuru*) the dead from the netherworld, as *Šamaš* can 'make the spirit approach its family'" (van der Toorn 1996: 53).

In the setting of royal dead at Ugarit, invocation of the long-dead ancestors (*rapi'ūma*) had a purpose beyond primary function of sustaining the dead in the afterlife. The royal ancestors were invoked in order to guide the newly dead to the Netherworld (Pardee 1996: 274). Archi (2012: 28) claims that the king of Late Bronze age Ugarit "achieved his privileged status in the Underworld greeted by his ancestors who had been evoked precisely for his purpose". The involvement of multiple generations of the dead therefore served to create connections between the multiple generations of the lineage as well as to distinguish the newly dead from the long dead.

In the context of Iron Age Zincirli, the KTMW stele details the kinds of offerings that the dead expected to receive. The inscription in full reads as follows:

1) I am KTMW, servant of PNMW, who commissioned for myself (this) stele while
2) still living. I placed it in my eternal chamber and established a feast (at)
3) this chamber: a bull for Hadad Qarpatalli,a ram for NGD/R
4) ṢWD/RN, a ram for Šamš, a ram for Hadad of the Vineyards,
5) a ram for Kubaba, and a ram for my "soul" that (will be) in this stele.
6) Henceforth, whoever of my sons or

7) of the sons of anybody (else) should come into possession of
8) this chamber, let him take from
9) the best (produce) of this vineyard (as) a (presentation-)offering
10) year by year. He is also to perform the
11) slaughter (prescribed above) in (proximity to) my "soul"
12) and is to apportion
13) for me a haunch.
[trans. Pardee 2014: 45]

As mentioned on the stele, the funerary monument was commissioned by KTMW during his life and to his specifications. It was erected in the "eternal chamber" (line 2), in which he established a feast that was intended to be performed "year by year" (line 10) in proximity to his "soul" (line 11), which was presumably represented by the stele (Pardee 2014: 45). The feast included offerings of a bull and five rams for deities such as *Hadad Qarpatalli*, *Šamaš*, *Hadad* of the Vineyards, and *Kubaba*, as well as a cut of ram meat for KTMW and fruit of the vineyard for the collective gathering (Pardee 2014: 45). All of these conditions needed to be met for the benefit of the survivors and, of course, the deceased, whose ancestorhood was always contingent upon the perpetual performance of commemorative banquets by heirs.

KTMW intended that the rich repast be conducted on an annual basis in front of a funerary stele that depicted the figure and name of the deceased alongside its visual and linguistic references to the banqueting staples such as meat, bread, and produce of the vineyard (Bonatz 2014; Herrmann 2014b; Lewis 2014; Pardee 2014). Strikingly, the inscription explicitly mentions that the "soul" of the dead (Sam'alian *nbš*)[9] could be summoned by the living through commemorative feasting in this particular locale. The presence of the disembodied soul via the stele is the mechanism by which KTMW could receive the offerings. In fact, the body of KTMW appears to have played no role at all in his commemoration; his mortal remains—whether inhumed or cremated—were not associated with the mortuary chapel and stele. Instead of connecting to the broader mortuary realm, the space was contextually affiliated with a nearby sanctuary (Hermann 2014b).

The commemoration rituals spelled out in the prayer text and KTMW stele imply a continued existence of the dead beyond the grave and beyond the body. More than that, the texts make clear an explicit connection between consumable offerings to the dead and ancestorhood. The link between feasting and ancestor veneration is not isolated but has a richly attested tradition in the Bronze and Iron Age in the Levant, Anatolia, Egypt, and Mesopotamia (Lewis 2014; van den Hout 2014; van der Toorn 2014; Müller 2014). The offerings could be for deities as well as for ancestors. For example, two stele from Ugarit (*KTU* 6.13 and 6.14) involve dedications to the god Dagan; these contributions include mortuary offerings (*pgr*) and a sacrificial dedication of a bull for a feast, possibly to be shared between the deity and ancestors (Niehr 2012; Lewis 2014: 71). Although a matter of debate (cf. Lewis 1989; Pardee 1996, 2002; del Olmo Lete 2004; Niehr 2012), the *pgr*-offering at Mari and Ugarit in some cases may have constituted "a rite in honor of the deceased members of the royal line in which all living

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[9] For discussion, see Suriano 2014b; MacDougal 2014; Pardee 2014; Steiner 2015

members of the royal family were required to participate" (Pardee 2002: 123). Similar offerings may have been dedicated to non-royal deceased recipients as well at the request of the donor (Niehr 2012: 153). Likewise, at Ugarit, the contested meaning and actual practice associated with the *marziḥu* is unresolved; this feasting activity may or may not have been directly associated with the funerary realm (Pardee 1996).

Although the texts give primacy to male family members and deities as recipients of offerings, in addition to those persons specified for *kispum* offerings and commemoration, a more inclusive "All Souls' Day" during the month of Abu commemorated all the dead (*Annunaki*), regardless of family connections (van der Toorn 2014: 83). The act of personalized commemoration at a stele, grave-site, or mortuary shrine represents one major mechanism of achieving ancestorhood while generic commemoration indicates ongoing personhood of the dead after burial that may or may not involve ancestorhood.

Women. According to the same Old Babylonian prayer text cited above (*BE* 6/2), women could be included in *kispum* offerings as unnamed spouses and mothers, or could be named in the case of the special social category of *nadītu* (van der Toorn 1996: 54). *Nadītu* were women who dedicated their lives to service of *Šamaš* in the temple at Sippar (van der Toorn 2014: 84). This service elevated their personhood and social status in life as well as after death and burial. However, these women did not produce heirs who could commemorate them. In an Old Babylonian prayer text that prefaced the *kispum* ritual, male names outnumber female names in a ratio of approximately 3:1 (*BE* 6/2 111, trans. van der Toorn 1996: 53). In the context of royal funerary ritual at Ebla, administrative texts indicate that funerary offerings and the involvement of specific ancestors may have followed binary gendered lines: commemoration of men involved weaponry and the invocation of male ancestors, while commemoration of deceased women, who received jewelry and specific garments, was more inclusive of ancestors of both genders (Archi 2012: 24-28).

Under the patrimonial-patrilineal household model of personhood discussed in Chapter 3, women did not become ancestors. The (matri)lineage of women was secondary to their male counterparts. Women could be legally designated as the principal heirs, however, including the responsibility to invoke the gods and the dead as indicated in legal documents from Emar and Nuzi (MacDougal 2014: 119-120). The patrilineal mode which generally privileged male inheritance has been supported with genetic evidence in the case of Ashkelon Tomb 5, an expansive rock-cut chamber tomb used over five or six generations that contained clusters of burials which were spatially delineated according to five different patrilineages (Bloch-Smith 2013: 256; Stager 2008: 1580). Twenty-two adult individuals yielded DNA that showed the presence of three distinct patrilineages, each of which was separated spatially into a designated burial cluster (Bloch-Smith 2013: 256). Matrilineage was not as coherent or well-attested among this sample, indicating that the male line of inheritance was of primary concern in death and burial. To an extent, this case also supports the assumption that shared burial chambers of the Bronze Age Levant functioned as tombs for family or extended kin groups (Schloen 2001; Baker 2010, 2012; Laneri 2010). In addition to the genetic results, Baker's (2010) spatial analysis of over 200 individuals in the rock-cut chamber tomb complex revealed an internal organization of burial "clusters" that may correspond to kinship groups and subgroups. As Bloch-Smith (2013: 256) points out, although the genetic evidence demonstrates "family affinities" along lines of male inheritance, it falls short of confirming the existence of "a single, extended family tomb" (Bloch-Smith 2013: 256).

Ethnographic cases of Cantonese death rituals, who closely follow patrilineal patterns, parallel the posthumous status of women in the ancient Near East. Unlike Cantonese men, women do not become ancestors. Their names are excluded from lineage records, and "unless they marry, their existence is not even noted in existing genealogies" (Watson 1982: 178), presumably because they have not produced heirs (at least not from a marital pairing). When they are named, it follows a patronym. Even so, women who do appear in records "disappear from the domestic altar after three of four generations. The nameless and, hence, ancestor-less qualities of the Cantonese woman are highlighted by the fact that she only appears in these formal contexts (genealogies, tablets, etc.) under the surname of her father" (Watson 1982: 179). Although women's corpses are treated the same as male remains, which includes exhumation of the bones after skeletonization, women's bones are grouped according to the prevailing patrilineage, usually placed along the sides of the tomb of their husbands (Watson 1982: 179).

Children. Although the ages of the dead are not specified, it is inferred that children are not typically represented in texts such as the Old Babylonian prayer to *Sîn* mentioned above, because they have not yet furthered the lineage. Subadults who have not yet procreated may fit yet another category in the spectrum of post-mortem personhood and ancestry. Although they could not themselves have been progenitors who produced heirs, the young offspring of specific lineages may have been afforded special treatment in death such as inclusion in chamber tombs alongside their ancestors and closely related relatives. This was likely the case in Megiddo's masonry-constructed chamber Tombs 100 and 50, for example, where subadults are represented in smaller proportions than their counterparts in pit and jar burials (see Chapters 6 and 7).

Ghosts. The posthumous category of ghosts provides the most telling information about relationships between bodies and personhood. In ancient Near Eastern thought, a clear connection was made between corpses and posthumous persons in which care of the body through inhumation was an important step toward care of the deceased person. Offering of physical sustenance to the disembodied soul of the dead was another major imperative. Although all of the dead who resided in the Netherworld fell under the broad category of *eṭemmu*, those ghosts without a surviving social network and who received neither of these prerequisites for the afterlife were the unlucky few who could cause harm to the living (Cooper 2009). These ghosts were considered dangerous and disenfranchised entities who had no family to care for them after death. In this scenario, proper burial of a corpse was a necessary and sufficient condition to avoid the most unfortunate and feared fate of becoming a ghost.

Ghosts constituted a powerful category of posthumous persons, although their personhood status was not equal to that of ancestors. Unlike ancestors, who were tied to a lineage or place, ghosts were conceptualized as roving, unmoored, and malevolent beings who could be unpredictable and dangerous. Another difference stands out between ghosts and chthonic beings such as ancestors and *Anunnakī*, since the former were not necessarily tied to the Netherworld or to a place of the past such as ruins or a *tell* (Suriano 2012). Ghosts lacked strong familial links and were unnamed. As unaccounted-for persons, they were not answerable to human authority.

In a House- and lineage-based society of the ancient Near East, the anonymity of ghosts served as a source of fear and anxiety, as described in an incantation to the sun-god:

> O Sun God, a terrifying ghost has attached itself to my back for many days, and does not release its hold, It harasses me all day, terrifies me all night,
> Always at hand to hound me, making my hair stand on end,
> Pressing my forehead, making me dizzy,
> Parching my mouth, paralyzing my flesh, drying out my whole body.
> Be it a ghost of someone killed in battle
> Be it a wandering ghost,…
> Drive it from my body, cut it off from my body, remove it from my body!...
> Remove the sickness of my body, that the one who sees me may sound your praises
> Eradicate the disease of my body!
> I turn to you, grant me life!
> [Foster 2005: 650ff]

As this example demonstrates, in ancient Mesopotamia and Egypt, ghosts were frequently blamed for mysterious or sudden medical and psychological ailments (Bottéro 1992: 283; Harrington 2012: 22-27; Scurlock 2006; Scurlock and Andersen 2005). According to Mesopotamian medical compendia, “ghost-induced illnesses” such as delirium, epileptic seizures, shock, and dementia were attributable to these malignant forces (Scurlock 2006; Scurlock and Andersen 2005). To an ancient Babylonian, the concrete and observable consequences of an encounter with a ghost showed the potency of ghosts as posthumous persons who were understood to be powerful agents acting alone and who were fully capable of causing physical harm or material misfortune to the living.

Ghosts could arise in several ways. Inaction or absence of care formed the root of the conditions from which ghosts emerged, as did the manner of death. The lack of a proper burial or treatment of the corpse could produce the dangerous combination of an unburied body with an uncontrollable ghost. Ghosts could emerge from certain kinds of deaths: dying from dehydration, drowning, immolation, or from violence—by murder or death in battle—could all have the same results (Scurlock 2006: 5). A text that Foster (1995: 409) classifies as a “magic spell” against the “restless spirit” of a ghost exemplifies the nature of a forgotten ghost, the ways in which it may have emerged through a bad death or lack of care, and its ability to wreak havoc:

> The ghost which has set upon me, keeps harassing me,
>   And [does not quit me] day or [nig]ht.
> Be it a stranger ghost,
> Be it a forgotten ghost,
> Be it a ghost without a name,
> Be it a ghost which has no one to provide for it,
> Be it a ghost of someone who [has no one to invoke his name],
> Be it a ghost of someone killed by a weapon,
> Be it a ghost of someone who died for a sin against a god or for a crime against a king,
> [Place] it [in the care of the ghosts of its family],
> May it accept this and let me go free!

The emergence and status of ghosts in the ancient Near East can be compared with the range of views of the human body after death in Medieval Britain, a context in which the extended life course allowed for the existence of posthumous and non-corporeal beings (Gilchrist 2012). The dead could be benevolent passive, or malevolent beings depending on the state of the human remains. Fleshed remains that were undergoing dynamic processes of decomposition constituted a source of fear, while skeletonized remains were considered to be passive and safe. For example, on the benevolent side, the so-called Church ghosts were seen as harmless apparitions who usually resided in Purgatory; these specters visited the living in order to provide "spiritual assistance" or to seek salvation (Gilchrist 2012: 219). Likewise, dry bones of the long dead could be treated as special curios that, as passive objects, could not harm the living. On the malevolent side, in folklore shape-shifting ghosts had voices and the ability to assault the living (Gilchrist 2012: 219). Physical bodies of the dead could also cause distress. The fleshed corpses of the newly dead stood in opposition to skeletons and engendered particular anxiety (Gilchrist 2012: 219). According to 12th century C.E. writers William of Newburg and William of Malmesbury, corpses served as the medium for "unclean spirits" (Gilchrist 2012: 219). These spiritual beings constituted a specific category of dangerous revenants who were more object-like than person-like and lacked a body of their own. In order for these malicious spirits to act on others, they needed to inhabit a dead body and were thought to have "slipped into the cadaver through the mouth [in order to wear] the dead body like a garment" (Gilchrist 2012: 219). These examples from Medieval Europe, like in the ancient Near East, show how bodies or body parts of the dead related to the roles of deceased persons as benevolent, passive, or malevolent beings.

Deified Dead. Although evidence for deification after death is patchy, I will demonstrate that extant sources from Middle Bronze Age Mari and Ebla reveal that this posthumous status was limited to those in the royal sphere. Certain deceased rulers are listed with theophoric markers in lists of kings and deities. These deified dead counted as the lowest-ranking deities among the gods. Moreover, through lists of funerary provisions with named recipients, this same collection of administrative writings also hints that social rank correlated with the degree of elaboration of grave goods. The higher the rank, the higher the quantity and quality of grave goods. Like ancestors, the deified royal dead were commemorated and the sites of their burials were known, visited, and revered by the ancient inhabitants of their cities.

The category of the deified dead is challenging to define because it cross-cuts categories and is closely wrapped up in concepts of ancestorhood veneration. Deification after death only applied to a small group of elite dead, the royal dead, in cities such as Ugarit, Ebla, and Mari, and in a handful of Biblical attestations. It is not always clear where ancestorhood stopped and divinity began. According to Lewis (2014: 73), the dead could attain divine status, which facilitated their veneration. These deified dead are referenced in divine terms such as *'lm* and *'ĕlōhîm*, the vocabulary of divinity in Ugaritic and Biblical Hebrew, respectively. The most often-cited biblical example is that of the dead Samuel, who was conjured by Saul from the Netherworld and is referred to as *'ĕlōhîm* (1 Sam. 28:13).[10] At Ugarit, Pardee (1996: 283-284) interprets the phrase *'Ināšu 'Ilīma* as a "collective term possibly denoting some part of the

[10] In contrast, Pardee (1996: 283 n.17) maintains that the divine name written *ilib* does not reference a divine ancestor but rather than "god of the father".

entirety of the human race that has joined the realm of the divinity" and to whom offerings of birds were dedicated. At Ebla, the evidence of deification of dead kings is more secure due to the linguistic marker of divinity, the Sumerian DINGIR sign, that preceded royal names in administrative texts and lexical lists (Archi 2012: 5-7). In some cases, certain dead kings were singled out as recipients of monthly sheep offerings or for bread offerings intended for minor gods, including deceased kings, that were delivered to the palace (Archi 2012: 6-7). Royal mausolea mentioned in these texts from Ebla further attest to the divine status of the dead kings, one called *NEnaš*, which contained the burials of the earliest kings, and another at Darib, where the bodies of ten later kings were buried and "worshipped" (Archi 2012: 7-13). In this context, the divinized kings could also be referred to as "gods of the kings" (Archi 2012: 9, 14-16).

Although the place of the deified dead in the pantheon is not made clear, "presumably, the status of the dead as 'gods' was much lower hierarchically than the status of the primary gods who made up the canonical pantheon" (Lewis 2014: 73). At Ugarit, the deified royal dead, referred to as *mlkm*, are listed at the end of lists of deities while the generic group of dead ancestors, the *rapi'ūma*, do not appear on the lists at all (Lewis 2014: 73). Likewise, the inclusion of the deified kings as recipients of bread offerings alongside minor gods at Ebla, described above, solidifies their place in the divine hierarchy as lower deities.

Transformations in Death

The rich textual record of the Bronze Age Near East provides insight into ritual practices, prohibitions, and taboos involved in the immediate aftermath of death: mourning and burial. These ritual performances translate to the pre-interment and interment stages of the funerary sequence. These funerary stages focused on dealing with the fresh corpse and initiating the social and physical transformations of the dead after death and burial. In the sections below, I focus on literary, liturgical, and epigraphic sources from Ugarit, Ebla, and Mari which serve as useful data points into the conceptual and practical world of Levantine deathways during the Middle and Late Bronze Age. These texts inform several additional primary sources, namely the *kispum* texts and KTMW stele, which I include here to enrich and deepen understandings of mourning, burial, and the role of the corpse in the funerary sequences of the ancient Near East.

Mourning

Mourning was a multi-stage process that involved sacrificial offerings and a litany of externalized emotional responses to death that were performed by specific personnel. I begin with Ugaritic liturgical sources on royal mourning practices of the second millennium B.C.E. These sources shed light on ritual aspects of mourning during the pre-interment phase that may not be visible archaeologically. Rituals for the dead could include summoning the ancestors, both the recently dead rulers (*mlkm*) and the long-dead, who may have been divinized kings and heroes (*rp'm*) (*KTU* 1.161:2-12; Lewis 1989: 171; Schmidt 1994: 100-101; Pardee 1996: 274). Another aspect of mourning involved performance of a sevenfold ritual of descent, sacrificial rites, and presentation of offerings. The ritual of descent may have directly involved the corpse in a repetitious ritual of interment in which the dead body was lowered into a burial pit or chamber and removed seven times over before final inhumation in a subterranean space, which was representative of the entrance to the Netherworld (*KTU* 1.161: 27-30; Pardee 1996: 275; Teinz 2012: 240-241). Presentation of sacrificial offerings often included a bird (*KTU* 1.161: 31; Pardee 1996: 275). Although the recipients are not explicitly stated, the bird was likely offered to the ancestors who were summoned to guide the dead ruler to the Netherworld (Pardee 1996: 275).

Activities that were specific to the group of mourners involved weeping, wailing, wearing sackcloth, and putting straw or dust on one's head (Brody 2008: 530; Felli 2012: 82). Wailing rites were also attested at Ebla, where loud crying over the body of the dead was a task "entrusted to hired women" and close relatives of the dead following washing, anointing, and decoration of the cadaver with jewelry (Archi 2012: 22-23). At Mari, mourning rituals were not as extended as described in the Ugaritic literary text and may reflect a more realistic mourning period of approximately two weeks. Exclusionary mourning rituals for royalty (*hidirtum*) were restricted to close relatives and could last around 15 days, while public mourning consisted of a "one-time demonstration" that marked the death (Jacquet 2012: 125-128).

The Ugaritic narrative *Tale of Aqhat* provides additional evidence of mourning procedures, which could be prolonged and involve the community who mourned at the house of the father. *KTU* 1.19:iv: 9-11 reveals the activities, place, and duration of mourning:

'rb.b/<bth b>kyt.	the weepers come <into his house>
bhklh.mšspdt.	The mourners into his palace,
bḥẓrh/pẓǵm.ǵr.	Those breaking their skin to his court
[trans. Parker 1997: 75-76]	

The same text later spells out the mourning procedure: mourners enter the house of the father of the deceased, Daniel, and express their grief by performing practices that are specific to mourning such as weeping. As mentioned in this and other Ugaritic texts, mourners engage in acts that are destructive to their own bodies including lacerating their skin, gnashing teeth, cutting their flesh and hair, and rending their clothing (c.f., *KTU* 1.5:vi:11-25; 1.5:vi:26-1.6:i:29; 1.15:v:12-14; 1.19:iv:10-26; 1.61:13-34; Brody 2008: 530). This goes on for seven years until Daniel closes the mourning period by offering a ritual meal and incense for the gods:

ybk.laqht/ǵzr.	He weeps for Aqhat the hero
ydm'.lkdd.dnil/mt.rpi.	Sheds tears for the child of Daniel, man of Rapiu.
lymm.lhrḫm/	From days to months,
lyrḫm.lšnt.	From months to years,
'd/šb'.šnt.	To seven years,
ybk.laq/ht.ǵzr.	He weeps for Aqhat the hero
yd[m'] lkdd/dnil.mt.r[pi	Sheds tears for the child of Daniel, man of Rapiu
mk].bšb'/šnt.	Then, in the seventh year,
wy'n [dnil mt] rpi/	Daniel, man of Rapiu

yṯb.ǵzr.m[t hrnmy	The hero comes back, the man of the Harnemite,
y]šu/gḥ. wyṣḥ	He raises his voice and cries:
t[b‘ bbty]/bkyt.	G[o from my house], you weepers
bhk[l]y.mšspdt/	Hence from my palace, you mourners,
bḥẓry pẓǵm.ǵr.	You, breaking your skin, from my court.”
wyq[ry]/dbḥ.ilm.	He pres[ents] a meal for the gods,
yš‘ly.dǵṯ[h]m(?)bšmym.	Into the heavens sends incense,
dǵṯ.hrnmy.[bk]/bkbm.	[To the] stars the Harnemite’s incense.

[*CAT* 1.19:iv: 12-25; trans. Parker 1997: 76]

The mourning procedures outlined in the *Tale of Aqhat* mirror the liturgical evidence from Ugarit and Mari in several ways and provide a framework for comparison with archaeological evidence. The significance of repeating certain activities seven times stands out and could represent the number of funerary episodes that involved the corpse or mourners. In both sources, rituals of mourning of a royal person take place in the palace. This perspective could be expanded to the house of the father in general for non-royal persons. This evidence provides a link between the archaeological evidence of intramural burial on the one hand and the setting of mourning and burial as described in text on the other hand. In both sets of texts, mourning encompassed outward grief in the form of weeping and wailing which were conducted inside the palace in front of a closed audience of relatives of the deceased. Finally, in the literary and non-literary sources, the mourning period is terminated with offerings of food, which could correlate with archaeological evidence of faunal remains inside burial pits and chambers, particularly in cases in which the animal bones are placed inside of open vessels such as bowls and platters as if being presented for consumption.

Burial

Burial of the corpse involved material offerings that were interred alongside the dead. Beyond the archaeological evidence of grave goods discussed in Chapter 5, texts attest to the use of various food, aromatic oils, textiles, weaponry, jewelry, and metal and ceramic vessels. Administrative texts from Ebla and Mari, for example, describe the deposition of offerings. At Ebla, sheep and bread were presented to deities and to the divinized dead royalty in the royal palace and at a mausoleum which contained the remains of dead ancestors (Archi 2012: 14-16). At Mari, elaborate expenditures for royal grave goods included weaponry made of silver and gold, which were provisioned for the grave of King Yarim-Lim (Jacquet 2012: 124). For non-royal persons, grave goods buried with the dead were comprised of “utensils” that belonged to the house of the deceased (Jacquet 2012: 124). As discussed in Chapter 5, the practice of depositing an array of elite and non-elite materials in the burial assemblage is reflected in the mortuary record of the ancient Near East.

Interment could involve investment in sensorial experiences as well as in expensive grave goods. Lamplight, for example, featured in burial rituals in Mesopotamia and at Ugarit. Lighting of lamps during burial and during subsequent visits to the burial locus was possibly related to special *kispum* rituals as described in Old Babylonian texts (van der Toorn 1996: 48-52). During the month of Abu, firewood or torches "lit the way of the souls of the dead who ascend on the night of the 9th of Abu" (Langdon 1935: 20 in Tsukimoto 1985: 48).[11] Along with the lighting of the flames came funeral feasts held by the families in honor the spirits of the collective, unnamed dead (van der Toorn 2014: 82-84). In some cases, these offerings were placed in a special room of the house containing a fireplace, lamp, and ceremonial table (van der Toorn 2014: 82).

In a related practice, the Ugaritic tradition of the cult of the dead, the sun deity *ŠPŠ*—whose epithet was "Lamp of the Gods" (*nrt.ilm.špš*) (Wiggins 1996)—played an important role in death and burial.[12] Having been invoked during funerary rites, she descended to the netherworld and accompanied the dead king Niqmaddu IV to his "eternal abode" (*KTU* 1.161:18-19; Lewis 1989: 171; Teinz 2012: 240-241). Lighting of lamps during the interment phase may have invoked this goddess to escort the dead to the netherworld. In this role *ŠPŠ* was also closely related to the sacrificial *pgr* mortuary ritual in which she guides the royal spirits from the netherworld to the palace in order to partake in this feast (*KTU* 1.39:12; 1.102:12; del Olmo Lete 2004: 20, 164; Niehr 2012: 156–157).[13]

Interment may have been preceded by a simple funeral procession that led to the grave-site, as indicated in sources from Egypt and Mesopotamia. For example, the Egyptian *Story of Sinuhe* has been dated to the MB I, set during the reign of Middle Kingdom pharaoh Senwosret I (ca. 1961-1917 BCE) (Cohen 2002: 38-39; Allen 2015: 56). Although the *Story of Sinuhe* was a literary composition rather than an historical account (Allen 2015: 56), the fragmentary text gives unprecedented insight into Canaanite death and burial practices in the early second millennium B.C.E. The narrator Sinuhe, an Egyptian expatriate, briefly compared his own Egyptian funerary customs with those of the indigenous inhabitants of Upper Retjenu, a region of the Levant that encompassed the highlands east of the Mediterranean coast of Lebanon and Syria (Allen 2015: 76). Longing for home, Sinuhe noted that the local Asiatics escorted their dead to the grave-site, having covered the body in the sheepskin before burial (Hallote 1994: 39-40; Allen 2015: 122). These Levantine pre-interment activities contrasted with more elaborate Egyptian pre-interment rituals involving dances and slaughter conducted outside of an above-ground tomb constructed of white stone (Allen 2015: 120-122).

Rituals of interment and procession are also attested in sources from Mari. Although mourning may have lasted for a period of approximately two weeks, burial may have taken place shortly after death. The text *ARM* 26/1 280 describes interment as occurring the day after death:

[11] At Ugarit, a royal funerary ritual is held in the month of *Gannu* while a ritual of evocation occurs during the month of *ḫiyyaru* (del Olmo Lete 2004: 219–232).
[12] Note that beyond *ŠPŠ*, other deities are invoked in the funerary text *KTU* 1.161 (Dietrich, Loretz, and Sanmartín 2013): Didanu, Ulkn and Trmn ("the hero[es]"), Sidanu-wa-Radanu, Toru >llmn, heroes of old, and dead kings Ammittamru and Niqmaddu (Lewis 1989). Dagan is also frequently associated with the mortuary realm in *pgr* ritual (Schmidt 1994: 36–38).
[13] The second part of this two-phase ritual took place at night (*lll*) in the palace (*bt mlk*) (*KTU* 1.39:12–22; del Olmo Lete 2004: 213). *KTU* 1.39 is a sacrificial liturgy dealing with the royal funerary cult that involves the entire pantheon on the night of *Šapšu pgr wtrmum* "of the dead/funerary offering" (del Olmo Lete 2004: 213). The nature of *pgr* as related to mortuary rites, however, is a matter of debate (cf. del Olmo Lete 2004: 164, n. 245; Schmidt 1994: 36–39; Niehr 2012: 153–155).

> The three sons of Batahrum, the […] have just died, all together. The first day they were sick and Batahrum sent me a message to get a diviner. I sent him one. The second day, as the night fell, they died, all together. After one night on the bed, they brought them out and buried them. He does not have descendants anymore [trans. Jacquet 2012: 124].

The text references laying out of the corpses on a bed, which could have been part of the ritual procedure of preparing the bodies. This practice of laying the recently dead body on a surface like a mat or bed could correlate with evidence from contemporaneous Middle Bronze Age burial chambers in Mesopotamia, at Baghouz, and the Levant, at Jericho, in which textiles and wooden furniture have been found in close association with the human remains (Felli 2012: 87).

The Corpse. The importance of properly disposing of a corpse through inhumation stands out as a theme in literary works such as *Tale of Aqhat*, which also demonstrates that the manner of death could play a role in determining a given person's mortuary practices. A clear distinction exited between the status of the *eṣemtu*, the bones of the deceased, and the *eṭemmu*, the spirit of the dead person that was bound to the body during life and released to the Netherworld after death (Jacquet 2012: 123). Jacquet (2012: 123) notes that in the context of Old Babylonian Mari, moving, digging up, or exposing the *eṣemtu* to the sun could amount to cursing the dead. This conceptualization may not have applied so strictly in the context of the Bronze Age Levant, although a negative connotation associated with moving a corpse or skeletal remains above ground after burial could readily explain the persistent Levantine practice of moving human remains around *within* subterranean burial chambers, which served as the primary and secondary loci of disposal. An avoidance of sunlight could also account for the use of lamplight inside burial chambers as a substitute or protective measure that was used as a way to light the chamber and summon *ŠPŠ* without risking exposure to sunlight.

The proper treatment of a corpse shortly after death was just as important as avoiding mistreatment of the human remains after burial. As we have seen with the example of ghosts, dying away from home or experiencing a "bad" death introduced complications and disruptions to expected procedures. For example, in the *Tale of Aqhat*, Aqhatu, like other heroes such as Kirta[14] in the Epic of Kirta cycle, was supposed to have been "buried in the 'caves of the gods of the earth/underworld'" (del Olmo Lete 2004: 332-333). However, unlike Kirta, who "was exalted among the '*Rapa'ūma* of the earth/underworld," Anatu's murder of Aqhat, motivated by jealousy, foiled these plans and he was not able to realize this honorable fate (del Olmo Lete 2004: 332-333). The plot of the narrative exemplifies the distress caused by the negative consequences of an untreated corpse that was left exposed as carrion. Aqhatu's father Daniel goes in search of his son's body and recovers its pieces inside the bellies of birds of prey; Daniel eventually buries his remains (*KTU* 1.19:iii:41).[15]

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[14] Kirta has also been vocalized as Keret.

[15] According to Pitard (1994), the line (*KTU* 1.19:iii:41) reads: yqbr.nn.bmdgt.bknrt. Although the two final letters of the line have been a source of controversy, they do not impact the first two words, yqbr.nn, which are of relevance here and mean "he buried him" (Pitard 1994: 31).

A passage from this same text, quoted at the beginning of this chapter, raises intriguing questions about the treatment of the corpse, particularly if special treatment was afforded to specific parts of the body. Aqhatu, the hero of the story, speaks to his eventual murderer, the goddess Anatu:

> In the end a man gets what?
> A man gets what as his fate?
> Glaze is poured on the head,
> Lye all over the skull.
> [ ] the death of all I shall die,
> I too shall die and be dead.
> [*KTU* 1.17:vi:35-38; trans. Parker 1997: 61-62]

This rather bleak passage creates a link between specific treatments of the body and the nature of death as inevitable and universal. Death may be accompanied by certain actions such as being covered with glaze and lime; in this case, these could be interpreted as acts of erasure that obscure the recognizable facial features of the dead. The reference to pouring lime on the head of the dead also recalls the regionally widespread prehistoric practice of plastering skulls of the dead during the Neolithic period (see Chapter 3). The plastered skulls date thousands of years earlier than the documentary evidence, and thus these two datasets are not directly related to each other. However, the obvious connection between textual description and archaeologically documented practice deserves examination and may reveal a vestige of cultural memory of deathways in the region that were already ancient during the second millennium B.C.E.[16]

Beyond the plastering of skulls, a practice which is not attested in the Bronze Age, corpses could be treated in specific ways before burial. Pre-interment preparations for burial that involved shrouding the corpse in wool or linen can be inferred from contemporaneous textual references. For example, an Akkadian source from the archives of Mari uses the Semitic root *QBR*—the same root as *qebērum*, 'to bury," with a secondary meaning to "to cover, to hide"—to reference covering a corpse in linen cloth in order to meet minimum requirements of disposal when burial was not an option (Jacquet 2012: 124, n6; 124-135). This word also carries the meaning "burial" in the sense of the place and ritual of interment and is attested in administrative texts, whereas a different term, *kimaḫḫum*, is attested in letters and may mean "tomb" more generally (Felli 2012: 83). Referencing the shrouding of corpses, texts from Ebla specify certain garments to be used on corpses, such as belts, mantels, and loin cloths (Archi 2012). The number and quality of the clothes depended on the status of the dead during life. For example, workers and lower official might receive a single cloth, while middle official could receive a set of clothes, and important official were endowed with a more elaborate set of garments such as a cloak, skirt or tunic, loin-cloth, and one "belt with frog decorated with gold of the value of 313 g of silver, 1 bracelet of copper and gold of 235 g, 1 dagger decorated with gold", and so forth with the quantity of precious goods increasing along with the social, economic, and political rank of

[16] The texts do not provide an indication of when after death the lime or plaster may have been applied to the skull. As discussed in Chapter 3, in the Neolithic Near East such modifications occurred after the crania were de-fleshed (naturally or artificially) and included modeling of facial features.

the deceased (Archi 2012: 20-21). For the corpses of elite women, these garments were to be fastened with two silver toggle pins (Archi 2012: 23). This textual evidence accords surprisingly well with the archaeological findings from Megiddo's Tomb 50, which contained elite individuals richly outfitted with gold, silver, and bronze jewelry—including silver pins—as discussed in Chapter 8.

Another aspect of corpse preparation involved anointing of the dead body with aromatic oils prior to burial. The Mari archives recorded oil disbursements intended *ana kimaḫḫim*, for the tomb, either to anoint the corpse or as provisions for the afterlife (Felli 2012: 83). Small containers that may have held unguents for these purposes have been found in Middle Bronze Age Levantine burials, including at Megiddo, in which small calcite or alabaster vessels were deposited in Tomb 100 and in Tomb 50 (see Chapter 8). At Ebla, regular festivals held at the *NEnaš* mausoleum included provisions of beer bread, malt, jugs, and "6 jars of aromatic oil and 6 jars of fragrant oil brought to N. for anointing the men; 2 jars of oil of the god Kura to n.; 1 jar of oil for anointing at the palace those who were present" (Archi 2012: 10). Although the Ebla list does not specify the corpse as a recipient of the aromatic oils, the practice of anointing was part of the ritual of visitation to the mausoleum and could relate to an effort to purify the participants as well as the mortuary setting, which was probably in need of aromatics and fumigation to cover the smells of decay (for further discussion of fumigation in chamber tombs, see Chapter 8).

Post-Interment Commemoration. As described above, rituals of post-interment commemoration are entangled with the process of becoming an ancestor. I argue that the roles of the deceased body and person could change in dynamic ways at different intervals after death and that such transformations are linked to ritual performance of the funerary sequence, which could extend long after death and include rituals of post-interment commemoration. The most important and common aspect of post-interment rituals of commemoration, as indicated in the *kispum* texts, *pgr*-rites, *marziḥu*, and on the KTMW stele, is the offering of consumables to some combination of the dead, deities, and mourners. These comestibles could be presented as sacrificial rites or in the form of joint banqueting between the living and the dead. The food and drink could be offered to the embodied dead at or near their burial site, to the disembodied dead in a sacred space away from the locus of burial, or be placed before a new embodiment of the deceased in the physical form of statues or other corporeal representations. The purpose was to ensure the continual care and feeding of the dead, which in turn was a ritualized practice of commemoration and a marker of ongoing personhood of the dead long after burial. For as long as the presentation of offerings was practiced, the personhood of the deceased continued on through multiple generations of descendants.

The Walking Dead

As the discussion on the emergence of ghosts demonstrates, the relationship between the dead body and personhood is complex, and the corpse or skeleton could be a source of fear. Below, I address conditions under which human remains could be considered dangerous. The danger inherent in a corpse may be especially apparent when the status of the dead as a posthumous person is uncertain or does not fit the prescribed categories of ancestor, ghost, and deified dead. Therefore, the feared dead represent a phenomenon that is separate from, and in opposition to, the dead who were properly cared for through *kispum* rituals.

Death Pollution and Necrophobia. The universalizing notion that "features of the death ritual may be due to necrophobia" (Robb 2013: 453) may apply to a limited degree in the ancient Near East. Necrophobia, more generally, may be related to the agency of the dead as forces for harm through their "corrupting flesh" and the unpredictable, vengeful nature of revenant corpses or spirits (Robb 2013: 453). Fear of supernatural and magical forces, in particular roving ghosts, was real and pervasive enough to warrant apotropaic protections and medico-ritual interventions (Scurlock 2006). These roving ghosts were an entirely separate phenomenon from family ghosts (MacDougal 2014: 7). The roving ghosts were considered to be "wandering and vagrant (*murtappidu*, *muttaggišu*)" and would exact revenge on unsuspecting people due to "their own misery" as uncared-for dead (Bottéro 1992: 284).

Despite clear and present supernatural dangers of the uncared-for dead, evidently inhabitants of the Bronze Age Near East were not too concerned with tangible issues of death pollution. As discussed above, from as early as the Neolithic period, and continuing throughout the third-second millennia B.C.E., intramural burial was common. Burials were often placed in subfloor pits that were dug into habitation surfaces of occupied buildings. Cases of re-use and re-opening of tomb chambers in both extramural (cemetery) and intramural (occupational) contexts indicate that purposeful interaction with corpses and skeletons was prevalent. For example. I detail in Chapter 8 how tomb re-use involved close face-to-face encounters with corpses at various degrees of decomposition ranging from relatively fresh, fleshed cadavers to fully skeletonized remains. Therefore, it was not physical contact with the dead body that was the source of fear. Rather, as I explained above, the fear of ghosts specifically was related to the anonymous nature of the dead who lacked a social network of family to provide substance for the afterlife, or whose bodies were not properly cared for after death. As strangers, these unnamed dead operated beyond the usual social and ritual strategies for managing the care and feeding of the dead. The lack of care amplified their potential for harm as they searched for food and shelter. In contrast, the dead who were commemorated and cared for did not pose these threats to the living.

Necromancy. Necromancy merits brief discussion here as another way in which the living contacted and interacted with the dead as bodies and spirits. Summoning of the dead could involve active questioning and consultation through necromancy, which differed from *kispum*, an unrelated practice that involved the presentation of ritual offerings to the dead, who were assumed to be present to consume them. In *kispum* rituals, ancestors had to be temporarily released from the Netherworld in order to receive the offerings in the household shrine, as illustrated through an Old Babylonian prayer to the moon god *Sîn* discussed above (*BE* 6/2, 111, trans. van der Toorn 1996: 53). For the royal dead of Ugarit, the clandestine meeting between living and dead arranged through necromancy was structured as a form of cultic consultation and reply (cf. KTU 1.104, 1.124; del Olmo Lete 2004: 346-347). In Mesopotamia, ghosts summoned for necromancy required the aid of *Šamaš* to emerge from the Netherworld, and once in the earthly realm, they needed a special kind of physical container comprised of human remains. According to incantation text BM 36703, necromancy involved a human skull for the ghost to inhabit temporarily (Finkel 1983). Such a practice assumes that the ghost required some sort of human physical form in order to provide the response to the human petitioner. Necromantic activities are also exemplified in Biblical text, where necromancy is shown as a corrupting force. In 1 Sam. 28: 3-5, Saul consults the witch of Endor to summon the dead Samuel for advice and pays a high price for crossing the forbidden boundary of life and death. Although both necromancy and *kispum* practices assume an active presence of the dead, these are separate phenomena. Unlike *kispum*, necromancy was intended to open a dialogue with the dead for specific purposes of consultation. Necromancy summoned the dead for the benefit of the living, in opposition to the goals of *kispum*, which was performed for the benefit of the dead and the extended, intergenerational family.

As demonstrated above, through rituals of commemoration that summoned the dead to dine with the living at specific locations, it is clear that these boundaries of life and death were occasionally permeable. However, the dead could be a source of fear if perceived as having been improperly treated or if acting beyond the confines of prescribed ritual activities of mourning, burials, and post-interment commemoration.

Summary and Conclusions

Textual sources attesting to the existence of ancestors, ghosts, and other posthumous entities from different contexts across the ancient Near East imply that the deceased could live on according to the model of an extended life course. In order for such transformations of personhood to continue after death, the deceased had to undergo ritualized transfigurations of body and social status following the mourning period. These transformations were enacted through the agency of living survivors, who performed specific and prescribed activities involving food and drink that were deposited at the grave-site or elsewhere. According to epigraphic evidence, ongoing commemoration activities such as *kispum* could take place at a shrine, as was the case for the KTMW stele that marked the locus of banqueting with the dead (Suriano 2014b).

Consumable offerings were intended to sustain the dead in the afterlife. Yet gods, ghosts, and ancestors did not necessarily retain an embodied form with which they could consume such offerings. These posthumous persons existed beyond their original physical bodies, which were subject to decay. Dead persons could be summoned or appear spontaneously in an ephemeral—but powerful—form that embodied death in a new way. The dead occupied a liminal status that crossed the boundaries between life and afterlife as well as boundaries of embodiment. The dead could inhabit alternative states of embodiment in order to receive offerings, as exemplified in the anthropomorphic representation of the dead KTMW and the ancestor statues at Qatna.

Despite the distances of various cultures and time periods represented by the texts from Ugarit, Old Babylonian Mesopotamia, and Zincirli, the data gleaned from these sources helps to frame an understanding of personhood from the burial contexts from the second millennium Levant that are the focus of this study. Encounters with the remains of the dead in re-used burial spaces, much like the ongoing interactions with the dead spelled out in texts that reference *kispum*, indicate that the personhood of the deceased could extend several decades and generations after biological death. Continuing this thread, in the following chapters I elaborate on diversity in death across the Levant, including archaeological markers of physical manipulation of the corpse, in order to situate the role of the body in transformations of personhood. Using focused archaeological case studies of funerary taphonomy in re-used and shared burial spaces at Middle and Late Bronze Age Megiddo, I demonstrate that extensive, prescribed sets of funerary activities were enacted repeatedly at grave-sites in order to bury, transform, and commemorate the dead.

CHAPTER 5 – MORTUARY PATTERNS OF THE SECOND MILLENNIUM B.C.E. LEVANT

In the previous four chapters, I outlined the background of this study and the theoretical and methodological frameworks employed in this project to address the status of the dead after burial in the second millennium B.C.E. Levant. Focusing on the role of the body at various stages in the funerary sequence, I argue that body treatment is closely linked to posthumous personhood outcomes, which could include social categories such as ghosts, ancestors, and the deified dead. In this chapter, I discuss the large and varied corpus of archaeological evidence related to death and burial in the second millennium B.C.E. Levant, with particular focus on body disposal methods. I argue that variation in three main characteristics of burial type, context, and disposal methods—which has been largely overlooked in previous scholarship—points to a high degree of diversity in Levantine deathways. Variation existed at multiple spatial and temporal scales: within the region at large, as well as within settlements, neighborhoods, and even single structures. The ways in which living survivors buried the dead—specifically, the degree of complexity and duration of the funerary sequence—facilitated processes of transformation, remembrance, and erasure of personhood after burial. I discuss the social and ritual importance of the household as a mortuary context, and the relationship between residential burial and social memory.

As discussed in detail in Chapter 2, previous studies have presented major mortuary trends of the Bronze Age from regional and chronological perspectives (e.g., Bloch-Smith 1992a, 1992b, 2003, 2013; Gonen 1992a, 1992b; Hallote 1994, 1995, 2002; Ilan 1995a, 1995b, 1996; Campbell and Green 1995; Ilan 1995a, 1995b, 1996; Baker 2006, 2010, 2012). This chapter will not reproduce these syntheses. Rather, through providing an updated overview of specific categories of mortuary data, this chapter will address the major lacunae of previous scholarship, namely the diversity and complexity of mortuary patterns of the second millennium B.C.E. The goal of the chapter is to present variation in mortuary patterns, organized by categories of burial type, context, and disposal methods, which are the main variables under study here. Discussion will focus on those burials types commonly found in intramural contexts in the Levant generally, and at Tel Megiddo specifically, with reference to the recently excavated burials in Building 12/K/15, which are covered in more detail in Chapters 6, 7, and 8. Following the presentation of data, I provide critical discussion of burial architecture, burial assemblages, and body disposal practices according to how these categories have been presented and received in Levantine scholarship.

The mortuary data presented here highlight the diverse ways in which dead bodies could be treated during the second millennium B.C.E. My argument in this chapter builds on the project's overarching claims that the social and embodied roles of the dead were mediated through the treatment of the dead body, which could be subjected to prolonged and complex sequences of deposition and re-deposition by living survivors. Funerary rituals could involve single or multiple stages, and the duration and complexity of the funerary sequence impacted the role of the deceased after burial. For some persons, multi-staged funerary rituals created long-term contexts for commemoration and social transformation, while others were inhumed in primary, unmarked graves that bore no obvious archaeological markers of re-visitation or disturbance, such as deposition of materials at the grave-site, erection of a monument or burial marker, or repeated handling of the human remains.[17] I make the case that the degree of complexity in the funerary sequence is related to embodiment and personhood after death and burial, such as who was selected to become an ancestor.

Mortuary Patterns of the Second Millennium B.C.E. Levant

In order to investigate the status of the dead after burial in the Bronze Age Levant, I turn my attention to mortuary archaeology of the second millennium B.C.E. As I argued in Chapter 2, through the method of funerary taphonomy, mortuary archaeology has the potential to reveal the sequence of deposition of materials and bodies. This method also sheds light on the funerary contexts out of which posthumous persons emerged because the sequence of deposition occurred through the deliberate actions of living persons who prepared the body, buried the dead, and re-visited the grave-site. Indeed, it is a truism that survivors bury the dead (Ucko 1969; Parker Pearson 1999; Tarlow 2011); it is through the agency of mourners[18] that determines where, how, and when to dispose of dead bodies. With this background in mind, below I discuss major mortuary patterns of the second millennium B.C.E. Levant.

What rules governed burial of the dead in the second millennium Levant? Formal characteristics of burial architecture, assemblages, and body disposal methods can elucidate shared characteristics of Levantine deathways. Such features have been traditionally understood as expressing "selected aspects of… identity, often corresponding with regional or culture-wide expectations in choice of goods or adornment of specific body parts" (Hofmann and Orschiedt 2015: 994). The differences within these features will reveal how these variables related to each other, and to the status of the dead after burial.

In this chapter, I demonstrate that burials of the second millennium B.C.E. Levant occurred in two locations: inside settlements, usually under floors of occupied houses, and outside settlements in cemeteries. Burials could contain single or multiple individuals who were inhumed in various ways: primary inhumation, where burial occurred once without subsequent disturbance; secondary inhumation, which involved re-locating the body from its original locus of decomposition for burial elsewhere; and compound disposal, which involved multiple episodes of interment and disinterment or disturbance (Sprague 2005: 57-72). Continuing this discussion of terminology and burial patterns, in the sections below I define burial terminology that will be used throughout this study and discuss the major trends and variations in burial practices with reference to the distribution patterns and comparanda in the Levant and surrounding regions of the eastern Mediterranean and Near East.

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[17] For discussion of the archaeological markers of re-visitation and disturbance to mortuary contexts, see Chapter 8.
[18] The term "mourners" carries connotations of an emotional response to death and burial. This term is appropriately applied to the context of the ancient Near East, where prescriptive responses to death by close family, friends, and associates are known and documented in a variety of textual sources. I discuss these sources in detail in Chapter 4.

Burial Terminology

Before turning to patterns of mortuary practices in the second millennium B.C.E. Levant, I define several key terms as used throughout this study. Definitions of mortuary architecture, type, and inhumation methods have been inconsistent throughout the literature in eastern Mediterranean archaeology, resulting in conflation of terms and a clear need for precise definitions (Martin, Cradic, and Kalisher 2018). For example, in Levantine archaeology the term “cist” refers to a wide range of burial architecture including simple and masonry-lined pits, as well as built chamber tombs (Bloch-Smith 1992: 29–31, 2003: 107-108; Gonen 1992b: 151-152; Ilan 1995a: 124–125; 1995b: 318). The same term in Aegean archaeology specifically means a small, rectangular, roofed grave lined with fieldstone, cut stone, or mudbrick that usually housed a single, primary inhumation (Dickinson 1983: 55-57; Shelton 2010: 61).

In this study, I organize burial architecture in terms of four major categories of purpose-built (or cut) funerary architecture: pit burials, which encompass simple and masonry-lined pits as well as earthen shafts; burial in ceramic jars;[19] masonry-constructed chamber tombs; and rock-cut chamber tombs (Figure 3; Andreou 2016; Bloch-Smith 1992; Gonen 1992; Hallote 1994, 1995; Ilan 1996; Kennedy 2015b; Martin, Cradic, and Kalisher 2018; Adams and Cradic 2018):

> *Simple Pit*. Oval to rectilinear space cut below ground into sediment or soft bedrock (Gonen 1992a: 9), with no constructed architectural features such as a lining. Simple pits were shallow, ca. 0.10-0.50 m in depth below the surface, and infilled with earth and brick debris.
>
> *Masonry-Lined Pit*. Oval to rectilinear pit that is fully or partially lined with at least one course of mudbrick or stone.[20] The pit was not roofed and was infilled with debris (earth and brick). In some cases, the pits contained floors of beaten earth, brick, or stone pavement. Masonry-lined pits include two subtypes: stone-lined pits and brick-lined pits.
>
> *Earthen Shaft*.[21] Unlined vertical pit one to three meters deep that is cut into earth, habitation debris, and/or bedrock and sealed with earth or debris fill. Entry to the shaft is from above or from a lateral entrance. The inhumation may be located at the bottom of the shaft or in one or more side chambers. This burial is an elaborated variation of simple pit burials (Carter and Parker 1995: 108; Andreou 2016; Adams and Cradic 2018).

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[19] Late Bronze Age Cypriot larnax burials and Egyptianizing anthropoid coffins from LB II Deir el-Balah, Lachish, Tell el-Far'ah (S), and Beth Shean (Bloch-Smith 2003: 110) are beyond the scope of this study. However, in previous studies they have been classified as a type of ceramic “container” burial (Bloch-Smith 2003: 110; DePietro 2012: 77-83).

[20] Pits with masonry lining on one side only have been excluded from this category and are classified as simple pits.

[21] The use of earthen shaft here is distinct from the Shaft Graves of Middle and Late Helladic Greece (i.e., Graves Circles A and B at Mycenae), which consist of rectangular cuts as deep as 4 m through earth and bedrock with ledges or walls to support a roof constructed of timber, clay, and/or stone. These shafts were backfilled with earth and usually contained multiple individuals buried successively (Dickinson 1983: 56; Biers 1996: 74-75).

Jar Burial. Inhumation inside a ceramic storage jar, pithos, krater, jug, bowl, or cooking pot placed inside a shallow pit. The pits are usually located below the floors of occupied domestic structures (cf. Ilan 1996: 248; Martin, Cradic, and Kalisher 2018).

Masonry-Constructed Chamber. Enclosed, subterranean, roofed cavities with or without entrances (*dromoi*) which were constructed of unworked fieldstones or ashlar masonry. The chambers were oval to rectilinear in shape. The chamber was built on all four sides with at least one course of mudbrick or stone. The roof consisted of stone or mudbrick slabs and could be vaulted. The chamber could contain architectural features such as an entry corridor (*dromos*[22]), threshold, and step as well as niches, platforms, or steps inside the chamber (Salles 1987; Ilan 1995a: 122–124; Marchegay 1999: 27–29).

Rock-Cut Chamber.[23] Hewn chamber(s) cut into bedrock. The chamber was accessed via a vertical shaft or a horizontal entrance which could be expanded from the natural opening of a cave. There is little consistency of size or plan of rock-cut chambers (DePietro 2012: 74); the feature could contain one chamber, or a central room with side chambers, which tended to be rectilinear but could also be kidney-shaped (Bloch-Smith 2003: 108, 2013: 255). Subtypes include loculi, bilobate, arcosolia, and bench tombs that vary in terms of size, shape, and architectural elaboration (Bloch-Smith 2003: 110-111).

In the next section, I present each type of burial architecture in depth, covering major spatial and temporal distributions patterns across the eastern Mediterranean during the Middle and Late Bronze Ages. I also discuss major patterns of context and body disposal methods that are associated with each burial type. My analysis demonstrates the high degree of variation that occurred even within single categories of burial architecture. I begin with pit burials, which are the most frequently attested of the burial types.

Simple Pits. The category of pit burials encompasses simple pits, masonry-lined pits (stone and brick), and earthen shaft burials. Each category is presented independently, beginning with simple pit burials. Simple pits are the most frequently attested type of burial of the Bronze and Iron Ages and contained inhumations—most often single and primary—of male and female individuals of all ages (Bloch-Smith 1992: 26). Burial assemblages, if any, were limited to a few ceramic vessels, which were occasionally accompanied by animal bones and jewelry such as beads (Bloch-Smith 1992: 26–27; Baker 2012: 114–118).

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[22] The term "*dromos*" refers to a point of access to a chamber tomb (Marchegay 1999: 28–29). This usage differs from the original meaning of a lateral entrance passage specific to Aegean *tholos* and chamber tombs.

[23] The terms "cave," "chamber," or "shaft" have all been used to refer to the category of rock-cut burial chambers (Bloch-Smith 1992: 36–41; DePietro 2012: 74; Gonen 1992a: 12; Hallote 1994: 224; Ilan 1995a: 124–126; Ilan and Gadot 2014; Mazar and Ilan 2014).

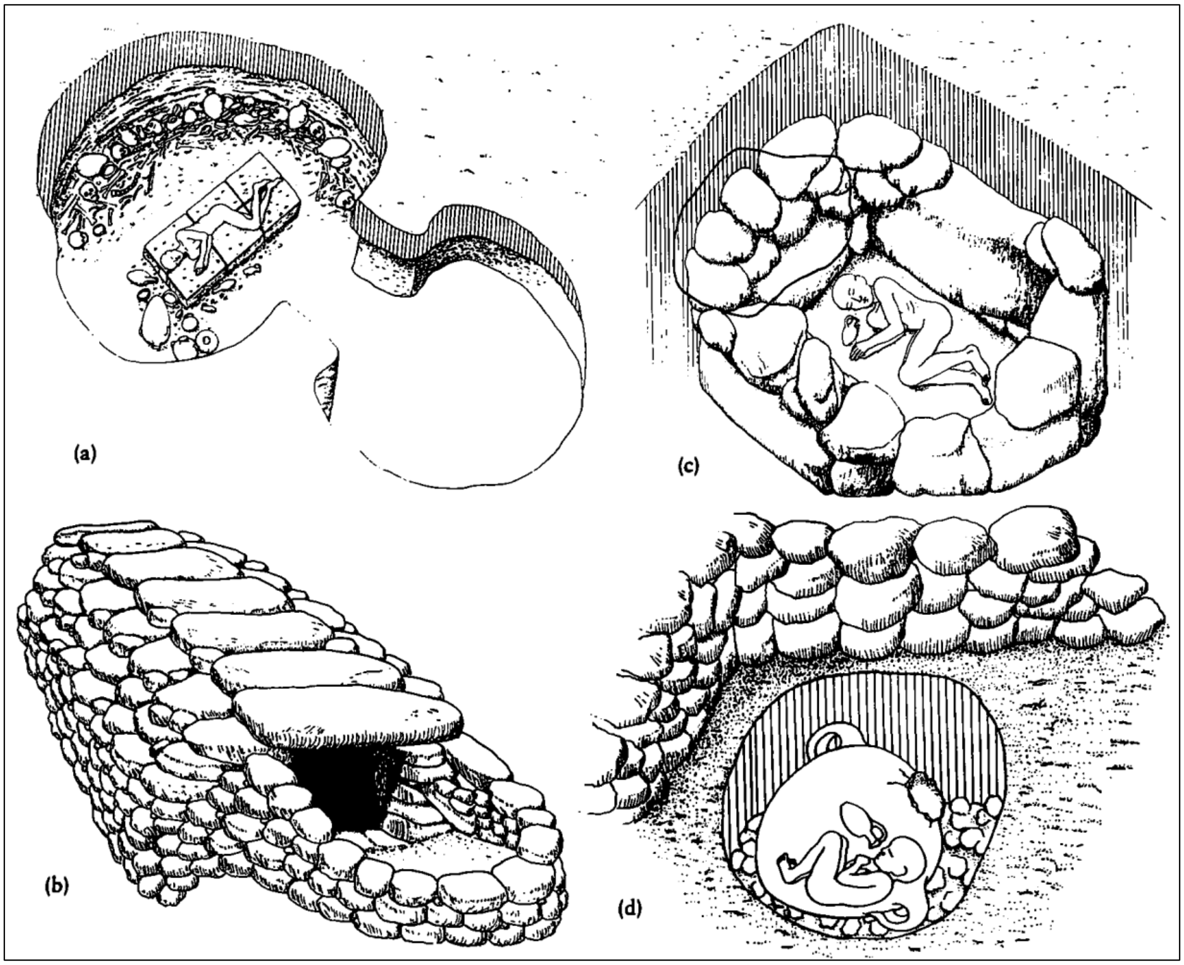

Figure 3. Major types of burial architecture of the Middle and Late Bronze Age Levant: (1) rock-cut chamber tomb; (b) masonry-constructed chamber tomb; (c) masonry-lined pit; and (d) jar burial (after Ilan 1995a:Figure 2.1).

Burial in simple pits, popular in the Middle and Late Bronze Ages, emerged as a major regional burial type during the preceding Early Bronze IV period. The so-called warrior burials of the late third millennium B.C.E. typically contained a single, primary inhumation of an adult who was interred alongside metal weaponry such as a blade, spearhead, or axe (Homsher and Cradic 2018; Burke 2014b: 407; Cohen 2009: 7; Garfinkel 2001; Philip 1995).[24] These burials are attested in isolated cases from third millennium B.C.E. Mesopotamia (Philip 1995b: 149-150) and appear in greater numbers across the Levant at Mari, Halawa, Til Barsip, Megiddo, Wadi 'Ara, Beth Shean, Jericho, Lachish, and Beit Mirsim, Tiwal esh-Sharqi, Khirbet al-'Umbashi, Amman, Tell el-'Umeri East, Khirbet Iskander, and Tell es-Sa'idiyeh (Cohen 2012;

[24] Burial architecture among the warrior burial group varied and could also include stone-lined pits (e.g., Gesher burials), masonry-constructed tombs (e.g., Baghouz, Tell el-'Ajjul) (Kennedy 2015b) and rock-cut chambers (e.g., Beth Shean, Rehov, Safed) (Cohen 2007; Garfinkel 2001; Hallote 1994; Kennedy 2015b; Philip 1995).

D'Andrea 2013: 137-138; Garfinkel 2001: 156; Kennedy 2015b: 122; Philip 1995: 140-142, 151-152).[25] By the beginning of the second millennium B.C.E., the MB I period, this type of inhumation became widespread from the Nile Delta to inland Syria and Mesopotamia (Garfinkel 2001; Kennedy 2015b: 122-126; Philip 1995: 142-49) and continued in smaller numbers through the MB II-III at sites such as Ras Shamra, Tell el-Dab'a, Tell el-Maskhuta and Hebron (Hallote 1994: 220; 1995: 110-12:Figures 6-7; Philip 1995: 144-46, 2006; Schietsl 2008).

Beyond the warrior burial phenomenon, simple pit burials are attested to ca. 45 sites that date to the MB I-III periods (Hallote 1994: 226–239). At 10 of these sites, simple pits occurred in intramural contexts (Cradic 2011: 12–13). Although this burial type continued to be popular during the Late Bronze Age and is attested to ca. 20 sites (Gonen 1992a), both regional distribution and context became more restricted than during the Middle Bronze period. Late Bronze Age simple pit burials occurred in the lowlands and inland valleys but were rarely attested in the central hills of the Shephelah, unlike during the Middle Bronze Age (Gonen 1992a: 20; Hallote 1994). In terms of context, simple pits of the Late Bronze Age are attested almost exclusively in extramural cemeteries (Gonen 1992a: 9–31) in contrast to the more frequent sub-floor intramural burials of the previous period. By the LB I-II only a handful of sites (e.g., Megiddo, Tell el-'Ajjul, Ashkelon, Tell el-Far'ah (N), and Ta'anach) exhibited significant numbers of intramural pit burials (Cradic 2011:12-13; DePietro 2012: 75).

Masonry-Lined Pit Graves. Masonry-lined burials varied considerably in terms of size, shape, construction method and materials and can be separated into two subtypes: stone- and brick-lined pits. The formal parameters of stone-lined pit graves are defined below (after Martin, Cradic and Kalisher 2018):

> (1) Shape: Curvilinear or rectangular pits dug into earth with rare instances of round, irregular or teardrop-shaped pits
> (2) Size: Exterior dimensions: lengths ranged from ca. 0.9–3.0 m, and widths varied from ca. 0.4–1.9 m. Interior dimensions: lengths ranged from ca. 0.5–1.9 m, with exceptional cases up to 3.0 m, and widths measured ca. 0.4–1.0 m, with the widest measuring up to 1.9 m
> (3) Depth: Variable, ranging from shallow (0.3–0.5m) to deep (0.5–1.6 m)
> (4) Construction of stone lining: Two or more sides of the pit were lined with a single row of fieldstones that were stacked in one to three courses, although the walls could range up to a maximum of six courses. Dressed stone slabs occasionally lined the sides of the pits instead of fieldstones

Stone-lined pit burials are a subcategory of masonry-lined pit burials and are attested at nine sites that date from the MB I through LB II periods, encompassing a corpus of 59 stone-lined burials that occurred both in extramural cemeteries and under floors in intramural contexts (Tables 34, 38). The intramural pits tended to be placed under floors, abutting existing architectural foundations (Martin, Cradic, and Kalisher 2018). Although the pits were typically

[25] See D'Andrea (2013: 137-38) for a comprehensive list of 107 warrior burials across 34 EB IV sites.

built to accommodate between one and three primary inhumations (Gonen 1992a: 151), these graves could occasionally be used for multiple successive interments, for example at Middle Bronze Age Tel Kabri (T.984, T.902) and Middle and Late Bronze Age Lachish (T.9028) (Martin, Cradic, and Kalisher 2018).

In the Aegean, functionally and architecturally equivalent "cist" tombs of the Middle and Late Helladic periods (ca. 2050-1070 B.C.E.)[26] are found intramurally as well as in clearly defined mortuary contexts, such as in extramural cemeteries or cut into extensive mortuary complexes (*tholoi*[27] and chamber tombs) (Dickinson 1983: 57; Shelton 2010: 61-65).

Brick-lined pits represent the second subcategory of masonry-lined pits. In the Levant, Egypt, and Mesopotamia, brick-lined pits were also used for inhumation burials of one or more individuals, albeit less frequently than their stone counterparts. In their construction, degree of elaborateness, and function, brick-lined pits closely resemble simple pit burials (Gonen 1992a: 17). Brick-lined pits were sealed with earth fill, mudbrick slabs, mud mortar, plaster, or even wooden boughs (Martin, Cradic, and Kalisher 2018; Brody 2008; Düring, Visser and Akkermans 2015). Like simple and stone-lined pits, brick-lined pits could be constructed against existing architecture, which formed one of the walls of the grave (Martin, Cradic, and Kalisher 2018). However, brick-lined pits were more often placed in extramural cemeteries than in intramural locations. Occasionally, more elaborate forms of brick-lined architecture were constructed including chamber tombs that were built partially or entirely of mudbrick or fired brick; unlike brick-lined pits, the brick chamber tombs are always roofed, sometimes with elaborate brick vaults (Schiestl 2008; Martin, Cradic, and Kalisher 2018).

Several parameters of dimensions and architecture below classify brick-lined pit graves (after Martin, Cradic, and Kalisher 2018):

(1) Shape: Rectangular or rectilinear, square, or curvilinear
(2) Size: Interior widths are variable, ranging from ca. 0.3-1.3 m. Interior lengths vary from 0.8-2.3 m
(3) Depth: Shallow (ca. 0.3–0.5 m) or deep (0.5-1 m) (after Green 2006: 428-430)
(4) Construction of lining: 1-3 courses and 1-3 rows of bricks or slabs

During the Middle and Late Bronze Ages, brick-lined pits occurred at coastal sites along the Levantine littoral as well as in the Jordan and Jezreel Valleys. These burials are attested as early as the MB I at Sidon, Herzeliya, and Jericho (Table 35; Martin, Cradic, and Kalisher 2018; Doumet-Serhal 2004, 2007; Kenyon 1981; Nigro 2009; Massafra 2013). Later brick-lined pit graves of the MB II-III have been found at Lachish, Aphek, and Pella (Martin, Cradic, and Kalisher 2018). The only known LB I brick-lined graves come from intramural contexts at Ashkelon and Megiddo (see below and Chapter 6). In the LB II, brick-lined burials are

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[26] Dating follows Boyd 2016: 200, Table 13.1 who uses the "high chronology" after Shelmerdine 2008 and Manning 2010.
[27] *Tholos* tombs are monumental mortuary structures that consist of a deep circular cut into a hillside that is accessed via a *dromos*. The large central chamber, which in rare cases opened onto a side room, is constructed of cut stone with a corbelled roof. The burial is usually an inhumation in a simple or masonry-lined pit (Biers 1996: 76-78).

represented by single examples from Palmaḥim and Deir el-Balaḥ, and by a group from the Tell es-Sa'idiyeh cemetery. Brick-lined burials continued in use through the Iron I period at Tell es-Sa'idiyeh and have also been found in the Philistine cemetery at Azor (Martin, Cradic, and Kalisher 2018).

Outside the Levant, the use of mudbrick and baked brick in burial architecture is well attested in Syro-Mesopotamia and Egypt (Düring, Visser, and Akkermans 2015:Table 3; Schiestl 2009: 43). In northwest Syria, numerous barrel-vaulted chamber tombs and brick-lined burials have been excavated at sites such as Middle Bronze Tell Arbid (Wygnańska 2014) and LB II Tell Sabi Abyad (Düring, Visser, and Akkermans 2015). In the Egyptian Delta region, brick chamber tombs have been excavated at Tell el-Maskhuta and in both cemetery and settlement contexts at Tell el-Dab'a (van den Brink 1982; Bietak 1991; Bloch-Smith 2003: 108; Forstner-Müller 2008; Schiestl 2008, 2009; Martin, Cradic, and Kalisher 2018).

Earthen Shaft Burial. Earthen shaft burial—also called "nodal shaft grave"—is a rare hybrid type that falls between rock-cut chamber tombs and pit burials (Andreou 2016: 189). These burials consisted of a small central "node" that opened "laterally off the shaft" and was typically intended for a single primary inhumation, although the shaft could be re-used to construct additional chambers (Carter and Parker 1995: 108). The most elaborate examples contained vaulted roofs as well as windows, benches, and "pillows" for the dead (Carter and Parker 1995: 108).

Shaft burials dug into earth or *tell* sediments (without being stone-lined) are rare in the Levant but are known from Syria-Mesopotamia (Carter and Parker 1995: 108; Adams and Cradic 2018). Earthen shaft burials are attested in the Middle Euphrates at Hadidi, Selenkahiye, and Tell Chuera during late third millennium B.C.E. (ca. 2600-2000 B.C.E.) (Carter and Parker 1995: 107-108). Although these earthen shaft tombs occurred in intramural contexts, they were more commonly placed in extramural locations (Carter and Parker 1995: 108).

Jar Burials. Jar burials are widespread throughout the Levant during the Bronze Age, with origins in the Pottery Neolithic period (Orrelle 2008: 7). During subsequent periods jar burials are attested continuously, in various frequencies, from the Chalcolithic through Iron I periods (Homsher and Cradic 2018; Al-Shorman and Khwaileh 2011: 94; Birney and Doak 2011; Bloch-Smith 1992: 29-33, 2013: 257; Gonen 1992; Hallote 1994: 58, 1995; Ilan 1996). The practice is also attested in the greater Near East and eastern Mediterranean. In Mesopotamia, subfloor infant jar burials appear as early as the late-fourth or early-third millennia and become ubiquitous over the course of the third and second millennia B.C.E. (Homsher and Cradic 2018; Dornemann 1979; Orrelle 2008: 71). On Crete and mainland Greece, burials of infants, small children, and adults in jars and *pithoi* are attested from Middle Helladic intramural contexts, for example at Mycenae, and from Neopalatial contexts on Crete (Dickinson 1983: 58; Alden 2000: 9, 21; Shelton 2010: 62; Hatzaki and Keswani 2012: 309-311).

Jar burials are most often located in small, shallow pits below house floors and courtyards, although occasionally jars are embedded in pits within other burials such as rock-cut chambers (Tables 38-39; Martin, Cradic, and Kalisher 2018; Hallote 1994: 180–181). Jar burials usually contain primary inhumations of a single neonate, infant or child (Bloch-Smith 1992: 32;

Ilan 1995a: 127; Kempinski 2002: 47; Orrelle 2008: 72). Adolescent or adult inhumations in jar burials are also attested, for example at Middle Bronze Sidon (Ogden and Schutkowski 2004: 164–165; Doumet-Serhal 2014: 34) and Megiddo (see Chapter 6); at Late Bronze sites of Tel Nami, Kfar Yehoshua, Tel Zeror, Tell el-Far'ah (North), and Azor (Gonen 1992a: 22, Figures 3, 30, 142–144; DePietro 2012: 71); and at the LB IIB–Iron I cemetery of Tell es-Sa'idiyeh (Green 2009) (Martin, Cradic, and Kalisher 2018). Although the usual practice is to bury one individual per jar, in a few cases more than one individual is buried in one jar, or two jars are used for a single inhumation. The latter practice is seen at Megiddo (see Chapter 6); Tel Dan (Ilan 1996:Table 4.2; Burials 4648, 379, and 371c); Kfar Yehoshua (Bloch-Smith 2003: 110); Hazor (Yadin *et al*. 1960: 82–85; T.24–T.26, Stratum 3); Tel Yoqne'am (Livneh and Ben-Tor 2005: 34; T.2609, Stratum XXI); and Tell el-Dab'a (van den Brink 1982: 19; F/I-J/22 Burial 2) (Martin, Cradic, and Kalisher 2018).

Masonry-Constructed Chamber Tombs. Masonry-constructed chamber tombs consist of enclosed, subterranean, roofed cavities with or without entrances (*dromoi*), which are usually constructed of unworked fieldstones.[28] Approximately 258 masonry-constructed chamber tombs have been unearthed from across 12 sites (Figure 4). Of these, 104 masonry-constructed chamber tombs are included in this study (Tables 32-33, 36).

The chambers were frequently re-used over long periods of time in antiquity and accommodated between one and 58 individuals, which is the maximum MNI currently known but likely underestimates the actual number of individuals who were present in a single chamber tomb (Table 32). [29] The chambers show considerable variation in terms of architectural elaboration and means of access. The size of the chambers varied between 0.46-20 m^2 and was generally proportional to its contents (MNI and quantity of grave goods) (Table 32; Martin and Cradic 2018). Likewise, access to the chambers tended to be proportional to the tomb's scale and degree of elaboration. The chambers could be accessed via a *dromos* (>1 m long), access corridor (<1 m long), shaft, vertical blocking slab, or a combination of these features (Martin and Cradic 2018).

Constructed chamber tombs first appeared during the MB I and were most popular during the MB II-III periods (Gonen 1992b; Hallote 1994: 57, 2001a: 204). In the LB II, the distribution of chamber tombs decreased in the southern Levant, with outliers at four sites: Aphek, Dan, Tell el-'Ajjul, and Palmaḥim (Table 32; Gonen 1992a, 1992b: 152-57; Ilan 1995b: 123; Marchegay 1999; Ben-Dov 2002; Gadot 2009; Yannai et al. 2013). In contrast, this tomb type remained popular at the site of Ugarit in the northern Levant throughout the Middle and Late Bronze Age (Marchegay 1999, 2008). Ugarit also stands out for the quantity and elaboration of its massive corpus of 205 masonry-constructed chamber tombs (Marchegay 1999). Based on Marchegay's (1999) archival research and architectural analyses, 51 of the tombs can confidently be identified as belonging to the MB II, MB III, or LB I periods and are included in this comparative study (Table 33).

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[28] For architectural and constructional details, comparanda, and variations, see Martin and Cradic 2018.
[29] For discussion of issues of individuality in chamber tombs, see Chapter 8.

Figure 4. Map of the Levantine sites with masonry-constructed chamber tombs.

Most chamber tombs, 239 out of 258 (93%) are intramural with the exception of eight LB masonry-constructed chamber tombs from the Lower Cemetery and Eighteenth Dynasty Cemeteries at Tell el-'Ajjul (Petrie 1934; Gonen 1992a: 152, 1992b: 80-82); eleven from the cemetery at Palmaḥim, which does not have an associated settlement; T.51 from Megiddo's Eastern Slope; and one burial from Alalakh, Tomb 03-3017[30] (Yener and Yazicioğlu 2010: 27-28; Mullins 2010: 51; Boutin 2010; Yener 2013: 266).

[30] The context of this tomb is not clear. The excavators note that it may be related to a kitchen and workshop area, which were excavated at the same elevation and area (Yener and Yazicioğlu 2010: 27-28; Mullins 2010: 51; Boutin 2010; Yener 2013: 266).

Chamber Tombs in Syria-Mesopotamia and Eastern Mediterranean. The introduction of masonry-constructed chamber tombs in the Levant represents an innovation from simple pit and stone-lined pit burials (Guy and Engberg 1938; Loud 1948; Gonen 1992b; Hallote 1994: 57, 2001: 204). This new burial architecture emerged within regional traditions of residential masonry-constructed funerary chambers (stone or brick) throughout greater Mesopotamia starting in the third millennium B.C.E. at Ur, Larsa, Isin, Nippur, Sippar, Tell Halawa, Mari, Assur, Tell Taya, Selenkahiye, Tell Hammam el-Turkman, Tell Barri, Chagar Bazar, Tell Mozan, Tell Mohammed Diyab, Tell Arbid, and Titriș Höyük, as well as in the Old Assyrian merchant colony of Kültepe/Kanish in central Anatolia (Laneri 2010: 125-30).

The usage of the term chamber tomb in the Levant differs from the "chamber tomb" typology of the MB-LB Aegean, which fit the rock-cut chamber tomb category (see below). Comparanda from Late Cypriot I and II periods on Cyprus more closely fit the Levantine template in terms of construction and scale. Nine intramural built chamber tombs from Enkomi—five "ashlar" tombs and four "*tholos*" tombs—parallel tombs from Ugarit, Megiddo, Tel Dan, and Tel Tweini (Keswani 2012: 190-199; Crewe 2009: 27). These tombs used a combination of mudbrick and stone building materials, varied in size, shape, and construction, and were associated with residential architecture (Keswani 2012: 190-199). Unlike Levantine tombs, the Cypriot tombs tended to be enclosed within the central courtyard rather than in a marginal space of the house (Keswani 2012: 190).

Rock-Cut Chamber Tombs. Rock-cut chamber tombs were widespread throughout the Middle Bronze period but became restricted regionally during the Late Bronze Age, with a preference for rock-cut chamber tombs in the highlands and simple pit burials in the lowland and inland valley areas (Gonen 1992a; Bloch-Smith 2003: 108). The chambers are difficult to date because they were often used continuously over long periods of time, having originally been cut as early as the Chalcolithic or Early Bronze Age with re-use during the subsequent second-first millennia B.C.E. (DePietro 2012: 74; Bloch-Smith 2013: 255). The chambers usually contained multiple interments, sometimes dozens or even hundreds of individuals, for example at the extensive Middle and Late Bronze Age chamber tomb complexes at Ashkelon, Wadi 'Ara, and Enkomi (Baker 2006, 2010; Gadot 2014; Keswani 2012).

These burial spaces occurred most frequently in extramural contexts, usually in cemeteries which could be located (1) on the slopes of *tells*, such as Megiddo, Lachish, and Jericho (Guy and Engberg 1938; Singer-Avitz 2004; Andreou 2012); (2) at a short distance away from a settlement like at Beth Shean and Shechem (DePietro 2012: 74); (3) or unrelated to a settlement such as at Wadi 'Ara and nearby burials in the Manasseh Hills west of the Jezreel Valley (Gadot 2014: 9-11). Isolated cases of intramural rock-cut chamber tombs across the eastern Mediterranean deserve mention, for example at Middle Bronze Hazor (T.1181) (Maeir 1997); MB-LB Ashkelon (Grid 50 complex) (Baker 2006, 2010); the MB-LB palace at Qatna (Royal Hypogeum and Tomb VII) (Pfälzner 2012, 2014); and the extensive corpus of ca. 185 chamber tombs at MB-LB Enkomi (Keswani 2004, 2012: 188-190; Hatzaki and Keswani 2012; Crewe 2009: 27). The phenomenon of the royal burial complexes in rock-cut chamber tombs also emerged in palatial centers during the Middle Bronze Age at Byblos (Tombs I and II, dated to the MB I), Qatna (Royal Hypogeum complex and Tomb VII; MB II-LB II A), and Ebla (Pfälzner 2012, 2014; Burke 2014b: 407).

In Greece, chamber tombs emerged in the Late Helladic I period (ca. 1680-1600 B.C.E.) and consist of one or more chambers cut into bedrock in the side of a hill that were always accessed via a horizontal corridor (*dromos*) that could contain a blocking wall (*stomion*) (Dickinson 1983: 57; Biers 1996: 76; Boyd 2015a, 2016: 200, Table 13.1). The average interior chamber area measured ca. 12.5 m^2 but could range up to a monumental scale of ca. 155 m^2 (Boyd 2015a:Table 2), which dwarfs even the most elaborate Levantine chamber tombs. Like their Levantine counterparts, Aegean chamber tombs were used for multiple individuals. Unlike the Levantine examples, chamber tombs are often found in cemeteries and extramural contexts, for example on the Panagia Ridge and Kalkani Hill near Mycenae (Biers 1996: 76; Shelton 2010: 64; Boyd 2015a: 438-440).

Tomb Types and Tomb Concepts

An important distinction between pits and chamber tombs concerns how burials were sealed, which relates to their functionality and potential for re-use (Andreou 2016; Martin, Cradic, and Kalisher 2018). Unroofed pits were dug, entered, and sealed from the top. After interment, the pits were backfilled with debris to seal the cavity. In contrast, masonry-constructed chamber tombs were not usually infilled with debris but were covered with a roof, which created an interior chamber (Martin, Cradic, and Kalisher 2018). This void enabled repeated access to the contents of the grave through a vertical or lateral entrance such as a threshold, *dromos*, or a sealed aperture in the roof. These entry features were not always obvious or accessible in between use but in some cases had to be dug out each time, as was the case in Megiddo’s Tomb 100. In contrast, on mainland Greece burials of the Middle and Late Helladic periods could be marked aboveground with heaps of earth and stone, pottery vessels, and standing stones and decorated stele, all of which could have facilitated re-use and commemoration (Alden 2000: 25-28).

Hallote’s (1995) cut/constructed burial categories distinguish pits and chamber tombs in terms of architecture and constructional method rather than function. A rock-cut chamber and constructed chamber are categorically different in her terms. However, as Andreou (2016) points out, they served similar purposes and therefore can be grouped together as conceptually as a coherent “tomb concept” as understood and practiced by the ancient population. Almost all rock-cut chamber tombs were re-used for multiple interments over long spans of time and remained accessible through features also found in constructed chamber tombs, such as entrances, thresholds, and steps (Gonen 1992b). Andreou (2016) considers the differences between burial in chambers/voids (of various types) and burials in sealed/filled contexts to be significant. Burials in chambers form a cohesive conceptual and practical standard that structured deathways of the Bronze Age Levant. He convincingly argues that these two categories of chamber tombs are conceptually related and that built chamber tombs, the predominantly intramural version that developed later in time, may have been inspired by extramural rock-cut chambers (Andreou 2016: 193).

Burial Assemblage

The category of burial assemblages, also termed “grave goods” or “funeral kit” in Levantine archaeology (Baker 2012), includes the material culture found in association with a burial or body (Tarlow 2011: 4). Beyond the objects found inside the grave are those that contributed to the funerary sequence but were not left behind during initial burial. This broader set of objects include as materials used to prepare the corpse or burial space; food and utensils for feasting at the graveside or elsewhere; and deposits made in or near the grave-site after initial burial (Ekengren 2013).

Study of burial assemblages can include the comprehensive set of objects within a given burial context, or discrete categories of material culture and organic remains derived from this larger assemblage such as pottery; metal weaponry (Cohen 2012; D'Andrea 2013; Harrell 2012; Philip 1989, 1995; Greener 2012); ground stone tools[31] and vessels (Ebeling 2002; Sparks 2007); inscribed objects such as scaraboids and decorated bone (Naeh 2018; Taylor 2004); jewelry and personal adornment (Golani 2010); and faunal remains (Horwitz 1987, 2001; Lev-Tov and Maher 2001; Lange 2014).

Based on a database of 27 Middle Bronze sites, the Levantine funeral kit could contain ca. 0-20 ceramic vessels, 0-1 scaraboids, and 0-1 toggle pins per individual, with some variation (see Appendix; Baker 2012: 91-100, Appendix B; Martin and Cradic 2018).[32] The kit could also contain perishable consumable offerings including meat, fruit, and wine or oil contained in vessels, as noted in the well-preserved tombs at Jericho (Kenyon 1960, 1965; Cradic 2017: 232). The kits varied considerably in time, space, and by tomb type; chamber tombs—when excavated intact—tended to have richer assemblages than pit burials (Crewe 2009: 28-29).

The burial assemblage often contained faunal remains in close spatial proximity to human remains. Faunal remains could be deposited in articulation on or near human skeletal remains, or fragmented and intermixed with human skeletal remains with no obvious spatial separation between the human and non-human remains.[33] Horwitz's criteria (1987: 251) allow identification of ritual deposits in mortuary contexts on a case-by-case basis: spatial relationship to human remains; bones found in articulation; narrow range of species; selection on the basis of age and sex of the animal; and selection of certain parts and sides of the body. These deposits could serve a number of ritual functions such as (1) residues of funerary feasts consumed by the mourners; (2) offerings to the dead for commemoration or as gifts for the afterlife; (3) sacrificial offerings to deities; or (4) some combination of these possibilities (Cradic 2017: 234-235; Hatzaki and Keswani 2012: 316-317; Horwitz 1987, 2001: 78; Lev-Tov and Maher 2001). Comparable assemblages of ceramic pots and animal bones have been excavated in chamber tombs from Middle and Late Cypriot contexts, where the average funeral kit included ca. 9 vessels per individual (Hatzaki and Keswani 2012: 316, 322: Table 17.1). A similar repertoire of grave goods accompanied the dead in Late Helladic Greece (Boyd 2016: 210-211).

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[31] Chipped stone tools have not received the same attention despite their presence in many burials of the Bronze Age.
[32] These sites include Alalakh, Ugarit, Tall Sūkās, Tell Tweini, Dan, Kabri, Akko, Hazor, Megiddo, Abu Hawam, Tell el-Far'ah (N), Dothan, Beth Shean, Tell es-Sa'idiyeh, Palmaḥim, Tel Burga, Aphek, Tel Aviv Harbor, Jericho, Tell el-Far'ah (S), Gezer, Lachish, Sarafend, Ashkelon, Tell el-'Ajjul, Gibeon, and Humraiya (see Appendix; Baker 2012: Appendix B).
[33] For further discussion of the relationship between human and non-human skeletal remains in burial chambers, see Chapter 8.

A prevalent assumption in Mediterranean archaeology is that grave goods reveal information about the deceased's life, particularly wealth, status, and gender, and that the burial assemblage can be categorized neatly into three types of objects: personal, status, and essential (Yasur-Landau 1992; Baker 2012: 26-27). This traditional approach is derived from the Binford-Saxe approach, which I discussed in Chapter 2. In this model, it is presumed that high-status objects found on or next to the body, particularly objects of adornment, seals, or weaponry, originally belonged to the deceased during life and therefore can be considered personal possessions of the dead (Yasur-Landau 1992; Hallote 2002; Baker 2012). However, as discussed in Chapter 2, this approach does not account for the fact that it is the living survivors, not the dead, who perform funerary rituals and make decisions related to how to bury the dead. Therefore, the burial assemblage should be interpreted in terms of how survivors perceived of the dead—during life or after death—and how survivors chose to project a certain identity or image of the dead during the funerary rituals. Hallote (2002), for instance, questions the relationship between burial assemblages and social status. Using the traditional proxies of grave goods and architecture, she argues that Middle Bronze Age burials may have represented "ideal" mortuary identities, such as that of a warrior, rather than reflecting "real" social status or organization as experienced during the lifetime of the decedent (Hallote 2002: 105-109).

A related hypothesis is that certain functional objects such as ceramic vessels constituted essential provisions for the afterlife in ways that mirrored their usage in life, such as "vessels for food and drink; tools for crafting; blades for chores…and jewelry for adornment and protection" (Bloch-Smith 2003: 105). The mundane nature of many of the grave goods, particularly pottery, supports this notion to a degree. For example, Nishimura (2015) has noted similar emphasis on household ceramics from late third millennium B.C.E. residential burials in Syria and Mesopotamia, which resembled the assemblages recovered from contemporaneous house floors (Cradic 2017: 233). However, I will again emphasize an important critique of this assumption. The notion that the meaning and function of the grave goods corresponded one-to-one with the meaning and function of the objects as they were used in household assemblages is flawed. Even though the objects may be identical to those used for domestic activities and appear to have been sourced from the ordinary household assemblage, the materials transformed in meaning once they were selected for use in the mortuary realm. The objects were removed from circulation in the world of the living in order to serve the symbolic and practical needs of the dead.

In summary, the role of material culture in burials has been interpreted as a "passive indicator of wealth or status, its role in the funerary process reduced to elite signification, conspicuous consumption, or the presumed material requirements of the dead in the afterlife" (Boyd 2016: 210). Yet, the relationship between grave goods and the deceased may not be so clear-cut; burials were symbolic ritual performances (Parker Pearson 1999: 5-6; Williams 2003: 4) that may not faithfully mirror the conditions experienced in life (Ucko 1969). Below, I review new approaches that consider the significance of the mortuary context to interpret the meaning of burial assemblages.

Baker's research (2006, 2010, 2012) uses depositional context to evaluate spatial patterns between grave goods and human skeletons, specifically the placement of certain ceramic types near different zones of the body, i.e., cranium, shoulders, torso, hips, and feet. The relatively homogenous composition and patterned spatial placements of the Bronze Age funeral kit indicates that the concept of grave goods was consistent among most burials, regardless of type, location, or architecture (Baker 2012: 57-59; Cradic 2017: 232). However, the funeral kit model is best applied to primary inhumations and is less useful in cases of secondary and co-mingled burials in which individual funeral kits were intentionally broken, removed, or modified after original interment. This approach is not appropriate in cases where kits were not meant to be discrete but were intended to be intermixed and shared among the individuals within the chamber (Cradic 2017: 233). In this study, the funeral kit is viewed as a set of intentionally deposited material residues of ritual action that may have served a range of functions such as an offering to the deceased or a deity, a means of commemorating the dead, a means of transforming the status of the dead, and metaphorical or actual act of destruction or caching of objects to mark death (Ekengren 2013).

Sophisticated new approaches clarify the role of material culture in burial. Anne Porter's (2016) "materiality of mourning" model uses object assemblages and deposition to capture patterns of coping with death in late third millennium B.C.E. Tell Banat (Syria). This model views funerary remnants as the product of survivors' actions and considers significant aspects of bodily treatment, such as evidence of burning and preservation. For Mycenaean Greece, Boyd (2016: 210) helpfully proposes three categories of deposition: (1) direct (material directly deposited in the burial); (2) consequential (deposition in consequence of another action, such as preparing a corpse); (3) and transformational (materials whose meanings change during the funeral sequence). At the Royal Hypogeum of Qatna, grave goods fit two categories: (1) offerings or personal belongings provided for the dead, deposited in the ossuaries and a special chamber; and (2) objects used by the living such as vessels for storing unguents or food, and residues of feasting such as animal bones (Crewe 2009: 31).

These novel approaches emphasize function and the significance of the context of recovery of grave goods for interpreting shifting meanings, object biography, human-object relationships, and ritualized use of material culture. The placement and choice of object reflects the final role of the object during its use-life. Unlike finds from a floor deposit or fill, the deposition of an object in a human burial was not coincidental; in other words, the "actual mortuary context is more than just incidental to the recovery of archaeological material" (Tarlow 2011: 4). Using a method such as funerary taphonomy, the different functions of objects can be elucidated through contextual analysis of their deposition and spatial relationships to the body and other objects as well as their formal properties and typologies (Ekengren 2013). As I discuss further in Chapter 8, the relationships between human skeletal remains and material culture can be complex. Funerary taphonomy helps to disentangle the order of deposition to reveal how individual objects related to individual skeletons; I argue that in cases of shared and re-used burial spaces such as Tomb 100, the answers have been obscured purposefully in antiquity by the survivors who re-visited the grave-sites and intermixed human remains with non-human materials and remains.

Inhumation

The predominant body disposal method practiced in the second millennium B.C.E. is inhumation. Inhumation involves the burial of the entire corpse, either underground or otherwise sealed by earth, stone, or architecture. Three forms of inhumation were practiced: primary, secondary, and compound inhumation. In primary inhumations, burial of one or more corpses occurs once without subsequent disturbance. Secondary inhumation involves one instance of re-locating the body from its original locus of decomposition for burial elsewhere. Lastly, compound disposal is an extended form of inhumation that involves multiple episodes of interment and disinterment or disturbance (Sprague 2005: 57-72).

Burials could contain single or multiple individuals, except compound disposals, which contained multiple individuals. In cases of multiple inhumations, the bodies of the inhumed individuals could be treated the same way or different ways, depending on factors such as when burial occurred in relation to the other individuals, and who was selected for extended burial treatments. In some cases, multiple individuals could all receive the same primary inhumation treatment whether they buried together in one episode or separately over time (in cases where subsequent inhumations caused little or no disturbance to the previously inhumed individual(s)), whereas in other cases a single grave could contain co-occurring primary, secondary, and compound inhumations.

All three of these inhumation disposal methods can be traced contemporaneously across the wider region—eastern Mediterranean (Greece, Cyprus), Levant, and Syria-Mesopotamia (Pfälzner 2012, 2014; Boyd 2015a; Moutafi and Voutsaki 2016; Keswani 2012)—which suggests that the introduction of secondary and compound disposals alongside primary inhumations was a widespread and culturally shared innovation of the Middle Bronze Age.

Co-Mingled Inhumations. Among the varied forms of inhumation, fragmentation and intermixing of the skeletons of multiple individuals stand out as meaningful variables of funerary practice. Broadly speaking, the "bulk" of Middle Bronze Age burials are primary inhumations (Hallote 1994: 63). However, the sample of 15 newly excavated burials from Building 12/K/15 at Megiddo indicates that 24 out of 43 MNI (ca. 56%) were secondary or co-mingled inhumations with a high degree of skeletal fragmentation (see Chapter 6). In some cases, the entire funeral sequence was performed once. The body was never disturbed, the grave never marked. In case of shared and re-used burial spaces, such as masonry-constructed chamber tombs, prolonged and complex sequences dragged on for months, years, and even decades after death and burial. These striking differences must be recognized and explained.

Problematically, researchers in Levantine archaeology tend to interpret co-mingled inhumations of multiple individuals from a functional perspective, asserting that multiple-interment burials provided a practical solution to limited burial space (Lewis 1989: 180-81; Bloch-Smith 1992: 48; Doumet-Serhal 2004: 140, 2014: 35; Blau 2006: 14; Andreou 2012: 140-41; Ilan, Gadot, and Uziel 2014; Nagar and Lev-Tov Chattah 2014: 31). This explanation strips social agency from mourners and ritual meaning from those funerary rituals that involved repeated disturbance, removal, and curation of individual bodies within a shared burial space. A key element has been missing from most previous studies: the importance of fragmentation and secondary or compound handling of deceased bodies within shared burial spaces.

Although the evidence is incomplete, it is likely that most masonry-constructed chamber tombs were used as multiple, successive burial spaces and predominately contained co-mingled remains. From this study's corpus of 104 masonry-constructed chamber tombs, the MNI was identifiable in 57 cases, occasionally only in general terms (i.e., "multiple" if a precise MNI was not provided). MNI could not be established in the remaining 47 tombs because it was not recorded, or because the chamber was found empty (Table 32). Of the sample of 57 masonry-constructed chamber tombs, 49 (86%) contained at least two individuals; most tombs (71%) contained at least four individuals, and over half (55%) contained at least five. On average, these tombs housed eight individuals, which is likely an underestimate due to the incomplete nature of the data of the tombs that enclosed "multiple" individuals. The median MNI is five, and the modal MNI is one, although this latter figure is likely inaccurate; more tombs (n=14) were identified as housing an unspecified number of "multiple" individuals than those that contained MNI of one (n=8). This evidence means that inhumation practices in chamber tomb contexts have not been scrutinized, and that the prevalent Levantine mortuary practice of intermixing and fragmenting human remains in multiple-successive burial chambers has been seriously overlooked.

Context and Location

Intramural burial is attested at 28 sites of the Middle and Late Bronze Age Levant and represented an innovative approach to mortuary context that re-emerged in the beginning of the Middle Bronze Age (Ilan 2003: 34; Bloch-Smith 2003; Cradic 2011:Table 2.3), with slightly later adoption of intramural burial on Cyprus during the Late Cypriot I period (ca. 1650-1450 B.C.E.) (Keswani 2012: 188). The practice is rooted in local tradition across the eastern Mediterranean and Near East with precedent as early as the Natufian period at sites such as Ain Mallaha, Nahal Oren, and Hayonim Cave, where burials were inserted into pits outside of houses or inside of abandoned dwellings, rather than inside occupied residences (Bar-Yosef 1998: 164). The practice of intramural burial inside of occupied buildings occurred in the Neolithic Era and beyond, becoming increasingly popular during the Middle Bronze Age (Orrelle 2008; Homsher and Cradic 2018). The indigenous practice of intramural burial peaked during the MB II-III, when intramural burial accounted for ca. 17% of the burial population (Hallote 1994, 1995:Figure 4; Gonen 1992a: 20; Brody 2008: 516). Extramural burial remained the prevalent burial location throughout the second millennium B.C.E. (Brody 2010: 126). By the second half of the millennium, fewer than 10 sites contained intramural burials (Gonen 1992a: 20–21, Figure 3; Birney and Doak 2011: 35, n.5). The decrease in intramural burial correlated with an increase in burial in designated areas that were outside the city boundaries (Gonen 1992a; Cradic 2011: 12–13, Table 2.3). Few sites (e.g., Megiddo and Tell el-'Ajjul) contained contemporaneous intramural and extramural burials (Cradic 2011: 13).

Intramural burial may have been a strategic component of place-making, commemoration, and group membership. Explanations for burial inside houses have included a combination of factors, such as (1) claiming and maintaining property ownership (Bloch-Smith 1992: 110–121; Brody 2010:126); (2) access to the locus of the cult of the dead and/or cult of the ancestors (Schmidt 1994; Hallote 1995: 105–107); and (3) creating membership within a corporate group (Brody 2008: 516, 529).

Architectural and stratigraphic evidence demonstrate that intramural graves varied in terms of the degree of pre-planning. Some burials were clearly *ad hoc* (and eventually forgotten about, as evidenced by later cuts) while others were carefully planned in advance. Pit and jar burials can be easily cut into an existing surface with little effort or disruption, but masonry-constructed chamber tombs required integration with the architecture of an existing or planned building. Stratigraphic and architectural evidence from Ugarit suggests that the subterranean chamber tombs were planned and constructed contemporaneously with a courtyard house (Callot 1983; Salles 1987, 1995; Gates 2003: 163). This may have been the case for several tombs at Enkomi (Crewe 2009: 28) and Megiddo: for the latter site, the superstructure of the *Mittelburg* palace complex and its subterranean tomb, *Grabkammer* I, may have been constructed as a unit; the floor of the room above rested directly on the chamber's vaulted roof (Gonen 1992a: 154-155). Similarly, the flat slabs that roofed T.4055 appear to have formed the pavement for the room above (Gonen 1992a: 153; Loud 1948:Figure 33A).

At both Megiddo and Ugarit, masonry-constructed chamber tombs are located below floors of small peripheral rooms so that their orientation corresponds to the rooms above (Martin, Cradic, and Kalisher 2018). The rooms above the chamber tombs continued to be used for habitation or, in some cases, the spaces may have been devoted to a funerary function (see Chapter 8); the phenomenon of placing additional burials near chamber tombs indicates the specialized mortuary function of the space. For example at Megiddo, pit burials are located immediately outside of chamber tombs *Grabkammer* II in the *Mittelburg* (Schumacher 1908: Taf. VI) and Tomb 100 in Building 12/K/15 (Martin, Cradic, and Kalisher 2018).

Burial locations provide important clues about the feasibility of ongoing commemoration performed at the interment locus. Household burials would have been far more accessible on a daily basis than off-site extramural cemeteries, which may have been re-visited periodically or not at all. At Megiddo, the rooms above the chamber tombs tended to be located in a peripheral area of the house (Figures 5-6) while at Ugarit, monumental chamber tombs could be accessible from a shared exterior space such as a courtyard or street (Callot 1983; Salles 1987: 160; 1995: 173–177; Marchegay 2000: 208; Keswani 2012: 186).

Not every house contained a masonry-constructed tomb. In no case did a single structure contain more than one chamber tomb (Martin, Cradic, and Kalisher 2018). At Ugarit, planned urban neighborhoods contained one chamber tomb for approximately every two to three households (Marchegay 2000: 208). Based on the street accessibility and distribution of the tombs, it is plausible (though speculative) that a single chamber tomb may have served several adjoining courtyard houses at Ugarit (Cradic 2011: 17), or was at least open to visitors "without passing through the private quarters" of the residence (Keswani 2012: 186). This was probably not the case at Megiddo, where the tombs were smaller and less accessible. Moreover, residential structures that were devoid of chamber tombs yielded other, non-built grave types such as pit and jar burials (Martin, Cradic, and Kalisher 2018). At Enkomi, Late Cypriot I chamber tombs that were constructed early in the town's development were placed in open, unoccupied areas that were eventually incorporated into architecture as the town expanded (Keswani 2012: 188). The tombs may have remained accessible from the interior rooms as well as courtyards and streets (Keswani 2012: 18).

Figure 5. Domestic structures with intramural burials in Area BB, Stratum X (after Loud 1948:Figure 400). House 3002 is in the southeast (grid O14), adjacent to House 3003 (grids O14-15).

Figure 6. Spatial distribution of intramural burials by type in Area BB, Stratum X Houses 3002 (left) and 3003 (right) (adapted from Loud 1948: Figure 400). Image prepared by R. Homsher and M. Cradic.

Residential Burial and Social Memory

As discussed above, the house served as an important locus for Middle Bronze Age mortuary activities that potentially spanned the entire funeral sequence of pre-interment, interment, and post-interment activities. These ritualized practices took place within an otherwise mundane domestic setting that was used for ordinary habitation activities. In creating a context for burial and commemoration within the occupied house, survivors modified the residential space architecturally and functionally in subtle or dramatic ways in order to accommodate the burials. The settlements of Ugarit and Megiddo exemplify how the transformation of urban domestic space into mortuary space could occur in a variety of ways. I argue that the choice to keep the dead spatially close to the living space of survivors carried meaning, particularly at Megiddo and other settlements with contemporaneous off-site cemeteries. Below, I analyze the significance of residential burials, drawing from contexts in the ancient Near East and Mesoamerica to demonstrate how intramural inhumation reinforced interactions between living persons and dead persons.

The significance of the house as a burial context has a deep history in the Near East as well as in comparable New World contexts. In the Classic and Postclassic Maya period (250-1521 C.E.), the "close association between human burials and domestic spaces of their living relatives" (Cervantes Pérez, Mijangos García, and Andrade Cuautle 2016: 4) has been linked to the creation and reproduction of collective memory and ancestor veneration (Gillespie 2002; King 2011). In both the Near East and Mesoamerica, the continuity of the houses as inhabited structures coupled with the longevity of intramural burial within them suggests an emphasis on the House as a social and physical entity with founders and a specific lineage that arose from its foundation (*sensu* Levi-Strauss 1982; Hendon 2002: 77; Blomster and Ponce de León 2017). The House is a corporate body with a permanent location; as colloquial institution, it serves as a locus of social reproduction and memory through transmitting property, titles, status, and material wealth from generation to generation (Levi-Strauss 1982: 174). Houses with intramural burials created a "genealogy of place" that could be referenced continually over multiple generations in order to reproduce the House and its foundational lineage, whether based on real or fictive kinship (McAnany 1995; Blomster and Ponce de León 20176). In a household from Etlatongo, Oaxaca, Blomster and Ponce de León (2017) have demonstrated that a succession of four burials in simple pits and masonry-constructed chambers over several phases of Mixtec occupation (late Middle Formative period, ca. 500-300 B.C.E.) related directly to the establishment of the house lineage. The continuity of place, context of burial, and even the types of burial architecture closely parallel practices in the Bronze Age Levant.

Disposal of the dead within occupied buildings offered survivors an intimate new way of interacting with the physical remains of the deceased. This physical interface redefined cityscapes—which partly transformed into funerary spaces—and served as a mnemonic cue (Cradic 2011: 55) that communicated the deceased's membership with a specific household. A close connection with the intergenerational household was emphasized as a significant identity marker in death over membership within the wider urban community (Laneri 2010: 121), which would have been more effectively achieved through burial in the community cemetery (Cradic 2011: 55–64).

Residential burials potentially provided lasting spatial connections between the living and the dead (Toohey et al. 2016). Intramural burial symbolically and literally incorporated generations of decedents into the physical structure of the house so that the burials became part of the architecture and biography of the building and, by extension, the household (Laneri 2010: 122; Blanton 1994: 5-7; Martin and Cradic 2018). Each burial created a specific locus of embedded social memory (Hodder and Cessford 2004: 31).

In summary, intramural (specifically residential) burial created long-term claims over property and inheritance; expressed household identities in death; and perpetuated intergenerational continuity of the house and household (Martin and Cradic 2018). Restricted access to sub-floor burial sites privileged a select group of household members who lived and worked in close proximity to the ancestors, and whose bodies were enmeshed within the house's biography and architecture (Martin and Cradic 2018).

Summary and Conclusions

In this chapter, I have presented mortuary patterns of the second millennium B.C.E. Levant. I argue that diversity was the rule in burial architecture, disposal methods, and burial assemblages of the second millennium B.C.E. A high degree of variation in all of these factors could occur within a single site (e.g., Kabri, Ashkelon, Enkomi, Mycenae, Tell el-Dab'a) (Schiestl 2008:Figures 2-3), or even a single building, for example in Building 12/K/15 at Megiddo (see Chapters 6, 7, and 8). However, within this wide variation in burial practices of the second millennium B.C.E., three important commonalities unite this disparate dataset: (1) burials were sealed and usually located below ground; (2) disposal was by inhumation—burial of the entire body—rather than cremation, excarnation, or mummification; (3) the overall repertoire of grave goods, when included in burial, is predictable based on the age-at-death of the individual (see Chapter 7). The stability of these specific variables among nearly all burials points to shared funerary norms for a proper burial across sites and provides a standard by which to measure difference in death and burial practices. Deviations from these norms, for example, may indicate improper burial, possibly linked to a "bad" death (Weiss-Krejci 2013; Nilsson Stutz 2015). The notable diversity among the less stable characteristics such as burial type, context, and disposal methods (primary, secondary, compound inhumations), however, deserves renewed attention as variables that occur within "normative" funerary practice.

The high degree of variation in Levantine mortuary patterns highlights the significance of agency on the part of the survivors and funeral participants and may be related to different post-mortem personhood outcomes. The role of the body was particularly significant, variable, and mutable during all stages of the funerary sequence, from preparation through post-interment activities. For example, LBK burials in Neolithic Europe provide insights into the role of body treatment:

> relationality was differently expressed in the deliberate dissolution of the *body*. This idea of the body as *malleable* and *unstable* is expressed in… cremation and secondary burial. Here, fixing a body or an identity permanently is eschewed,

> stressing the social process of their creation and transformation, which could continue for a varying length of time after death [Hofmann and Orscheidt 2015: 994; emphasis added]

The body as the operative principle of difference and ritual meaning also applies to the Middle and Late Bronze Age Levant, Greece, and Cyprus but, like all other aspects of burial, must be taken alongside the wider context of funerary practices that occurred before, during, and after disposal of the cadaver. The relative degree of elaboration of body treatment—taken together with burial architecture, grave goods, and visibility and accessibility of the burial context—stands out as an important factor that is measurable archaeologically. These differences in funerary practices are closely linked to emergent differences in post-mortem personhood status that became especially important throughout the eastern Mediterranean during the mid-second millennium B.C.E. In the following chapter, I investigate the mortuary evidence from Middle and Late Bronze Age Megiddo, with a continued focus on diversity of mortuary practices and body disposal methods.

CHAPTER 6 – INTRAMURAL BURIALS AT SECOND MILLENNIUM B.C.E. MEGIDDO

This chapter presents archaeological data on intramural mortuary practices at second millennium B.C.E. Tel Megiddo. Extensive excavations at Megiddo over the last century have revealed a wealth of settlement and mortuary data from the Middle and Late Bronze Age. I explain below how the site is well-suited for addressing the project's research questions concerning the status of the dead after burial and the role of the body in the funerary sequence. As I discussed in Chapter 4, the textual record of the ancient Near East attests to the posthumous existence of ancestors, ghosts, and the deified dead. I argue that these transformations of personhood after death related to the treatment of the corpse and are therefore accessible through mortuary archaeology using methods of funerary taphonomy.

Using the mortuary archaeology evidence from Megiddo, I provide a contextualized synthesis of burial patterns focusing on inhumations that were located within the boundaries of the Middle and Late Bronze age city. I draw from a variety of sources and offer a comprehensive perspective on burial practices at the site. Previous studies on mortuary practices at Megiddo (e.g., Kassis 1973; Hallote 1994, 2001) have not accounted for the full scope of the burial evidence, which I accessed using published reports as well as unpublished archival sources. I include here never before published data from the Oriental Institute excavations as well as new evidence that has been uncovered recently by the renewed excavation project, the Megiddo Expedition. The total corpus of 271 burials is drawn from three major expeditions:

(1) 210 burials from excavations conducted by the Oriental Institute of the University of Chicago from 1925-1939 (Loud 1948).

(2) 22 burials from the excavations conducted by Gottlieb Schumacher from 1903-1905 in the *Mittelburg* and *Nordburg* (Schumacher 1908).

(3) 39 burials from the renewed excavations of The Megiddo Expedition, which have bene conducted under the auspices of Tel Aviv University from 1992 to the present. The project has uncovered burials in Areas K, H, and J (Adams and Cradic 2018; Cradic 2018; Martin, Cradic, and Kalisher 2018; Martin and Cradic 2018).

Below, I introduce the site and address the scope and limitations of this archaeological dataset. I explain that the legacy data from the Schumacher and Oriental Institute excavations, which were insufficiently documented by today's disciplinary standards, pose serious challenges in terms of establishing a base line for categorization and interpretation of the mortuary evidence. The archaeological materials from the three excavation projects are not easily comparable due to different methods of data collection and recording over the last century, particularly when it comes to issues of MNI, age-at-death, and taphonomic observations. However, I make the case that these challenges can be overcome through careful readings of original photographic and written sources from excavation archives. I highlight how legacy evidence held at the Oriental Institute can be improved for research use through standardized methods of data collection.

In the following sections, I summarize the main findings related to mortuary evidence from each expedition beginning with the Oriental Institute excavations, which uncovered the majority of the burials at the site. Following this contextualization of the evidence, I discuss mortuary patterns at the site by burial type, age-at-death, body disposal methods, and spatial and temporal distributions of inhumation. I argue that Megiddo's Middle and Late Bronze Age burials demonstrate the high degree of diversity that is attested elsewhere in the southern Levant during these same periods. Megiddo's intramural burials span the full spectrum of diversity in terms of burial type, MNI, and body disposal methods. Building 12/K/15 in Area K exemplifies the intensity of variation that existed within the closed temporal and spatial context of a single house during one phase of occupation. The specific inhumation practices for a given deceased person—i.e., single inhumation in an unmarked pit or multiple-successive inhumations inside Tomb 100, a re-used chamber tomb—were closely related to the posthumous status of the dead within the household. These mortuary choices determined who was commemorated and who was forgotten.

Building on this evidence, I explain further in Chapters 7 and 8 that intramural burial at Megiddo was a social strategy that maintained close spatial, temporal, and architectural links between the living and the dead, even those whose burials were unmarked. Burial underneath the floor of an occupied residential structure facilitated continuous interactions with the corporeal remains of the dead over several generations of inhabitants. Burial within the residential building incorporated the dead within the social and architectural framework of the house, which could be conceptualized in terms of lineage and membership within an intergenerational group. The place of burial served as a ritualized locus for personhood transformations after death. As I demonstrate through closely contextualized case studies of funerary taphonomy, the combined variables of burial type, context, and body disposal methods created a pathway to ancestorhood.

Background

Tel Megiddo

The 12-ha. site of Tel Megiddo is located in the Jezreel Valley in the Lower Galilee region of present-day State of Israel (Figure 7). The Jezreel Valley is an intermontane alluvial plain that is situated between the Central Highlands, which lie to the south, and the hills of the Galilee to the north (Homsher 2013: 30). From its northwest corner, the Jezreel Valley connects to the Northern Coastal Plain, and from the southeast it meets the Jordan Valley through two natural corridors, the Harod and Beth Shean Valleys (Homsher 2013: 30). Megiddo is situated along the edge of the Carmel Ridge and the mouth of the Wadi 'Ara, which leads westward toward the coast (Homsher 2012: 6). Due to its strategic location, Megiddo commands an important vantage point at the nexus of an ancient crossroads that connected the Mediterranean coast with the Jordan Valley. The steep Carmel Ridge forces an inland route away from the Coastal Plain through the inland valleys; this ancient transportation route, the Via Maris, connected Egypt with Syria-Mesopotamia and Anatolia through the Levant (Cline 2000: 7;

Homsher 2013: 30). In addition to it advantageous geographic location, Megiddo is in close proximity to several perennial springs, such as 'Ain el-Qubbi, which is adjacent to the lower tell (Homsher 2013: 133). The sediments and soils of the surrounding hills and alluvial plain provide ideal settings for agriculture and resources for building materials (Homsher 2013: 133). The prominent location of Megiddo in this intermontane valley played an important role in its development during the Bronze and Iron Ages as a wealthy urban settlement that had access to maritime and land trade and controlled a fertile and well-watered hinterland.

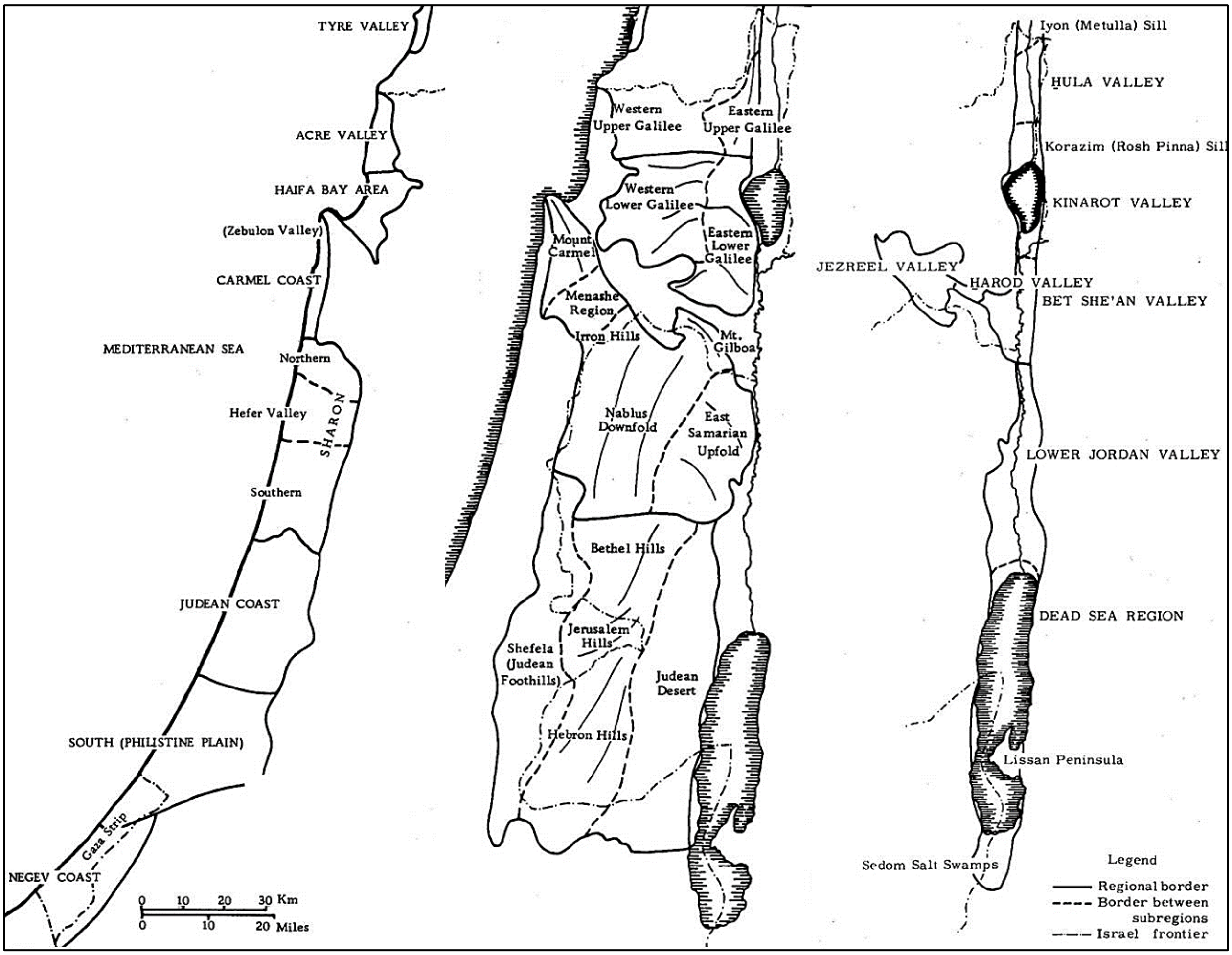

Figure 7. Maps distinguishing elements of the Coastal Plain (left), Central Highlands (center), and Jordan Valley (right) in Cisjordan of the Southern Levant (after Homsher 2013:Figure 2; adapted from Orni and Efrat 1964:Figure 20, 27, 41).

The settlement contains over 20 major phases of occupation from the Early Bronze through Persian periods, ca. 3500-500 B.C.E. The presence of lithics and ceramics from Neolithic and Chalcolithic periods on the mound and in its immediate vicinity attest to activity at the site during these earlier periods. However, these remnants are not associated with any occupational remains (Adams, Ussishkin, and Finkelstein 2013: 285). The first stratum of occupational activity occurred in Stratum XX, the Early Bronze Age I period (ca. 3500 B.C.E.), in the east of the site which contained a natural outcrop of bedrock with structures and carved bedrock features (Adams, Ussishkin, and Finkelstein 2013: 285-287; Adams et al. 2014).

The cities of Bronze Age Megiddo contained monumental and domestic architecture, massive fortifications, and a large corpus of human burials. The burials, which encompassed a wide variety of types, were located within the city walls as well as in the extramural cemetery on the eastern slope of the mound (Figures 8-9; Loud 1948; Guy and Engberg 1938). Of relevance here is the urban settlement of the Middle and Late Bronze Age, which spanned Strata XIVA/XIII-VIIA (Homsher 2013:Table 3, 134). The city of the MB II-III periods expanded the areas of settlement at the site and contained monumental architecture and fortifications that are the hallmarks of Middle Bronze Age Levantine cities during this period of re-urbanization. At its largest, the settlement encompassed 12-ha. (8-9-ha. upper mound, and ca. 4-ha. lower mound) and was surrounded with monumental earthworks that consisted of freestanding ramparts and a city-wall constructed of earth, fieldstone, a limestone glacis, and mudbricks, and mud mortar (Homsher 2012, 2013: 39-46, 133-134; Arie 2008: 10). The Middle Bronze city of Stratum XIII was entered in the north (Area AA) through a double-entry gate with towers, which were typical features of the repertoire of Middle Bronze Age urban monumental architecture (Figures 8-9; Homsher 2013: 134-136; Herzog 1997:Figure 4.2).

The city underwent modifications in Stratum XII, which saw the expansion of the city wall, addition of buttresses and a glacis, and a shift in the location and architecture of the city gate (Homsher 2013: 136-138; Herzog 1997:Figure 4.3). In the east (Area BB), a *temenos* wall and high place with standing stones were constructed in the cultic area (Homsher 2013: 137-138; Kempinski 1989: 57). This “sacred area” was flanked by a neighborhood of courtyard houses to the east, and a rectilinear palatial building, Building 5001, to the west (Homsher 2013: 137-138; Herzog 1997:Figure 4.3; Kempinski 1989: 57). The city plan remained relatively consistent through the end of the Middle Bronze Age and beginning of the Late Bronze Age, Strata XI-IX, with the addition of the construction and expansion of a Palace 2041 (Strata IX-VIIA), which abutted the gate complex (Loud 1948:Figures 381-384). During the Late Bronze Age, a triple-entry gate of Strata IX-VIIA replaced the earlier gates of the Middle Bronze Age city (Loud 1948:Figures 381-384). Temple 2048, a *migdol* (tower-)-style building of the Middle and Late Bronze Age, was constructed in the east of the site in Strata XI-X, continuing the series of superimposed temples and altars that dated as early as the Early Bronze Ib period, ca. 3300 B.C.E. (Adams, Ussishkin, and Finkelstein 2014; Adams et al. 2014; DiPietro 2012: 45-46; *contra* Hallote 2001a). These temples continued in use through the Late Bronze Age, which witnessed a rise in construction of monumental public buildings such as the new gate and palace complex in the north of site (Area AA).

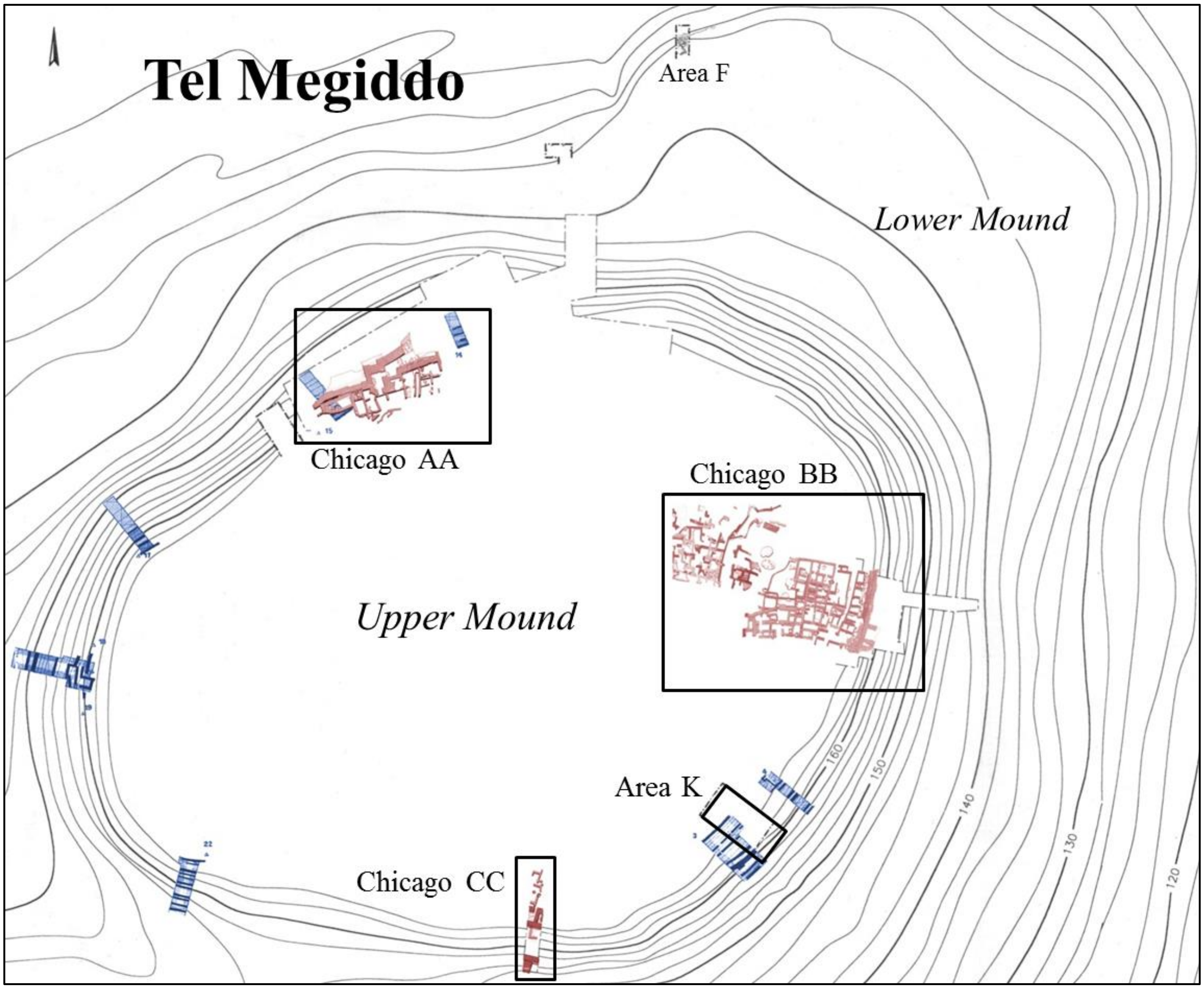

Figure 8. Plan of Tel Megiddo showing areas of excavation that exposed remains belonging to the MB I period (after Homsher 2013:Figure 40; adapted from Loud 1948:Figures 378, 397-398, 407; Schumacher 1908:Tafel II).

The names of several Late Bronze Age rulers of Megiddo and other major sites such as Byblos are recorded in the Amarna Letters, the diplomatic correspondence of ca. 370 tablets sent between the Egyptian administration and the local Canaanite vassal rulers (Moran 2000). For example, King Biridiya of Megiddo who ruled over the LB II city is known from six tablets from the Amarna archives (Langgut, Adams, and Finkelstein 2016). He and his peers at administrative centers such as Jaffa, Deir el-Balaḥ, Gaza, and Beth Shean were political and economic vassals of the Pharaoh, bound by treaties, to whom they owed loyalty and taxes in the form of grain and beer (Killebrew 2005: 24-25, 52-54; Finkelstein 1996; Burke and Lords 2010). The monumental courtyard-style palace of the rulers of Megiddo, Palace 2041 of Strata IX-VIIA, has been excavated in Area AA. The scale and rich findings of a hoard of ivory furniture and precious metals inside the building, which was destroyed in a violent conflagration ca. 1130 B.C.E., and attests to the wealth and prestige of these rulers, who participated in far-flung systems of maritime and land exchange with Egypt, the Aegean, and Syria-Mesopotamia.

Below, I provide historical context on the Middle and Late Bronze Age Levant. I return to Megiddo in Chapters 6 and 7, in which I detail the diverse range of burial practices that are attested within the urban settlement of Megiddo during the second millennium B.C.E. In Chapter 8, I provide deeply contextualized case studies of three mortuary contexts at Megiddo to demonstrate the relationships between these diverse body disposal methods and embodiments of death at the site. In many ways, Megiddo represents a microcosm of Levantine urban settlements, mirroring the high degree of burial variation. Therefore, my model for funerary ritual based on Megiddo applies to second millennium B.C.E. Levantine deathways more broadly. With reference to Megiddo, in the next section I provide the historical background and archaeological setting of this study: the second millennium B.C.E. Levant, the periods of the Middle and Late Bronze Age.

Limitations and Scope

The sheer quantity of intramural burials attested at Megiddo is remarkable. The number of documented burials uncovered in excavations at Megiddo outnumbers other Levantine sites, which makes Megiddo a productive, if not unproblematic, case study. The number of known burials is high compared to other sites for two possible reasons. The first is a clear preference for intramural burial by the city's Middle and Late Bronze Age inhabitants. The second reason is simply due to the extent of excavations at the site, particularly the early excavations. On average, Schumacher employed 70-200 local laborers per day who worked ten or more hours at a time (Schumacher 1908: 1-2). Although Schumacher offered bonuses for small finds and sifted debris from tomb contexts, he noted that many small finds were "very easily lost" in the large-scale process that involved moving and dumping large volumes of debris (Schumacher 1908: 2-3). Likewise, Oriental Institute's decades-long project was conducted on a massive scale by hundreds of Palestinian and Egyptian workers.

The majority of the intramural burials at Megiddo were uncovered by the first two expeditions: Schumacher and Oriental Institute. Out of a total corpus of 392 known intramural burials at Megiddo, 271 burials are included in this study's analysis. The remaining 121 burials, all of which were excavated by Oriental Institute, were excluded due to insufficient data or because the burials were beyond the project's chronological scope. As is the case with legacy evidence at Megiddo and elsewhere, such as the excavations at Ugarit (Schaeffer 1936, 1938, 1939, 1948), grave goods were routinely published in full (e.g., Loud 1948), yet human skeletal remains and context were often not recorded in sufficient detail to permit comparative osteological or taphonomic analysis (Cradic 2016; Martin and Cradic 2018). Additionally, 125 burials[34] from the Eastern Slope cemetery (Guy and Engberg 1938), which are likely extramural, are excluded due to issues of uncertain dating and context.[35]

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[34] The 125 burials from the extramural cemetery are not included in the corpus of 392 intramural burials cited above.
[35] Eighteen of the 125 burials can be securely dated to the Middle Bronze Age (Arie 2008: 4-6, Table 2). Arie (2008) argues that the area of the Eastern Slope cemetery was incorporated into the city for residence during the MB II-III

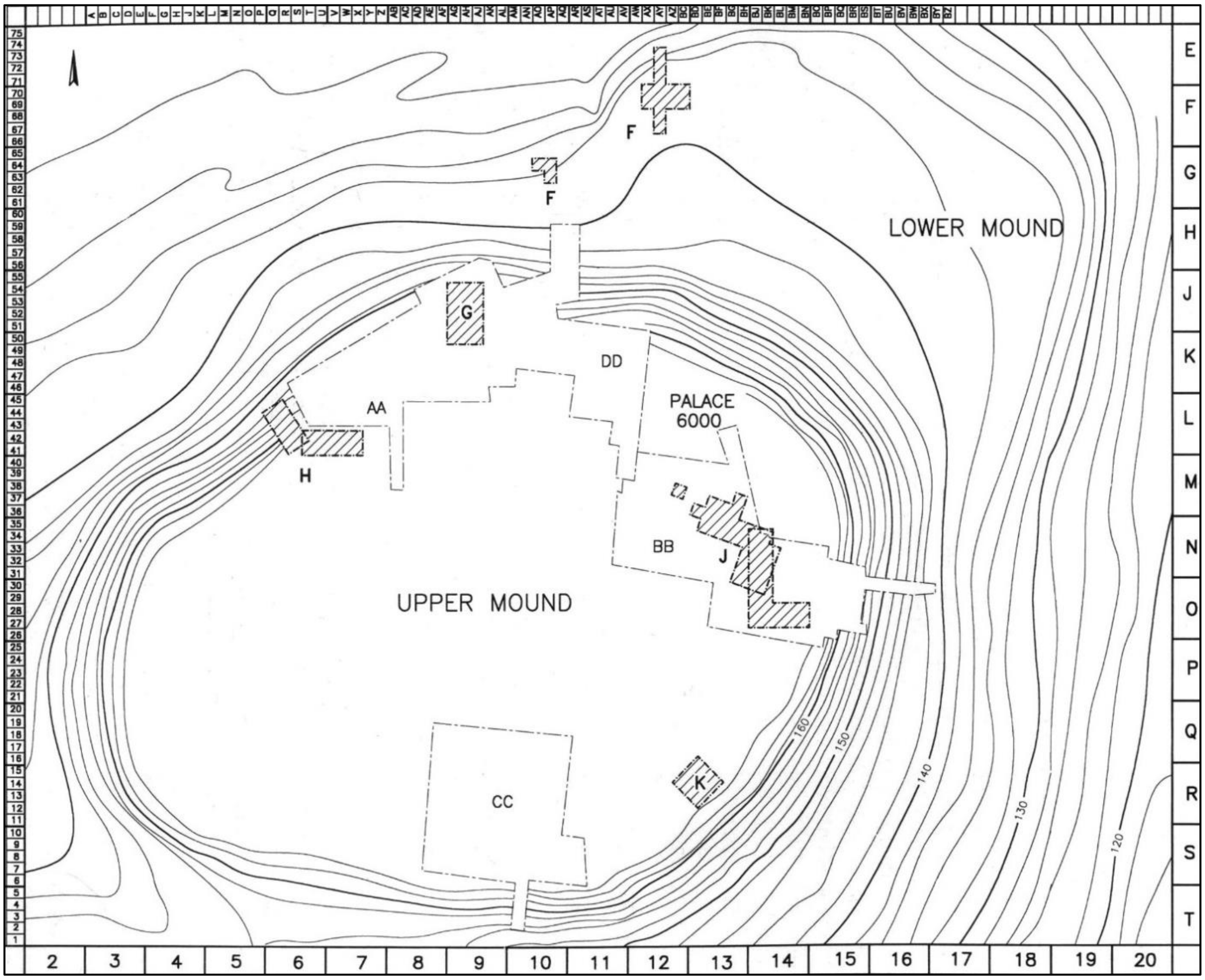

Figure 9. Plan of Tel Megiddo. Oriental Institute areas of excavation outlined with dashed line (after Finkelstein, Ussishkin, and Cline 2013:Figure 1.1).

Torv (2015) outlines a methodology for using archival sources from legacy collections to improve original datasets for taphonomic analysis. Her archival archaeothanatology research employs both written records (reports and excavation diary) and visual observations (field photographs, sketches, plans, and detailed illustrations) to flesh out sketchy descriptions when available information is missing or inadequate. The aim is to reconstruct the temporal and spatial relationships between the burial feature, human remains, and grave goods. She applies the method to Tamula XXII, a burial of an adult male from prehistoric Estonia. Her primary sources included ten photographs, one drawing, and one diary entry from 1961. Torv's (2015: 171, 185) results show that (1) archaeologists' field notes can aid taphonomic interpretation and differentiate between intentional and natural factors; and (2) high resolution visual

periods. However, the Oriental Institute excavators did not record the burial contexts in sufficient detail to identify the function of this area over time (Guy and Engberg 1938), so these burials are excluded from study.

documentation is best for capturing data to reconstruct the relative order of decomposition of skeletal articulations.

I applied Torv's methods (2015) to the legacy evidence from Megiddo. The methodology provides a framework for extracting data from a variety of sources, such as published photographs and reports as well as field diaries and unpublished field negatives. For any of Oriental Institute burials that were photographed—either published in *Megiddo II* or unpublished but accessible via field negatives at the Oriental Institute Museum (see below)—the visual evidence was used to determine the age-at-death of individual decedents in a coarse-grained way. The age identifications from this legacy dataset were possible by using the scale provided in the photographs to measure skeletal elements that happened to be visible, usually long bones. These measurements were compared against standards in Buikstra and Ubelaker (1994). This same method of measuring with the scale in the photograph was used to determine architectural dimensions of burials when these metrics were not provided in publication.

It should be noted that the architectural and osteological measurements may be imprecise, or that the photographs (which are not orthophotos or otherwise rectified) could be distorted. Although the data was collected as systematically as possible, the same bones were not necessarily visible in all photographs, leading to a problematic lack of control over the available evidence. Moreover, for subadults in particular, measuring of bones is not a preferred method for aging under normal circumstances due to the absence of certain landmarks and structures on the bone that are present in adults (Buikstra and Ubelaker 1994: 44). However, these methods were applied cautiously in order to maximize an otherwise un-utilized but important legacy dataset; the results should be taken as estimates, rather than as definitive identifications, which would have to come from direct examination of the skeletal elements. These coarse-grained identifications suffice for the purposes of this study, which is focused on taphonomy rather than demographics or osteological analysis.

For the burials that appear in photographs in *Megiddo II*, I consulted a trained osteologist and Megiddo Expedition colleague, Rachel Kalisher, to confirm my identifications or to make determinations in cases where I was uncertain. Ages fit three main classes as follows: (1) subadult (<18 years), a category which is further divided into four subcategories of individuals aged under one year, infants (1-2 years), children and juveniles (3-13 years), and adolescents (13-17 years); (2) adult (>18 years); and (3) unidentified. The ages of any individuals whose age group could not be identified confidently were designated as unidentified. For most subadults, the level of precision was limited out of caution, since bone fusion and dental development—the primary means of age identification in immature individuals (Buikstra and Ubelaker 1994: 39-44)—could not be determined from images alone and requires first-hand examination of the specimens. Therefore, specific age groups (i.e., infant, child, juvenile, adolescent) could not be differentiated, resulting in a general "subadult" or "subadult-unidentified" determination (Tables 67-68). Using this method, the age groups of 236 individuals were identified.[36] The number of

[36] Age and body positioning results that were derived from a smaller dataset of 78 individuals, limited to only those published images in *Megiddo II*, was obtained using these same methods and will appear in Martin, Cradic, and Kalisher 2018.

individuals exceeds the number of burial contexts, since many contained more than one individual.

Archival Research at the Oriental Institute Museum

In addition to the published excavation report, field diaries and negatives archived at the Oriental Institute Museum (OIM) contain a wealth of unpublished information that minimized the gap in the usability and quality of data between the recently excavated burials and those uncovered by the Oriental Institute excavations at Megiddo. To improve and expand the dataset for this project, I accessed a variety of archival documents and photographic records including: field diaries, 1935-1939; locus registers, 1927-1939; and field negatives, 1935-1939. I transcribed the relevant sections, since I was not allowed to make copies of these original documents. For observations using photographic sources, I followed a standardized recording method following my methodology for the published records (see above) to denote burial type, approximate dimensions, and context as well as to approximate the number, age group (subadult, adult, or unidentified), and disposal methods of individuals (Cradic 2016; Tables 67-68).

I cross-referenced the archival evidence with the existing database of published burials, checked for consistency between all of the documents, and added missing records. Not all of the records were usable; some photographs were out of focus, grainy, damaged, or did not provide adequate perspective, orientation, or scale to observe context and contents of a burial. In other cases, a burial was visible in an image but was not the intended subject of the composition. Therefore, in some cases I could not identify all of the variables of burial type, approximate age-at-death, MNI, and body disposal method, which accounts for the slight differences in the sample sizes among these categories in my presentation of the data below. Results were as follows:

(1) I added information or confirmed burial type and dimensions, as well as basic information about the human skeletal remains for 115 burials for which only sparse data, such as registration number, appeared in publication.
(2) The archives contained records for thirteen unpublished burials. It is possible that the excavators uncovered additional burials that were not recorded at all.
(3) In total, the Oriental Institute Museum archives produced 128 new usable burial records.

Oriental Institute Excavations

Below, I present the intramural burial evidence collected from each major excavation at Megiddo. I begin with the Oriental Institute excavations. The Oriental Institute excavated several hundred intramural burials in Area AA, Area BB, and Area CC from 1925-1939.[37] The vast majority of these burials were located in residential areas of Area BB, the eastern half of which was comprised of densely built housing blocks that ringed the edge of the *tell* (Figure 8; Loud 1948:Figures 398-402). These burials spanned Strata XVIII-VIII, the Early Bronze Ib through LB I periods (Table 2). The chronological scope of this project limits the discussion here to 210 burial contexts: (1) 169 burials in Area BB assigned by the excavators to Strata XIV-VIII, the MB I through LB II periods, which provide a comparative corpus for discussion of Tel Aviv University's Area J burials; (2) 25 burial loci in Area AA assigned by the excavators to Strata XIII-VIIA; and (3) 16 burials from Area CC that belong to Strata XIII-VIII.[38]

<table>
<tr><th>Area H</th><th>Area J</th><th>Area K</th><th>Oriental Institute</th><th>Period</th></tr>
<tr><td></td><td>J-1</td><td></td><td>XX</td><td>EB I</td></tr>
<tr><td></td><td>J-2</td><td></td><td>Phase in XIX</td><td rowspan="4">EB IB</td></tr>
<tr><td></td><td>J-3</td><td></td><td>XIX</td></tr>
<tr><td></td><td>J-4</td><td></td><td>XVIII</td></tr>
<tr><td></td><td>J-4a</td><td></td><td>Not detected</td></tr>
<tr><td></td><td>J-5</td><td></td><td>XVII</td><td rowspan="3">EB III</td></tr>
<tr><td></td><td>J-6b</td><td></td><td>XVII</td></tr>
<tr><td></td><td>J-6a</td><td></td><td>XVI</td></tr>
<tr><td></td><td>J-7</td><td></td><td>XV</td><td>EB III/IBA</td></tr>
<tr><td></td><td>J-8</td><td></td><td>XIV</td><td>MB I?</td></tr>
<tr><td></td><td>J-9-J-10</td><td></td><td>XIII</td><td>MB I-II</td></tr>
<tr><td></td><td rowspan="2">J-11-J-12</td><td></td><td>XII</td><td rowspan="2">MB II</td></tr>
<tr><td rowspan="2">H-16</td><td>K-11?</td><td>XI</td></tr>
<tr><td>J-13</td><td rowspan="2">K-10</td><td>X</td><td>MB III/
LB I</td></tr>
<tr><td>H-15</td><td></td><td>IX</td><td>LB I</td></tr>
<tr><td>H-14</td><td></td><td>K-9</td><td>VIII</td><td>LB IIA</td></tr>
<tr><td rowspan="2">H-13</td><td></td><td>K-8</td><td rowspan="2">VIIB</td><td rowspan="2">LB IIB</td></tr>
<tr><td></td><td>K-7</td></tr>
<tr><td>H-12</td><td></td><td>K-6</td><td>VIIA</td><td>LB III</td></tr>
</table>

Table 2. Megiddo stratigraphy correlated between Tel Aviv University and Oriental Institute excavations.

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[37]Burial loci may include more than one individual and/or more than one burial type (e.g., T.2031 contained a jar burial and a simple pit burial).

[38] Burials with the same registration number (e.g., T.4051) that appear more than once on Tables 67-68 are counted as a single burial context, except when one context contained burials of two or more types (e.g., T.2031 in Area BB, Stratum XII). The number of discrete entries reflects the number of individuals in a given burial.

Area BB

The Middle and Late Bronze Age remains in Area BB contained the site's "sacred precinct" as well as a densely built residential area of courtyard houses (see Chapter 2). The burials from Area BB fall under the four major types: simple pit (n=88), jar burial (n=45), stone-lined pit (n=22), and masonry-constructed chamber tomb (n=8) (Table 3).

Stratum	Jar	Simple pit	Stone-lined pit	Masonry-constructed chamber	UID	Total
XIV	1	11	3	0	4	19
XIII[39]	13	11	5	0	0	29
XII	9	15	8	2	1	35[40]
XI	9	12	1	5	1	28
X	11	10	3	1	0	25[41]
IX	2	18	1	0	0	21[42]
VIII	0	11	1	0	0	12[43]
Total	*45 (27%)*	*88 (52%)*	*22 (13%)*	*8 (5%)*	*6 (3%)*	*169 (100%)*

Table 3. Distribution of burial types in Area BB, Strata XIV-VIII.

Burial Type, Disposal Method, Age-at-Death, and MNI. The distribution of burial type skews heavily toward the simplest forms of burial architecture, which comprise the majority of the burials. Simple pit burials alone account for more than half of the corpus. Together, pit (simple and stone-lined) and jar burials make up 92% of the burials whereas masonry-constructed chambers represent a mere 5% of the assemblage. This pattern fits expected trends for Middle Bronze Age Megiddo specifically, and for the southern Levant more broadly (Hallote 1994, 2001a; Cradic 2011).

The ages of 191 individuals from this corpus could be approximated and were categorized into three main categories: (1) subadult (<18 years), which is divided into four subcategories of individuals aged under one year, infants (1-2 years), children and juveniles (3-13 years), and adolescents (13-17 years); (2) adult (>18 years); and (3) unidentified (Table 4). The sample size of 191 individuals is significantly larger than the number of burials (n=169) because several burials contained more than one individual. However, even this total likely underestimates the actual number of individuals.

The results show that subadults represent over half (52%) of the individuals buried in Area BB over the course of the Middle and Late Bronze Ages. Adults comprise 32% of the

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[39] In Area BB, Stratum XIII was divided into Strata XIIIA-XIIIB; the count here combines these into Stratum XIII.
[40] T.2031 was counted twice because it contained two burials of different type (see Table 67).
[41] T.2039 was counted twice because it contained two burials of different types (see Table 67).
[42] T.5040 was counted twice because it contained two burials of different types (see Table 67).
[43] T.2106 was counted twice because it contained two burials of different types (see Table 67)

individuals, and 16% are individuals of unidentified age. For 189 individuals, body disposal methods were identifiable through descriptions or figures (Table 5). Body disposal methods fit three categories: primary inhumation; secondary/co-mingled inhumation; and burials in which methods of inhumation co-existed. Identification of secondary inhumations were made cautiously. In any cases in which body disposal appeared to be secondary but could not be distinguished from non-intentional disturbance, the burial was recorded as unidentified (UID). Due to the ambiguous nature of the data, 50% of the corpus fell under this category. Of identifiable body disposals, primary inhumation was most frequently attested, accounting for about nearly half (46%) of the individuals, while the categories of secondary/co-mingled and primary/secondary comprised small proportions of the sample (Table 5).

Age	Number of burials
Subadult	100 (52%)
Under 1 year	*1*
Infant	*4*
Child	*9*
Adolescent	*0*
Subadult-UID	*86*
Adult	61 (32%)
UID	30 (16%)
Total	191 (100%)

Table 4. Approximate age-at-death of individuals in Area BB, Strata XIV-VIII.

Stratum	Primary	Secondary/ co-mingled	Primary/secondary	UID	Total
XIV	6	1	0	11	18
XIII	8	0	0	21	29
XII	12	2	0	22	36
XI	5	1	1	20	27
X	12	2	0	11	25
IX	25	0	0	6	31
VIII	19	0	1	3	23
Total	*87 (46%)*	*6 (3%)*	*2 (1%)*	*94 (50%)*	*189 (100%)*

Table 5. Distribution of body disposal methods, Area BB Strata XIV-VIII.

Area AA

As discussed in Chapter 2, during the Middle and Late Bronze Age the function and architecture of Area AA shifted from residential space with blocks of courtyard houses in Strata XIII-X to a monumental "palace" structure, Palace 2041, which appeared in Stratum IX and remained in use through Stratum VIIA, the end of the Late Bronze Age (Loud 1948:Figures 381-384). Area AA contained 25 burials from Strata XIII-VIIA, which followed similar trends of proportions of burial type compared with burials of Area BB (Table 6). Like in Area BB, simple pit burials make up a plurality of burials in Area AA (n=10, 40%). However, in Area AA the simple pits take up a smaller share of the overall corpus than in Area BB where they comprise 52% of burials. Jar burials (n=7) comprise just over a quarter of the corpus, which nearly equal to the proportion of jar burials in Area BB. Stone-lined pits (n=4) are represented in similar proportions as in Area BB. Counting all pit and jar burials together, these basic forms of burial architecture account for 84% of the mortuary corpus of Area AA. Masonry-constructed chamber tombs (n=3) are represented in greater proportions, ca. 12%, in Area AA than in the residential neighborhoods of Areas BB and K, which also contained this tomb type (see below). These constructed tombs are assigned to Strata XI, which pre-dates the construction of Palace 2041, and are therefore not related to the transformation of space in Area AA from residential to palatial. However, these tombs required greater material investment and planning than pit and jar burials, possibly indicating that Area AA was an elite sector with greater material resources than the other neighborhoods in the periods leading up to the construction of the palace.

Stratum	Jar	Simple pit	Stone-lined pit	Masonry-constructed chamber	UID	Total
XIII	1	2	1	0	0	4
XII	0	1	0	0	0	1
XI	2	2	0	3	0	7
X	3	5	1	0	1	10[44]
IX	1	0	1	0	0	2
VIII	0	0	0	0	0	0
VIIB	0	0	1	0	0	1
Total	*7 (28%)*	*10 (40%)*	*4 (16%)*	*3 (12%)*	*1 (4%)*	*25 (100%)*

Table 6. Distribution of burials by type and stratum, Area AA Strata XIII-VIIB.

Burial Type, Disposal Methods, Age-at-Death, and MNI. The approximate ages-at-death were identified for 28 individuals (Table 7). Like in Area BB, subadults once again make up a majority of the identifiable burials. At 25% of individuals, adults make up a similar proportion of the population as in Area BB where they represented 32% of the individuals. The ages of a sizable minority of the population were not identifiable with the available information. However, body disposal methods were identifiable in 26 cases. Primary inhumation was the means of disposal for at least 54% of the burials, outnumbering the secondary/co-mingled category that was attested to only two cases and made up just 8% of the sample (Table 8). No cases of co-existing primary/secondary burial were identified in Area AA, and in 10 cases body disposal methods were unidentified.

[44] T.4106 was counted twice because it contained two burials of different types (see Table 67).

Age	Number of burials
Subadult	15 (54%)
Under 1 year	*2*
Infant	*1*
Child	*3*
Adolescent	*0*
Subadult-UID	*9*
Adult	7 (25%)
UID	6 (21%)
Total	28 (100%)

Table 7. Approximate age-at-death of individuals in Area AA Strata XIII-VIIB.

Stratum	Primary	Secondary/ co-mingled	Primary/secondary	UID	Total
XIII	3	0	0	1	4
XII	1	0	0	0	1
XI	3	2	0	3	8
X	5	0	0	5	10
IX	2	0	0	0	2
VIII	0	0	0	0	0
VIIB	0	0	0	1	1
Total	*14 (54%)*	*2 (8%)*	*0 (0%)*	*10 (38%)*	*26 (100%)*

Table 8. Body disposal methods, Area AA Strata XIII-VIIB.

Area CC

Area CC was excavated as a narrow sounding that was cut into the southern edge of the *tell* (Figures 8-9). Therefore, not much is known about its fragmentary architectural remains during the Middle and Late Bronze Ages. However, the fieldstone walls and paved floors that were uncovered in Strata XIII-VIII match the typical construction for houses uncovered in other areas of the settlement, indicating that this sector was used primarily for residential purposes (Loud 1948:Figures 407-408).

Area CC contained 16 burials from Strata XIII-VIII. Simple pit (n=6) and jar burials (n=6) are the most common burial types and are represented in equal proportions, with each category comprising ca. 38% of the corpus. Like in Areas AA and BB, these simple types of mortuary architecture represented the vast majority (ca. 76%) of the burials in the area. In comparison, constructed tombs of any type are few: Area CC contained three stone-lined pits, which make up 19% of the sample, but contained no masonry-constructed chamber tombs (Table 9).

Stratum	Jar	Simple pit	Stone-lined pit	Masonry-constructed chamber	UID	Total
XIII	1	1	0	0	0	2
XII	1	0	0	0	0	1
XI	0	0	1	0	0	1
X	3	0	1	0	0	4
IX	1	4	1	0	1	7
VIII	0	1	0	0	0	1
Total	*6 (38%)*	*6 (38%)*	*3 (19%)*	*0 (0%)*	*1 (6%)*	*16 (100%)*

Table 9. Distribution of burials by type and stratum, Area CC Strata XIII-VIII.

Age	Number of individuals
Subadult	11 (65%)
Under 1 year	*0*
Infant	*4*
Child	*2*
Adolescent	*1*
Subadult-UID	*4*
Adult	4 (23%)
UID	2 (12%)
Total	17 (100%)

Table 10. Approximate age-at-death of individuals in Area CC, Strata XIII-VIII.

Stratum	Primary	Secondary/ co-mingled	Primary/secondary	UID	Total
XIII	2	0	0	0	2
XII	1	0	0	0	1
XI	1	0	0	0	1
X	1	0	0	3	4
IX	4	0	0	3	7
VIII	0	0	0	2	2
Total	*9*	*0*	*0*	*8*	*17*

Table 11. Body disposal methods, Area CC Strata XIII-VIII.

Burial Type, Disposal Methods, Age-at-Death, and MNI. Out of 17 individuals inhumed in these burials, the ages of 15 individuals were identifiable (Table 10). Subadults make up 65% of the individuals, outnumbering adults by nearly three to one. The age distributions within the subadult category included four infants, two children, one adolescent, and four subadults of unidentified age. All nine individuals whose body disposal type could be identified were primary inhumations; the disposal methods of the other eight individuals were unidentified (Table 11).

Schumacher's Excavations

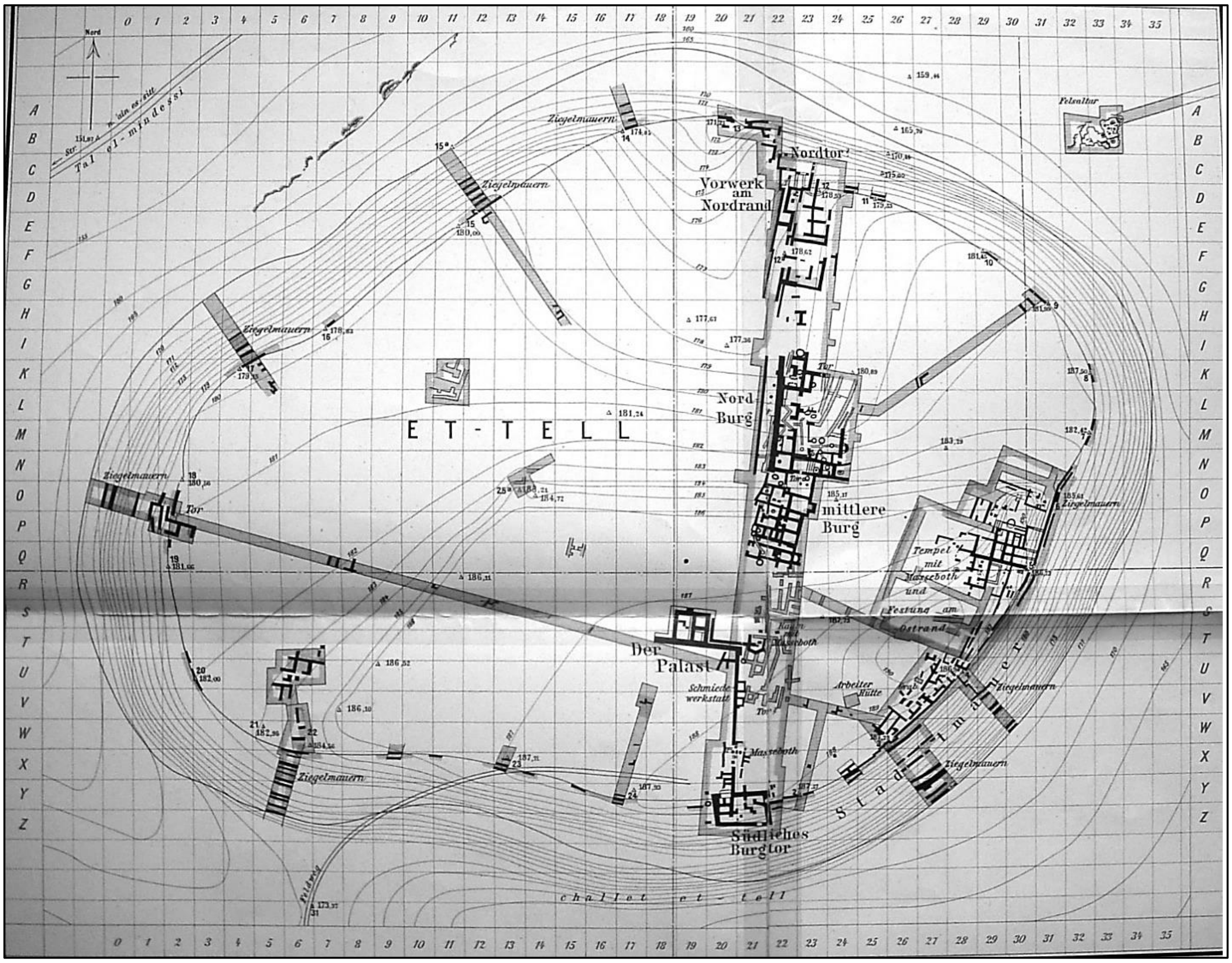

Figure 10. Schumacher's plan of Tel Megiddo. The Nordburg and Mittelburg complexes are located in the center of the site (grids K-Q/21-24) (Schumacher 1908:Tafel II).

Gottlieb Schumacher was the first excavator of Tel Megiddo, which he identified by its local name, Tell el-Mutesellim (Schumacher 1908). Schumacher excavated several soundings at Megiddo and recorded 22 Middle and Late Bronze Age burials in and around the *Nordburg* and *Mittelburg* complexes, located in the center of the site west and southwest of what would later become the Oriental Institute's Area BB (Figures 8-10). The *Nordburg* is a monumental courtyard "palace" structure that covers an extensive area of ca. 1500 m^2 and contained a monumental masonry-constructed chamber tomb (Schumacher 1908: Pl. 12A; Nigro 1994: 16-17). The *Mittelburg* is an enigmatic rectilinear building containing two masonry-constructed chamber tombs that is also called the "Egyptian castle, because of the large number of excavated Egyptian scarabs found there" (Schumacher 1908: 14). The two buildings are connected by a courtyard (Schumacher 1908: 14).

The burials included jar burials (n=8); stone-lined pits (n=7), simple pits (n=4), and masonry-constructed chamber tombs (n=3) (Table 12). At least 12 of these burials were located in Squares M23-K23, an area that Schumacher identified as an intramural "necropolis" that belongs to his first and second strata (Schumacher 1908: 14-15, 54-62). Most of these burials appear to be stone-lined pits that contained multiple subadults and adults in various groupings (Schumacher 1908: 54-62). One burial (Burial 6) is a simple pit, and four of the 12 burials were infant burials in ceramic vessels (Burials 1, 2, and 10, which contained two infant bowl burials). Schumacher also refers briefly to "two small chambers, *d* (Figures 12-13), 3 m long and 0.75-0.80 m wide each" that "contained a considerable amount of human bones scattered around without articulation and probably deriving from several bodies" (Schumacher 1908: 17). I refer to these features as Chambers D1 and D2; it is not clear if these are chamber tombs or rooms containing subterranean burials (Table 12).

Context	Jar	Simple pit	Stone-lined pit	Masonry-constructed chamber	UID	Total
Mittelburg	2	1	0	2	0	5
Nordburg	2	2	0	1	0	5
Necropolis	4	1	7	0	0	12
Chambers D1 and D2	N/D	N/D	N/D	N/D	N/D	N/D
Total	*8 (36%)*	*4 (18%)*	*7 (3%)*	*3 (14%)*	*0 (0%)*	*22 (100%)*

Table 12. Distribution of burials from Schumacher's excavations by burial type and location.

The most notable of Schumacher's finds are three subterranean masonry-constructed chamber tombs: *Grabkammer* I and *Grabkammer* II in the *Mittelburg*, and *Chamber f* in the *Nordburg*. Schumacher affiliated the *Grabkammer* tombs with the second half of his Second Stratum (Schumacher 1908: 14-15). Schumacher interprets the tomb as a "room" (Room a) that is part of the necropolis, even though both tombs are clearly incorporated into the architecture of the *Mittelburg* as shown on his final plans (Schumacher 1908: 14-15, Pl. IV-VI).

Grabkammer I contained at least six individuals—five adults and one child—who were laid out in different orientations and positions around the sides of the chamber, with the center of the chamber left empty (Schumacher 1908: 15). Two individuals faced west, two faced eastward, one was oriented north, and another south (Schumacher 1908: 15). The chamber contained a stone bench with the skeleton of an adult in an extended position who was interred with high status items such as gold-beveled steatite scarabs and bronze jewelry (Schumacher 1908: 15). The remaining individuals were placed in a flexed position "or squashed together" (Schumacher 1908: 15). Based on these descriptions of the body positioning, all of the individuals can be identified positively as primary inhumations.

Grabkammer II is a small masonry-constructed chamber tomb that contained at least 12 individuals who were "lying partly above and partly beside each other" in different orientations (Schumacher 1908: 20). He describes the remains as "crumbly" and "mostly scattered around in disarray" (Schumacher 1908: 20), so it is impossible to say how many individuals were buried in the chamber. The descriptions are conflicting: he goes on to describe an unknown number of individuals laid in flexed position with large vessels placed near their heads (Schumacher 1908: 20-21). It is clear from the description, however, that a variety of body disposals were practiced. Two individuals, identified as adolescents 12-15 years old, were found with bronze bead anklets *in situ*, suggesting that these were undisturbed primary inhumations (Schumacher 1908: 20). The two tombs are likely dated to the MB III/LB I on the basis of architecture, finds, and stratigraphy (Schumacher 1908:Figures 9-9a, 17-18a; Gonen 1992b: 154-155; Pechuro 2013: 223-226; Finkelstein 2013:Table 4.3). Schumacher excavated two infant jar burials and a pit burial in the vicinity of the built tombs (Schumacher 1908: 17-23).

Chamber f is a monumental masonry-constructed tomb that measures ca. 20 m^2. The tomb was accessed via a stepped *dromos* that led below ground from the floors of the Stratum VIII/VII *Nordburg* building. *Chamber f* likely dates to the Late Bronze I-II periods (see Pechuro 2013; Finkelstein 2013).[45] In the earlier Middle Bronze strata of the *Nordburg*, Schumacher excavated two jar burials that contained the remains of infants or young children as well as two simple pit burials, one of which contained the remains of two adult individuals (Schumacher 1908: 54-56).

Burial Type, Disposal Method, Age-at-Death, and MNI

In some cases, Schumacher recorded individuals' age-at-death and the sex of the skeleton. However, the scientific merit of these findings is questionable and the ages are difficult to verify based on the available evidence. It is not clear on what basis he made age identifications, which may not be credible.[46] As with the Oriental Institute excavations, photos and hand-drawn illustrations of selected burials in publication (Schumacher 1908) allows for coarse-grained visual verification (Table 13). Similarly, body disposal may be inferred only for those burials that were published with adequate figures.

In general terms, the data demonstrate that the category of secondary/co-mingled was well-attested in Schumacher's corpus; this body disposal method is present in four out of six burial contexts (Table 14). MNI and age of the decedents could not be determined with much certainty; there are too many unknowns. The descriptions and photographs of jar burials provided the most reliable data. The most minimal estimates of Schumacher's evidence show that the burials contained at least 17 subadults distributed in 13 burials, and at least 11 adults distributed in four burials.

[45] The structure was looted in antiquity, leaving no traces of original grave goods or osteological remains. The identification of *Chamber f* as a tomb is based on its context and architecture (Pechuro 2013).
[46] Schumacher was trained in architecture, surface surveying, and topography, and he did not appear have employed any qualified physical anthropologists or other scientists in his archaeological work (Daubner 2012: 84).

Age	Number of individuals
Subadult	17
Adult	11+
UID	6+
Total	24+

Table 13. Distribution of age-at-death, Schumacher's necropolis.

Context	Stratum	Primary	Secondary/co-mingled	Primary/secondary
Chamber D1	2	0	2+	N/D
Chamber D2	2	0	2+	N/D
Grabkammer I	2	6	N/D	N/D
Grabkammer II	2	2+	10+	N/D
Chamber f	N/D	N/D	N/D	N/D
Necropolis	1-2	11	1?	1?

Table 14. Distribution of body disposal methods by burials excavated by Schumacher.

Tel Aviv University Excavations: The Megiddo Expedition

The Megiddo Expedition is run under the auspices of Tel Aviv University. The project has been active at the site since 1992 and has produced three volumes of reports: *Megiddo III* (Finkelstein, Ussishkin, and Halpern 2000), *Megiddo IV* (Finkelstein, Ussishkin, and Halpern 2006), and *Megiddo V* (Finkelstein, Ussishkin, and Cline 2013).[47] The project has exposed 39 burials belonging to the Middle Bronze and Late Bronze periods from across the site in Areas K, H, and J (Table 15). These burials contained at least 82 individuals.

Excavation methods and research goals of the Megiddo Expedition have developed over the years, with an increasing emphasis on slow and careful exposure of burials. With the introduction of Total Stations at the site in 2012, recent excavation recording includes digital illustration, georeferenced orthophotography, and 3D modeling (Prins 2016). In Areas K and H, most burials have been excavated under the guidance of an osteologist who measures skeletal remains *in situ*. However, the quality of data varies from season to season and area to area.[48]

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[47] The next volume, *Megiddo VI* (Finkelstein, Martin, and Adams 2018), contains the full stratigraphic reports of Area H (Cradic 2018) and Area K (Martin et al. 2018) as well as reports on burials from Area K (Martin and Cradic 2018; Martin, Cradic, and Kalisher 2018) and Area J (Adams and Cradic 2018). The relevant stratigraphic report of Area J appears in *Megiddo V* (Adams and Bos 2013).

[48] Osteological data was not available from the 1994, 1996, 1998, 2000, and 2010 seasons because the skeletal remains were never analyzed, and the original material is no longer accessible. Cursory osteological data from those seasons is presented here based on field observations, photographs, and plans (Adams and Cradic 2018).

The expedition has recovered MB-LB burials regularly since the 2010 excavation season with the exposure of the MB III/LB I (Stratum X/IX) house in Area K's Building 12/K/15, a courtyard house ca. 240 m^2 which contained 15 burials (Martin et al. 2018). Burials from the MB I-III periods were encountered sporadically during the excavations of Area J from 1994-2010, producing 22 burials from Levels J-8 through J-12/13 (Strata XIV-X). Two burial contexts dating to the MB II and LB I were exposed in 2016 inside an elite residence or palatial annex building in Area H, Building 14/H/87 (Strata IX-XI), which contained at least eleven individuals.

Area	Jar	Simple pit	Masonry-lined pit	Earthen Shaft	Masonry-constructed chamber	UID	Total
H	0	1	0	0	1	0	2
J	3	6	2	10	0	1	22
K	3	9	2	0	1	0	15
Total	*6 (15%)*	*16 (41%)*	*4 (10%)*	*10 (26%)*	*2 (5%)*	*1 (3%)*	*39 (100%)*

Table 15. Distribution of burials by type uncovered by the Megiddo Expedition.

Area H

Area H is located in the northwest of the site, abutting Oriental Institute's Area AA, which contained monumental palace and gate complexes during the late Middle Bronze and the LB I-II periods (Figure 11; Table 16). Of relevance to this discussed are structures from Level H-14 (Building 14/H/12, dated to the LB IIA period) and Levels H-15 and H-16 (Building 14/H/87, MB II-LB I). Both structures are extensions of the elite palace sector, which was not well preserved in the west (Cradic 2018; Loud 1948:Figures 380-382). Building 14/H/87, which contained two burials, has not been fully exposed due to the confines of the narrow excavation area (10 m wide). However, two architectural and stratigraphic sub-phases of Building 14/H/87 have been identified: Levels H-16 (early) and H-15 (terminal) (Figures 12-13). During the early phase, dated to the MB II-III, the building functioned primarily as a mortuary complex. During its terminal phase, dated to the LB I, Building 14/H/87 functioned as an elite residential building. The Level H-15 building is characterized by well-preserved architecture complete with beaten earth floors, storage features, and cooking installations including a tabun; at least one burial feature; and an impressive assemblage of *in situ* local and imported vessels that are characteristic of the LB I period (Cradic 2018; Martin 2018).

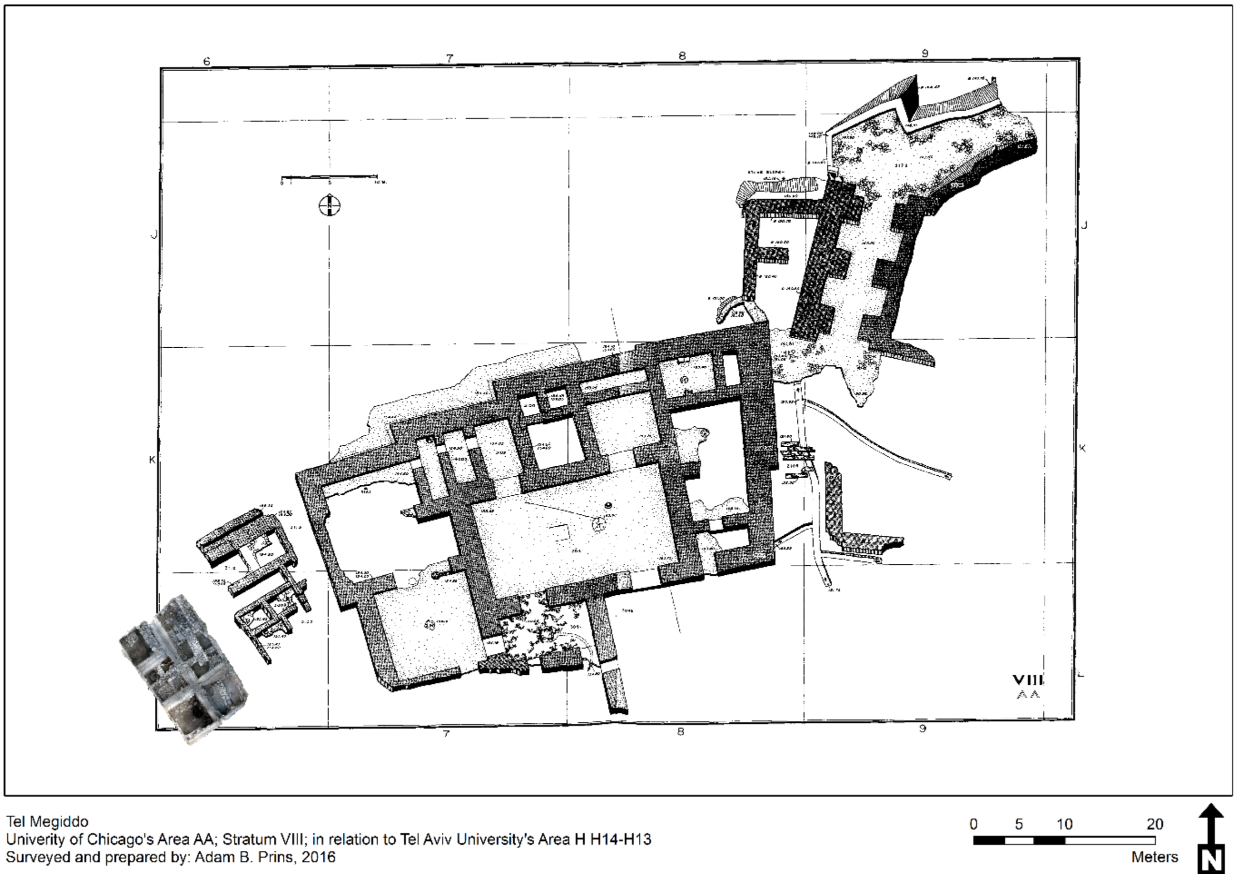

Figure 11. Plan of Area H (west) in relation to Area AA (east). Palace 2041 (Stratum VIII) is the monumental structure situated east of Area H's Building 14/H/12 (image by A. Prins; adapted from Loud 1948:Figure 382).

Two undisturbed burial contexts containing at least 11 individuals were uncovered in Building 14/H/87: Burial 16/H/45, a simple pit burial dating to the LB I period (*ca*. 1500 B.C.E.), and Tomb 16/H/50 (Tomb 50), a monumental masonry-constructed chamber tomb that dates to the MB II-III period (*ca*. 1650-1550 B.C.E., Stratum X) (Table 17). Burial 16/H/45 and Tomb 50 are the first burials to emerge of what it is likely a larger mortuary corpus in Area H, based on previous findings from Area AA and recent excavation of the contemporaneous Building 12/K/15 in Area K.

Burial 16/H/45 contained two adult individuals who were inhumed together after a short gap of time. Individual 1, a primary inhumation, was placed in the pit after the original inhumation of Individual 2, who was disturbed and disposed secondarily in order to accommodate Individual 1 within the shared burial space (see Chapter 8). The simple pit was cut into habitation surfaces and abutted Chamber 55, an enigmatic stone-lined pit to the north in Square F/9 that may be a disturbed stone-lined pit or stone-built shaft burial (Figure 12). The burial contained an assemblage of five ceramic vessels, including two decorated wares imported from Cyprus, as well as two beads, a ceramic stopper, two pins, faunal remains, and fragments of bronze and faience (Table 50).

Tomb 50 is a monumental masonry-constructed chamber tomb (Figures 12-14). The *dromos* was filled with rubble and has not yet been excavated. The narrow passage slopes downward from south to north, leading to a rectangular burial chamber *ca*. 1.5 m wide x 2.35 m long x 1.15 m high from the ceiling to the main depositional layer. The chamber's gabled roof consisted of four massive limestone slabs sitting on top of slightly corbelled interior walls constructed of unworked medium fieldstones. The tomb is the only feature unearthed so far in Area H that is affiliated with Level H-16, so its broader context is not yet clear. The chamber was built on top of a thick mudbrick structure, likely the Stratum XII city wall; the mudbricks are identical in size and composition to the Stratum XII city wall excavated in Area K (R. Homsher, pers. comm.; Figure 14).

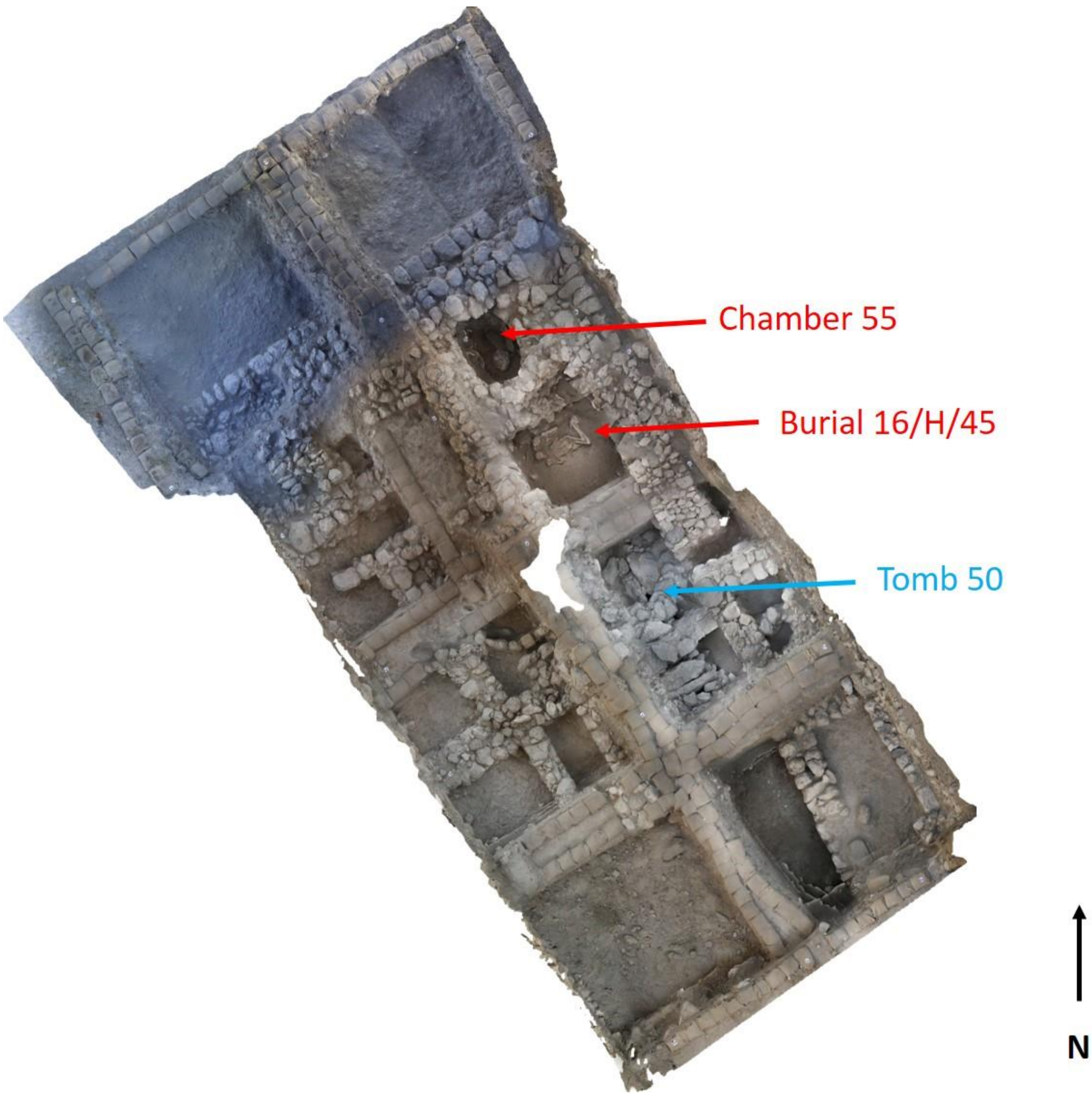

Figure 12. Orthophoto of Area H at the end of the 2016 season. Level H-15 features are labeled in red; Level H-16's Tomb 50 is labeled in blue. Image prepared by A. Prins, R. Homsher, and M.Cradic. Courtesy of the Megiddo Expedition.

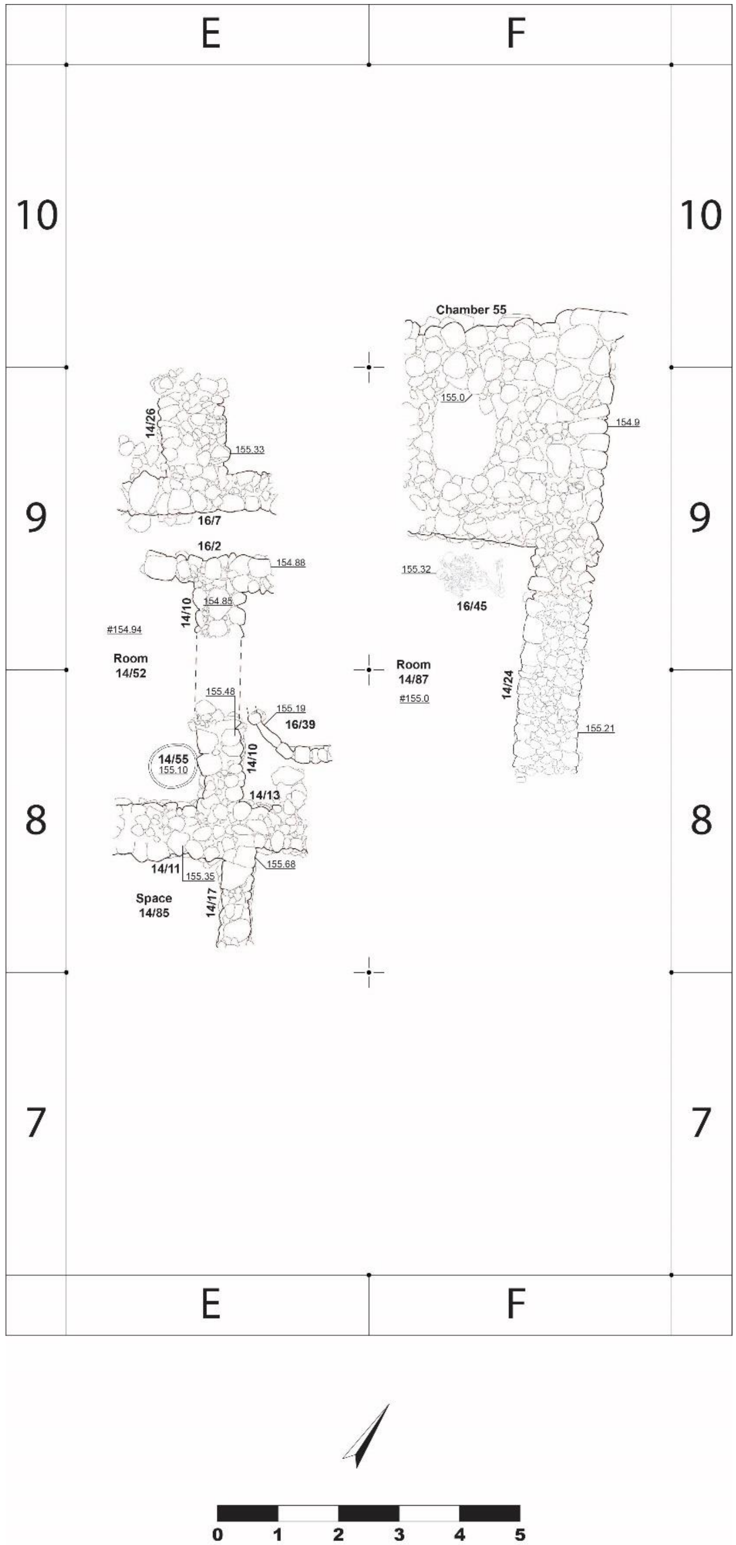

Figure 13. Plan of Level H-15, Building 14/H/87. Illustration prepared by C. Herriott. Courtesy of the Megiddo Expedition.

Oriental Institute Stratum	*Tel Aviv University Level*	*Date (B.C.E.)*	*Period*	*Main Features, Area H*	*Main features, Area AA*
VIB-VIIA	H-12	12th century	LB III	Residential area	Palace and gate
VIIB	H-13	13th century	LB IIB	Residential area, Building 12/H/84	Palace 2041
VIII	H-14	14th century	LB IIA	Residential area, Building 14/H/12	Palace 2041
IX	H-15	15th century	LB I	Elite residential area, Building 14/H/87	Monumental courtyard structure (early palace?) and subfloor burials
X	H-16	16th century	MB II-LB I	Monumental mortuary complex	Monumental structure (early palace?) and subfloor burials

Table 16. Summary of Middle and Late Bronze Age stratigraphy in Area H, Levels H-13 through Level H-16.

Figure 14. Tomb 50 interior facing northwest with Stratum XII mudbricks visible after removal of burial deposits. Photo by R. Homsher. Courtesy of the Megiddo Expedition.

The burial assemblage of Tomb 50 included 26 ceramic vessels; two calcite vessels; one faience scaraboid; and dozens of pieces of worked and incised bone/ivory inlays in several discrete assemblages. In addition to this impressive array of finds, the primary inhumations were richly decorated with bodily ornamentation that included bronze, silver and gold jewelry; beads made from stone, faience, and shell; bronze and silver pins paired with gold brooches; and a belt or beaded textile made of hundreds of small, perforated seashells.

Burial Type, Disposal Method, Age-at-Death, and MNI. The sample size in Area H is limited, so discussion will focus on body disposal method and age-at-death rather than burial type, which is evenly distributed between one simple pit and one masonry-constructed chamber tomb. The most striking observation is the co-presence of different body disposal methods within each of these discrete contexts, both of which exhibited a combination of primary, secondary, and co-mingled inhumations. Beyond the shared disposal methods, important differences distinguish the two burials: Burial 16/H/45 contained one primary and one secondary inhumation who were buried in close proximity in time and space. Once sealed, the burial was not disturbed and was probably not marked. In contrast, Tomb 50 exhibited all three disposal methods, but the individuals were separated spatially and temporally, possibly according to their disposal method. The secondary and co-mingled individuals were concentrated in the back (north) of the tomb, while the three primary inhumations that were interred later were clustered in the front and center of the tomb.

Body positioning and orientation were identifiable among the primary inhumations and also show variation. Individual 1 in Burial 16/H/45 was laid west-east in a supine flexed position, with the knees to the right side of the body (south). Both arms were bent toward the body and both hands rested on the upper torso (Figure 15). In Tomb 50, Individual 1 was oriented north-south in a right lateral flexed position. Individuals 2 and 3 were perpendicular to Individual 1 (see Chapter 8, Figures 44-45). These individuals were superimposed and both were laid in a supine position, but in opposite orientations so that the head of Individual 2 rested on the feet of Individual 3 with their pelvises overlapping. Individual 3's legs were splayed, with the feet resting on a platter that contained faunal remains (Figure 16). No clear patterns of orientation or body positioning emerge from the burials; diversity is the rule.

Burial	***Level***	***Date***	***Burial Type***	***Individual***	***Disposal***	***Age***	***Sex***	***Articulation***	***Position***	***Orientation***
16/H/45	H-15	LB I	Simple Pit	1	Primary	Adult	N/D	Articulated, well preserved	Supine flexed, arms flexed and hands resting on torso. Cranium facing upward.	W-E
16/H/45	H-15	LB I	Simple Pit	2	Secondary	Adult	N/D	Disarticulated	Long bones stacked and intermingled with sheep/goat bones. Cranium facing NE.	W-E
16/H/50 Tomb 50	H-16	MB II-III	Masonry-constructed chamber tomb	1	Primary	Adult	Female	Articulated, well preserved	Right lateral flexed, arms flexed and hands resting on torso. Cranium facing west.	N-S
16/H/50 Tomb 50	H-16	MB II-III	Masonry-constructed chamber tomb	2	Primary	Adult	Male	Articulated, some disturbance and softening of bones	Supine, legs flexed to the left, arms flexed and hands resting on torso. Cranium facing upward.	E-W
16/H/50 Tomb 50	H-16	MB II-III	Masonry-constructed chamber tomb	3	Primary	Child, 8-10 years	UID	Articulated, bones soft and not well preserved	Supine, splayed legs, arms extended away from body.	W-E
16/H/50 Tomb 50	H-16	MB II-III	Masonry-constructed chamber tomb	4	Secondary	UID	UID	Disarticulated	UID	E-W?
16/H/50 Tomb 50	H-16	MB II-III	Masonry-constructed chamber tomb	5-9	Secondary co-mingled	Adult (all)	UID	Disarticulated	Scattered and co-mingled	Scattered and co-mingled

Table 17. Summary of burials in Area H, Levels H-15 and H-16.

Figure 15. Orthophoto of Burial 16/H/45. Photo by A. Prins. Courtesy of the Megiddo Expedition.

Figure 16. Legs of Individual 3 in splayed position, oriented E/W. Individual 2 overlaid Individual 3. Photo by A. Prins. Courtesy of the Megiddo Expedition.

Age-at-death also stands out as an important pattern. Unlike the usual predominance of subadult individuals in residential burials of Megiddo, as clearly demonstrated in Areas AA, BB, J, and K, nearly all of the individuals inhumed in Area H's elite burials were adults—several individuals were mature adults over the age of 60—at the time of their deaths. Only one child was identified, Individual 3, in Tomb 50. This young individual, aged ca. 8-10 years, may have been of special status or lineage to be selected for inclusion in the chamber tomb that was otherwise reserved for adults of high status as indicated by their relative wealth and good health.

Area J

Area J is a continuation of Oriental Institute's excavations in the eastern sector of the site in Area BB (Figures 8-9). Results from the Tel Aviv University and Oriental Institute excavations demonstrate that during Stratum XIV to XIII, the MB I period, the eastern part of the *tell* functioned as a residential area with a small shrine (Table 18; Loud 1948:Figures 395-397; Adams and Bos 2013). During Stratum XII–X in the MB II-III, the area developed into an elite compound and cultic center which were built in the central and western parts of the area (Loud 1948: 87; Adams and Bos 2013: 128).

Oriental Institute Stratum	*Tel Aviv University Level*	*Period*	*Main Features, Areas BB and J*
XV	J-7	Intermediate Bronze	Temples 4040, 5192, and 5269
XIVB	J-8	MB I	House with burials
XIVA	J-9	MB I	House with burials; stone-lined Silo 06/J/140; Temple 4040 re-use
XIIIB/A	J-10	MB I	Terrace wall 08/J/18; massive fill
XII	J-11	MB II	Elite complex
XI	J-12	MB II	Elite complex
X	J-13	MB III-LB I(?)	Elite complex

Table 18. Summary of Area J stratigraphy (after Adams and Cradic 2018:Table 1).

Unsurprisingly, Area J has yielded similar results in terms of the density and diversity of intramural burials. The twenty-two excavated burial contexts contained at least 28 individuals. A range of burial types is represented including simple, stone-lined, and earthen shaft pits; jar burials; and the Hypogeum Complex 06/J/37 (Table 19). The burials span the entire Middle Bronze period, with most belonging to the MB I (Adams and Cradic 2018). Eighteen burials belong to sub-floor domestic contexts, and the five burial loci of so-called Hypogeum Complex 06/J/37 are associated with an elite complex of Stratum XII-XI ("Palace", Adams and Bos 2013; Adams and Cradic 2018).

Burial Type, Disposal Method, Age-at-Death, and MNI. Burial architecture in Area J, like in Areas AA and BB, tended to be basic and modest. Unlike the Area BB excavations, Area J was devoid of masonry-constructed chamber tombs, which could be due to excavation bias.

Simple pit burials (n=6) and their subtype, earthen shaft burials (n=10), were the most frequently attested burial type, followed by jar burials (n=3). Although simple architecture was prevalent, several of the burials elaborated on the template of simple pits, including two stone-lined pits (Burials 98/J/69 and 10/J/190). The ten earthen shaft burials account for 45% of the burials in Area J, bringing the total of burials dug into earth (without stone linings) to 86% of the assemblage (Adams and Cradic 2018). Counting the stone-lined pits within the general pit burials category, together the pit and shaft burials make up 95% of the corpus. These patterns closely mirror Oriental Institute's findings in the same excavation area (cf. Tables 3 and 19).

Keeping with broader site-wide trends, primary inhumation was the predominant disposal method across burial types for individuals of all ages. Disposal method was identified for 21 burials, all of which were primary inhumations. Fourteen burials contained single inhumations, and five burials contained two or more inhumations. Burial 10/J/136 did not contain any human remains, and three burials (10/J/113, 10/J/171, 10/J/172) contained only fragmentary bones.

Burial	*Level*	*Oriental Institute*	*Period*	*Burial Type*	*Individual*	*Disposal*	*Age*	*Sex*	*Position*	*Orientation*
10/J/126	J-8	XIV	MB I	Jar	1	Primary	Subadult	N/D	UID	SE-NW
10/J/172	J-8	XIV	MB I	UID	1	UID	UID	UID	UID	UID
10/J/190	J-8	XIV	MB I	Stone-lined pit	1	Primary	Subadult	N/D	Supine flexed	N-S
00/J/104	J-8-J-10	XIV-XIII	MB I	Shaft?	1	Primary	Subadult 3 years	N/D	N/D	N/D
10/J/171	J-8-J-10	XIV-XIII	MB I	Shaft?	1	UID	N/D	N/D	N/D	N/D
98/J/83	J-8-J-10	XIV-XIII	MB I	Simple pit	1	UID	N/D	N/D	N/D	N/D
10/J/100	J-9	XIV	MB I	Jar	1	Primary	Subadult	UID	Left lateral flexed	NE/SW
10/J/113	J-9	XIV	MB I	Jar	1	Primary	Subadult	N/D	Individuals placed next to each other inside storage jar	E-W
10/J/113	J-9	XIV	MB I	Jar	2	Primary	Subadult	N/D	Individuals placed next to each other inside storage jar	E-W
94/J/65	J-8-J-10	XIV-XIII	MB I	Simple pit	1	Primary	Adult?	N/D	N/D	N/D
98/J/77	J-10	XIIIA	MB I	Simple pit	1	UID	N/D	N/D	N/D	N/D
98/J/88	J-10	XIIIA	MB I	Shaft	1	UID	Adult	N/D	N/D	N/D
06/J/129	J-8-J-10	XIV-XIII	MB I-II	Simple pit	1	Primary	Adult	Female	N/D	N/D
10/J/136	J-10 or later	XIII or later	MB I	Shaft	0	--	--	--	--	--
98/J/69	J-8-J-10	XIV-XIII	MB I	Stone-lined pit	1	UID	N/D	N/D	N/D	N/D
06/J/107	J-12-J-13	XI-X	MB II-III	Shaft	1	Primary	Adult	Female	Supine flexed	N-S
04/J/56	J-8-J-10	XIV-XIII	MB I-II	Simple pit	1	Primary	Adult	UID	N/D	NE-SW
96/J/26	J-11-	XII-XI	MB II	Hypogeum	1	UID	UID	UID	UID	UID

	J-12									
06/J/37	J-11-J-12	XII-XI	MB II	Hypogeum	1	Primary	Adult 18-25 years	Female	UID	S-N
06/J/37	J-11-J-12	XII-XI	MB II	Hypogeum	2	Primary	Subadult 15-18 years	UID	Supine?	S-N
06/J/37	J-11-J-12	XII-XI	MB II	Hypogeum	3	Primary	Adult 25-30 years	Male	UID	S-N
06/J/37	J-11-J-12	XII-XI	MB II	Hypogeum	4	Primary	Mature adult	Male	UID	UID
04/J/75	J-11-J-12	XII-XI	MB II	Hypogeum	1	Primary	Adult	Female	Right lateral flexed	N-S
04/J/75	J-11-J-12	XII-XI	MB II	Hypogeum	2	Primary	Subadult 8-9 years	UID	Right lateral flexed	N/S
04/J/86	J-12-J-13	XI-X	MB II-III	Shaft	1	Primary	Subadult 5-6 years	UID	Supine flexed?	S-N
06/J/8	J-12-J-13	XI-X	MB III	Simple pit	1	Primary	Mature adult	Male	Supine, right arm extended	E-W?
06/J/8	J-12-J-13	XI-X	MB III	Simple pit	2	Primary	Young adult	UID	UID	UID
06/J/75	J-11-J-12	XII-XI	MB II	Hypogeum	1	Primary	Young adult	Female	UID	N-S?
06/J/75	J-11-J-12	XII-XI	MB II	Hypogeum	2	Primary	Subadult 14-15 years	UID	UID	N-S?

Table 19. Summary of burials from Area J (after Adams and Cradic 2018:Table 2; osteological data after Sameora 2013; Sameora and Adams 2018).

The ages-at-death were determined for 22 out of the 28 individuals at different levels of precision. Osteological analysis was conducted on 11 of the individuals excavated during the 1994-2006 seasons (Tables 65-66) and the remaining identifications are based on field observations and photographs. Adult and subadult populations are evenly distributed, with a slightly higher representation of adults (n=12), who make up 55% of the population. Nearly half (n=10; 45%) of the individuals are subadults. These proportions fall within the expected ratios of the burial population at Megiddo. Biological sex was determined for eight adult individuals from six burials, five of whom were female (ca. 63%) and three of whom were male (ca. 38%). Although these results may indicate a large share of female individuals, the dataset should be viewed cautiously in light of its limitations and under-representation of the full set of burials.

In summary, single primary inhumations in pit burials of various types predominate the Area J burial assemblage. Although the dataset is problematic in the uneven quality of the available evidence, some tentative conclusions can be drawn. Age and sex distributions are relatively even and representative of the mortality profiles of the ancient population, with nearly equal representation of subadults and adults as well as males and females, where identifiable. Overall, burials from this area are more homogenous than the results from other areas in terms of burial type, body disposal method, and MNI.

Area K

The excavation of the courtyard house Building 12/K/15 of Level K-10 (MB III–LB I) in Area K, located on the southeast of the mound, has yielded 15 intramural burials that contained the remains of at least 43 individuals (Figure 17).[49] Twenty-three individuals were identified in Tomb 100, a masonry-constructed chamber tomb, and 20 individuals were distributed among fourteen jar, simple pit, and masonry-lined pit burials (Tables 20-21).[50]

Simple Pit Burials. Nine of the 15 burials are simple pit inhumations. The pit dimensions were not identifiable in most cases, but their approximate sizes and shapes could be inferred based on the age, size, and positioning of the skeleton (Martin, Cradic, and Kalisher 2018). The ages-at-death of the individuals ranged from under one to over 40 years old, which impacted the depth and widths of the pits. Five burials contained subadult individuals, of which four were infants (Burials 14/K/59, 14/K/66, 14/K/67 and 14/K/103), and one was a child (Burial 10/K/88). Three burials contained adult individuals (Burials 12/K/59, 12/K/89, 12/K/96).[51] With the exception of Burial 12/K/96, all of the simple pit burials contained a single inhumation in a flexed position.

Jar Burials. Three jar burials were identified in the corners of walls (Burials 10/K/83, 10/K/118, 14/K/175). The vessel types included one jug (10/K/83), one storage jar (14/K/175) and one pithos (10/K/118) (Martin, Cradic, and Kalisher 2018). Each of the burial vessels was modified to insert the corpse; the neck and shoulder of the vessels were broken in the case of Burials 10/K/83 and 14/K/175, and a large hole near the neck of the container of Burial 10/K/118 probably served this same purpose (Martin, Cradic, and Kalisher 2018). The containers were then sealed with sherds that were placed on top of the opening. Part of the storage jar of Burial 14/K/175 was covered with the sherd of an inverted krater (cf. Schumacher 1908:Abb. 23), and the mouth of the pithos burial (14/K/118) was closed with a body sherd (Martin, Cradic, and Kalisher 2018). The breaking and sealing of vessels used for burial occurred widely across the Levant and Nile Delta and therefore can be characterized as a regional practice that placed priority on the burial container, i.e. ceramic storage vessel, over the dimensions or practicality of such a container (cf. Yadin *et al*. 1960: 85; Bloch-Smith 1992: 31; Ilan 1996: 248; Kempinski 2002: 46–47; van den Brink 1982: 19–20; Doumet-Serhal 2004: 108; Ben-Ami 2005: 170; Birney and Doak 2011: 33).

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[49] The full report will appear in the *Megiddo VI* volume (Martin, Cradic, and Kalisher 2018, in press).
[50] Burials of earlier levels and a few additional Level K-10 burials discovered in the 2016 season are not yet analyzed and are not included here.
[51] The age of the individual in Burial 12/K/27 is undetermined.

Locus	*Burial type*	*MNI*
10/K/83	Jar burial (jug)	1
10/K/88	Simple pit burial	1
10/K/100	Masonry-constructed chamber	23
10/K/118	Jar burial (pithos)	3
12/K/27	Simple pit burial	1
12/K/59	Simple pit burial	1
12/K/89	Simple pit burial	1
12/K/96	Simple pit burial	2
14/K/49	Brick-lined pit burial	2
14/K/59	Simple pit burial	1
14/K/66	Simple pit burial	1
14/K/67	Simple pit burial	1
14/K/103	Simple pit burial	1
14/K/175	Jar burial (storage jar)	2
14/K/200	Stone-lined pit burial	2

Table 20. Summary of burials from Level K-10 Building 12/K/15 (adapted from Martin, Cradic, and Kalisher 2018:Table 4.1).

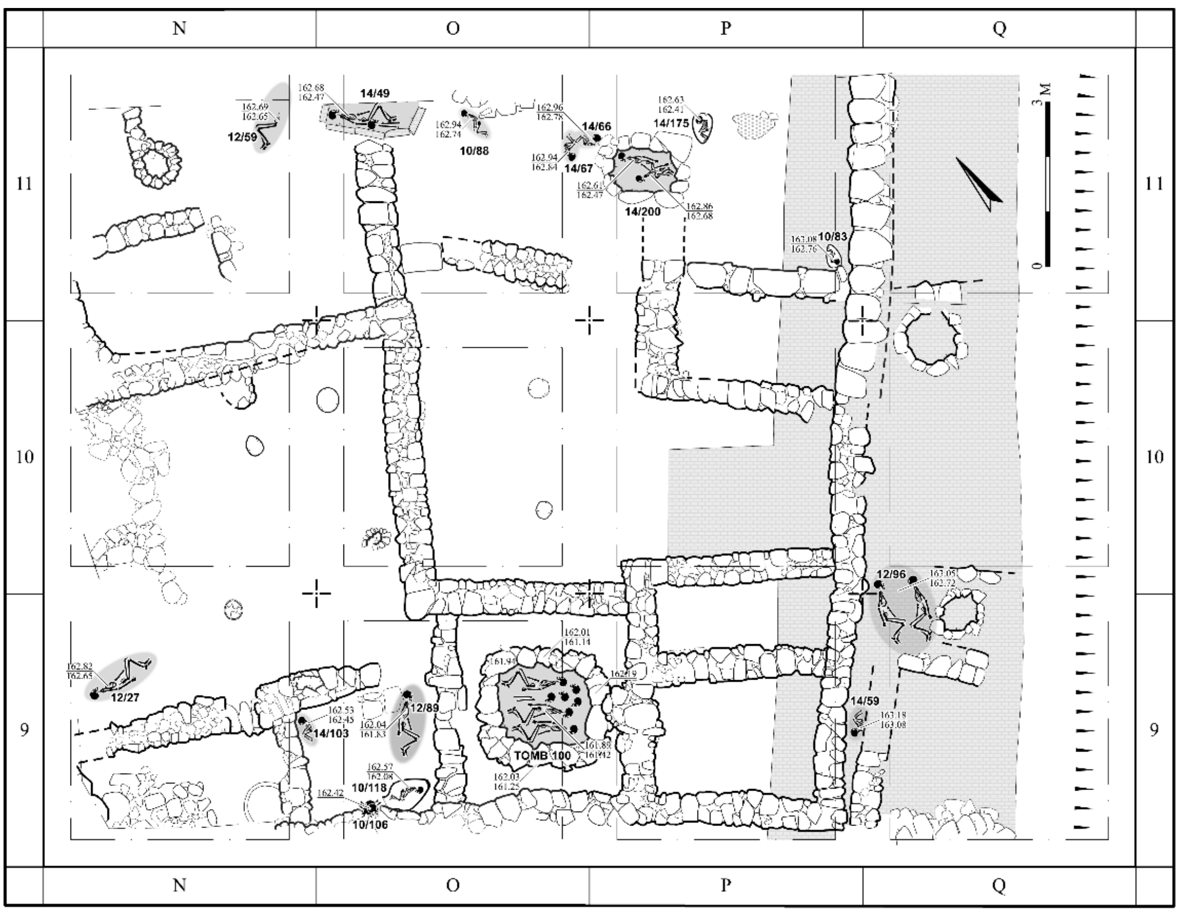

Figure 17. Plan of Level K-10 Building 12/K/15. Illustration by A. Pechuro. Courtesy of the Megiddo Expedition.

Burial	*Individual*	*Disposal*	*Age*	*Sex*	*Articulation*	*Position*	*Orientation*
10/K/83	1	Primary	Neonate	UID	Articulated, well-preserved	Right lateral flexed (fetal position)	SSW (head) – NNE
10/K/88	1	Primary	Child (2.5-3 y)	UID	Partially articulated, badly preserved, cranium smashed	Right lateral flexed	N - S (legs)
10/K/118	1	Primary?	Neonate	UID	Postcranial remains relatively well-preserved, skull fragmentary	Undetermined	Undetermined
10/K/118	2	Primary	Child (3.5-4 y)	UID	Poorly articulated	Found head first at bottom of vessel, position undetermined	Probably ESE (head) - WNW
10/K/118	3	Secondary?	Adolescent (14-16 y)	Male	Remains of cranium and jaws	-	-
12/K/27	1	Primary	UID	UID	Articulated	Left lateral flexed	WNW (head) - ESE, facing NE
12/K/59	1	Primary?	Adult (age undetermined)	UID	Partially exposed, poorly articulated	Undetermined	Possibly ENE - WSW (legs)
12/K/89	1	Primary	Adult (25-30 y)	Male	Articulated, well-preserved	Supine flexed (legs to left); arms strongly flexed (across chest)	NE (head) - SW, facing SSE
12/K/96	1 (SE)	Primary	Adult (40+ y)	Female	Articulated, partially preserved	Supine(?)	NNE (head) - SSW, facing WNW
12/K/96	2 (NW)	Primary	Adult (20-25 y)	Female?	Articulated	Supine flexed (legs to left); arms strongly flexed (across chest)	NNE (head) - SSW, facing ESE
14/K/49	1	Primary	Adult (20-25 y)	Male	Apart from legs, fully articulated	Supine extended; arms strongly flexed (across chest)	NW (head) - SE
14/K/49	2	Primary (disturbed)	Adult (40+ y)	Female	Not articulated, only partially preserved	-	-
14/K/59	1	Primary	Infant (1-1.5 y)	UID	Partially articulated, poorly preserved	Undetermined	SW (head) - NE, facing NW
14/K/66	1	Primary	Infant (8-9 m)	UID	Articulated	Supine(?) flexed (legs to right)	SE (head) - NW
14/K/67	1	Primary	Infant (1.5-2 y)	UID	Articulated, poorly preserved (only skull and torso)	Supine(?); arms along body, slightly flexed	SW (head) - NE
14/K/103	1	Primary	Infant (1-2 m)	UID	Articulated, complete	Right lateral flexed(?); right arm extended along body, phalanges near pelvis	NNE (head) - SSW, facing WNW

14/K/175	1 (upper)	Primary	Infant (1-2 m)	UID	Articulated	Right lateral flexed; arms extended along body	NNE (head) - SSW, facing NNW
14/K/175	2 (lower)	Primary	Infant (1-2 m)	UID	Articulated?	Undetermined	Probably NNE (head) - SSW
14/K/200	1 (upper)	Primary?, disturbed	Juvenile (8-9 y)	UID	Partially articulated, skull displaced, poorly preserved	Undetermined	Possibly WNW (head) - ESE
14/K/200	2 (lower)	Primary	Juvenile (10.5-11.5 y)	UID	Articulated	Supine flexed (legs to right); right arm slightly flexed (across pelvis)	NNW (head) - SSE, facing E

Table 21. Individuals in pit and jar burials of Level K-10 Building 12/K/15 (after Martin, Cradic, and Kalisher 2018:Table 4.2).

Masonry-Lined Pit Burials. Building 12/K/15 contained two masonry-lined burials, Burial 14/K/200, a stone-lined pit, and Burial 14/K/49, a brick-lined pit. Burial 14/K/200 comprised a rectilinear cavity that measured ca. 1.0 m high, 0.7 m wide, and 0.5 m deep. Fieldstones lined the pit on all four sides and was in-filled with brick debris, which sealed the grave goods and the two superimposed individuals whose skeletons were separated by a thin layer of debris. The grave was not marked above ground (Martin, Cradic, and Kalisher 2018). Burial 14/K/49, a shallow pit burial, was lined with brick masonry and sealed with hard-packed sediment (Martin, Cradic, and Kalisher 2018). The pit contained two individuals, the secondary inhumation of an adult female and the primary inhumation of an adult male (Table 21).

Masonry-Constructed Chamber. Building 12/K/15 contained one masonry-constructed chamber tomb, Tomb 100, which was located under the plaster floor of Room 12/K/88 (Figures 17-18). The rectangular tomb was constructed of fieldstone masonry and covered with a roof built of fieldstone slabs which formed a corbelled vault. The chamber measured ca. 1.4 m high from floor to ceiling, 1.5 m wide, and 1.7 m long (Figure 19). The tomb was accessed on the northwest side through a narrow threshold ca. 0.55 m wide that was sealed with a flat slab placed upright. The architecture and entrance are closely paralleled in T.51 from the Eastern Slope cemetery (Guy and Engberg 1937: 53, Figure 53). As I explain in Chapter 8, its construction and long use spanned the entire phase of the Level K-10 building, ca. 100-150 years, the span of four to five generations. The earliest vessels in the burial assemblage date to the MB III, and the latest vessels date to the LB IB (ca. 1600–1450 BCE) (Martin and Cradic 2018).

Figure 18. Tomb 100 before removal of roofing stones. Note that the white plaster floor of Room 12/K/88, which sealed the tomb, is visible in the north and east sections. Photo by M. Schaeffer. Courtesy of the Megiddo Expedition.

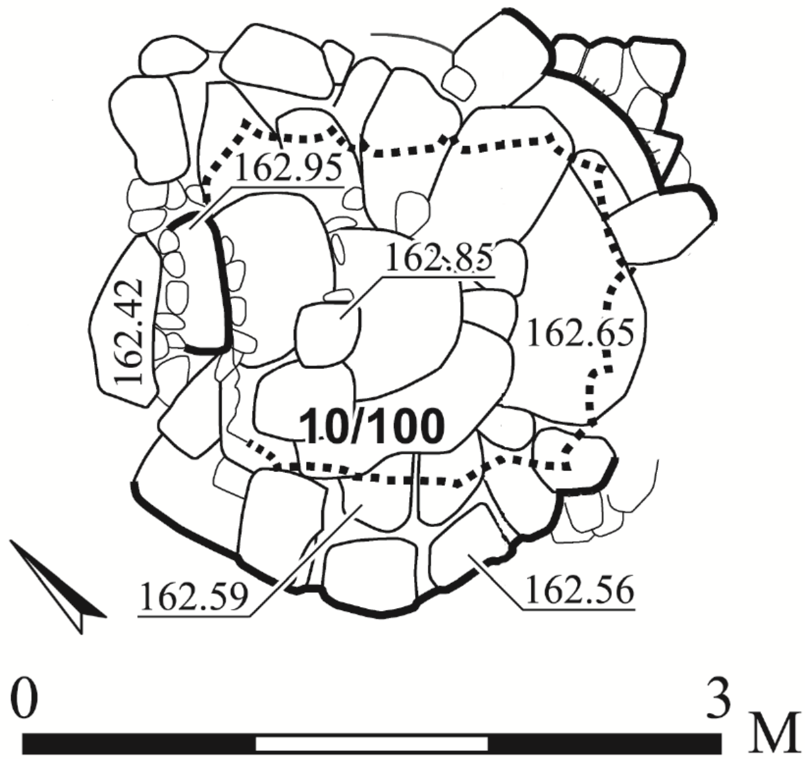

Figure 19. Schematic architectural plan of Tomb 100. Illustration prepared by A. Pechuro. Courtesy of the Megiddo Expedition.

The skeletal remains of the 23 individuals who were inhumed inside the chamber were co-mingled and fragmented remains of secondary or compound disposals. Not a single individual was in articulation, although isolated cases of partial articulation were encountered. The chamber's contents consisted of disarticulated human and animal bones, much of which was poorly preserved, brittle, or had turned to fine bone dust (Martin and Cradic 2018). The skeletal remains were interspersed with an assemblage of grave goods including 61 intact or mostly complete pottery vessels; 13(+) bronze objects; two silver objects; two stone vessels; four scaraboids; and dozens of fragments of incised bone inlays (Tables 42-43; Martin and Cradic 2018). The dense accumulation of finds completely covered the tomb floor with debris ca. 0.50-0.65 m thick, leaving a space of ca. 0.75-0.9 m high between the top of the accumulation and the roof (Figure 20). The bones and artifacts were concentrated in a "bone heap" in the back (southeast) of the chamber, opposite of the entrance, which was relatively clear of debris (Martin and Cradic 2018).

I discuss further in Chapter 8 that the high degree of disarticulation and degradation of the remains inside the chamber can be explained as the accumulative result of repeated disturbance to the chamber in antiquity. The skeletal remains of all 23 articulated individuals could not fit inside the chamber, but the disarticulated and fragmented remains of these individuals could be accommodated. The earlier depositions of human remains and offerings were displaced, disarrayed, and disarticulated upon a new deposit or visitation to the tomb.

Figure 20. Topmost depositional layer inside Tomb 100 (Layer 1). Facing southeast. Photo by M. Schaeffer. Courtesy of the Megiddo Expedition.

Burial Type, Disposal Method, Age-at-Death, and MNI. The dataset of 43 individuals from Building 12/K/15 yielded 16 adults, who comprised 37% of the individuals, and 26 subadults who made up 61% of the population (Table 22). These proportions of subadults to adults compare well with the findings from Areas AA, BB, and CC, where subadult individuals outnumber adult individuals. In Area K, the quality of the data allows for further insights on age-at death, particularly regarding the youngest individuals whose bones may degrade faster than the bones of adults and therefore may not be fully represented in MNI counts (Bello and Andrews 2006; Martin, Cradic, and Kalisher 2018). Infants comprise 23% of the total burials in Building 12/K/15. When isolated for only the pit and jar burials, this proportion rises to 40% of the population. These figures reflect the expected rates of infant mortality in the second millennium B.C.E. (Martin, Cradic, and Kalisher 2018). Similar proportions of infants found in intramural contexts have been encountered at Middle Bronze Tel Dan (Ilan 1996: 293–294); Middle-Late Bronze Age Tel Yoqne'am (Smith, Nebel and Faerman 2005:Table V.4), MB II–LB I Ta'anach (Lapp 1969: 27–28; Hallote 1994: 192–193); Middle Bronze Tell el-Far'aḥ (N) (Mallet 1973, 1987, 1988; Hallote 1994: 197); and Middle Bronze Tell el-Da'ba (van den Brink 1982: 94; Martin, Cradic, and Kalisher 2018).

Comparing the pit and jar burials with Tomb 100 reveals additional patterns. Tomb 100 contained a higher proportion and quantity of adults (n=10, 44%) than the intramural pit and jar burials (n=6, 30%) but an equal number of subadults (n=13), who comprised 57% of the chamber tomb's decedents as opposed to 65% of the pit and jar burial population. Subadults are represented in high proportions in both datasets.

Sex identifications were more limited than age identifications. The skeletal remains of sixteen of the 43 individuals, mostly adults, could be sexed. Among the combined dataset, the ratio is evenly split among males (44%) and females (56%), and individually the two intramural burial datasets exhibit roughly the same patterns (Table 23). Based on these ratios, neither age nor sex appear to have been major variables in determining which individuals were selected for which intramural burial type with the obvious exception of the jar burials. Rather, the inclusive age and sex distributions among both datasets correspond with expected age and mortality profiles of co-residential or other inter-generational group such as an extended family or lineage (Cradic 2017). I expand on the factors involved in selecting disposal methods in Chapters 7 and 8, arguing that demographic considerations were less important than the social role of the decedent within the household after burial.

Burial type	*Infants (<2 y)*	*Children (2-6 y)*	*Juveniles (7-12 y)*	*Adolescents (13-17 y)*	*Adults (18+ y)*	*Undet.*	*Total*
Jar burials	4	1	-	1	-	-	6
Simple pit burials	4	1	-	-	4	1	10
Masonry-lined pit burials	-	-	2	-	2	-	4
Subtotal	*8 (40%)*	*2 (10%)*	*2 (10%)*	*1 (5%)*	*6 (30%)*	*1 (5%)*	*20*
Chamber-tomb 10/K/100	2 (9%)	6 (26%)	3 (13%)	2 (9%)	10 (44%)	-	23
Grand total	*10 (23%)*	*8 (19%)*	*5 (12%)*	*3 (7%)*	*16 (37%)*	*1 (2%)*	*43 (100%)*

Table 22. Age distributions of individuals in Building 12/K/15 (after Martin, Cradic, and Kalisher 2018:Table 4.3; data after Faerman 2018 and Faerman and Smith 2018).

	Subadults (<18 y)		*Adults (18+ y)*			
Burial type	*Female*	*Male*	*Female*	*Male*	*Total female*	*Total male*
Jar burials	-	1	-	-	0	1
Simple pit burials	-	-	2	1	2	1
Masonry-lined pit burials	-	-	1	1	1	1
Subtotal	*0*	*1*	*3*	*2*	*3 (50%)*	*3 (50%)*
Chamber-tomb 10/K/100	1	1	5	3	6 (60%)	4 (40%)
Grand total	*1*	*2*	*8*	*5*	*9 (56%)*	*7 (44%)*

Table 23. Sex distribution (where determined) of individuals in Building 12/K/15 (after Martin, Cradic, and Kalisher 2018:Table 4.4; data after Faerman 2018 and Faerman and Smith 2018).

Body disposal employed in Building 12/K/15 encompassed the spectrum of inhumation methods. Nineteen individuals were identified as primary inhumations, four of which were disturbed or uncertain primary disposals. One individual in a jar burial (Individual 3, Burial 10/K/118), and four from Tomb 100 (Individuals 1, 2, 3 and 4) were likely secondary; and 19 individuals of Tomb 100 were compound disposals.

Disposal method was evaluated based on calculation of taphonomic index, which relied on field observations of skeletal completeness and articulation combined with the results of osteological analysis (see Chapter 8; Table 48). For the pit and jar burials, 12 individuals among 11 burials contained individuals that were reasonably complete and articulated to the extent that it was clear that the burials had not been disturbed in antiquity. These were identified as primary inhumations (see Table 46). Eight individuals among six burials contained skeletons that were incomplete (some of the burials contained individuals in both categories). Three of these burials were identifiable as primary inhumations after lab analysis (Faerman 2018), which demonstrated that the criteria for primary burial were met due to the presence of small bones of the hands and feet (see Table 47). For subadults whose remains were poorly preserved, such as Individual 1 in Burial 10/K/88, the presence of articulated bones, in this case, vertebrae and limbs, was adequate for identifying the burials as a poorly preserved primary inhumation.

Distribution of Intramural Burials at Megiddo

The total corpus of 271 intramural burials can be broken down into several categories for analysis. In Chapter 7, I evaluate demographic factors of age-at-death and biological sex as possible variables for selection of burial type, context, and disposal method. Here I focus on the frequencies of burial types and their distributions within the site of Megiddo. Intramural burial peaked during the MB II through LB I periods (Strata XII-IX) in terms of both quantity and diversity of burial type and disposal methods. The frequencies of pit and jar burials were more consistent and were represented in higher numbers throughout time and space than the more architecturally complex chamber tomb structures. Masonry-constructed chamber tombs first appeared in the MB I-II period (Stratum XIIIA), peaked during the MB III-LB I periods (Strata X-IX), and persisted through the LB I-II periods (ca. Stratum VIII).

Simple pit burials were consistently the most numerous burial type throughout the site in different strata and represent half (ca. 50%) of the entire burial corpus (Table 24). Simple pits contained inhumations of all age groups, mostly singly but occasionally with more than one individual. Simple pit burials were followed closely in frequency by jar burials, which make up 26% of the corpus. Jar burials occasionally outnumbered simple pit burials in specific contexts, such as in Schumacher's "necropolis" and in Area BB Strata XIII. Thirty-nine masonry-lined pits comprise 14% of the assemblage, followed by 16 masonry-constructed chamber tombs, which account for 6% of the corpus.

The earthen shaft burials and Hypogeum complex uncovered in Area J represent a unique phenomenon. These pits are included in the simple pit category here to account for their basic architectural components of a shaft and chamber cut into earth, which did not exhibit any evidence of masonry. Comparanda are few and far between, but may (speculatively) include two features: (1) Schumacher's Burial 7, located in the southern courtyard of the *Nordburg*, and (2) Structure 5239, a stone structure in Area BB (Adams and Cradic 2018; Schumacher 1908: 58-60; Loud 1948:Figure 401). Burial 7 is an unlined pit that contained the poorly preserved remains of four individuals (Schumacher 1908: 58-60). The pit may have been accessible via two stone-lined pits or shafts that were in-filled with ash, burnt animal bones, and earth debris (Schumacher 1908: 58-59, Figures 67-68). The pits could have connected the burial with the Stratum 3 surface, or perhaps more likely, may have served as a repository for ritual offerings related to the burial.

Stratum[52]	Jar	Simple pit*	Masonry-lined pit	Masonry-constructed chamber	UID	Total
XIV	1	11	3	0	4	19
XIII	15	14	6	0	0	35
XII	9	17	8	2	1	37
XI	11	14	2	8	1	36
X	17	15	5	1	1	39
IX	4	22	3	0	1	30
VIII	0	12	1	0	0	13
VIIB	0	0	1	0	0	1
Schumacher's Strata 1-2	8	4	7	3	0	22
Tel Aviv University	6	26	4	2	1	39
Total	*71 (26%)*	*135 (50%)*	*40 (15%)*	*16 (6%)*	*9 (3%)*	*271 (100%)*

Table 24. Tel Megiddo burial distributions by type. *The simple pit category includes earthen shaft burials.

Structure 5239 is a rectilinear structure that was interpreted by the original excavators as a subterranean chamber belonging to Stratum IX (Loud 1948:Figure 401; Ilan 2001). However, this identification and stratigraphic affiliation does not explain its shape—three deep chambers—or its depth. Structure 5239 penetrates 4.5 m in depth, cutting into the remains of Stratum XV (ca. 159.85-155.35 m) (Loud 1948:Figure 401; Ilan 2001: 307; Adams and Cradic 2018). This depth matches the elevations and construction of the Hypogeum Complex 06/J/37, which was cut to a depth of 4.6 m from the surface level of Stratum XI into Early Bronze occupation, with its bottom elevation at nearly the same elevation as Structure 5239 (Adams and Cradic 2018). As suggested by Ilan (2001) and Adams and Cradic (2018), Structure 5239 may be a built shaft

[52] Burials uncovered by the renewed excavations often fall in between the traditional Oriental Institute stratigraphic affiliations. The 18 burials from Areas H and K are late in the sequence, in Strata X, X-IX, and X. In Area J, 15 burials are earlier in the sequence, Strata XIV, XIV-XIII, and XIII, and seven are late and can be associated with Strata XII-IX. Schumacher's Strata 1 and 2 roughly correlate with Strata X-IX.

tomb. The lack of human remains, however, prevents a positive identification of Structure 5239 as a funerary feature.

Following the category of simple pits, Megiddo contained 40 masonry-lined pit burials, most of which fall between Strata XIII-IX (see Table 38). Masonry-constructed chamber tombs, although a rare burial type, stand in a league of their own in terms of architectural complexity and richness of finds. Most of Megiddo's masonry-constructed chamber tombs were affiliated with Stratum XI, the MB III period (Martin and Cradic 2018; Loud 1948). Tomb 100, which correlates with Oriental Institute Strata X-IX, is roughly contemporary with *Grabkammern* I and II (cf. Kempinski 1989: 193). *Chamber f* is likely the latest of the chamber tombs. Pottery provides the best clues for dating the legacy material: characteristic wares such as Bichrome Ware, Base Ring I, and Base Ring II emerge at Megiddo during the MB III, MB III/LB I and LB I periods respectively and can provide relative chronologies (Gonen 1992a: 98-100; Artzy, Perlman, and Asaro 1978; Yannai, Gorzalczany, and Peilstocker 2003).

In summary, burials of all types occurred widely throughout the site. Each area of excavation yielded multiple burial types, exemplifying the high degree of diversity of mortuary practices of the Middle and Late Bronze Age. Even Area H, with the smallest sample size of only two burials, contained two different burial types: one simple pit and one masonry-constructed chamber tomb. Each of these burials contained multiple individuals and exhibited more than one method of body disposal. Areas with larger sample sizes, such as Area BB and Area K, yielded the full spectrum of burial type, context, and body disposal method, which occurred in many different combinations. It is not unusual at Megiddo to find a burial that contained more than one individual and more than one body disposal method. I analyze these patterns in full in Chapters 7 and 8, building on my argument that the ways in which the dead were buried and re-visited determined their personhood status after death.

Summary and Conclusions

The three major excavations that have been conducted at Megiddo over the last century have provided a rich mortuary dataset that lends new insights into practices of intramural burial at the site. Drawing from published and unpublished evidence, I have provided a new and updated synthesis of mortuary patterns at second millennium B.C.E. Megiddo. This chapter's review of Megiddo's 271 intramural burials reveals that intramural burial comprised a widespread practice during the Middle and Late Bronze Age despite the competition for urban space, which was a diminishing resource during this period of prosperity and expansion. The choice of mortuary context was socially and ritually significant, particularly in light of the contemporaneous and expansive extramural cemetery.

The evidence also shows that diversity in death at second millennium B.C.E. Megiddo was the rule rather than the exception. In fact, Megiddo's burials exhibit an even higher degree of variation in burial type, context, and body disposal methods than any other Middle or Late Bronze Age Levantine settlement currently known. As evident in Areas AA, BB, K, J, and H, these mortuary characteristics varied not only between neighborhoods across the site but within a single building and even within a single room. These results are analyzed further for implications regarding posthumous personhood and embodiments of death in Chapters 7 and 8.

CHAPTER 7 – EMBODIMENTS OF DEATH AT SECOND MILLENNIUM B.C.E. MEGIDDO

The previous chapter presented 271 intramural burials that have been excavated at Megiddo, focusing on distributions of burial type, body disposal methods, and context. These burials were located in seven main areas across the site, reflecting a cross-section of the residential and monumental sectors of the Middle and Late Bronze Age cities of Strata XIII-VIIA. This broad dataset represents a sizeable population of the city who chose to bury the dead inside of occupied buildings. The dataset reveals that the Middle and Late Bronze Age elite and non-elite inhabitants of Megiddo shared the same basic set of mortuary practices, particularly a tendency to inhume the dead in pits and jars. However, I demonstrate that the Megiddo data reveal a high degree of variation within each category of burial type, body disposal methods, and context that cross-cuts variables such as age-at-death and wealth. Diversity in death occurred within as well as between contexts during all strata and in all neighborhoods. The degree of diversity raises important questions concerning the relationship between burial practices and the status of the dead after burial, as well as the role of the corpse in the funerary sequence.

This chapter focuses on how body disposal, individuality, body position, and age-at-death correlate with burial type. I also investigate composition of burial assemblages and patterns of spatial distributions of burials throughout the settlement. These patterns of intramural burial at second millennium B.C.E. Megiddo contribute to answering this project's research questions concerning the status of the dead after burial. Within this heterogeneous dataset, a constellation of features stands out that reveals some shared funerary norms, particularly an emphasis on primary inhumation. The findings also highlight correlations between co-mingled burials and masonry-constructed chamber tombs as well as relationships between age-at-death and richness of burial assemblages. These results show that posthumous social outcomes could vary widely, most significantly according to body disposal and age-at-death. Burials that were re-visited for multiple-successive inhumations or for deposition of *kispum*-like offerings of commemoration had different outcomes than those that were not re-opened or marked by rituals of remembrance. The archaeological evidence is clear that a multitude of burial practices occurred contemporaneously; the question is why and how certain bodies were subject to continual physical, social, and ritual manipulation.

I argue that differing treatments of the human remains impacted the status of the dead at both short- and long-term intervals after burial. Bodies that were manipulated after burial received focused attention from the living through close physical encounters between the living and the dead. The duration of such interactions determined the duration of the transformation of personhood after death; the greater the complexity involved in manipulation of the dead body, the closer the dead came to embodying an ancestor. Different embodiments of death co-existed at the site within discrete neighborhoods, buildings, and even rooms. Depending on the circumstances of inhumation, such as location, individuality (MNI), disposal method, and occurrences of re-visitation to a grave-site, specific embodiments of death could continue, transform, or cease personhood at various stages following death and inhumation. I examine these questions below, focusing on how variables of body disposal, individuality, age-at-death, and burial assemblages varied according to burial type.

Body Disposal, Individuality, and Age-at-Death

This section investigates three aspects of body treatment within Megiddo's intramural burials: body disposal, individuality, and age-at-death. I compare these variables within each main category of burial type, which acts as a control. The main types of burial architecture include jar burials, simple pits, masonry-lined pits, and masonry-constructed chamber tombs. Following a brief discussion on body positioning, which does not appear to have been an important mortuary factor at Megiddo, I turn to burial assemblages. The composition of burial assemblages, which are indicators of the richness and investment in a given mortuary context, are examined as a separate variable that may be related to age-at-death, focusing on the recent findings from Area K's corpus of 15 intramural burials in Building 12/K/15.

Jar Burials

Across the Levant, jar burials consistently contained primary inhumations of subadults up to the age of six years, usually with one individual inhumed per jar (see Chapter 5). The practices from Megiddo reflect these trends and represent one of the few cases in which age-at-death played an important role in determining the type of burial architecture. The sample of 71 jar burials provides a robust corpus against which to test these findings. Like in the Levant more broadly, the frequencies of jar burials at Megiddo are related proportionally to the representation of age groups in the burial population, which is characterized by a high ratio of subadults. This age group was also interred in simple pit burials, and occasionally in stone-lined pits, both of which were used for all age groups. The high frequencies of young children among the burial population is not surprising given expected child mortality rates in the Bronze Age (Faerman 2018).

Although the intramural jar burials at Megiddo mostly conform to expectations of the age-at-death and body disposal of the decedent, several exceptions stand out that separate this corpus from the usual patterns of age and number of individuals. In terms of individuality, jar burials containing multiple individuals have been excavated in four out of 71 cases. From the Oriental Institute excavations, a jar burial in Stratum IX Room 4004 in Area AA contained at least two infants (Loud 1948: 132, Figure 357). Schumacher encountered a similar situation in Corridor *g* of the *Mittelburg*, where he described in scanty terms jar burial *a* as containing the skeletal remains of multiple infant individuals (Schumacher 1908: 18–19; Abb. 14–15; Tafel IV). In the Megiddo Expedition excavations, two of the three jar burials in Building 12/K/15 contained more than one individual. Burial 14/K/175 contained the primary inhumations of two infants whose skeletal remains were superimposed and complete. They were likely buried at the same time. Burial 10/K/118 contained the remains of three individuals, one neonate, one child, and one adolescent male. All three individuals were poorly preserved. The adolescent male was represented by cranial fragments only; the remains may have been disturbed accidentally, may be intrusive, or the adolescent may have been disposed secondarily in or near the jar burial. Although secondary inhumations in jar burials are rare, comparanda include two burials from the Middle Bronze Age cemetery at Sidon (Burials 1 and 11; Ogden and Schutkowski 2004: 164–165; Doumet-Serhal 2014: 34), and five burials containing cranial fragments at late second millennium B.C.E. Azor (Bloch-Smith 1992: 32).

Simple Pits

Simple pits were the most frequently attested burial type (see Chapter 6), so it is unsurprising that this type of burial architectural also contained the widest variation in age-at-death, individuality, and body disposal methods. The 39 burials uncovered by the Megiddo Expedition in Areas H, J, and K exemplify this diversity. I focus on this dataset of 17 simple pit burials (excluding earthen shaft and Hypogeum burials from Area H to avoid conflation) as a representative sample of the larger corpus of Middle and Late Bronze Age simple pit burials at Megiddo (n=135) because these variables of body treatment could be confirmed in the recently uncovered burials through careful excavation and laboratory analysis.[53] The 16 pit burials contained 19 individuals (Table 25).

Overall, the simple pit burials show a clear preference for primary inhumation as a disposal method and for single individuality. Body disposal method was identifiable in 17 out of the 19 individuals, 16 of whom were inhumed primarily. One individual, Individual 1 in Burial 16/H/45, was the sole example of secondary inhumation as well as the only case in which co-mingled body positioning occurred. In terms of individuality, in all cases but three the pit burials contained single inhumations, demonstrating that an overwhelming number of the simple pit burials contained only one individual. The three burials containing more than one individual contained just two individuals, all adults. Each area of excavation exhibited one double burial, demonstrating that although these multiple inhumations are relatively rare, they are not unusual and are attested to different areas throughout the site. Of the 19 individuals, the ages-at-death of 16 individuals were identified. Adults (n=11, 69%) are represented in higher proportions than subadults (n=5, 31%), possibly due to the preference to inhume infants and young children in jar burials and stone-lined pits (see below).

[53] This sample excludes the earthen shaft and Hypogeum burials from Area J, which are sub-types of pit burials, to avoid conflation.

Burial	*Period*	*Individual*	*Disposal*	*Age*	*Sex*	*Position*	*Orientation*
98/J/83	MB I	1	UID	N/D	N/D	N/D	N/D
94/J/65	MB I	1	Primary	Adult?	N/D	N/D	N/D
98/J/77	MB I	1	UID	N/D	N/D	N/D	N/D
06/J/129	MB I-II	1	Primary	Adult	Female	N/D	N/D
04/J/56	MB I-II	1	Primary	Adult	UID	N/D	NE-SW
06/J/8	MB III	1	Primary	Adult	Male	Supine, right arm extended	E-W?
06/J/8	MB III	2	Primary	Adult	UID	UID	UID
10/K/88	MB III-LB I	1	Primary	Child	UID	Right lateral flexed	N-S
12/K/27	MB III-LB I	1	Primary	UID	UID	Left lateral flexed	WNW- ESE
12/K/59	MB III-LB I	1	Primary?	Adult	UID	UID	ENE-WSW
12/K/89	MB III-LB I	1	Primary	Adult	Male	Supine flexed	NE-SW
12/K/96	MB III-LB I	1	Primary	Adult	Female	Supine(?)	NNE-SSW
12/K/96	MB III-LB I	2	Primary	Adult	Female?	Supine flexed	NNE-SSW
14/K/59	MB III-LB I	1	Primary	Infant	UID	UID	SW-NE
14/K/66	MB III-LB I	1	Primary	Infant	UID	Supine(?) flexed	SE-NW
14/K/67	MB III-LB I	1	Primary	Infant	UID	Supine(?)	SW-NE
14/K/103	MB III-LB I	1	Primary	Infant	UID	Right lateral flexed(?)	NNE-SSW
16/H/45	LB I	1	Primary	Adult	N/D	Supine flexed	W-E
16/H/45	LB I	2	Secondary	Adult	N/D	Co-mingled	W-E

Table 25. Simple pit burials in Areas J, K, and H.

Masonry-Lined Pits

Megiddo's corpus of 40 masonry-lined pits (Table 24) shows variation in each variable under study: body disposal, individuality, and age-at-death, with patterning evident in this final category, which demonstrates segregation of adults and subadults. Not all of the factors of body disposal method, individuality, and age-at-death were discernable from the available evidence, so the sample sizes reported here vary slightly between each of these categories and reflect the maximum identifications that the data allows.

Masonry-lined pits could contain one or multiple individuals, although single inhumations were more common. Well over half of the stone-lined pit burials, 57% (21 out of 37), contained single inhumations, while 43% (16 out of 37) contained two or more inhumations. The majority of the identifiable cases of body disposal methods—32 out of 39 individuals (82%)—contained exclusively undisturbed, primary inhumations.

The general age classes of 54 individuals from 35 burials could be ascertained from a combination of the Oriental Institute excavators' observation and systematic osteological examination in the Tel Aviv University excavations, The Megiddo Expedition. Overall, Megiddo's stone-lined pit burials were more frequently used for inhumation of subadults, who comprised 63% of the sample (34 out of 54 individuals), than for adults. The remaining 37% of individuals were adults (20 out of 54). Moreover, of the 32 burials in which ages of all decedents could be determined, 66% (n=21) exclusively contained subadults, while a quarter (n=8; 25%) exclusively contained adults. Only three burials, comprising 9% of the sample, contained adult and subadult inhumations together (Martin, Cradic, and Kalisher 2018). No infants were found in any of the recorded masonry-lined pit burials.

In summary, stone-lined pit burials most often contained subadult inhumation(s), primary disposals, and rarely contained adults and subadults together (Martin, Cradic, and Kalisher 2018). This phenomenon has parallels at Middle Bronze Sidon, where stone-lined pits predominately housed single primary inhumations of subadults (Doumet-Serhal 2004; Ogden and Schutkowski 2004). The separation of the deceased by age cohort fits a wider trend among other burial types from Megiddo's Middle Bronze strata (Hallote 2001a: 205), and the special treatment of subadults may specifically relate to the composition and distribution of the burial assemblages (see below).

Masonry-Constructed Chamber Tombs

Megiddo's 16 intramural masonry-constructed chamber tombs (see Table 26) exhibit patterns of individuality, age-at-death (where identifiable), and disposal method. The chamber tombs contained multiple individuals of all ages whose skeletal remains show consistent patterns of disturbance, re-deposition, disarticulation, and fragmentation.[54] Concerning this first category of individuality, a coarse-grained MNI—single or multiple inhumation—could be identified for 10 of the 11 tombs uncovered by the Oriental Institute team; all but one (T.3092) contained multiple inhumations. MNI could also be determined for Schumacher's *Grabkammer* I—where he identified six individuals—and *Grabkammer* II, where he lists 12 individuals (see Tables 36-37; Schumacher 1908: 14-15, 20). Evidence was insufficient for T.4098 and *Chamber f*, both of which were found empty. As discussed above, Tomb 100 contained an MNI of 23 and Tomb 50 contained at least nine individuals. Therefore, in all identifiable cases but one, T.3092 which contained one subadult individual, the chamber tombs contained multiple inhumations, ranging in MNI from six to 23.

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[54] The Eastern Slope cemetery contained one masonry-constructed chamber tomb, T.51, which is excluded from analysis here due to its extramural context (Guy and Engberg 1938: 52-55, Figures 53-56). T.3031 from Area BB Stratum XIIIA is of uncertain identification and is not included here. Further information about the tomb appears in Table 36.

<table>
<tr><th>Stratum</th><th>Period</th><th>Area AA</th><th>Area BB</th><th>Area K</th><th>Area H</th><th>Mittelburg and Nordburg</th></tr>
<tr><td>XII</td><td>MB II</td><td></td><td>T.3092
T.3095</td><td></td><td></td><td></td></tr>
<tr><td>XI</td><td>MB II</td><td>T.3175
T.4055
T.4098</td><td>T.2129
T.3075
T.3080
T.3085
T.3110</td><td></td><td></td><td></td></tr>
<tr><td>X</td><td>MB III/LB I</td><td></td><td>T.3070</td><td rowspan="2">T.100</td><td>T.50</td><td></td></tr>
<tr><td>IX</td><td>LB I</td><td></td><td></td><td></td><td>Grabkammer I, Grabkammer II</td></tr>
<tr><td>VIII</td><td>LB I/IIA</td><td></td><td></td><td></td><td></td><td>Chamber f</td></tr>
</table>

Table 26. Masonry-constructed chamber tombs from Megiddo, Strata XII-VIII.

Age-at-death is challenging to determine from photographic evidence, so the sample is small and includes the two chamber tombs uncovered by the Megiddo Expedition and Oriental Institute T.3080, where one adult individual is visible in a photograph (Loud 1948: Figure 215). In the Megiddo Expedition sample of Tomb 50 and Tomb 100, all age groups (adult and subadult) were present, although in different proportions. This may have been the case with other chamber tombs, as hinted at by Schumacher for *Grabkammern*, for example, although the ages of the decedents cannot be confirmed (Schumacher 1908: 14-15, 20).

Body disposal methods could be identified in four of the Oriental Institute tombs, T. 3080, T.2129, T.4055, and T.3175, and two tombs from the Megiddo Expedition, Tomb 100 and Tomb 50. Based on photographic evidence, T.2129, T.4055, and T.3175 contained co-mingled secondary or compound deposits of multiple individuals (see Table 68). T.3080 contained both primary and secondary inhumations (see Table 68). From the Megiddo Expedition dataset, Tomb 100 contained exclusively co-mingled compound disposals, and in Tomb 50 primary inhumations were co-present with co-mingled secondary or compound disposals (see Chapter 6). Schumacher's descriptive evidence can be used cautiously as an indicator of the use of at least one disposal type, primary inhumation, in *Grabkammer* I and the presence of primary, secondary, and co-mingled compound disposals in *Grabkammer* II. Because it is impossible in some cases to differentiate secondary and compound disposals when the skeletal remains are co-mingled using photographic evidence alone, these categories are combined into one category of co-mingled burials, which includes secondary and compound disposals together. In total, the sample set includes eight tombs: four contained co-mingled deposits; three contained a combination of the full spectrum of disposal methods; and in one (unconfirmed) case, a chamber tomb contained only primary disposals. At least 88% of the tombs in the sample evidence co-mingling of the skeletal remains.

In summary, chamber tombs contained inhumations of multiple individuals. In most or all cases, disposal methods indicate that the chambers were re-used. This evidence points to shared values in death for those selected for deposition in shared burial spaces of the chamber tombs; co-mingled deposits, achieved through secondary or compound disposal, was the normative practice for chamber tombs. This required re-visitation to the burial site on numerous occasions, which is a clear indicator of the intentionality of the practice to achieve fragmentation and mixing of the remains of multiple individuals. These activities likely took place within the chamber, rather than removing corpses or moving bodies into the chamber after initial decomposition. The chamber served as the primary locus of initial and subsequent disposals.

Body Position

Body positioning and orientation are important components of the taphonomic record and merit discussion. Positions are presented based on a combination of how the body was laid—e.g., on the back, front, or side—and the position of the limbs, whether extended or bent. Without much variation, Megiddo's intramural burials fall within six main categories of body position, all of which are typical for Levantine burials of the Middle and Late Bronze Age (after Martin, Cradic, and Kalisher 2018):

(1) Supine: Corpse is interred on the back, facing upwards.
(2) Lateral: Corpse is laid on the side.
(3) Flexed: Legs are flexed, with knees pulled towards the torso.
(4) Extended: Legs are extended.
(5) Prone: Corpse is laid face-down on the stomach.
(6) Co-mingled: Skeletal remains are disarticulated and intermixed with other skeletal and material remains.

Body Position	Right Lateral Flexed	Left Lateral Flexed	Supine Flexed	Supine Extended	Supine Unknown	Prone Extended	Co-mingled	Unknown	Total
Number of Individuals	20	8	22	3	10	1	28	47	139

Table 27. Individuals by burial position in Strata XI–VIII, Areas AA, BB and CC, and in Areas H, J, and K (adapted from Martin, Cradic, and Kalisher 2018:Table 5).

The body positions of 139 individuals were evaluated combining the variables of flexion and side of the body. Identifications could be made for 92 individuals, while 47 cases remain unknown (Table 27).[55] Martin, Cradic, and Kalisher (2018) have demonstrated that age generally does not relate to burial position, although several other patterns come to light: (1) supine positioning is more common than any other position (ca. 25% of individuals); (2) lateral and co-mingled positioning are equally represented, each accounting for ca. 20% of individuals; (3) right lateral flexed, supine flexed, and co-mingled positions are fairly evenly represented, each taking a share of ca. 14-20% of the corpse arrangements; (4) flexed skeletons are far more common than extended positions, representing 36% of the sample; (5) among lateral inhumations, right-sided positioning outnumbers individuals laid on their left side; and (6) supine extended and prone positions are rare.

[55] The dominant position was recorded in cases where more than one position is represented by different body parts belonging to the same individual (such as cases where the cranium or legs fell opposite the rest of the body during decomposition).

In terms of orientation, the inhabitants of Megiddo followed existing architecture rather than any cardinal direction or other point of reference when burying their decedents (Martin, Cradic, and Kalisher 2018). This lack of consistency in directionality was the norm in the Middle and Late Bronze Age Levant (Gonen 1992a: 18; Hallote 1994: 61; Brody 2008: 528) and has been documented elsewhere, at Tel Dan (Ilan 1996: 248), Ashkelon (Brody 2008: 518), Tell el-'Ajjul (Gonen 1992a: 118) and in the Nile Delta (van den Brink 1982: 39–44). Therefore, while orientation does not appear to have been a major mortuary consideration, the same is not true of body positioning.

The sample of 139 individuals from across the site represents a wide variety of body positions. All of the positions except for co-mingled remains are generally associated with primary inhumations that have retained their original placements from deposition until excavation. Despite this fact, co-mingled positions are disproportionately high. Co-mingled bodies account for 20% of the body positions, and rises to 28% when counting only the 97 identifiable cases. Co-mingled positions represent the highest proportion within a single category among all of the options. Given the high frequency of primary inhumations in jar, simple pit, and masonry-lined pit burials reviewed above, the high representation of co-mingled positions is surprising and is likely due to the strong correlation between co-mingled skeletal remains and masonry-constructed chamber tombs. These two variables are closely related and support the argument detailed in Chapter 8 that masonry-constructed chamber tombs served as the ritualized loci of transformations of personhood after death, particularly for those individuals selected for ancestorhood.

Burial Assemblages

Issues of body treatment aside, another important mortuary variable to consider is the burial assemblage. Although the richness and quality of the burial assemblage could vary, the overall composition of the materials included with the human remains was relatively consistent. Objects and non-human skeletal remains found in burials, if included at all, were simple, low in quantity, and fall into three main categories: (1) ceramic vessels; (2) faunal remains; and (3) non-ceramic small finds including pins, rings, earrings, beads, scarabs, and pieces of decorated bone inlay. Although most burials contained grave goods, it is not unusual to encounter simple pit and jar burials at Megiddo that lacked any accompanying materials whatsoever. For example, in Building 12/K/15, four out of 15 burials—all simple pits containing individuals of various ages (12/K/27, 12/K/59, 14/K/59, and 14/K/103)—were completely devoid of any grave goods (Martin, Cradic, and Kalisher 2018). In Area J, grave goods were present in 13 burials but completely absent in eight burials (see Tables 63-64), whereas in Area H both Burial 16/H/45 and Tomb 50 contained burial assemblages. The absence of associated materials points to low material investment in the mortuary context during the interment phase and also generally indicates a lack of post-interment activities at the burial locus.

Ceramics. When grave goods are present in a burial, ceramics are consistently the most frequently attested type of material culture found in graves across categories of age, burial type, and disposal method. Pottery can range from plain wares to decorated fine wares such as Cypriot imports. The ceramic assemblage is based around three main vessel types: juglets, jugs/jars, and plates/bowls (Martin, Cradic, and Kalisher 2018). For southern Levantine burials at large, juglets and bowls each comprise 36% of the assemblages and jugs/jars make up 16% of the funeral kit (Hallote 1994: 84, Figure 13).

The ratios of these vessel classes in the MB III-LB I (Strata X-IX) intramural burials of the Oriental Institute excavations closely resemble the proportions of vessels deposited in the pit and jar burials in Building 12/K/15, where the total assemblage consists of 30 vessels and eight stoppers (see Table 40). These ceramic vessels were present in 11 graves (see Table 41). Juglets (57%) are the most common vessel type, followed by nearly equal proportions of bowls (23%) and jugs (20%) (Martin, Cradic, and Kalisher 2018). Ceramic stoppers found inside or in close proximity to burials may have originally belonged to these jugs and juglets, or may be remnants of libation offerings at the grave-site (see Chapter 8). Alternatively, they could simply be residual debris from the associated household. Along these same lines, overall the types of vessels included in the burials of Building 12/K/15 were not special but were identical to vessels that make-up the daily-life occupational assemblage. Therefore, the vessels were likely sourced from the household assemblage rather than being obtained specially for the funerary context, as was the case in residential burials of late third millennium B.C.E. Mesopotamia (Nishimura 2015). Imports were rare in the burials of Building 12/K/15; only two vessels (7%) were long distance imports, both from Cyprus: one Cypriot Monochrome bowl and one Cypriot Base Ring I spindle bottle (Martin, Cradic, and Kalisher 2018).

Differences in composition and quantity of vessels stand out between masonry-constructed chamber tombs and other burial types. The constructed tombs contained richer, more varied, and more elaborate assemblages of ceramics and non-ceramic grave goods than any other burial type. For example, the ten constructed tombs at Middle Bronze Tel Dan, which comprised 30% of the site’s MB II-LB I intramural burials, contained 54% of the vessels from the entire site’s burial assemblages (Cradic 2011: 26). The chamber tombs not only contained proportionally more vessels than other burial types but also a higher ratio of vessels per individual, particularly the overall share of lamps (86%), jars (75%), bowls/plates (65%), and imported pottery (Cradic 2011: 26-27, Table 4.4). The rich assemblages found in masonry-constructed chamber tombs were partially a result of their function as re-used mortuary spaces that were continually accumulating human remains and materials over long spans of time. The assemblages attest to the material significance of these tombs and underscore their role in rituals of the funerary sequence that involved deposition of offerings.

As an example of the phenomenon of burial assemblages in masonry-constructed chamber tombs, I utilize Building 12/K/15 and Building 14/H/87 to compare the distributions of pottery in pit and jar burials with the pottery in masonry-constructed chamber tombs. In Building 12/K/15, Tomb 100 contained a more diverse pottery assemblage than the other burial types, including a higher share of lamps and fewer bowls. The chamber tomb’s assemblage was composed of ca. 39% juglets, 23% lamps, 21% jugs, 8% bowls, and 3% storage jars (Figure 21; see Table 43). The remaining three vessels, encompassing ca. 5% of the assemblage, were Cypriot imports, which mirrors the pit and jar burials’ two imports (ca. 7%). Tomb 100’s 23 MNI were afforded with 61 vessels, a ratio of ca. 2.65 vessels per individual, which is nearly double that of the other burials in Building 12/K/15. The 30 vessels from the pit and jar burials were distributed among 20 MNI, a ratio of 1.5 vessels per individual. Similarly, in Building 14/H/87, chamber Tomb 50 contained 26 vessels, a ratio of ca. 2.9 vessels per individual (see Table 52). The ceramic assemblage in Tomb 50 differs from both Tomb 100 and from the broader assemblages of pit and jar burials and is dominated by bowls/plates (ca. 42%), followed by juglets (ca. 27%), jars (ca. 15%), lamps (ca. 8%) and jugs (ca. 8%). In contrast, simple pit Burial 16/H/45 contained five vessels, a relatively high ratio of 2.5 vessels per individual. This assemblage is unusually rich for a simple pit burial and contained three Cypriot imports, comprising 60% of the entire assemblage. Its vessel distributions concentrate on the three main vessel types: two bowls (40%), two jugs (40%), and one juglet (20%).

Figure 21. Ceramic assemblage of Tomb 100. Photo by P. Shrago. Courtesy of the Megiddo Expedition.

Non-Ceramic Small Finds. For burials that contained grave goods, non-ceramic small finds were also relatively common among all burial types. In the pit and jar burials of Building 12/K/15, metal jewelry—mostly composed of bronze or copper alloys—was present in five burials, and stone beads of various types were present in three burials, always occurring in groupings of six or more beads. Other finds included fragments of kohl, a faience plate, two perforated shells, and decorated pieces of worked faunal bone used as inlays for small boxes (Naeh 2018; see Table 40). Burial 16/H/45 contained an array of small finds including several gold objects in addition to the usual repertoire which in this case included a bronze pin, shell bead, and fragments of bronze and faience (see Table 50).

The chamber tombs contained the richest of the burial assemblages in terms of quantity, variation, and presence of high value objects such as gold and silver artifacts. Tomb 100 contained at least eight bronze pins, two daggers with bronze handles—one handle included a degraded ivory inlay—two silver rings, in addition to four scarabs/scaraboids and dozens of pieces of incised bone inlays in an array of geometric motifs (Figures 22-24; see Table 42). In Tomb 50, the three articulated individuals were richly dressed with valuable body decorations. Individual 1 was outfitted with two anklets made of uniform bronze beads, as well as a shell belt or embroidered fabric situated across the hips (see Chapter 8, Figure 8.30). This belt or embroidery was comprised of hundreds of identical white shell beads that were found *in situ* aligned horizontally across the lower torso of Individual 1. A silver pin and red-gold brooch with a green bead were also found with this individual (see Chapter 8, Figure 55). Individual 2 was buried with a gold torque, gold bracelet, and gold headband (Figures 24-25; see Chapter 8, Figure 56). Individual 3 was wearing five silver finger rings and beads made of white shell, blue faience, and black stone. Two additional sets of silver pins and associated red-gold brooches were found in the chamber, along with a third bronze bead anklet, two silver pins, two to three bronze pins, two stone vessels, a scaraboid, a gold earring, and dozens of pieces of incised and carved bone inlays, many of which were decorated with figural motifs (see Chapter 8: Figure 54; see Table 50). These worked bone pieces were likely carved from cattle bones (Sapir-Hen, pers. comm.).

Figure 22. Bronze toggle pin (10/K/120/AR013) from Tomb 100. Photo by P. Shrago. Courtesy of the Megiddo Expedition.

Figure 23. Bronze blade with hilt (10/K/102/AR001) from Tomb 100. Photo by P. Shrago. Courtesy of the Megiddo Expedition.

Figure 24. Fragments of decorated bone inlays in geometric and figural motifs from Tomb 100. Photos by P. Shrago. Courtesy of the Megiddo Expedition.

Figure 25. Gold headband (top), gold torque with duckhead clasps (bottom), and gold bracelet (center) found with Individual 2 in Tomb 50. Photograph by the Israel Museum. Courtesy of the Megiddo Expedition.

Faunal Remains. Unworked faunal bones were found in four burials of Building 12/K/15: 12/K/89, 14/K/49, 14/K/200, and Tomb 100. In each case, the faunal assemblage included caprine and deer. The assemblage was particularly rich and varied in the case of Burial 14/K/200, which contained bones of a gazelle and another large mammal (Sapir-Hen, Martin, and Finkelstein 2017). In Building 14/H/87, preliminary results show a strong, even exclusive, preference for young sheep and goat which were found in both burial contexts, Burial 16/H/45 and Tomb 50 (Sapir-Hen pers. comm.).[56] The latter grave contained an abundance of faunal bones, most of which were either complete and/or elements in articulation. The bones may have derived from cuts of meat intended for consumption and may correlate with the high proportion of serving vessels, particularly bowls and plates, that were found within Tomb 50 (see Chapter 8, Figures 51-53).

Many of the faunal remains were carefully placed near the corpse in particular ways. In two cases (Burials 14/K/49, 14/K/200) faunal remains in partial articulation were positioned to the left and/or right sides of the lower torsos of the deceased, and in Burial 12/K/89 faunal bones were found near the human cranium. Faunal bones have been found inside vessels in two burials: Burial 14/K/200, where a bone was placed inside a bowl, and in Tomb 50, where two platters contained articulated remains of sheep/goat. The placement of faunal bones inside serving vessels indicates an intention for consumption by the living or by the dead. Beyond the placement of the faunal remains, the composition of the faunal assemblages of the burials was selected for particular species and differed from the assemblages of occupational contexts (Sapir-Hen, Martin, and Finkelstein 2017). Together, all of these factors point to intentional ritual deposits, whether for consumption, a burial gift, or a sacrifice (Horwitz 1987, 2001).

The Funerary Landscape: Spatial Distributions of Intramural Burials

Residential Building 12/K/15 serves as a useful case study for intramural burials of the mid-second millennium B.C.E. The structure exemplifies the diversity of death and burial practices that occurred together within a single occupational context. The house contained a wide variety of mortuary practices in terms of burial architecture; grave goods; body disposal methods; and number of individuals per burial. These differences also relate to the visibility of death and burial within the urban landscape and the accessibility of graves following interment. Despite the high density of burials within Building 12/K/15, few were re-used or marked in any way above ground, indicating that commemoration and visitation of the dead was limited to only certain burials which received ongoing offerings. However, the integration of the burials within the living space of the household attests to the close, if concealed, relationships between the living and the dead during this period at Megiddo.

Relationship to Architecture

Spatial distribution of burials within occupied buildings follow the same basic patterns across the site; the burials' relationship to architecture in Building 12/K/15 closely matches patterns from Area AA (Strata XII-X) and Area BB (Strata XI-VIII), in which burials of different types, age groups, and degree of elaboration co-occurred within the same rooms, or in adjacent rooms. In Building 12/K/15, two burials were placed alongside the building's exterior wall,

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[56] As of December 2017, the faunal remains from Burials 16/H/45 and Tomb 50 have not yet been analyzed fully, precluding any definitive determinations of the age or sex of the fauna in the burial assemblage.

cutting into the Stratum XII mudbrick fortification that abutted the building on the southeast side. All other burials were cut into existing floors of six, roofed rooms inside the house situated around the central courtyard. A similar arrangement was documented in Area BB, such as at House 3002 in Stratum X (Table 28). This courtyard house parallels Building 12/K/15 in its architectural plan and the layout of its burials (cf. Figures 5-6 and 15; Martin, Cradic, and Kalisher 2018; Loud 1948: Figures 400-402). Masonry-constructed chamber tomb T.3070 occupied its own room within House 3002. Several other burials were nearby in neighboring rooms, in this case including the courtyard, which differs from most other cases where there is a marked avoidance of the unroofed courtyard (Loud 1948: Figure 400).

The burials were typically not marked in any way but were oriented with and placed next to wall foundations. Along with this clear preference for burying along the edges of the room, another pattern emerges based on age of the decedent: corners were preferred for the youngest individuals, small children and infants (Burials 10/K/83, 10/K/118, 14/K/103, 14/K/175) (Martin, Cradic, and Kalisher 2018). After interment, the floors were repaired and the cuts left no identifiable trace (Martin, Cradic, and Kalisher 2018).

Approximately half of the rooms of Building 12/K/15 contained at least one inhumation, and several rooms (B1a, E2, and H) yielded more than one burial. In contrast, the central courtyard (Space A) did not contain burials (Martin, Cradic, and Kalisher 2018). Room 12/K/88 (also termed Space E2) presents a special case. This space contained four burials: two simple pit burials (12/K/89, 14/K/103), a jar burial (10/K/118), and Tomb 100. It is not unusual to find burials of the same stratum in the immediate vicinity of a chamber tomb. For example, Schumacher encountered this situation in the *Mittelburg*, where many burials were found near *Grabkammer* I, including *Grabkammer* II, beside which were pit and jar burials (Schumacher 1908: 13-22).

Grave Marking

Grave marking was rare at Megiddo. In only two burials from the Oriental Institute excavations could any possible grave marker be discerned from published photographs: T.2017 (Area CC, Stratum IX), an infant burial in a partial stone-lined pit, where a possible stone slab was identified (Loud 1948: Figures 360, 408); and Tomb 5050 (Area BB, Stratum XI), the inhumation of a child in stone-lined pit (Loud 1948: 126: Figure 326). However, both of these burials are stone-lined pits, so what was identified as possible markers could simply have been part of the grave construction. Schumacher (1908: 56) noted a few cases where cup-like stones abutted graves or served as part of their construction. Subtle grave markers, such as plaster floors, may have identified important burial loci for household residents (Hallote 2001a: 36). This is likely the case for Tomb 100, although the extent to which the grave was ever visible above the surface of the floor is not clear.

Across the Levant, the installation of storage jars and *pithoi* at the head or foot of a burial, or built into its structure in the case of masonry-lined pits and chamber tombs, may have served the dual purpose of marking the grave-site and functioning as a repository for libations (DePietro 2012: 85-86; Brody 2008: 523). The jar mouths would be visible above the surface of the subterranean inhumation. This practice has been documented in LB I and LB II burials at Ashkelon (brick-lined pit Burial 169; Brody 2008: 523); Azor (simple pit D80); Tell Abu Hawam (eleven pit burials); Tell el-Far'ah (N); Tell Fekheriye; Deir el-Balaḥ (DePietro 2012: 86); Lachish (Singer-Avitz 2004); Tell el-Dab'a; and Tell es-Sa'idiyeh (Tombs 385, 369, and 84), where bricks and stones may have served as the primary grave markers (Green 2006, 2014).

Locus	*Burial type*	*Burial location*	*Relation to architecture*	*MNI*
10/K/83	Jar burial (jug)	Space B1a, Building 12/K/15	In wall corner	1
10/K/88	Simple pit burial	Space H, Building 12/K/15	Alongside earlier wall	1
10/K/100	Masonry-constructed chamber	Space E2, Building 12/K/15	Parallel to walls of small room	23
10/K/118	Jar burial (pithos)	Space E2, Building 12/K/15	In wall corner	3
12/K/27	Simple pit burial	Space F (F2?), Building 12/K/15	Near wall	1
12/K/59	Simple pit burial	Space G, Building 12/K/15	-	1
12/K/89	Simple pit burial	Space E2, Building 12/K/15	Alongside earlier wall	1
12/K/96	Simple pit burial	Southeast of Building 12/K/15	Alongside southeastern external wall of building	2
14/K/49	Brick-lined pit burial	Between Spaces G and H, Building 12/K/15	Near wall, below entrance?	2
14/K/59	Simple pit burial	Southeast of Building 12/K/15	Alongside southeastern external wall of building	1
14/K/66	Simple pit burial	Space H, Building 12/K/15	Above earlier wall	1
14/K/67	Simple pit burial	Space H, Building 12/K/15	Above earlier wall	1
14/K/103	Simple pit burial	Space E2, Building 12/K/15	In wall corner	1
14/K/200	Stone-lined pit burial	Space H, Building 12/K/15	Built into earlier wall corner	2
14/K/175	Jar burial (storage jar)	Space B1a, Building 12/K/15	In corner of earlier walls	2

Table 28. Spatial distributions of burials in Building 12/K/15 (adapted from Martin, Cradic, and Kalisher 2018:Table 1).

Diversity in Death

Megiddo's sizable corpus of 271 intramural burials provides a rich dataset from which to draw several conclusions about mortuary practices among its Middle and Late Bronze Age inhabitants. Analysis of distributions of burial type and architecture, body disposal methods, MNI, and age-at-death has demonstrated that across the settlement in different periods, Megiddo's population engaged in a wide range of mortuary practices that can be traced at all levels of perspective: within a given stratum, area, building, and room. These site-wide patterns of diversity in death have been encountered consistently in every area in which burials have been found, from Schumacher's exposure of the *Mittelburg* to the present excavations. These patterns raise the question of why certain individuals were chosen for specific burials.

For example in Building 12/K/15, burials varied in terms of type; individuality; body disposal (primary, secondary, compound, co-mingled, and various combinations therein); and quantity and composition of grave goods. In this structure, like others (cf. Area BB House 3002, Building 14/H/87, *Mittelburg*, and *Nordburg*), there was a specialized spatial demarcation in death between the burial population inside a chamber tomb, and a roughly equal number of contemporaneously buried individuals who were interred in pits and jars elsewhere in the house. Building 12/K/15 provides insight into which factors may have been of importance when determining the burial treatments of specific individuals, whether interred in Tomb 100 or not. Variables of sex, age-at-death, and wealth status—as measured by grave goods and burial architecture—can be evaluated as factors of selection.

Material Investment: Grave Goods and Burial Type

When contextualized, grave goods and burial type may be used as relative indicators of investment in an individual's or group's funerary treatment (although see Chapter 3 for a critique). As mentioned above, four burials in Building 12/K/15—three simple pits (Burials 12/K/27, 12/K/59, 14/K/59) and a jar burial (Burial 14/K/175)—were empty of any grave goods, and several others contained a small quantity of generic offerings such as a ceramic juglet (see Table 40). In contrast, stone-lined Burial 14/K/200, second in architectural complexity to Tomb 100, contained a relatively rich assemblage. This burial contained two juveniles who were interred with four ceramic vessels, a scarab, metal earrings and a metal pin, a stone vessel, over a dozen beads, several pieces of bone inlay, perforated shells, fragments of a kohl stick, and faunal remains. Tomb 100 was the most elaborate tomb in terms of architecture and its burial assemblage, which contained slightly more vessels per individual (ca. 2-3 vessels) than the average burial (ca. 1-2 vessels; see above). The difference is somewhat minimal but still significant, given the ongoing investment in the tomb's architecture and long-term (re-)use. Overall, however, the distribution of the grave goods was generally low among all burials, with spikes in investment for the constructed tombs, which also stand out for their architectural elaboration.

These patterns demonstrate that the relative richness of the burial assemblages correlates with the degree of architectural elaboration of a given burial. Simple pits and jar burials received the lowest quantity of grave goods, both in terms of the overall assemblage and per individual, and the constructed tombs received the highest quantities and proportions per individual. It is difficult to assess how these measures correlate with body disposal method since Tomb 100 is the stand-alone example of compound disposals in the Building 12/K/15. The tomb's high MNI and investment in architecture may overshadow any significant differences between burials of different inhumation types.

Age Cohorts and Personhood at Middle Bronze Age Megiddo

Sex and age distributions can also be evaluated as determining factors for burial treatment. These biological variables were fairly even among both datasets in Building 12/K/15 (pit/jar burials and Tomb 100) and proportionally reflect the inter-generational population of a longstanding co-habitational social group. Concerning biological sex, the small sample size limits interpretive potential of the dataset. Fewer than half of the population, ca. 37%, could be sexed: the sex of a total of 16 out of 43 individuals were identified, including seven males (44%) and nine females (56%) (see Table 23). The differences between the numbers and proportions of males and female in the sample as a whole are not significant and show a relatively even split, with a slightly higher representation of females; this pattern holds for each of the sub-samples. Tomb 100 contained six females and four males, a relatively even ratio (Faerman and Smith 2018). In the pit and jar burials, the population is equally split, with three females and three males (Faerman 2018).

No clear patterns related to biological sex could be deduced from this population. Although a patrilineal or patrilocal pattern such as that inferred from Ashkelon's Tomb 5 would be expected to produce individuals clustered by patrilineage, these lineages are not visible from the osteological evidence. We might also expect to see more males than females selected for burial in Tomb 100, or for individuals in the pit burials to be spatially clustered according to biological sex if such a patrilineal descent pattern were to be found in Building 12/K/15. Neither of these patterns could be detected from the available evidence; any clustering within Tomb 100 that may have once existed was intentionally obscured by the survivors in antiquity, erasing spatial distinctions of lineages or biological sex within the tomb (see Chapter 6). Similarly, the limited data from six out of 20 individuals is not fine-tuned enough to distinguish any groupings by sex in the pit and jar burials. In the two multiple-interment burials for which the sex of all individuals was identified, the evidence is inconclusive: one burial (Burial 12/K/96) contained two adult females, and the other (14/K/49) contained one young adult male (20-25 years) and one older adult female (40+ years) (see Table 21).

In terms of age, all major age groups (i.e., subadults, and adults) are attested in the pit burials as well as in the masonry-constructed chamber tomb (see Table 22). Subadults are better represented in the population of Building 12/K/15 overall (61%) compared with adults (37%), but these proportions do not extend in the same way among all burial types. In the pit burials and masonry-constructed chamber tombs, the quantity and proportions of subadults to adults are similar. In the pit burials, subadults make up 50% (n=7) of the population, while adults comprise 43% of the individuals (n=6; one individual was unidentified). In Tomb 100, subadults constitute 56% (n=13) of all individuals, and adults are 44% (n=10) of the individuals. Among the infant population, there is a preference for pit and jar burials: 40% were inhumed in pit burials, 40% were buried in jar burials, and 20% were included in Tomb 100.

The jar burials as an isolated burial type contained only infants and young children with the exception of the fragmentary remains of an errant, and possibly intrusive, adolescent in Burial 10/K/118 (see above). Two patterns emerge. Jar burials standout as an exceptional pattern that is related to age demographics, with particular emphasis on the very young. The other side of this same coin applies to burials of the youngest age cohort. Infants were differentiated based on age in terms of grave goods, burial type—with jar burials by-and-large restricted to the youngest decedents—and, to a degree, spatial distributions of infant burials. Building 12/K/15 and Houses 3002 and 3003 in Stratum X of Area BB show segregation of intramural mortuary space based on age and burial type. Certain spaces were devoted specifically to jar burials and kept separate from burials of other age groups (e.g., Space B1a in Building 12/K/15; see Table 28; cf. Houses 3002 and 3003 in Figures 5-6).

Age Cohorts and Burial Assemblages at Megiddo and Beyond. Grave goods may point to an age-based system of mortuary investment in Levantine burials as a whole. During the Middle

Bronze Age, the richness and quantity of grave goods increased directly in proportion to the age of the decedent. On the lowest end of the age-personhood spectrum were infants, who received the fewest and most basic grave goods, such as a juglet. On the highest end of the age-personhood spectrum were adults, who were outfitted with a more elaborate kit including several ceramic vessels and objects, such as pins or jewelry (Bloch-Smith 1992: 140; Baker 2012). This correlation between age and grave goods remained consistent through the Iron Age (Bloch-Smith 1992: 140; Henricksen Garroway 2012) and may signal important differences in burial practices depending on the social, as well as physiological, age of the decedent.

This hypothesis holds up when tested against the Oriental Institute burial dataset (n=31; see Table 39), in which the quantity of ceramic offerings increased in proportion to the age of the decedent. The number of pots per infant burial averaged ca. three vessels. However, this average inflates the reality of most infant burials; in most cases infant burials contained only one ceramic vessel. In contrast, among the Oriental Institute burials, older children's offerings averaged five pots per burial, whereas adult burials contained a much higher average of seven vessels per burial.

Among the pit and jar burials of Building 12/K/15, the quantity of ceramic vessels in burials were *not* dependent on age: infants as a cohort received just over one vessel each (average of ca 1.25 vessels per individual), compared with adults who received just under two vessels each (average of ca. 1.83 vessels per individual). Jar burials as an isolated burial category, usually reserved for infants and young children, tell a similar story. Jar burials contained one vessel per individual compared with pit burials, which cross-cut a broad range of age groups, and contained ca. 1.33 vessels per individual.

All in all, the evidence is contradictory and inconclusive. The quantity of ceramic vessels could be dependent on the decedent's age-at-death, but not as a rule. However, the picture changes considerably when expanding the definition of grave goods to include the entire burial assemblage rather than just ceramics. The results change due to the proportion of vessels in the burial assemblages as a whole. In Building 12/K/15, among subadults, pottery comprised only half the total burial assemblage. In contrast, pottery vessels took up a share of nearly three-quarters (74%) of adults' burial assemblages, which otherwise contained few non-ceramic objects (Martin, Cradic, and Kalisher 2018).

Among the pit and jar burials of Building 12/K/15, the distribution and composition of the burial assemblage as a whole (ceramics and non-ceramic objects) differed slightly depending on the ages-at-death of decedents, but in unexpected ways. Among all subadults (infants and children), the offerings averaged ca. three grave goods per individual, while adults received slightly *fewer* objects than subadults, an average of 2.5 grave goods per individual. Although this difference of less than one object per individual appears negligible, it is significant in light of the fact that adults in Areas AA and BB received far more grave goods than subadults, as discussed above. In contrast, in Building 12/K/15 the opposite scenario occurred, with a much more equitable distribution of objects per burial regardless of age. Therefore, with few exceptions—e.g., Burials 14/K/59 and 14/K/103—subadults not only received the greatest quantity but also the greatest variety of grave goods per individual compared with adults in Building 12/K/15 (Martin, Cradic, and Kalisher 2018).

At Megiddo more broadly during the MB II–LB I/IIA (Strata XII–VIII), the richness and quantity of grave goods in jar, simple pit, and stone-lined pit burials increased in proportion to age of the decedent, like the patterns discerned among pottery alone. Rather than peaking in quantity and elaboration among subadults as was the case in Area K, grave goods were few and basic among the youngest age groups. Infants received the most modest funeral kits, ranging from a single ceramic vessel up to nine objects, with an average of ca. three objects per individual. Burials of subadults (other than infants) contained two to 13 grave goods per burial, averaging ca. four objects, most of which were ceramic vessels; non-ceramic objects were infrequently attested among this group, contrasting with the more complex burials assemblages of Area K's subadult individuals. Finally, adults were endowed with the most elaborate kits that encompassed two to 19 objects per burial, averaging ca. 6 objects per individual, about three of which were non-ceramic objects (Martin, Cradic, and Kalisher 2018).[57]

The relatively rich burial assemblages among the youngest age cohorts in Building 12/K/15 is unusual when compared with the burial corpus of second millennium B.C.E. Megiddo (see above) and that of the Levant at large, in which the quantity of grave goods was generally higher in burials of adults (see Chapter 5). In Building 12/K/15, special treatment was afforded to subadults in opposition to the normative practice of burying adults with considerably more elaborate funeral kits. These contradictory patterns hint that the composition of grave goods, and by extension the relative investment in a given individual's burial, may have differed depending on multiple factors, such as physiological age in some cases, and the status of the dead after burial in other cases. I investigate relationships between material investment, ages, and personhood in the section below.

Personhood in Early Life

The distribution of grave goods among subadults raises the question of when personhood begins and ends. Conception, gestation, birth, and infancy are important transitional phases in the life course that are critical for evaluating when some*thing* becomes some*one* (Janzen 2002: 140). The ambiguity and vulnerability of these phases mean that there is considerable cross-cultural variation concerning when personhood begins from religious, political, and legal standpoints. For example, under current U.S. federal law, a fetus acquires legal personhood once viable outside the womb (Janzen 2002: 142).

As to when personhood began in the ancient Near East, Hittite and Babylonian law codes may provide answers from a legal perspective. Specific laws pertaining to miscarriage and

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[57] Sample sizes were as follows: (1) infants: 38 objects, MNI 8, Strata X-IX; (2) other subadults: 139 objects, MNI 32, Strata XII-VIII; (3) adults: 209 objects, MNI 34, Strata XII-VIII.

abortion distinguish punishments that increase in severity with respect to fetal age. One Old Hittite version reads:

> If anyone causes a free woman to miscarry—if (it is) the tenth month, he shall give 10 shekels of silver.
> If (it is) the fifth month, he shall give 5 shekels of silver and pledge his estate as security [Stol 2000: 42]

These texts imply certain economic and legal values were connected to fetal age. According to the law code, fetuses aged five months carried lower compensation values than those at full term. These values increased in proportion to age, with two possibilities: either five shekels for the loss of fetuses between one and five months, and 10 shekels thereafter, or a direct one-to-one ratio of shekels to months of gestation (Stol 2000: 42).[58]

The Old Babylonian Laws of Hammurabi (§§209-214) carried similar stipulations. For example, section §209 orders that in the case of a man who strikes the daughter of a (free) man, he must pay 10 shekels of silver to compensate for the loss of her fetus (Stol 2000: 40). These texts suggest that fetal age and personhood status were related in the realm of crime and punishment, and that personhood accrued over the course of gestation.

These values were significant; in the context of sixth century B.C.E. Babylonia, Pirngruber (2014: 110-112) estimates that living expenses for one unskilled, free worker living a "subsistence lifestyle"—including food (grain, sesame, dates, meat, cress), commodities such as clothing and fuel, and housing—were equivalent to nine to ten silver shekels per year. On this basis, a "Babylonian labourer should have earned about 37 shekels of silver per year to maintain a hypothetical family of four persons…This result compares well with…27 shekels of silver for an urban household unaffiliated with a temple or palace during the reign of Nabonidus" (Pirngruber 2014: 112). These sixth century B.C.E. annual costs of living per capita were higher than those of the third-second millennium B.C.E. during the Ur III and Old Babylonian periods, respectively (Pingruber 2014: 109). Taken together, these Old Hittite and Neo-Babylonian social, legal, and economic systems placed considerable value on the life of an unborn fetus, which could be worth as much as one person's entire living expenses for six months to one year.

As discussed above, grave goods and burial type could vary according to the age-at-death of the decedent, hinting at a different status after burial for the youngest age cohort than other age groups. This pattern relates not only to the personhood status of the dead after burial, but the personhood status of the very young during life. Presumably, personhood of the dead would not be created, and thus could not be continued or transformed after burial, if it did not first exist during the lifetime of the deceased. However, according to the *Epic of Gilgameš*, an exception may apply to still-born infants, who were treated better in the Netherworld than their older counterparts. Unlike the gloomy, dark, and dusty existences of most of the inhabitants in the

[58] Pregnancy was calculated in lunar months. As Stol (2000: 42) notes, a lunar month lasts for 28 days, totalling 280 days, or ten months, of gestation.

Netherworld, the “ghosts of still-born children… ‘enjoy syrup and ghee at gold and silver tables’” (Cooper 2009: 25).

In contrast with infants, who were usually inhumed in jar burials, children ages two and older were the most flexible age cohort of any and could occur in burials usually reserved for other ages. Children on the younger end of the spectrum could be buried in jar burials, while older children could be inhumed in masonry-lined pits or masonry-constructed chamber tombs. The status of children in death was more ambiguous than that of infants and may have been connected to specific social thresholds that were met at different points in childhood, explaining why some children were buried in jars and others in pits. The former group may have been of equal status to infants—perhaps not having achieved personhood yet—while the latter had already passed an important social marker in the life course before death. According to the mortuary evidence, we may be dealing with an important age threshold at Middle Bronze Age Megiddo that occurred around two years of age at minimum, after which some children could be buried outside of jars.

Summary and Conclusions

Physiological age and personhood status were closely related during infancy and childhood in ancient Levantine society. The special—if differing—treatment of infants in particular suggests that the very young were accorded a different status from other age cohorts, with the possibility that infants were often not afforded personhood in death at all in some cases (Appell-Warren 2007: 89; Lemos 2013). However, the early childhood age threshold of two years may have marked a turning point in the personhood status of the young during life and after death.

Less visible social variables may have also been in play in determining how individuals were buried. The dead who were buried below the house floors shared certain features in death: (1) primary inhumation as the prevailing disposal method, which is not dependent on variables of grave goods, age, sex, or burial type, with the exception of masonry-constructed chamber tombs; and (2) a co-dependence between the two variables of relative wealth, burial architecture and grave goods, wherein the degree of elaboration in burial architecture generally correlates with the richness of the burial assemblage. The strong correlations between body disposal, positioning, and masonry-constructed chamber tombs also stands out as an important pattern. The predominance of co-mingled bodies in masonry-constructed chamber tombs had a direct impact on embodiments of death and posthumous social outcomes in these specific mortuary contexts. I investigate these relationships in Chapter 8 using in-depth examples of burial taphonomy from Area K and Area H.

The dead shared the same residential space in death, and so it is assumed that they also shared living space when alive. Presumably all of the deceased in Building 12/K/15, for example, belonged to the co-habitational household group, who, based on their mortality profiles, may have been belonged to an extended family or kin group. In other words, the population of the house may have been related by kinship and a common lineage, whether predicated on real or imaginary blood ties, marriage, or affiliation with the household (Stowers 2008: 5-7). The inhumations *outside* of Tomb 100 may have emphasized belonging within the co-residence group at large (Cradic 2011: 61–62). Interment *inside* shared chamber tomb represents a subset of this group who belonged to a particular lineage within the extended kin group, possibly related to property inheritance (Cradic 2017; Martin, Cradic, and Kalisher 2018; Hallote 2001a: 208; Baker 2010). As I explain in the following chapter, the household inhabitants of Building 12/K/15 embodied these roles in death and beyond the grave, where their personhoods and bodies continued to play a part in the life of the house.

CHAPTER 8 – TRANSFORMATIONS IN DEATH: THE FUNERARY SEQUENCE

This chapter presents a new model for the funerary sequence involved in re-used and shared burial chambers in the Bronze Age Levant, focusing on the case study of Tomb 100 from Megiddo's Building 12/K/15. Following this in-depth case study, a comparative analysis of the funerary sequences and taphonomic situations of two additional examples, Tomb 50 and Burial 16/H/45 from Building 14/H/87, are discussed. They support the findings from Tomb 100 as well as demonstrate the diverse embodiments of death that were practiced co-terminously at the site.

This taphonomic framework is implemented in order to reconstruct the sequential performance of funerary rituals associated with this tomb, in which mourners intentionally and repeatedly fragmented both individual bodies and funerary kits over several generations of use. I argue that long-term commemoration of the deceased is one way in which the personhood of the dead could be prolonged after biological death. At second millennium B.C.E. Megiddo, corporeal fragmentation was the primary pathway to new personhood status after death.

I argue that an extensive, prescribed set of funerary activities was enacted repeatedly at the burial site in order to bury, and then commemorate, the dead. These ritual performances disturbed the burial site during all phases of the funerary sequence, effectively disrupting natural processes of decomposition. Dismemberment facilitated the transformation of the deceased from a whole, corporeal person with an individual name and biography into a fragmented, non-corporeal, nameless ancestor with a crowd-sourced body and biography. The sequential performance of funerary rituals demonstrates a rich and active practice of funerary religion involving long-term commemoration of the dead, which transformed the deceased into venerated ancestors and household members. Such a transformation is not surprising in this ancient Near Eastern context in which ghosts, ancestors, and household deities were understood to exist as non-corporeal persons (see Chapter 4).

Of particular relevance is the continuous use of the burial site during the prolonged occupational phase of Level K-10, which spanned the MB III-LB I periods based on pottery and radiocarbon results (ca. 1600-1450 B.C.E.; Strata X-IX) (for radiocarbon results, see Table 49; Martin and Cradic 2018; Toffolo et al. 2014: 229: Table 3, 238-241). The tomb contained compound, co-mingled inhumations that resulted from an extended and complex funerary sequence involving continual manipulation of the human remains. The extensive re-use of this burial chamber resulted in the deliberate intermixing of funerary kits and skeletal remains belonging to the tomb's individuals, who were interred successively over a span of ca. 150 years. Closing rituals marked the final sealing of the tomb in the Late Bronze I period, after which inhabitants across Megiddo, including those residing in Building 12/K/15, ceased to bury their dead underneath house floors.

Osteology and Taphonomy

Tomb 100 contained at least 23 individuals whose bone debris covered the entire surface of the chamber interior and accumulated to a depth of ca. 0.50-0.65 m thick, leaving a void of ca. 0.75-0.9 m high between the top of the accumulation and the roof. The main concentration of debris was located in the rear (east) of the chamber, opposite the threshold, and dense accumulations also lined the north and south walls of the chamber. The top layer of accumulation contained the densest concentration of grave goods, which were sitting within or on top of the debris matrix; the *in situ* materials had not been moved since their final deposition in the LB I period (see Figure 18). This applies to the tomb context more broadly; the tomb structure and contents were undisturbed and intact upon discovery, with only minor softening and cracking of the interior faces of the limestone masonry. The sealed condition of the tomb protected its rich contents from destructive natural and anthropogenic processes of erosion, water action, collapse, and looting.[59]

Depositional Phases

As a result of sustained disturbance to the chamber in antiquity, the burial contents were not stratified in an orderly manner. Despite the challenges of discerning vertical stratigraphy in these preservation conditions, six layers of accumulation could be distinguished based on elevation of the materials as well as the texture and color of the debris (Figures 26-31). These depositional phases covered the entire use of the tomb, from construction to closure. The bulk of the objects and osteological remains, both human and animal, were found in the upper two layers in two concentrations: (1) the main debris accumulation in the east of the tomb, opposite the entrance (the “bone heap”), and (2) scattered along the north, east, and south perimeter walls of the chamber. The fewest finds were located in the west, near the entrance, most likely because this area received the most foot traffic each time the small chamber was re-opened.

Based on depositional patterns of six layers of accumulation, the tomb was opened on *at least* six occasions. However, in all likelihood, it was accessed far more often as suggested by the high degree of fragmentation and intermixing of individual skeletal elements throughout each layer of deposition. Combined with the stratigraphic evidence, two additional observations relating to the osteological evidence point to regular and repetitive handling of dead bodies inside the chamber over a long span of time. First, the minimum number of inhumations (MNI 23), and the dispersal of skeletal elements belonging to these individuals throughout the chamber, suggests an accumulation of bodies over time involving multiple episodes of re-opening of the chamber. Not a single body was left untouched or in articulation, which indicates

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[59]Given that the entrance and the roof were sealed, and many high-value objects were visible at the top of the debris, the possibility of robbery as the cause of the high degree of bone disarticulation and degradation can be excluded. Water action was detected but was not responsible for the state of disarticulation. Humidity and seepage of rainwater caused minor damage to the masonry and the contents in the top layer of debris, on which a crystallized calcite deposit was found, probably caused by seep water that dissolved the limestone masonry and re-crystallized on the surfaces of the finds (Martin and Cradic 2018).

that this same practice of fragmentation and dispersal was applied to each and every body, even the last inhumation. Second, the high degree of skeletal fragmentation of individual bones and entire bodies suggests close and continuing handling of the human remains on multiple occasions.

Together, this evidence of frequent and deliberate handling of human remains indicates that the tomb could have been opened for either of two separate events: addition of a new interment, or for scheduled ritual performances beyond the act of inhumation, such as deposition of offerings and ritualized handling of the already-inhumed human remains (see below). In regard to the former scenario, although it is plausible that the chamber was opened separately for each new inhumation, therefore at least 23 times, it is also possible that more than one body was inhumed at a time, so this number remains somewhat speculative. If we assume that the tomb was re-opened on at least 23 occasions, this means that the chamber would have been opened on average every six to seven years.[60] Although the evidence is not precise enough to identify each episode of inhumation, the high degree of skeletal fragmentation and dispersal hints that something close to this may have been the case.

Terminology

In Chapter 2, I introduced the method of funerary taphonomy and outlined my criteria for calculating the taphonomic index of a burial context. In this chapter, I apply these taphonomic methods to three mortuary case-studies. I frequently refer to body disposal methods as primary, secondary, or compound disposals, which I defined in Chapter 2. I refer to primary inhumations that have been minimally disturbed or disturbed unintentionally, such as through bioturbation or erosion, as primary disturbed disposals. My usage of the term secondary disposal applies to any case in which human remains have been moved or disturbed from their original locus of decomposition (which may occur within a single burial context, such as a chamber tomb) such that the disturbance resulted in significant and observable re-configuration of the skeletal remains. What I mean by this is repositioning of some or all bones, occasionally involving breakage; disruption of articulations; or obvious cases of re-organization of the anatomical order of the bones in the body, such as bundling or stacking. All of these scenarios count as secondary disposal. The intentional re-occurrence of secondary disturbance to the skeletal remains qualifies as compound disposal, and often, compound disposals will correlate with co-mingled burials and heavy fragmentation of individual skeletal elements. Co-mingling refers to a specific state of disarticulation in which the bones of more than one individual are intermixed as a result of disturbance that occurred after decomposition (as opposed to occasional intermixing from bones of primary inhumations that were positioned close together or touching). Disarticulation more generally refers to the absence of articulation of individual bones according to expected anatomical order and is used as a criterion for identifying cases of disturbance, whether primary disturbed disposals or secondary and compound disposals. When I refer to fragmentation of skeletal remains below, I mean the breakage of individual skeletal elements, which also implies

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[60] See below *Corpse Preparation* and Chapter 4 for discussion on the interval of seven in Near Eastern funerary rituals.

some degree of fragmentation of the entire skeleton as a unit. Fragmentation of bones usually occurs after decomposition and therefore frequently correlates with secondary and compound disposals.

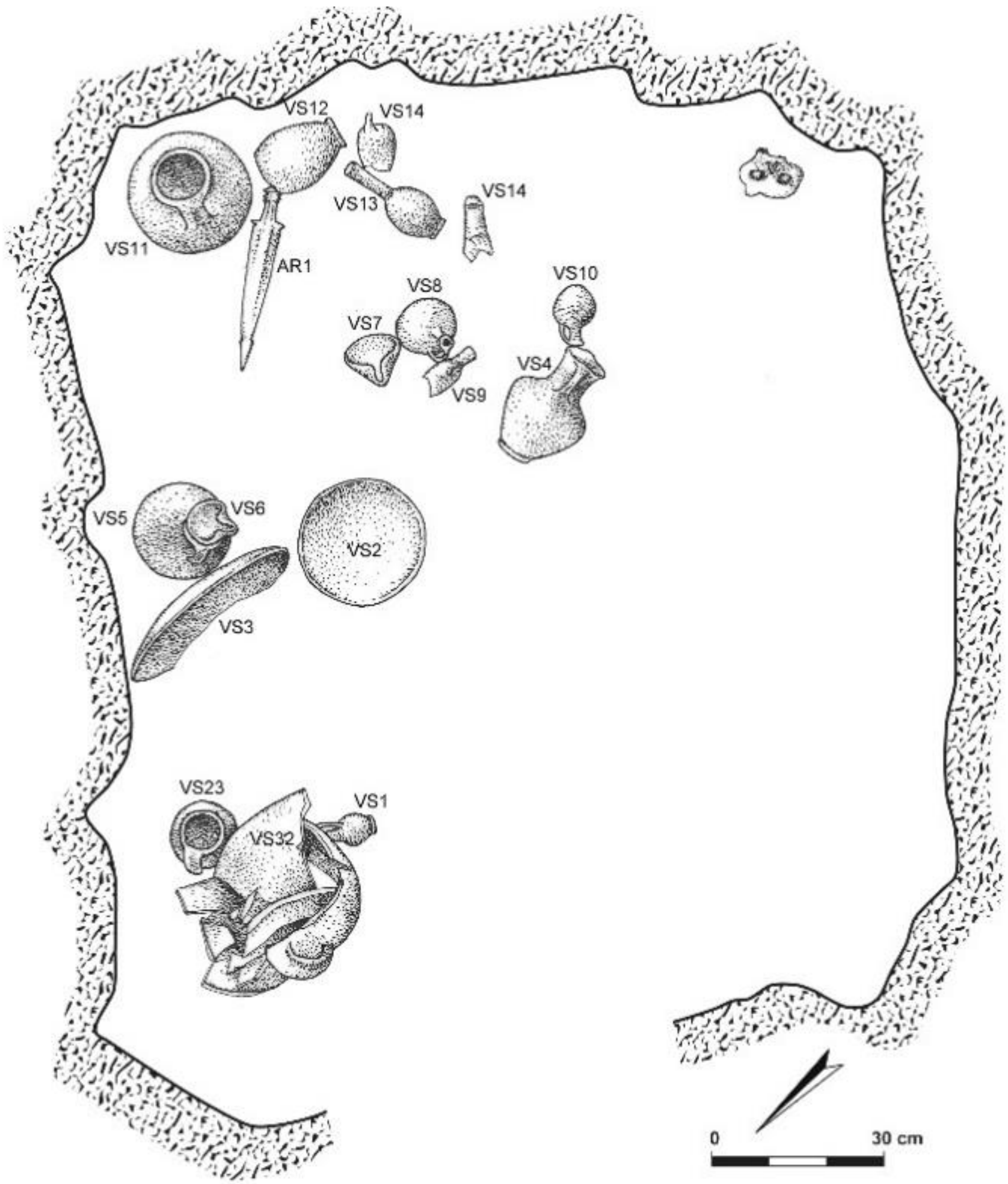

Figure 26. Plan of tomb interior; topmost layer of deposition (Layer 1). Illustration prepared by R. Homsher, Y. Roban, and M. Martin. Courtesy of the Megiddo Expedition. AR= artifact; LB= lab; VS= vessel

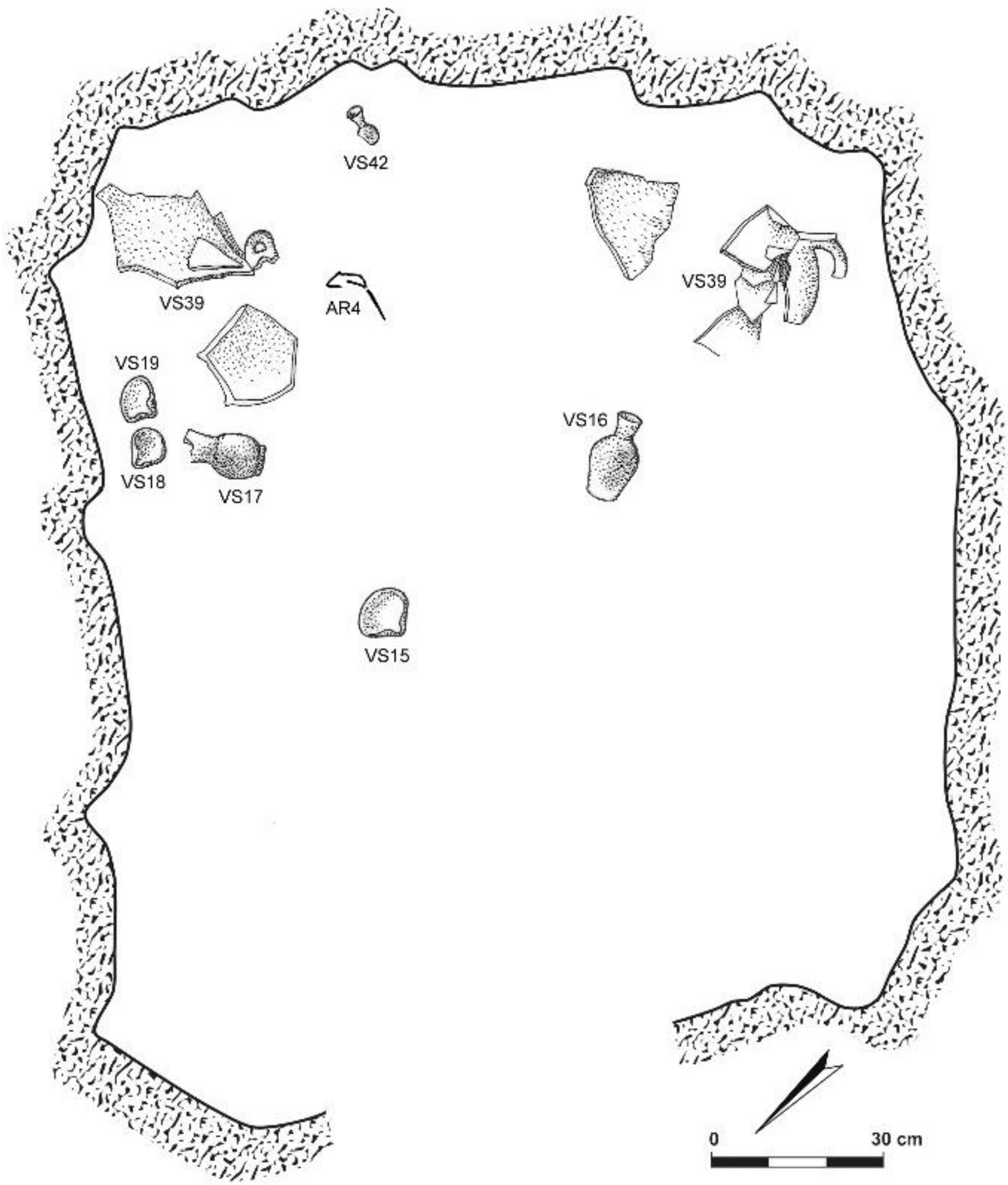

Figure 27. Plan of tomb interior; Layer 2. Illustration prepared by R. Homsher, Y. Roban, and M. Martin. Courtesy of the Megiddo Expedition. AR= artifact; LB= lab; VS= vessel

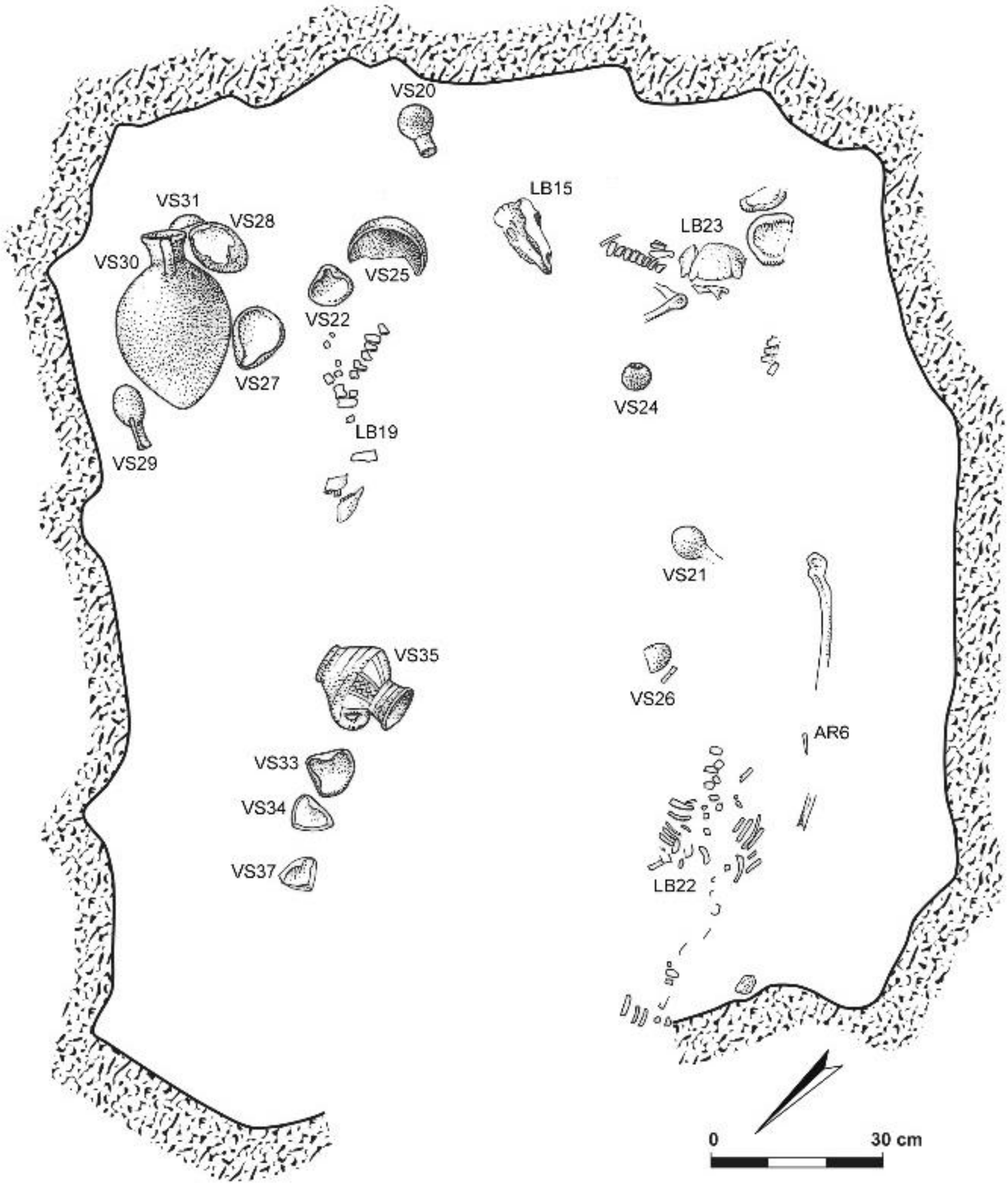

Figure 28. Plan of tomb interior; Layer 3. Illustration prepared by R. Homsher, Y. Roban, and M. Martin. Courtesy of the Megiddo Expedition. AR= artifact; LB= lab; VS= vessel

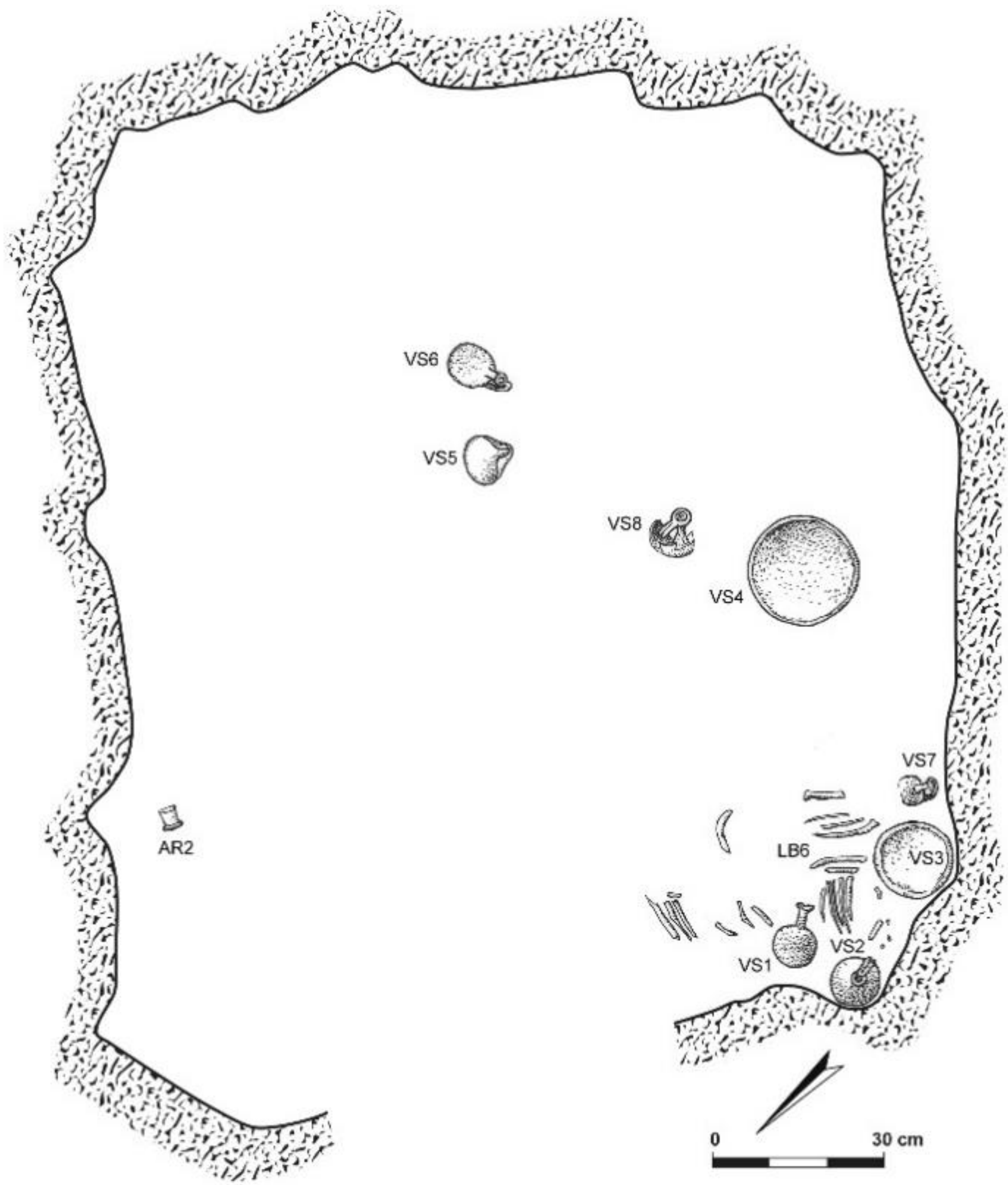

Figure 29. Plan of tomb interior; Layer 4. Illustration prepared by R. Homsher, Y. Roban, and M. Martin. Courtesy of the Megiddo Expedition. AR= artifact; LB= lab; VS= vessel

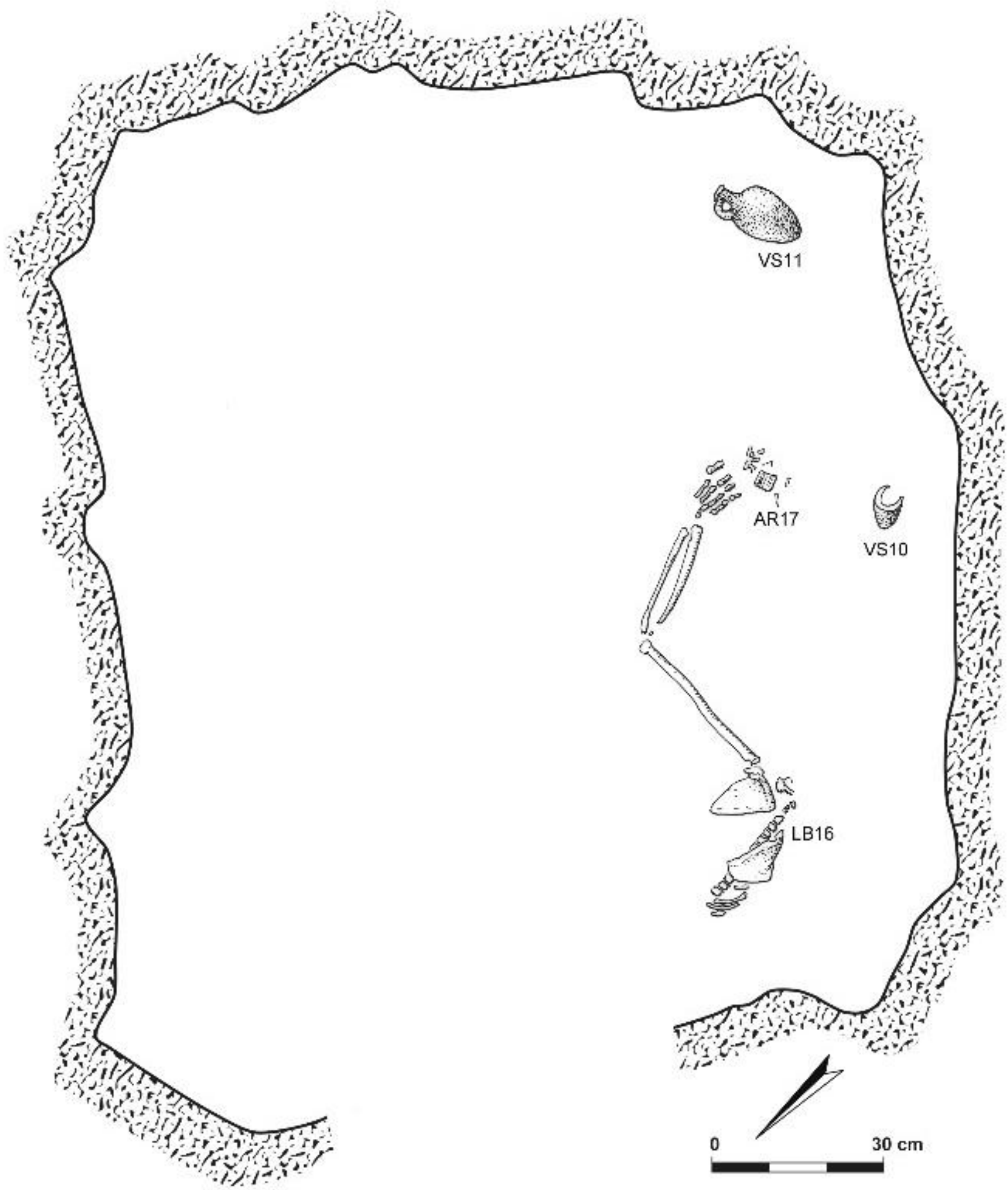

Figure 30. Plan of tomb interior; Layer 5. Illustration prepared by R. Homsher, Y. Roban, and M. Martin. Courtesy of the Megiddo Expedition. AR= artifact; LB= lab; VS= vessel

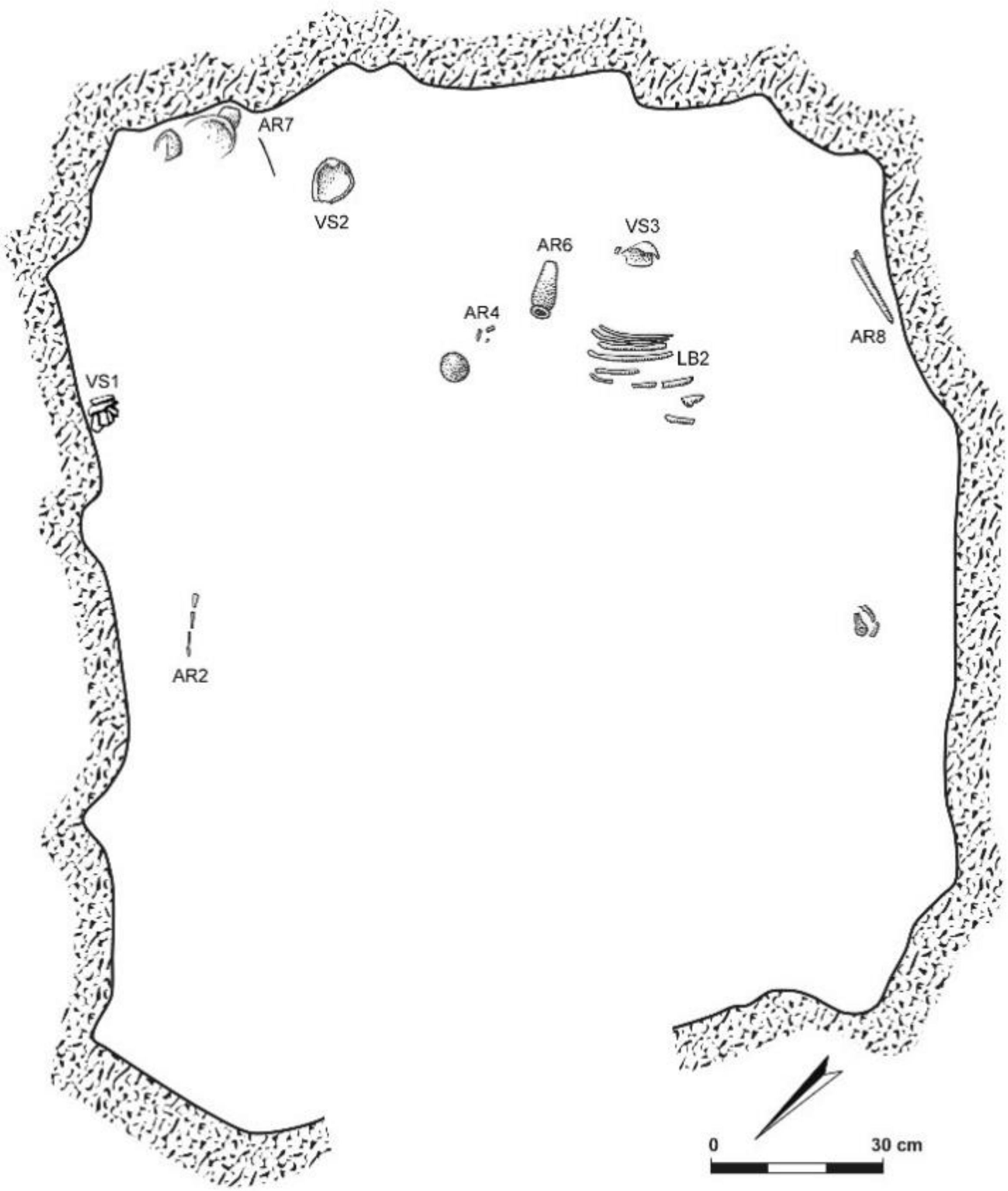

Figure 31. Plan of tomb interior; Layer 6. Illustration prepared by R. Homsher, Y. Roban, and M. Martin. Courtesy of the Megiddo Expedition. AR= artifact; LB= lab; VS= vessel

Skeletal Remains

The tomb's population comprised over half of the known burial population of Building 12/K/15. Therefore, this burial context was of social and ritual significance to the residents of the building. However, unlike the pit and jar burials, which were mainly primary inhumations, the disposal methods of Tomb 100 can be characterized as co-mingled inhumations that resulted from secondary and compound disposals (see above *Terminology*).

The fragmented and distributed nature of the skeletal and material remains obscured any indicators of vertical status differentiation based on wealth, rank, sex, or age. The latter categories of sex and age in particular were not determining factors in the process of selecting decedents for burial in Tomb 100. Sex distributions, where identifiable, show an equal split among males and females (see Table 23). Age is also evenly distributed; subadult individuals accounted for 13 of the 23 individuals (57%) identified in the osteological assemblage of Tomb 100 (see Table 22). The tomb's population corresponded with expected morality profiles (Martin, Cradic, and Kalisher 2018) and thus may have represented an intergenerational subset of the broader household membership. For comparison, the other 14 burials in Building 12/K/15 contained 20 individuals and demonstrated similar mortality profiles in which subadults comprised 65% of the population (see Tables 21-22; Martin, Cradic, and Kalisher 2018). Although the subadults were immature persons who could not have produced descendants, they may have been part of the special lineage group of the tomb.

Taphonomic Index of Tomb 100

The human and faunal skeletal remains were broken to such an extent that only four individuals could be isolated in the field. Not a single skull was complete enough to be reconstructed and as a result of these poor preservation conditions, osteological analysis focused on skeletal elements—specifically long bones and teeth—rather than individuals; nineteen of the 23 individuals were identified through bone fragments only (Faerman and Smith 2018). Small bones such as hand and foot bones, as well as vertebrae, ribs, pelvic bones, and cranial remains were not reported. Based on long bones alone, the MNE was reported as 145 (91 long bones of adults, 54 long bones of subadults) and 281 teeth (see Tables 44-45; Faerman and Smith 2018). This count does not represent the entire osteological assemblage, most of which was too fragmented to identify.

Four individuals that could be isolated in the field and lab are scored separately below, and these totals are taken into account for the overall taphonomic index of the tomb. The entire assemblage of osteological material has to be considered together in the co-mingled context of Tomb 100, which scores low on the taphonomic index (see Table 29):

(1) Skeletal completeness: the dataset in the osteological report is incomplete and does not include the entire corpus of material, reporting only on teeth for cranial remains, and long bones for postcranial remains. Taking these two regions together, the individuals are still seriously under-represented for completeness, and fall on the lowest third of the scale. **Score: 3**

(2) Breakage of bones: every single specimen, with the exception of a very small number of the elements from Individuals 1-4 (see below), was broken to various degrees. **Score: 2**

(3) Disarticulation: disarticulated bones represent ca. 90-95% of the osteological material, accounting for the large quantity of bones that are not mentioned in the report but were documented in the field. **Score: 2**

(4) Surface modification: the bones closest to the side walls of the tomb in the top layer of the bone heap exhibited modification from weathering in the form of a crystallized deposit from water seepage. These comprise ca. 10-15% of the material. At least a third of the total volume of skeletal material was intentionally fragmented, some pulverized and turned to unidentifiable bone dust through extended processes of heavy modification in antiquity. **Score: 4**

The total score is **11/40**. This low score accurately reflects the poorly preserved remains and extensive disturbance to the skeletal remains in antiquity. Together with contextual evidence, Tomb 100 is evaluated as containing mainly compound disposals with occasional instances of partial secondary disposals (see below).

Burial/ Individual	Skeletal Completeness	Breakage of Bones	Disarticulation	Surface Modification	Taphonomic Index Score (min: 4; max: 40)
Individual 1	4	4	4	7	19
Individual 2	2	3	2	7	14
Individual 3	2	2	2	7	14
Individual 4	4	4	4	7	19
Tomb 100 general	3	2	2	4	11

Table 29. Taphonomic Indices, Tomb 100.

Secondary Disposal

The six depositional layers presented above (Figures 26-31) were discerned in part due to the presence of four individuals who were identifiable based on partial skeletal articulation. Individuals 1, 2, and 3 were found in depositional Layers 3 and 4, and Individual 4 was located in Layer 5.

Individual 1. Individual 1 (registration number: 10/K/102/LB19) was identified as an adult male. This individual was located in the northeastern quadrant of the tomb in Layer 3 of deposition (Figures 28, 32, 34). This individual was represented by the partially articulated remains of a vertebral column along with cranial remains including a maxilla and mandible. An associated tibia belonging to Individual 1 was found in close proximity (Faerman and Smith 2018). The taphonomic index is graded below:

(1) Skeletal completeness: this individual is represented by four of the eight possible regions of the body, all of which were incomplete. Cranial remains were limited to the jaws and

teeth, and postcranial remains were represented only by the vertebral column and an isolated long bone. **Score: 4**

(2) Breakage of bones: with exception of the few articulated bones, it is assumed that the remainder of the bones that belonged to this individual are scattered among the dense, fragmented bone debris. **Score: 4**

(3) Disarticulation: the level of disarticulation mirrors the skeletal completeness, which was measured based on the presence of articulated elements. **Score: 4**

(4) Surface modifications: none noted on the identifiable material. However, Individual 1 was located within the top three layers of deposition, which were subject to the heaviest modification as well as exposure to air and, to a limited degree, water action (see above). The find spot of the individual close to the surface of the debris suggests that the rest of the skeleton of Individual 1 would have been among the most heavily modified material at the top of the bone debris. **Score: 7**

Individual 1 scores **19/40** on the taphonomic index and, together with the broader context of the tomb, can be identified as partial secondary disposal; most of the skeletal elements were disposed of in multiple rounds of compound disposal, while part of the skeleton was moved less frequently.

Figure 32. Tomb 100: Cranial remains of Individual 1. Courtesy of the Megiddo Expedition.

Individual 2. Individual 2 (10/K/102/LB22) was identified as an adult who was oriented NNW/SSE and placed in a supine position. The individual was represented by a limited number of articulated postcranial remains, including the vertebral column and ribs, which were located in the western quadrant of the tomb within the matrix of Layer 3 (Figures 28, 33). Additional remains not in articulation, the cervical and lumbar vertebrae, were found scattered in the southwestern and northeast of the tomb respectively (Faerman and Smith 2018).

(1) Skeletal completeness: poor representation of one skeletal region. **Score: 2**

(2) Breakage of bones: it is assumed that the majority of this individual’s skeleton, which was not found in articulation, is among the debris of fragmented bones. **Score: 3**

(3) Disarticulation: the number of elements in articulation is represented in the same proportion as the completeness of the skeleton. **Score: 2**

(4) Surface modification: none noted on the identifiable material, which constitutes a low proportion of this individual’s skeletal elements, which were among the top layer of heavily modified material. **Score: 7**

The taphonomic index of Individual 2 is **14/40**. This score is consistent with the contextual evidence indicating that Individual 2 is a secondary/compound disposal.

Figure 33. Tomb 100: Articulated postcranial remains of Individual 2. Facing southwest. Courtesy of the Megiddo Expedition.

Individual 3. Individual 3 (10/K/102/LB23) was identified as an adult who was represented by a limited number of skeletal elements, including the vertebral column, fragmented left humerus, and cranial fragments (Figures 29, 34). This individual was placed a supine position oriented SE/NE in the southeastern quadrant of the chamber, near Individual 2 (Faerman and Smith 2018). This individual was located in Layer 4 (Figure 29).

(1) Skeletal completeness: incomplete representation of three regions. **Score: 2**

(2) Breakage of bones: high degree of breakage among the bones that are present and identifiable as belonging to Individual 3. Presumably, the elements not represented in articulation are also fragmented in the bone heap. **Score: 2**

(3) Disarticulation: only the vertebral column and cranial fragments were partially in articulation, while the rest of Individual 3 must have been disarticulated. **Score: 2**

(4) Surface modification: none noted on the identifiable bones. Accounting for the general level of modification present in the tomb lowers the grade. **Score: 7**

The taphonomic index of Individual 3 is **13/40**. Most of Individual 3 was subjected to compound disposal, while part of the skeleton was likely moved just once after reaching skeletonization, resulting in this low representation of partial articulations.

Figure 34. Tomb 100: Vertebral columns of Individuals 1 (north) and 3 (south) and cranial fragments of Individual 3 next to the vertebrae. Facing east. Courtesy of the Megiddo Expedition.

Individual 4. Finally, Individual 4 (10/K/120/LB16), located in Layer 5, presented the clearest case of articulation (Figures 30, 35). This adolescent female was located in the south of the tomb, placed in a prone position and oriented SE/NE. The individual was represented by articulated postcranial remains including the vertebral column, left scapula, left humerus, left ulna, left radius, and bones of the left hand, all of which were in anatomical order except for the first metacarpal and third proximal phalanx (Faerman and Smith 2018).

(1) Skeletal completeness: this skeleton, represented by a complete left hand, arm, shoulder, and part of the vertebral column, was the best represented of all the individuals in Tomb 100. Three skeletal regions were represented. The complete hand is weighted higher than the other skeletal regions. **Score: 4**

(2) Breakage of bones: the bones that were present were complete, but those that were not represented were likely in various states of breakage; fragmentation was less intense in the lower layers of the tomb where this individual was located. **Score: 4**

(3) Disarticulation: the identifiable bones were in articulation with the exception of two bones of the left hand. However, this is still only a small proportion of the total skeleton, which was otherwise scattered and disarticulated. Disarticulation is measured on the same basis as skeletal completion, which accounts for the entire set of represented skeletal elements. **Score: 4**

(4) Surface modification: none noted for the bones that were present, meaning the unaccounted-for bones were likely modified along with the rest of the corpus of skeletal material in the tomb. However, as noted above, modification was less severe in the lowest layers of deposition. **Score: 7**

The taphonomic index of Individual 4 is **19/40**. Individual 4 is identified as a secondary/compound disposal. The corpse may have been moved around secondarily while flesh remained on the bones. Later, compound disposal affected the most of the cranial and postcranial remains after skeletonization, but the left side of the upper body remained in place.

Figure 35. Tomb 100: Articulated postcranial remains, Individual 4. Facing south. Courtesy of the Megiddo Expedition.

Compound Disposal

The high degree of disarticulation and skeletal fragmentation can be explained by the prolonged process of compound disposal, in which human and material remains were circulated inside the tomb chamber. With the exception of the four individuals described above, compound disposal was the prevalent disposal method for the individuals interred in Tomb 100 resulting in a high degree of skeletal fragmentation, disarticulation, and intermixing of bones belonging to more than one individual. These activities completely disrupted the anatomical order of individual skeletons, which were no longer identifiable as discrete units. It is argued that most of the tomb's individuals were moved around within the chamber many times over, while a small minority, such as Individuals 1, 2, 3 and 4, were disturbed just once or twice.

In the case of co-mingled burials, evidently at a certain point in each individual's funerary sequence corporeal integrity and wholeness ceased to be a concern. Each new inhumation disturbed previous corpses and their grave goods, which were often pushed toward the sides or back of the tomb. Original grave goods may have been removed in the process. Consequently, important information has been lost regarding the original burial conditions, such as individual corpse positioning, preparation and treatment, as well as associations between specific grave goods and corpses (Keswani 2004: 24). It does not follow, however, that the resulting anatomical disorder merely represented the unintended consequences of "unceremoniously sweep[ing] aside" of bones belonging to earlier inhumations, which were carried out simply to "make room" for additional inhumations (Lewis 1989: 180-181; Bloch-Smith 1992: 48; Doumet Serhal 2004: 140; Blau 2006: 14; Ilan, Gadot, and Uziel 2014; Nagar and Lev-Tov Chattah 2014: 31). This functionalist interpretation overlooks the deeper social and ritual implications of these repeated funerary treatments, which intentionally modified materials and bodies (Chapman 2000; Fowler 2003; Keswani 2004: 23-24; Osborne 2011: 36-37; Gramsch 2013: 464).

Just as we do not assume that bodily *preservation* practices such as mummification or embalming served only functional purposes (Giles 2013), it is counter-productive to assume that bodily *fragmentation* practices constituted merely "cavalier" (Baker 2012: 24), pragmatic activities that were devoid of ritual and social significance. Rather, the co-mingled skeletal remains represent the end result of a series of highly ritualized, symbolic depositional episodes in which mourners actively handled and removed deceased bodies (Parker Pearson 1999: 5-6; Williams 2003: 4). Such practices were reserved for selected persons and demonstrate mourners' close and continuing contact with the physical remains of the dead at short- and long-term intervals after death.

Based on the taphonomic indices of the tomb in general, the scores of Individuals 1, 2, 3, and 4, and the observable degree of bone fragmentation and scattering, it is likely that mourners would have encountered various states of bodily decomposition and skeletal articulation during re-visitation activities that occurred following original interment. In other words, some if not all of the bodies were moved around during all stages of decomposition. The survivors had a hand in the high degree of intermixing and disorder. Moreover, mechanical processes such as moving, fragmenting, or removing bones and objects would have affected decomposition rates and conditions (Weber 2014: 91). Stages of putrefaction, decomposition—which included stages of "active" and then "advanced" decay—and skeletonization were functions of time. These stages of decay were also dependent on the conditions of the tomb, whether open or sealed; its depth below ground; exposure to animals, air or water; temperature and humidity; corpse mass; and the burial space itself, whether a filled space, in which case the sediment composition and acidity played a role in the microenvironment, or if the burials took place in a void as was the case for Tomb 100 (Duday 2009: 32-40; Weber 2014: 97).

Continuous handling of certain bodies after death was a specialized treatment reserved for specific persons. These highly intentional practices reveal a close connection between post-mortem bodies, personhood, and commemoration, all of which were necessary conditions for ancestorhood. Concern with death pollution does not appear to have been a major factor in body treatments, given both the intramural context and frequent re-use of many second millennium B.C.E. burial spaces. Encounters with decomposing bodies inside of the small tomb chamber would have created specific sensorial conditions that were meaningful in this ritualized context; I address the sensorial aspects of light, scent, and the use of mind-altering drugs during these rituals of transformation below.

During use of Tomb 100 ritualized bodily fragmentation practices obscured individual biographical and biological identities of its decedents. The performance of prolonged funerary rituals transformed the dead into new states of being during the three temporal or ritual phases following death: (1) pre-interment, (2) interment, and (3) post-interment phases. Such practices accomplished two major goals: (1) for the recently deceased, completion of a given individual's biological and social death; and (2) for the long-deceased, incorporation of the dead into a shared ancestral identity based around the intergenerational household of Building 12/K/15. Each step was an integral component of transforming the dead into ancestors.

The Funerary Sequences of Tomb 100

The funerary sequence approach is particularly relevant for disentangling ritual phases associated with multiple-successive interments, which is a challenging endeavor due to the intertwined nature of the materials. Although it is impossible to parse specific events associated with each individual, an overall picture emerges that broadly reconstructs the three overlapping phases of pre-interment, interment, and post-interment activities. The funerary sequence model considers the role of memory in Canaanite death and burial practices using the *rites de passage* perspective on phases of separation/liminality, transition, and (re)incorporation (van Gennep 2004 [1960]). These ritual-temporal phases occurred at different levels of time that elapsed after death. The following analysis will reconstruct three funerary phases within this framework: (1) pre-interment phase (separation/liminality; biological death); (2) interment phase (transition to social death); and (3) post-interment activities at the grave-site (re-incorporation). Each of these funerary phases has archaeological correlates that can be traced in the mortuary record.

Pre-Interment Phase

Following biological death, mourning rituals and funerary preparations would begin. These activities comprised the pre-interment phase, which could include the following steps: (1) preparing the corpse; and (2) assembling the funerary materials and preparing the burial space. Pre-interment phase marked biological death and the beginning of mourning rituals, during which the corpse occupied a liminal social status: active decay had begun, which initiated unmistakable signs of biological death such as changes in the temperature and color of the skin and in limb compliance (lividity), as well as bloating and putrefaction (Weber 2014: 97). Yet the body still resembled the living person and was not yet removed from the social network inhabited in life (Nilsson Stutz 2015: 2-5).

Corpse Preparation. Pre-interment activities, especially corpse preparation, are difficult to trace archaeologically due to the intermingled, fragmented nature of the remains in Tomb 100, and the fact that many of the pre-interment practices likely occurred away from the burial locus. In the Middle and Late Bronze Age, inhumation was the main disposal method across the Levant. Generally, body preparation was limited to wrapping the body in a cloth that was held in place by pins located at the shoulder. Resins, beeswax, ointments, and perfumed unguents may have been used to treat corpses prior to burial as indicated, for example, by lipid residues recovered from ceramic vessels inside a sarcophagus in the Royal Hypogeum at Qatna (Mukherjee et al. 2007). Although later attempts at body preservation or mummification involving bitumen have been traced in the LB IIB-Iron IIA cemetery at Tell es-Sa'idiyeh (Green 2014: 159), this is not the case during the MB III-LB II. Cremation was also virtually unattested during the Middle and Late Bronze Age (Bloch-Smith 1992: 38).[61] Other aspects of corpse preparation could involve washing, anointing, dressing, shrouding, wrapping, and binding the body, which may have been displayed (Brody 2008: 530).

In the case of Tomb 100, because we are left with disarticulated and fragmented bones, there is no preserved evidence that could be indicative of either washing or anointing the flesh of decedents interred in Tomb 100.[62] Residue analyses yielded preserved plant compounds and opiate residues in lamps (see below), but produced no evidence of oils, resins or waxes in the vessels sampled. Likewise, no direct evidence of clothing survived in the tomb. However, 13 intact bronze/copper pins were found scattered throughout the tomb. These pins may have held clothing in place on the corpse. In addition, many bronze/copper fragments and chips that were found were scattered throughout the tomb debris may indicate a higher number of pins than the 13 that survived. Although neither textiles nor phytolith deposits were detected within the tomb, these have been found in other Area K burials that may indicate a general practice of corpse shrouding. For example, a thin layer of phytoliths that adhered to several long bones in Burial 12/K/89 may represent the remnants of textiles used to cover the body (Martin, Cradic, and Kalisher 2018). Along these lines, shrouding, wrapping and binding with linen cloth has been traced at Tell es-Sa'idiyeh, where mineralized textile impressions were found preserved on bronze objects within several burials (Green 2014: 159).

The absence of articulated skeletons in Tomb 100 meant that few cases of body positioning could be established, precluding positive identifications of the binding of extremities. Binding and bundling corpses prior to inhumation can be identified in burials with tightly flexed bodies (Reese-Taylor, Zender, and Geller 2006: 48-50) such as Ashkelon Burial 169, in which the legs of a young adult female may have been bound together (Brody 2008: 531). Because of changes in lividity that occur within hours of death (Weber 2014: 97), this bundling must have occurred shortly after death—in the magnitude of hours to days—either before the onset of *rigor mortis*, which lasts around 36 hours, or soon thereafter. Therefore, it is likely that the pre-interment phase lasted for a short time, and that burial occurred within days after death.

[61] Some of the human bones interred in the Royal Hypogeum at Qatna showed signs of heating to 200-300 degrees Celsius for over an hour (Witzel and Kreutz 2007: 178-179; Pfälzner 2012: 209-210). This may have been an intentional practice of burning to mitigate odors of decomposition (Witzel and Kreutz 2007: 185). Lange (2014: 251) convincingly argues that the corpse was wrapped, covered in paste made of oil, resin and pigment, and burned prior to being deposited in the southern chamber of the burial complex.

[62] The frequency of bone breakage was highest in the top three layers of deposition. Although not all of the bones were broken, nearly all were disarticulated (with the exception of isolated articulations observed for Individuals 1, 2, 3, and 4). The three conditions of disarticulation of the skeleton, co-mingling of bones, and fragmentation of individual skeletal elements often occurred together.

Among the 23 individuals in Tomb 100, no direct evidence of special bodily ornamentation in death could be discerned. Three scarabs were recovered from Tomb 100, but these could not be associated with specific skeletal remains. Other jewelry, such as two silver rings or earrings and bronze leaf fragments that may have adorned clothing, were also found scattered on the top layer of deposition without any associations. These objects probably once adorned the corpse before and during interment, and were subsequently separated from the body during multiple phases of movement and fragmentation associated with this compound disposal burial.

In terms of corpse display, Tomb 100 did not contain features such as a bench, niche or platform inside the tomb that could have been used for laying out the body. Although the lack of a feature for corpse display inside Tomb 100 does not preclude that such a practice occurred outside the tomb prior to burial, we cannot draw any positive conclusions from this absence of evidence. Corpse display may have occasionally been part of pre-interment phase in the Middle and Late Bronze Age Levant, as indicated by an exceptional example of a wooden preparation table located inside the Royal Hypogeum in the Royal Palace at Qatna (Witzel and Kreutz 2007; Lange 2014: 250). The table contained an articulated skeleton, which was laid on the table in a supine extended position (Witzel and Kreutz 2007: 175).

Although there are limitations to tracing these rituals archaeologically, the Ugaritic liturgical evidence provides useful information concerning a pre-interment ritual of lowering the corpse into a pit or grave, which was performed seven times (*KTU* 1.161: 20-30; Pardee 1996: 275; Teinz 2012: 240-241). While this ritual may have been symbolic only (Salles 1995: 179) and is not easily traceable archaeologically if performed physically, this ritual of descent may have occurred inside the burial chamber, which could have been opened every six to seven years (see above). Alternatively, the ritual of descent may have involved multiple phases of burial, exhumation and reburial in a location different than the eventual grave-site (Pardee 1996: 274-275).[63] Such a practice has been identified in the Royal Palace at Qatna, where corpses were originally interred in the Royal Hypogeum, and then were transported along with their grave goods into Tomb VII, located elsewhere in the palace, for secondary burial (Pfälzner 2014: 145-149). If the latter case, then we can look to the 15 other burials in Level K-10 Building 12/K/15 for evidence of delayed inhumation or removal of the corpse from its primary locus of decomposition before permanent burial in Tomb 100. Such evidence would include disturbed and incomplete burials in the vicinity of the tomb.

Delayed Inhumation. Delayed burial could explain the presence of contemporaneous inhumations of five individuals in close proximity to Tomb 100, all located in Space E2 of Building 12/K/15 (see Figure 15). Burial 10/K/118 for example, which was located ca. two meters west of Tomb 100, showed signs of disturbance and contained remains of three individuals. One of these individuals, a young adult male aged 16-20 years, was an age outlier

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[63] For Ugarit, Pardee (1996: 274-275) suggests that a two-meter-wide pit located near two tombs in the royal palace may have been where this seven-fold ritual of descent took place. However, based on the debris fill, this feature may have simply been a refuse pit.

among the infants and children of the Level K-10 jar burials. This individual was represented by his fragmentary cranium and mandible. This individual may have been originally interred near the pithos, thus disturbing its two primary inhumations, and then secondarily his post-cranial remains were moved elsewhere, perhaps into Tomb 100, following complete decomposition. Whether his cranium and mandible were purposefully or accidentally left behind is unknown; cranial elements were generally well represented in Tomb 100, where teeth from 21 out of at least 23 individuals were represented.

Delaying inhumation within the shared chamber tomb during a prolonged mourning period could indicate certain taboos regarding purity, or proscriptions concerning issues of time duration between inhumations, in which it was not yet acceptable or safe to re-open the tomb upon another individual's death. However, this does not explain all cases of nearby inhumations. Burial 12/K/89, for example, was located only ca. one meter west of Tomb 100 but was likely never intended for burial in the chamber. This complete, undisturbed primary pit inhumation was interred with a bowl carefully placed next to the individual's cranium. The flexed body was positioned for permanent burial, and the burial site was not marked in any way (see Figures 65-66). Most of the Level K-10 burials fit this model and were intended for permanent primary inhumation outside of Tomb 100 (see Chapter 6). Therefore, delayed burial may explain isolated cases of disturbed and incomplete inhumations nearby Tomb 100, but this kind of secondary disposal involving exhumation and relocation into Tomb 100 was probably exceptional. In most cases, the pre-interment phase was short; primary burial occurred within days after death in a permanent location. This was probably also the case for the majority of the inhumations in Tomb 100, although it is impossible to differentiate between those individuals who were originally inhumed in the chamber and individuals who were secondarily disposed of in the tomb because of the subsequent intermixing of the skeletal remains.

Interment Phase

The interment phase comprised the act of burial, which included deposition of the corpse and grave goods. Tomb 100 contained only co-mingled compound burials in which primary, secondary, and tertiary disposals co-occurred. All skeletal material was disarticulated, and most individuals had been displaced from their original positions—presumably interred initially as primary inhumations in the center of the tomb—before being pushed toward the back (east), where the bulk of the skeletal material from many individuals was indistinguishably mixed together in a heap (see Figure 18).

The interment phase marked a new sequence of funerary rituals, which began during pre-interment preparation and would last at least through the initial deposition of the body and grave goods. For primary disposals that lacked evidence of post-interment activities at the grave-site, the interment phase terminated an individual's funerary sequence. For the individuals of Tomb 100, the interment phase continued the transition from biological to social death. Such a transformation was accomplished through burial as a ritualized performance of social distancing. Burial removed the corpses from the realm of the living and restricted physical interaction with the decomposing bodies. Decay slowly eroded identifiable features of individuals, which erased their biographical identities and completed their transition from biological to social death. Yet at the same time, the tomb was revisited. Its location within the occupied house kept the dead in close proximity to daily activities of the household and its members, thereby retaining the deceased within the intergenerational social network of the household. The dead, who were socially remote yet physically near, took on new roles within the household.

Overall, the interment phase would have comprised several steps that would be repeated for each inhumation. First, mourners would gain access to the tomb, most likely by moving aside the vertical slab in the west. Next, the funerary participants may have lit oil lamps for practical and symbolic reasons (see below). Then at least one person would have to step down into the chamber, a depth of ca. 0.15-0.65 m from the entry threshold to the chamber floor, in order to position the corpse. This step involved moving aside the latest inhumation toward the back and sides of the chamber, possibly disturbing other, earlier inhumations in the process. For the first few burials inside this tomb, the body could have easily been laid in an extended position in the center of the chamber, oriented east-west. While this practice may have carried through the entire span of the use of the tomb, the center space would have become more constricted as debris accumulated and encroached into the middle, north, and south of the chamber.

Deposition of Grave Goods. Grave goods were composed of objects, such as ceramics and jewelry, and perishable consumable offerings including meat and wine or oil contained in vessels. The relatively homogenous composition and patterned spatial placements of this “funeral kit” throughout the second millennium B.C.E. indicates that the interment phase was consistent among most burials, regardless of type, location, or architecture (Baker 2012: 57-59).

At minimum, each inhumation would have been accompanied by two to three ceramic vessels (see Chapter 7). Several individuals would have also received objects such as scaraboids, wooden boxes inlaid with carved bone, rings and earrings, weaponry, beads, and stone vessels. However, each individual’s original funeral kit remains unknown since fine-grained spatial and stratigraphic clustering could not be discerned in this compound disposal tomb. Individual funeral kits were likely variable, as was the case for the other 14 pit and jar burial inhumations in the Level K-10 house (see Chapters 6 and 7). Further, although specific kits may have been initially associated with a particular individual, this distinction would have quickly evaporated upon successive interments and consequential mixing of skeletal and other materials. Therefore, the funeral kit model should not be applied to co-mingled burials, where individual funeral kits were intentionally broken, removed, or modified after original interment. This approach, while very useful for primary inhumations, is not appropriate in cases where kits were not meant to be discrete, but were intended to be intermixed and shared among the individuals within the chamber as is evident from the dispersed nature of the burial assemblage within Tomb 100. For primary inhumations, interment would have involved arranging grave goods near the corpse, such as around the cranium, torso, and pelvis (Baker 2006: 10-18). Although the mixing of the materials precluded reconstructing which objects were associated with which individuals, the chronological span of the assemblage indicates that the materials were deposited sequentially over the entire use-life of the tomb.

Food Offerings. Lastly, the funerary assemblage included faunal remains recovered inside the burial chamber. The faunal assemblage consisted of predominately sheep/goat remains, including an intact sheep/goat cranium which was intermixed with the human skeletal remains in the eastern bone heap inside the burial chamber (Sapir-Hen, Martin, and Finkelstein 2017). These animal bones demonstrate that food offerings were distributed to the deceased, probably as the leftovers from the funerary repast. The inclusion of the sheep/goat cranium in particular indicates that the funerary feast may have involved whole animal offerings. In this scenario, the meatier cuts were likely portioned out to mourners for consumption at or near the grave-site while the meat-poor elements, like the cranium, were served to the dead. Such a funerary meal was known as a *marziḥu* in Ugaritic (*marzeaḥ* in the Hebrew Bible), though this term and its attendant activities were probably not exclusively associated with funerary practices (cf. Pardee 1996; Lewis 1996; Brody 2008: 529, n. 163; Lange 2012: 165-167).

Ceramic Assemblage. The ceramic assemblage can also serve as indirect evidence for food offerings, feasting, or both. Tomb 100 contained relatively few open vessels, with only five plates or bowls out of the entire ceramic repertoire, comprising just ca. 8% of the assemblage which otherwise consisted of closed forms, primarily jugs and juglets which made up ca. 60% of the ceramics. Likewise, Megiddo Middle Bronze Age burial assemblages increased in the quantity and proportion of jugs and juglets over time, from the MB II (55% of burial assemblages) to the LB I (65% of burial assemblages) (Cradic 2011: 43, Tables 5.10-5.11). These proportions provide clues as to whether the meat portions were deposited as offerings for the deceased or as part of a larger funerary feast in which mourners participated. Open vessels like bowls, plates and platters, used for serving and immediate consumption, represent feasting proxies, whereas closed forms more likely stored liquid offerings. Overall, these patterns indicate that the closed vessels—especially jugs and juglets—and whatever substances they contained, took on special funerary meanings during interment.

The remaining 31% of vessels in the assemblage of Tomb 100 consisted of storage jars (ca. 3%), imported pottery (ca. 5%) and lamps (ca. 23%) (see Figure 21; see Table 43). Unlike vessels for serving and storage, lamps played fundamentally different roles in the funerary sequence that were not related to food consumption (see below). Across the Middle and Late Bronze Age Levant, lamps typically comprised a small proportion of grave goods, ranging between 1–13% of the ceramic assemblage. The quantity of lamps among all burial types peaked in the MB III (Hallote 1995: 116, Figure 11), when each individual received ca. 0–2 lamps (Baker 2012: 185-186, Appendix B). This quantity decreased to ca. 0–1 lamps per individual during the Late Bronze Age (Martin and Cradic 2018).

At Megiddo, lamps increased slightly from ca. 3% of the burial assemblage in the MB II to ca. 9% of the assemblage in the MB III/LB I (Cradic 2011: 43, Tales 5.10-11). Lamps were somewhat more evenly distributed across tomb types at this site than elsewhere, with approximately half of all lamps recovered from masonry-constructed chamber tombs (28 lamps from eight out of seventeen tombs) and the other half distributed across pit and jar burials (21 lamps from 13 burials). However, upon closer inspection, these distributions reveal a significant skew towards the use of lamps mainly for re-used chamber tombs. While over half of all masonry-constructed chamber tombs at the site contained between one and five lamps, only a small proportion (ca. <5%) of Megiddo's hundreds of pit and jar burials contained a single lamp, demonstrating that the few cases where they are present in pit and jar burials are exceptional.

Given these local and regional distribution patterns, the high representation of lamps in the ceramic assemblage of Tomb 100 stands out both in absolute (n=14) and relative (23%) terms (Martin and Cradic 2018). Therefore, burial type played an important role in the quantity of lamps present in a given assemblage; lamps were most frequently attested in re-used burial spaces such as chamber tombs (cave, rock-cut and masonry-constructed), but were rarely found in single-use and sealed contexts such as pit burials (Gonen 1992b: 19; Martin and Cradic 2018). This pattern holds in Building 12/K/15, where lamps were present in Tomb 100 but not in any of the pit or jar burials (see Tables 41, 43).

Blurred Lines: Overlap between Stages of the Funerary Sequence

It is important to consider issues of time that elapsed between interments and how these stages overlapped. Ritual timeframes can be extrapolated based on the degree of skeletal articulation. Three “levels” of time (Weber 2014: 97-98) elapsed after death for individuals interred in Tomb 100:

(1) Time between biological death and primary inhumation, which usually encompassed primary inhumation inside the tomb or elsewhere. This stage was likely short—it would have included putrefaction and the beginning signs of corpse decay—and would have lasted from several hours to several days (see above).

(2) Time between primary inhumation and the end of advanced decay, in which bones transition from “wet” to “dry” (Weber 2014: 97). The process of reaching dry bone stage could take as little as three weeks to over six months, depending on specific conditions of burial and any subsequent disturbances, such as re-opening the tomb (Weber 2014: 97). This stage was probably followed by secondary disposal within the tomb or movement of bones into the tomb. In at least four cases, secondary disposal occurred before this stage was complete.

(3) Time that elapsed after skeletonization, which involved re-openings of the tomb and further fragmentation, disarticulation of individual skeletons, and continual compound disposals. In Tomb 100 this last multi-episodic stage was prolonged, lasting from several years to several decades. This stage culminated in complete disarticulation of almost all individual skeletons. A significant volume of bones was so fragmented that they turned into bone dust that comprised much of the debris. Eventually, most of the bones became extremely disordered and intermixed with others in the east of tomb, opposite the entry, while other bones were pushed to the north and south sides of the chamber.

The isolated examples of discrete, articulated elements belonging to Individuals 1, 2, 3, and 4 (see above) provides an instructive illustration of these stages of decomposition and bone movement. For instance, Individual 4’s vertebral column and left arm were located in the southwest of the tomb: left scapula, left humerus, left ulna and radius, and most hand bones (proximal phalanges, metacarpals, carpals), were all found in anatomical order (Figures 30, 35, and 36). These articulated skeletal elements were disconnected from the cranium and most of the other post-cranial remains with which they originally belonged. The body was oriented southeast-northwest and positioned face down on the stomach. This prone body position is rare at Megiddo, attested in only one case out of 99 identified individuals. At this site, most primary interments were placed in a right lateral flexed or supine flexed position (see Chapter 7). This corpse was moved into this prone position while at least some flesh remained on the bones. The secondary disposal must have occurred during levels 1-2 of decomposition (decay to advanced decay), but prior to complete bone dryness and skeletonization. It is not clear if the articulations became separated from the remainder of the skeleton during one or more episodes of movement.

Figure 36. Articulated left hand of Individual 4 in Tomb 100. Photo by M. Schaeffer. Courtesy of the Megiddo Expedition.

One of two scenarios is possible. Either the entire skeleton had remaining flesh and was moved secondarily as a whole corpse toward the west, with further movement and separation of the body parts occurring as a tertiary disposal once the corpse reached the skeletonization level of decay. Or, the skeleton was mostly bone dry when moved toward the south, thus separating the left arm—with its remaining flesh or connective tissues (see below)—from the rest of the skeleton during this single instance of disturbance. The first scenario is more likely based on the presence and articulation of the small, fragile hand bones in particular. Delicate articulations, especially the phalanges and scapula-thoracic articulations, tend to get separated from other skeletal elements during secondary disposal more frequently than robust persistent joints, such as those of the lumbar vertebrae, knee, and pelvic basin (Duday 2006: 45-48; Knüsel and Robb

2016: 4).[64] Moreover, the articulations present in Individual 4 are more extensive than any of the other individuals, which is another indicator that much of the body retained flesh when it was moved, which likely occurred in the weeks or months after primary inhumation. In this case, the entire corpse must have been moved toward the southwest before reaching skeletonization, while muscle, skin, and tendons were still intact.

As is the case with the Jericho tombs discussed in Chapter 2, in the ancient Near East soft tissues can occasionally preserve years after skeletonization. Cartilage and other connective tissues that persisted after skeletonization could have been responsible for the isolated cases of preserved articulations encountered in co-mingled contexts of Tomb 100 and Tomb 50 (see below). In this scenario, corpses could have retained ligaments, tendons, or cartilage that held together articulations of the hands and vertebrae. According to Roksandic (2002), articulations of some cervical vertebrae, which have interlocking components and strong ligaments, may persist longer than other parts of the body, possibly explaining the articulated vertebrae in Individuals 1, 2, 3, and 4 in Tomb 100. Legs and feet, if protected with clothing will also persist longer than arms, which tend to decompose early in the sequence (Roksandic 2002). However, if not protected, hands and feet will disarticulate early, as will the first and second cervical vertebrae which are subjected to pressure from the cranium (Roksandic 2002). More often than not, tissues and natural fibers like wool tend to decompose in the earlier stages of decomposition particularly in hot, humid environments like Megiddo (Forbes 2008: 236; Janaway 2008: 166-170). Moreover, cadavers may be subject to decomposition of soft tissues by biotic (bacteria, fungi, insects) and abiotic (temperature, humidity, depth below ground, soil composition and pH) factors even before burial, which further weakens the possibility of cartilage as an explanation for partial articulations at this specific site (Nawrocki 1995: 51-52; Carter and Tibbett 2008: 38-43). The forensic evidence does not provide a straightforward answer. Due to the absence of positive evidence of soft tissues being preserved after skeletonization at Megiddo, I interpret the presence of articulated remains in the maximal sense—in terms of belonging to skeletons which were still at least partially fleshed when (re-)deposited, therefore assuming that such movement occurred in the weeks to months following death.

Several important conclusions can be drawn from this example. First, we are dealing with at least one clear case in which secondary disposal occurred *before* full decomposition. Second, we have a case of tertiary disposal, where the arm was separated from the rest of the subsequently skeletonized body at a later (tertiary) instance of disturbance. Both of these interpretations also hold for the three other partially articulated individuals. Third, these partial articulations indicate that Tomb 100 likely served as the original—and therefore, primary—locus of decomposition for most, if not all, of its inhumations. Finally, we may infer that at least some of Tomb 100's secondary disposals occurred within a relatively short time after primary inhumation, as little as several weeks or months following death. Based on the location of this individual's arm near the western wall of the chamber, which was a relatively open and

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[64] As a counterpoint, note that the humero-ulnar articulation of the elbow, which was represented in Individual 4, is a stable articulation that tends to last longer than other articulations of the arm "due to its strong soft tissue support and complex morphology" (Knüsel and Robb 2016: 4).

unoccupied space, it seems likely that this (premature?) disturbance occurred because a new inhumation was placed in the center of the chamber. Therefore, several interments may have occurred in quick succession, even while the previous corpse underwent active decomposition.

Post-Interment Phase

The post-interment phase involved two major activities: (1) ongoing visitation and depositions at the grave-site; and (2) compound disposals. Ongoing commemoration involving prolonged care and feeding of the dead in Tomb 100 is indicated by three key elements: stratified deposits of artifact and faunal remains within the fill around the tomb structure; grave marking; and remnants of an installation related to food and drink offerings.

Episodes of Re-Visitation to the Chamber Tomb. The post-interment phase encompassed multiple instances of opening the tomb and the attendant compound disposals that occurred during the interment phase of new inhumations. These repetitive activities occurred over the course of ca. 150 years. If the tomb was re-opened on at least 23 occasions, as discussed above, then we can estimate that the chamber would be opened roughly every six to seven years. Repeated, ritualized corporeal fragmentation, which was performed each time the tomb was re-opened, separated and destroyed individual skeletons which became unrecognizable. This ritualized process obliterated the biographical and biological identities of the 23 dead individuals, whose fragmented bones were physically and ritually incorporated together to form a new, collective identity. These post-interment compound disposals fundamentally set apart Tomb 100 from the contemporaneous primary burials scattered throughout the Level K-10 house, in which corporeal integrity was an important feature in death; these inhumations were left unmarked, undisturbed and intact unlike the highly fragmented, frequently disturbed and ritually incorporated inhumations in Tomb 100.

Unlike the interment phase, which was relatively consistent among all burials in the second millennium B.C.E. Levant, the post-interment phase only occurred in special circumstances. The post-interment phase has been less frequently identified in primary inhumations, except where specific offering deposits occurred outside of sealed burials. Such depositions, when identified as mortuary in nature, demonstrate ongoing commemoration at the grave-site. For example the fill outside of Burial 169 at LB I Ashkelon, which was sealed with mud-mortared wooden timbers and plaster, contained remains of meat offerings, an assemblage of 13 ceramic stoppers, chert debitage and blade fragments, and open and closed vessels (Brody 2008: 523-527). In addition, an upright pithos that was built into the southern closing wall of this brick-lined burial likely remained accessible and in use for offerings after the burial was sealed (Brody 2008: 523).

Tomb Closure and In-Filling. After the final interment, Tomb 100 was closed and sealed with fill and a layer of plaster. The capstones and vertical entry slab of the tomb were first detected within this fill. The layer above the plaster consisted of Level K-9 surface accumulations, ca. 0.25 m thick, into which a pillar base was installed. After the infilling, the tomb was not disturbed by intrusive constructional activities or robbing, which gives us an important look at the final closure rituals conducted at the active burial site before it was abandoned.

First, the fill that sealed the exterior of the tomb chamber contained two intact oil lamps; dense concentrations of sherds, faunal bones, charred olive pits, flint blades; and an assemblage of 40 ceramic stoppers. Plausibly, these remains could represent habitation debris, given the tomb's occupational context. However, the density of animal bones and ceramic stoppers was higher than the house's typical domestic assemblage (Martin and Cradic 2018). In contrast to the unconsumed carcasses deposited inside the tomb chamber, the faunal remains recovered externally may represent residues of funerary feasts. The collection of stoppers could be related to libation offerings, like the 13 stoppers at Ashkelon Burial 169, which "may indicate a practice of opening vessels by the graveside which were not deposited on top of the tomb" (Brody 2008: 523). Overall, the abundance of pottery and faunal remains throughout the fill layers is reminiscent of the fill surrounding Ashkelon's Burial 169. Likewise, mixed debris located above the elite built tombs at third millennium B.C.E. Umm el-Mara (Syria), which contained a bronze chisel, silver bowl, and fragments of vessels and bone combs, has been interpreted as material evidence for ancestor veneration that occurred long after burial (Schwartz 2012: 66).

Evidence of faunal and material offerings in close proximity to intramural burials has also been identified at the Middle Bronze sites of Tell el-Dab'a, Tell el-Maskhuta, Tel Dan (Brody 2008: 527), Tell Arbid (in the tomb entry shafts; Wygnańska 2014), Sidon (Doumet-Serhal 2010: 121), Gesher (Garfinkel and Cohen 2007: 67), Tel Kabri (Kempinski 2002: 51), and Qatna (Pfälzner 2007: 56–59; Lange 2014: 244–46). Later examples come from Tell es-Sa'idiyeh cemetery (Green 2014: 163–65), and compelling inscriptional evidence of commemorative food offerings has been found on the KTMW Stele, a funerary monument from early first millennium B.C.E. Zincirli (Sanders 2013; Bonatz 2014; Hermann and Schloen 2014).

The offerings deposited above the subterranean burial site of Tomb 100 were facilitated by grave markers. A white plaster surface of Level K-10 covered most of the tomb structure, marking its location below the floor (see Figure 16). Beyond its function as a surface of Room 12/K/88, the plaster served as a special floor-level marker that created a visual and physical boundary between the funerary realm below and the habitation area above. According to Hallote (2001b: 36), subterranean chamber tombs "were almost certainly visible long after they were sealed. The spot would be subtly marked, often by the plaster of the floor, which would come up to the lip of the tomb but not hide it." In the case of Tomb 100, the chamber's prominent entrance slab visibly protruded into the Level K-10 surface and may have been visible within the lowest surface striations of the stratum above (Martin and Cradic 2018). The top of the slab was situated ca. 0.10-0.30 m above the tomb's other exterior roofing stones, demonstrating that the slab was constructed to sit flush with or protrude above the occupational surfaces above.

A pillar base affiliated with Level K-9 was positioned ca. 0.50 m above the tomb's roofing slabs in the east and may have served as a secondary grave marker. The placement of the pillar base may have been coincidental; yet, given the visibility of the grave markers discussed above, the occupants were probably aware of the tomb's location below Level K-9 Room 08/89. The uneven, sloping Level K-9 floor, which sunk around the contours of Tomb 100's vaulted roof, may have also served as a subtle, if accidental, reminder of the presence of the (now inaccessible) tomb structure below the house floor.

A flat semicircular installation constructed of small fieldstones, provides additional evidence for ongoing commemoration performed at the tomb site, specifically related to care and feeding of the dead. The ledge was built into Level K-10 Wall 12/K/4 and was flush with the Level K-10 plaster floor that sealed the tomb structure (Figure 37). The installation, dubbed an "offering table" in the field, was located just above the easternmost tombstones alongside degraded *tabun* fragments and a dense accumulation of ash, charcoal, phytolith deposits, and animal bones. This small platform may have served as a repository for libations, food offerings, or burnt offerings. Additionally, the majority of the 40 ceramic stoppers in the tomb fill were found in close proximity to this built feature. Similar features appeared in the *Nordburg* "necropolis," where Gottlieb Schumacher (1908: 56, Figure 61b) noted that "three of the burials (*a*, *b*, *c*) show a 0.35–0.40-m-high and 0.30-m-wide stone at their southern end, which . . . exhibits a cup-like depression at its centre, a spiral hole drilled or hewn out." [65] Across the Levant, funerary installations linked to ongoing care and feeding of the dead—specifically cooking installations and feasting residues—have been identified in a few cases, which include *tannurs* and drains at Middle Bronze Sidon (Doumet-Serhal 2010: 121); pipes, drains, and perforated slabs located near tombs at LB II Ugarit;[66] an upright storage jar built into Ashkelon Burial 169 (Brody 2008: 527); and a white plaster basin surrounded by red-stained sediment at multiple-interment Tomb TWE-A-00170 at Tell Tweini, which also contained perforated roofing slabs (Hameeuw and Jans 2008: 81).

[65] The dating of these stone-lined pit burials is not secure. Based on the pottery, Burials *a*, *b*, and *c*—all of which exhibited this cup-like feature built into the stone lining of the grave—likely date to the late Middle Bronze Age (Schumacher 1908: 54–55).
[66] Although many of the so-called funerary installations at Ugarit may not actually be related to burials (cf. Pardee 1996: 279–80 and Pitard 2002: 151–55). For an updated response using new evidence, see Lange 2012: 173–75.

Figure 37. Tomb 100 after removal of roofing stones. Note the semi-circular stone installation built into Level K-10 Wall 12/K/4 directly southeast of Tomb 100 in the right of the photograph. Courtesy of the Megiddo Expedition.

Transformations in Death

The above reconstruction of funerary sequences raised intriguing new insights about treatment of the dead and the role of commemoration in Tomb 100. Bodily fragmentation processes during the post-interment compound disposals, and the co-occurrence of interment and post-interment phases, lead to more nuanced interpretations regarding treatment of individuals after death and how this treatment changed as the time after death became more distant. Far from representing irreverence for the dead, these sequences were highly ritualized performances that transformed the decedents in Tomb 100 from biographical individuals with distinct bodies into an incorporated, heterarchical group with fragmented, co-mingled bodies. Through repeated mechanical manipulation whole corpses were transformed into disarticulated bones or fragmented body parts, which became extremely disintegrated, damaged, and unrecognizable as individuals. After secondary disposal, the decedents shared their bodies, space, and grave goods.

As each individual's funerary sequence progressed, and as the time since death became more distant, their biographical identities—as told through accompanying material goods and identifiable physical features of the skeleton—also became more remote. Bodies were fragmented, but grave goods were not; ritual breakage applied to human bodies specifically, rather than objects. Although the individual objects were generally not broken, the composition of individual funeral kits was obfuscated through the disruption and scattering of objects. The positioning of the objects could not be associated with any individual but in fact belonged to everyone. The loss of personal property, which shifted to collective property, was analogous to the integration of bodies, which signaled a new, corporate identity. In other words, the breaking up of whole bodies and whole funeral kits were parallel processes that facilitated the incorporation of the individual person and individual object into the corporate group. Such co-mingled and scattering of individual skeletons achieved biological and then social death during the pre-interment and interment phases, respectively. During post-interment commemoration, the deceased were transformed into their new, collective identities and took on a corporate role.

This ritual sequence recurred repeatedly over 150 years, or approximately five to seven generations of the household of Building 12/K/15. Such continuity indicates that the survivors and mourners placed meaningful emphasis on this particular group over a prolonged period of time. During most of this time, the tomb was accessible and periodically re-visited for additional inhumations. Even after it was sealed, the tomb was marked and commemorated.

The evidence of post-interment deposits around the tomb fill indicates continued activities at the grave-site that featured perishable food and liquid offerings. Such offerings, perhaps along the lines of a *kispum* ritual, are hallmarks for active commemoration of the dead collectively, along the lines of a cult of the dead that memorialized or even venerated the deceased. Tomb 100 is therefore paradoxical in terms of the role of memory in death and burial. On the one hand, continued handling of bodies, objects and deposits for a prolonged period, even after closure of the tomb, indicates that the dead were remembered. Yet, these particular commemoration practices over time eradicated individual bodies, thereby eliminating personal, biographical identities of deceased individuals who became subsumed within the collective dead. Moreover, hierarchical status and individualized commemoration were probably not factors in Tomb 100 because there were no measurable differences among the interments.

Intramural Context of Tomb 100

The co-residential group who occupied Building 12/K/15 shared living space and death space. The most salient feature of any residential burial—whether or not in a collective tomb—is its subfloor, domestic location, which kept the dead closely linked to the house and its residents. This spatial proximity between household members, living and dead, continued their relationship over a number of generations (Brody 2008: 529; McAnany 2010: 137).

Disposal of the dead within occupied buildings offered survivors an intimate new way of interacting with the physical remains of the deceased. This physical interface redefined cityscapes as places partly transformed into funerary spaces and served as a visual mnemonic cue (Cradic 2011: 55) that communicated the deceased's membership with a specific household. A close connection with the intergenerational household was emphasized as a significant identity marker in death over membership within the wider urban community (Laneri 2010: 121), which would have been more effectively achieved through burial in the community cemetery (Cradic 2011: 55–64). Residential burials at Megiddo and elsewhere therefore served as loci of social memory, providing permanent spatial connections between the living and the dead as means of both commemoration and social reproduction of the intergenerational household lineage (Toohey et al. 2016). Within this context, the specific variables of compound body disposal and protracted re-use of the burial chamber marked Tomb 100 as a special locus of social memory within Building 12/K/15.

Multiple-successive burials could have served as "referential chains" within the household social network (Gillespie 2010: 104). The tomb was not located in a monumental, visible, or public context, but quite the opposite: hidden, below the floor of a house, inaccessible to all but residents and those within the household's social network. Every aspect of a burial—location, grave goods, burial architecture, and the even bodies of the interred individuals—referenced the past and the future household lineage (Gillespie 2010: 103-104). Over time, the collective lineage becomes more important than any single person. Along these lines, the bodies of the deceased were irrecoverably bound together in order to "articulate a descent ideology even if co-residential members [were] not biologically related to each other or to house founders" (McAnany 2010: 138). In this sense, we may be dealing with ancestors derived from a shared household lineage. Tomb 100 may have served as an ancestral cache where bodies and objects of inalienable—but heritable—value were stored, managed and concealed in reverential and referential ways (McAnany 2010: 139).

The inhumations literally embodied processes of memory selection with each sequential interment, creating a coherent "memory community" (McAnany 2010: 136) specific to this tomb. In this case, memory selection minimized differences—objects and bodies were not curated or displayed but thoroughly intermingled to emphasize shared household identity in death (McAnany 2010: 139; Gillespie 2010: 99). Through repetition of practices, each sequential burial referenced previous interments and sustained the commemoration of predecessors (Gillespie 2010: 104). In the end, the repetitive funerary sequences resulted in incorporation of discrete bodies and biographies into a new, shared ancestral identity.

Sensorial Aspects of the Funerary Sequence: Lamplight, Scent, and Fumigation

The location of the burial chamber in close quarters with living inhabitants of Building 12/K/15 brings to light the phenomenological aspects of burial and visitation to the re-used tomb. Although evidently the caching of corpses within an occupied building did not pose ideological problems for the inhabitants of the house, it probably raised practical issues that occupants had to address, such as odor and lighting of the chamber during funerary rituals. In this respect, the high number and proportion of oil lamps inside the burial chamber, which comprised 23% of the tomb's ceramic assemblage, may be related to both functional and symbolic aspects of funerary sequence (Martin and Cradic 2018). Unlike the other ceramic vessels that comprised the burial assemblage, lamps were not used for serving or storage but fulfilled fundamentally different roles. Based on the depositional patterns of the lamps inside the tomb, the experiential features of the funerary sequence related to lamps could involve (1) multiple instances of igniting and extinguishing of lamplight to illuminate the chamber; (2) use of lamps to display other materials; and (3) burning of special substances to fumigate and prepare the chamber.

The presence of a high number of lamps inside the burial chamber supports the idea that lighting and extinguishing of lamps was an important aspect of funerary ritual in the second millennium B.C.E. (Green 2014: 162). All of the lamps found inside Tomb 100 showed evidence of burning, such as charred and blackened rims, and all were found sitting upright as if to maximize light from the flame (Martin and Cradic 2018). In one case, a lamp was balanced on the mouth of a jug in the north of the tomb, which may have functioned as a shelf for the ignited lamp (Figure 38). Similar scenarios have been traced across the Levant in burial chambers that contained niches or shelves. For example, in Tomb VII in the palace at Qatna, one lamp was placed in a wall niche that was located in a relatively high-traffic zone of the chamber (Pfälzner 2014: 142, Figure 4). Similar niches are attested at Tell el-'Ajjul, Jericho, Tel el-Far''ah (S)[67] and Ugarit (Martin and Cradic 2018).[68] Ugarit's Tomb 51 contained three niches, inside of which were placed five lamps with burnt nozzles facing the back of the chamber (Marchegay 1999: 120).

In addition to the light benefit, in at least one case a lamp was used to curate material remains, including grave goods and isolated body parts. The lamp contained bronze chips and bronze leaf as well as five human teeth—mostly canines—placed inside the lamp (Figure 39). The teeth must have been placed inside the lamp after disarticulation of the skeletons to which they originally belonged, which shows the usage of lamps at multiple phases of the mortuary ritual, not just to provide flame during interment. Furthermore, lamps themselves were used as external offerings, as evidenced by the presence of two lamps that were found just outside Tomb 100's entrance (Martin and Cradic 2018). This situation is paralleled at Megiddo T.912 (Guy and Engberg 1938: 68, Figure 75) and at Kabri T.498 (Kempinski 2002: 51), where lamps were found in the tomb entry shafts, having been deposited alongside other pottery after the final use of the burial chamber (Martin and Cradic 2018). The lamp in the shaft of T.912 represents a special case, as it was found upside down; inverted lamps are also known from Tell es-Sa'idiyeh, where extinguishing lamplight through inversion may have symbolically sealed the tomb (Green 2006: 233–237; Martin and Cradic 2018). One such case was documented inside Tomb 100, although it is not clear if this inverted lamp was intentionally placed upside down, or if this placement was the coincidental result of re-positioning of grave goods and corpses in the back of the chamber (Martin and Cradic 2018).

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[67] Tell el-'Ajjul Tombs 246, 263, 406, 407, 411 and 1166; Jericho Tomb J14; Tell el-Far'ah (S) Tombs 905, 914 and 960 (Marchegay 1999; Baker 2010: 11–14; Martin and Cradic 2018).
[68] These niches were variable in size and shape, and could be built into *dromoi* or be located inside tomb chambers, with some placed above and some cut into the floor (Marchegay 1999: 101–102; Baker 2010; Martin and Cradic 2018).

Figure 38. Lamp placed on top of a jug inside Tomb 100. Courtesy of the Megiddo Expedition.

Figure 39. Lamp deposited in the top depositional layer of Tomb 100. The vessel contained bronze plates and human teeth. Courtesy of the Megiddo Expedition.

Beyond providing light and displaying material remains, lamps may have been used to evoke scent through burning. Encounters with recently interred human remains—or any corpses that had not yet reached the dry bone stage—would have been malodorous.[69] From a functional and sensorial standpoint, a desire to neutralize this putrid odor through fumigation may explain the inclusion of 14 lamps within the tomb assemblage (Weber 2014: 97-98). The scant few pieces of fragmented—and unfortunately, unidentifiable (M. Benzaquen pers. comm.)—charcoal found inside the chamber were inside lamps. More importantly, residue analysis from one lamp unexpectedly yielded morphine-derived compounds (Namdar 2018; Martin and Cradic 2018).

The enclosed space of the tomb chamber may have facilitated morphine consumption through fumigation. The presence of such a powerful and disorienting psychotropic substance inside the tomb carries important implications concerning the ritualistic, symbolic, and sensorial aspects of the funerary sequence during close encounters with the dead. In the wider region, the presence of opium has been documented during the Bronze Age in Egypt, and it is also known from residues of opium alkaloids in Cypriot Base Ring juglets to a limited degree (Merrillees 1962, 1968; Bisset et al. 1996; Bisset, Bruhn, and Zenk 1996; Koschel 1996; Chovanec, Rafferty and Swiny 2012; Guerra-Doce 2015; Chovanec, Bunimovitz, and Lederman 2015; Stein 2017). Two Base Ring I juglets were found inside Tomb 100, possibly providing additional indirect evidence of the presence of opium in this funerary context.

Although the use of psychedelic drugs in funerary contexts is not currently known in the second millennium B.C.E. Levant, the presence of mind-altering drugs in other sacred spaces in the Levant and globally has a long history that contextualizes the presence of opium in the mortuary realm. A ceramic storage jar from the temple courtyard at Late Bronze Age Kamid el-Loz, for example, contained ten liters of Viper's Bugloss (*Echium linné*), a powerful hallucinogen (Stein 2017: 511–512). Beyond the Levant, botanically derived psychoactive drugs have been found in diverse mortuary contexts spanning several millennia and continents. For example, burnt cannabis seeds are attested in third millennium B.C.E. Eastern Europe and the Caucasus. Bronze Age burial mounds in Russia contained intoxicating preparations of wormwood and cannabis. Opium residues in vessels and opium poppy seeds have been identified in mortuary contexts from second millennium B.C.E. Iberia, and beer with hallucinogenic additives are attested in Spain in different periods, during both the third millennium and again in the second century B.C.E. (Guerra-Doce 2015: 756–770; Martin and Cradic 2018).

Burned opium not only produces a distinctively pungent aroma that could mask odors of decay but also has powerful narcotic effects such as hallucination, euphoria, and disassociation, which is the feeling of being outside of one's body (Lee 2006: 205). Drug-induced alteration of the senses could impact the experience of the funerary rituals. In multi-use burial spaces such as Tomb 100, the corporeality of the dead is unavoidable, since living mourners would regularly handle decaying corpses during each successive funeral. The dead—who eventually transformed into ancestors and ghosts—retained an embodied form during these encounters, though one that

[69] Schumacher (1908: 142) even noted a lingering "powerful odor of putrefaction" upon opening an undated multiple-interment tomb in the southeast of the mound.

became less and less recognizable over time due to the predictable processes by which death transforms bodies. The ritualized dismemberment of bodies in the chamber exposed the discontinuities between fragmented dead bodies on the one hand, and their formerly intact, embodied biographical identities on the other hand. Mourners would be forced to confront the social and biological discontinuities of death, as well as their own place on the life-afterlife continuum. Funerary rituals, perhaps performed in altered states of consciousness, reconciled these bewildering social and physical disconnects. As acts of inversion, experiences of altered consciousness could have bridged the mystifying contradictions between living and dead bodies and persons, as well as the state of the deceased as both decaying corpse and ancestor. Through drug-induced effects of disassociation, mourners could temporarily join the dead by also existing within and outside of their own living bodies, thus bridging the divide and activating new social relationships with the dead (Martin and Cradic 2018).

Comparative Study: Funerary Sequences of Burial 16/H/45 and Tomb 50

The funerary sequence of Tomb 100 exemplifies the procedures undertaken in the specific context of re-used, intramural burial chambers. Due to the demonstrated diversity in death and burial at the second millennium B.C.E. site, this model may not apply to other tomb types, and may not apply in the same way to other shared burial spaces. Below, comparative analyses of the funerary sequences of two additional burials contexts, simple pit Burial 16/H/45 and masonry-constructed chamber Tomb 50 from Area H, demonstrate the plurality of deathways that were in play within a single neighborhood or even a single burial context. The corpses of individuals inhumed in the same burial spaces were not necessarily treated the same way after death, and could have different outcomes of their status after burial.

Burial 16/H/45

Simple pit burial 16/H/45 contained the remains of two adult individuals at elevations of 154.25-154.47 m. The pit measured *ca*. 0.66 m deep and *ca*. 1.0 m wide north to south. The pit was sealed with earth and may have been marked at the top with two light gray mudbricks. Individual 2 was squeezed into a narrow space only 0.23 m wide between Individual 1 and an east-west oriented row of fieldstones, which abutted Chamber 55 (Figures 40-41).

Osteology and Taphonomy. The *in situ* finds and skeletal remains indicate that the burial was not disturbed after its sealing in the LB I period (see below). Osteological analysis was conducted in the field by Rachel Kalisher; lab analyses are pending. Preliminary results indicate an MNI of 2. Both individuals are adults of indeterminate sex. The following field observations present the condition, completeness, articulation, and positioning of each individual (Table 55).

The human skeletal remains were generally in a good to excellent state of preservation. Individual 1 was particularly well-preserved; the individual skeletal elements were *in situ* and proved easy to identify and articulate. Almost all of the bones remained in anatomical order. Although the mandible dropped away from the cranium after decomposition of soft tissue, all teeth remained embedded in the bone, and the mandible and cranium were still in articulation (Figure 42). The identification of Individual 1 as a primary burial is straightforward and based on the complete representation, anatomical order, and articulation of the skeleton.

Figure 40. Burial 16/H/45 with pottery assemblage. Courtesy of the Megiddo Expedition.

Figure 41. Burial 16/H/45 with Individuals 1 and 2 fully exposed. Courtesy of the Megiddo Expedition.

The disarticulated skeletal remains of Individual 2 were intermixed and overlapping, which made the bones difficult to isolate and remove. The cranium in particular was fragile and partially crushed post-mortem (Figure 43a-b). However, the individual bones were generally complete. Individual 2 was identified as a secondary inhumation based on the presence of several articulations that were observed among a general situation in which skeletal elements were otherwise re-deposited. Some bones were arranged in a stacked position, while others were jumbled and intermixed with faunal remains.

Individual 1, a well-preserved primary inhumation, was found in articulation oriented W-E with the cranium facing upward. The body was laid in a supine flexed position, with the legs bent to the right (south). The feet were resting on a small fieldstone. An ovicaprid cranium was placed at the feet, oriented N-S. The arms were flexed with both hands placed on the upper torso. Three complete vessels were near the pelvis and lower torso to the right (south) of the skeleton. A juglet was immediately SW of the cranium, and a fifth vessel, a carinated bowl or cooking pot, was located north of the pelvis of Individual 1, just below the left elbow. This vessel was positioned at the interface between Individuals 1 and 2.

Individual 2 was a secondary inhumation, with the long bones loosely stacked and oriented W-E. In the south, these bones overlaid the right shoulder and arm of Individual 1. During secondary disposal, the cranium (with the mandible attached) was separated from the body and placed in the west of the stack, facing north. Non-human faunal bones, predominately long bones and mandibular fragments of sheep/goat, were intermingled with the human bones. A second sheep cranium with its horns intact, oriented SW-NE, was placed at the eastern edge of the bone pile near the sheep cranium at the feet of Individual 1.

Figure 42. Burial 16/H/45: Individual 1 cranium and mandible. Photo by A. Prins. Courtesy of the Megiddo Expedition.

a. b.

Figure 43. Burial 16/H/45. Detail of the cranium of Individual 2 facing west (a) and east (b). Photo by A. Prins. Courtsey of the Megiddo Expedition.

Taphonomic Index. The skeletal elements of Individual 1 were fully represented. Individual 2 was represented by complete, if damaged, cranial elements: cranium and mandible with teeth in situ as well as ribs, vertebrae, and long bones. Twenty-three hand bones that may have been associated with Individual 2 were found in the matrix above the burial (see below). Although this does not represent the bones of two complete hands, each of which has 27 bones, the loss of small and delicate bones is not unusual in secondary inhumations and the presence of these bones indicates the presence of a disturbed inhumation (see Chapter 2). This supports the identification of Individual 2 as a secondary, rather than compound, disposal, which is reflected in the taphonomic index score for Individual 2 (Table 30). Most skeletal elements were represented but in different degrees of articulation and spatial dispersion.

Individual 1. Individual 1 is classified as a complete, primary inhumation of an adult individual who was in an excellent state of preservation.

(1) Skeletal completeness: the skeleton of Individual 1 was complete. **Score: 10**

(2) Breakage of bones: bones were complete. **Score: 10**

(3) Disarticulation: Individual 1 was in articulation. **Score: 10**

(4) Surface modifications: cranial trephination cut marks were observed, however, these modifications occurred shortly before death and did not have time to heal. The square cut was made with a sharp, high quality blade and may have been intended to relieve pressure or perform surgery (R. Kalisher, pers. comm.). No post-mortem surface modifications were noted. **Score: 10**

Individual 1's taphonomic index score of **40/40** is a clear indicator that no disturbances occurred to this inhumation, and that the identification as a primary disposal is with high confidence.

Burial/ Individual	Skeletal Completeness	Breakage of Bones	Disarticulation	Surface Modification	Taphonomic Index Score (min: 4; max: 40)
Individual 1	10	10	10	10	40
Individual 2	7	7	3	10	27

Table 30. Taphonomic Indices, Burial 16/H/45.

Individual 2. Individual 2 represented a complex case. Although disturbance was obvious based on the re-arrangement of the order of the bones, it was not immediately clear in the field if Individual 2 represented a primary disturbed disposal, secondary disposal, or compound disposal. Upon closer examination and scoring of the taphonomic index, Individual 2 is identified as a secondary disposal who was likely moved once into a new position, resulting in the loss of small bones of the hands and feet (see below).

(1) Skeletal completeness: this category is difficult to assess, but field observations and documentation (photographs and 3D models) indicate that at least part of six major skeletal regions were represented. All or nearly all ribs and most vertebrae were present, along with cranium, teeth, and long bones of the upper and lower body. The pelvis was fragmentary and scattered, and most or all of the hand and foot bones were missing from the immediate vicinity of the burial context. **Score: 7**

(2) Breakage of bones: bones were intact, with some minor *in situ* breakage of the cranium. The pelvis was fragmented. **Score: 7**

(3) Disarticulation: some of the ribs were in articulation, and the mandible was slightly out of position relative to the cranium. The long bones were disarticulated and stacked. Bones of the hands and feet did not appear to be present, although this must be verified through laboratory analysis. **Score: 3**

(4) Surface modification: not noted. **Score: 10**

The taphonomic index of Individual 2 is **27/40**. The taphonomic score and context indicate that Individual 2 is a well-preserved secondary disposal.

Burial Assemblage. A small assemblage of imported and local ceramic vessels and precious metal jewelry comprised the grave goods of Burial 16/H/45 (see Tables 50-51). The burial contained five complete vessels in three different areas of the burial, all closely associated with Individual 1. In addition to the vessels, bodily adornments were found with the skeletons. On the body of Individual 1 were three gold foil rosettes, with parallels from T.2108 in Stratum IX and treasure hoard 3100 in Stratum VIII (Loud 1948: Pl.224: 22-23); and a shell or frit bead adhering to the left temporal bone, perhaps used as a hair decoration. A bronze pin was found below the cranium of Individual 2.

Funerary Sequence of Burial 16/H/45

The two adult individuals interred in Burial 16/H/45 shared a burial space and grave goods. However, the disposal methods differed meaningfully between Individual 1, the primary inhumation, and Individual 2, the secondary inhumation. These differences are unusual for a simple pit burial, which is most often used for single primary inhumations at Megiddo.

Two different scenarios of the funerary sequence may have occurred with the same final taphonomic result: (1) Individuals 1 and 2 were interred in the simple pit burial simultaneously, in which case Individual 2 was moved into the pit as a secondary interment, having decomposed elsewhere; or (2) Individual 2 was inhumed in the pit first, as a primary or secondary burial, and then disturbed when the pit was re-used for the primary inhumation of Individual 1. In this case, the location and dimensions of the original pit would have been known to those mourners performing the later inhumation, either through memory or by marking with stones. The burial was sealed and undisturbed following the interment of Individual 1, who decomposed in place.

Although Individual 2 was mostly disarticulated, several skeletal elements in partial articulation indicate that some flesh remained on the body when this inhumation was arranged in Burial 16/H/45. Individual 2's mandible had slipped slightly away from the cranium. Rotation of the mandible in place, after secondary disposal, could have resulted from decay of muscles and ligaments supporting the jaw (Nawrocki 1995: 52) coupled with pressure from the weight of the sediment above the skeleton, which was the case for Individual 1, whose mandible had fallen onto the cervical vertebrae. Several ribs of Individual 2 were in articulation, and the vertebral column was partially articulated, found close to the bottom of the cranium. Conversely, the disarticulated long bones were arranged in a somewhat orderly, compact stack in a small space 0.23 m wide between Individual 1 and the stones in the north. Most were oriented east-west. These disarticulated remains may have been bundled together in an organic wrapping material before secondary disposal.

Pre-Interment Phase. The only clues about the pre-interment phase come from the post-interment phase of Individual 2. The organized re-positioning of the long bones of Individual 2 indicates that certain—but not all—skeletal elements had reached an advanced stage of decomposition to allow the bones to be moved out of anatomical position. The secondary disposal of Individual 2 likely occurred in the magnitude of several weeks to months (rather than days) after death. Although several hand bones were missed during this secondary disposal (see below), most of Individual 2's skeletal elements were carefully collected, possibly wrapped, and then deposited in the narrow space north of Individual 1.

The re-positioning of Individual 2 must have occurred during the pre-interment preparation stage of Individual 1 and may have involved collecting the long bones and any other decomposed remains as well as the bundling or wrapping of the partially decomposed remains. It is also possible that the long bones were dismembered and then stacked in place in order to accommodate Individual 1. Individual 2 lost bones of the hands and feet in the process.

Interment Phase. The taphonomic evidence supports a scenario of simultaneous burial: primary inhumation of Individual 1 and secondary inhumation of Individual 2. Several long bones belonging with Individual 2, such as a radius, overlaid the left humerus and scapula of Individual 1. This depositional pattern indicates that Individual 1 was placed in the pit immediately before the bundled remains of Individual 2 were re-deposited. During the same funerary event, Individual 2's osteological assemblage was deposited slightly above and next to Individual 1. Individual 2, as a secondary disposal, was removed from an original locus of decomposition in order to be interred together with Individual 1 in the subfloor pit.

Individual 2's original burial space may have been in the immediate vicinity based on related osteological finds located in the backfill of the burial in Square F/9. Twenty-six isolated human bones were found in the backfill above and around Burial 16/H/45 at elevations up to 0.25 m above the burial (154.74 m asl). Twenty-three of these specimens were foot, hand and finger bones. Few hand bones were found in association with Individual 2 during excavation of the pit burial, meaning that most of these elements were already missing. In contrast, Individual 1's right and left hand and foot bones were *in situ*, eliminating the possibility that these floating bones belonged to Individual 1. Moreover, the isolated bones all belonged to an adult individual(s), which also fits the biological profile of Individual 2. Therefore, it is likely that Individual 2 was disposed as a primary inhumation near Burial 16/H/45 before the inhumation of Individual 1. Delicate and unstable articulations like phalanges are the most likely to get left behind during the process of secondary disposal, which would have involving digging up the fill of the pit burial as well as disturbing the skeletal remains of Individual 2 (Bello and Andrews 2006; Duday 2006: 33). The fill containing the hand bones was then re-deposited after inhumation to seal the pit.

Post-Interment Phase. As explained above, Individual 2's post-interment phase coincided with Individual 1's pre-interment and interment phases. Disturbance to the original primary inhumation occurred during preparation for the burial of Individual 1. Once the bones of Individual 2 were collected, the burial space was expanded. Individual 1 was deposited, followed by the re-burial of Individual 2, whose bones partially overlaid those of Individual 2.

The burial was not disturbed, and no clear remnants of post-interment offerings were found in the vicinity of the burial with the possible exception of Chamber 55, which may be an associated funerary feature of the Level H-15 building.

Summary and Conclusions: Burial 16/H/45

In summary, the funerary sequence was complex for this simple pit burial. Individual 2 was inhumed first, with disturbance occurring during the interment phase of Individual 1. This means that the interment phase of Individual 1 overlapped with the post-interment phase of Individual 2, which occurred a short interval after the interment phase of Individual 2.

The context of Burial 16/H/45 is intriguing given its close spatial and stratigraphic proximity to Tomb 50, located immediately to the south. The presence of these high-status burial features in close spatial and temporal proximity may indicate an ongoing mortuary use of the building that terminated with Burial 16/H/45 during the early phase of Level H-15.

Tomb 50 (Burial 16/H/50)

Tomb 50, a subterranean masonry-constructed chamber tomb, has yielded an initial MNI of nine, including seven adults and two subadults (see Tables 54, 56-62). In addition, possible bones of an unborn fetus may have been present, and were found in the pelvic area of Individual 2, an adult female. Further finds of isolated bones of an adolescent and infant could indicate the presence of more individuals (see Tables 59-62); however, these were represented by few elements and are not included in the MNI count. The three individuals closest to the entrance were inhumed as primary burials, while at least six individuals were secondary inhumations concentrated in the rear of the chamber. Two of the three primary disposal individuals were adults, and one was a child aged 8-12 years. Five of the six secondary disposals were adults and one was a subadult individual. These six individuals were inhumed primarily, likely in the front or center of the chamber, and were subsequently moved around within the tomb chamber (see below). This disturbance occurred after decomposition, resulting in significant re-configuration and intermixing of individual skeletons, which fits this study's usage of the term secondary burial rather than primary disturbed inhumation (see above *Terminology*).

Osteology and Taphonomy. A layer of mud wash *ca*. 0.3 m deep sealed the main deposit of burials and grave goods (Figure 44), although the tops of the largest jars and jugs were only covered by several centimeters of wash. The moist, dark-brown, sandy clay may have disturbed the original deposits to a minor extent, but ultimately the intrusive natural layer protected the human and non-human skeletal material, which was kept moist and was generally found *in situ*. Several discrete layers of wash were encountered during excavation, indicating that alluvial deposits flowed into the chamber during separate episodes. The first event evidently took place in antiquity, having partially covered the secondary disposals in the back of the tomb. Another event took place after full decomposition of the primary inhumations, as indicated by the displacement of the cranium of Individual 2, which had been dislodged from the vertebrae and mandible by a stone that fell onto it from the eastern wall of the chamber.

The state of preservation of the skeletal material was variable. The primary adult inhumations (Individuals 1 and 2) were generally well-preserved, articulated, and complete, with a few exceptions, namely the cranium of Individual 2, which had been dislodged and partially crushed by a small stone (Figure 45). Several small stones had also fallen onto the left torso of Individual 1. The right side of the skeleton and the cranium of Individual 1 proved difficult to recover; these elements, though in articulation, were lodged in and under the west wall of the burial chamber, which had partially subsided since the original burial took place, essentially slightly collapsing onto the right half of Individual 1 (Figures 46-47). Individual 3, the third and final primary inhumation, was also found in articulation (Figure 47). The bones of this subadult were very soft, and many had partially disintegrated into the sediment, leaving an orange stain. The bones were measurable *in situ* but did not preserve well during recovery. The poor preservation conditions may be related to the age of this young individual, since the bones of subadults may not preserve as well as the bones of adults (Bello and Andrews 2006).

Figure 44. Tomb 50. Mud wash sealing the burial deposits before excavation. Facing northwest. Photo by A. Prins. Courtesy of the Megiddo Expedition.

Figure 45. Individual 2. Note the dislodged cranium but in situ mandible. Facing northwest. Photo by A. Prins. Courtesy of the Megiddo Expedition.

The co-mingled secondary inhumations in the back of the chamber were in a fair state of preservation. These secondary disposals sat at an elevation ranging from 152.20-152.45 m asl. As discussed above, the degree and intensity of fragmentation was minimal; most individual skeletal elements were intact but out of anatomical order and scattered incoherently. Therefore, discrete bones were generally not attributable to any individual (Figure 48). Some elements were fragmentary, having been broken in antiquity; however, they remained identifiable and had not turned into bone dust as was the case in Tomb 100. The overall state of completeness of individual skeletal elements indicates that the skeletons were not continually moved around but were re-positioned once or twice.

Taphonomic Index. As discussed above, the three primary disposals were nearly completely represented and in articulation (for skeletal inventories of the primary inhumations, see Tables 56-58). The co-mingled disposals were represented by cranial and postcranial remains as well as 45 teeth. Forty-one teeth belonged to adults and four were derived from a subadult(s) individual (see Table 59). All 32 of Individual 3's teeth were accounted for, so these teeth must have belonged to a second subadult individual, who was represented by one left mandibular canine, one right maxillary canine, one left maxillary incisor, and one maxillary molar (see Table 59).

Beyond the teeth, a total of 759 skeletal elements were recovered in three areas: (1) 589 skeletal elements (including 134 bones of the hands and feet) were recovered in the main deposit of co-mingled inhumations (see Table 60); (2) 37 elements (28 hand/foot bones) were found in the lowest layers below this deposit, possibly having intruded into the "clean" mudbrick debris on which the tomb was built (see Table 62); and (3) 133 elements that were not associated with Individuals 1, 2, and 3 which were found in front (southern) half of the chamber (see Table 61). Based on these data, the taphonomic index of the tomb and Individual 1, 2, and 3 are graded below (Table 31).

Tomb 50. The taphonomic observations and scores of Tomb 50 present a complex scenario in which primary and secondary disposals occurred together within the same mortuary context. Based on patterns of deposition within the tomb chambers, these two types of disposal were separated by time and space. The three primary inhumations Individuals 1, 2, and 3, were delineated spatially from the six secondary disposals, which were located in the back of the chamber. The former group likely represents the final inhumations and the latter group represents the earliest disposals in the use of the tomb.

(1) Skeletal completeness: Individuals 1, 2, and 3 were almost fully represented, and ca. 60% of the expected skeletal elements for the six co-mingled individuals was represented, although the actual number of individuals may have been higher and isolated bones were found that did not contribute to the calculation of MNI. **Score: 7**

(2) Breakage of bones: bones were mostly intact and complete, with breakage of ca. 30-40% of the co-mingled bones in the back of the tomb upon excavation (some of these were initially intact but did not survive the excavation process). **Score: 7**

(3) Disarticulation: Individuals 1, 2, and 3 were mostly in articulation, and the six individuals in the back of the tomb were co-mingled, with the exception of the cranium, teeth, and some vertebrae of Individual 4 (see below). **Score: 6**

(4) Surface modification: staining from bronze objects was observed on several bones, and Individual 3 was poorly preserved from the humidity of the tomb. No other signs of weathering or other post-mortem modifications to the bone surfaces were observed. **Score: 7**

The tomb's overall taphonomic index of **27/40**, together with contextual evidence, depicts a situation of well-preserved human remains amid a corpus of mixed disposal methods.

The discrete remains of Individuals 1, 2, 3, and 4 are scored on their own below.

Burial/ Individual	Skeletal Completeness	Breakage of Bones	Disarticulation	Surface Modification	Taphonomic Index Score (min: 4; max: 40)
Individual 1	9	10	8	9	36
Individual 2	10	10	9	10	39
Individual 3	10	10	10	6	36
Individual 4	4	7	4	10	25
Tomb 50 general	7	7	6	7	27

Table 31. Taphonomic Indices, Tomb 50.

Individual 1. Individual 1 was one of the latest disposals in the chamber, after which Tomb 50 was sealed. Individual 1 was not disturbed after inhumation.

(1) Skeletal completeness: Individual 1 was nearly complete, but was missing 13 teeth. Several elements from the right sagittal half of the body, such as the ulna, radius, and humerus were present but were lodged under the wall of the tomb and were not safe to remove. **Score: 9**

(2) Breakage of bones: bones were complete and *in situ*. **Score: 10**

(3) Disarticulation: the skeleton was in anatomical order with minimal movement on the right side of the body that was caused by pressure and subsidence of the tomb wall. **Score: 8**

(4) Surface modification: green staining around the distal aspects of the right and left tibia and fibula from bronze bead anklets (R. Kalisher, pers. comm.). **Score: 9**

Individual 1's taphonomic index score of **36/40** supports the contextual observations that this adult female was an undisturbed, well-preserved primary inhumation.

Individual 2. Individual 2 is part of the group of three individuals who were inhumed as primary disposals near the end of the use of Tomb 50. The skeleton was found intact and *in situ*, with minimal indications of disturbance, all of which resulted from minor collapses of the tomb wall.

(1) Skeletal completeness: Individual 2 was nearly complete, with a few elements of the legs and feet missing because they extended below the east wall of the tomb and could not be removed. **Score: 10**

(2) Breakage of bones: bones were complete and *in situ*. **Score: 10**

(3) Disarticulation: bones were found in anatomical order. The cranium had been smashed by falling stone after burial and was separated from the *in situ* mandible. **Score: 9**

(4) Surface modification: none noted. **Score: 10**

Individual 2's score **39/40** on the taphonomic index, a high score that confirms the contextual evidence that this adult male was an undisturbed, well-preserved primary disposal.

Individual 3. Individual 3 is an undisturbed primary inhumation who was interred at the same time, or shortly before, Individual 2 (see below).

(1) Skeletal completeness: complete. **Score: 10**

(2) Breakage of bones: bones were complete and *in situ*. **Score: 10**

(3) Disarticulation: bones were articulated and in anatomical order. **Score: 10**

(4) Surface modifications: significant softening of the bones of this child, which became spongy and difficult to remove from the surrounding sediment. Orange staining was observed on almost all of the bones, which could have resulted from natural degradation of the bones and conditions of the sediment and humidity. **Score: 6**

Individual 3's taphonomic index of **36/40** strengthens the identification of this individual as an undisturbed, primary disposal with evidence of *in situ* degradation of the skeletal material.

Individual 4. Individual 4 is part of the group of six individuals who were re-positioned as secondary disposals in the back of the tomb chamber. This individual had been disturbed after the original primary inhumation, resulting in the disarticulation of most of the skeleton.

(1) Skeletal completeness: Individual 4 was among the co-mingled inhumations in the back of the tomb and was represented by elements from four skeletal regions: the upper body, flat bones, cranial bones, and teeth. However, these were incomplete and the remainder of the skeletal elements are assumed to have become co-mingled and could not be isolated. **Score: 4**

(2) Breakage of bones: fragmentation of the cranium. **Score: 7**

(3) Disarticulation: except for the few elements found in anatomical order, the remains of Individual 4 were presumably disarticulated and co-mingled. **Score: 4**

(4) Surface modification: not noted. **Score: 10**

The taponomic index results of **25/40** supports the identification of Individual 4 as a secondary disposal with low representation of skeletal remains and evidence of a moderate level of disturbance.

Spatial and Temporal Organization

The location of the individuals and grave goods inside the chamber indicates a spatial and temporal organization to the burials. Three primary individuals were located closer to the entrance than the co-mingled, secondary inhumations in the rear (north) of the chamber. These primary inhumations were placed along the western wall in the front (south) of the chamber immediately abutting the stepped entrance (Individual 1), and in the center of the chamber (Individuals 2 and 3). Individual 2 was directly above Individual 3. The superimposed corpses were parallel with each other, with their pelvises overlapping, but their bodies were oriented in the opposite directions. Individual 2 was oriented east-west, and Individual 3 was oriented west-east (Figure 47). Individual 1 was perpendicular to the other primary inhumations, oriented north-south.

Figure 46. Tomb 50: Orthophoto of Individuals 1 and 2. Image prepared by A. Prins. Courtesy of the Megiddo Expedition.

Figure 47. Tomb 50: Orthophoto of Individuals 1 and 3. Image prepared by A. Prins. Courtesy of the Megiddo Expedition.

Figure 48. Tomb 50: Co-mingled human skeletal remains in the back of the tomb chamber. Facing northwest. Photo by A. Prins. Courtesy of the Megiddo Expedition.

In contrast, the six(+) secondary disposals in the back of the chamber had been disturbed at least once, prior to the inhumations of Individuals 1, 2, and 3. Based on the relative completeness of the individual skeletal elements, these individuals had been moved from their primary locus of decomposition, also inside the tomb, to an intermixed secondary deposit in the back of the chamber.

The main concentration of grave goods was located in the east, protruding into the center of the chamber from the eastern wall. Many of the vessels were located near the front step (Figure 49). Presumably the earliest deposits were those abutting the eastern wall in the north and center of the chamber. Most of the vessels and artifacts were intact and sitting upright on the same surface as the primary inhumations (Figures 49-53).

Figure 49. Main vessel assemblage in the east of the tomb facing southeast. Photo by A. Prins. Courtesy of the Megiddo Expedition.

Figure 50. Detail of the main vessel assemblage in the east of the tomb facing southeast. Photo by A. Prins. Courtesy of the Megiddo Expedition.

a. b.

Figure 51. Open platter 16/H/63/VS1 associated with Individual 1 facing northwest (a) and west (b). Photos by A. Prins. Courtesy of the Megiddo Expedition.

Figure 52. Open platter 16/H/63/VS1 after removal. The platter contained articulated faunal vertebrae of sheep/goat. Photo by A. Prins. Courtesy of the Megiddo Expedition.

Figure 53. Open platter 16/H/64/VS1 with faunal bones of sheep/goat and charred remains at the feet of Individual 3, facing west. Photos by A. Prins. Courtesy of the Megiddo Expedition.

Burial Assemblage

Several discrete assemblages of polished bone inlay pieces were found, some inside vessels. These remarkable pieces fall into three main shapes: (1) rectangular pieces in large and small sizes, some incised with geometric and figural motifs; (2) squares, both plain and incised with geometric and figural motifs; and (3) miscellaneous pieces shaped as triangles, ducks, ungulates, and possibly two fragmentary human figures. Several pieces are carved in relief showing an ungulate being attacked at the head by a feline, likely a lion (Figure 54).

Body ornaments made of luxury materials were found with each of the three primary inhumations. The body of Individual 1 was decorated with gold, silver, and bronze jewelry. Two complete bronze bead anklets were found encircling each ankle (Figure 55). These are identical to anklets made of 25 bronze beads each that adorned the bodies of two individuals interred in *Grabkammer* II (Schumacher 1908: 20, Figure 17). A silver duck-head shaped pin and ring-shaped gold brooch were found in association with the left chest region. The gold brooch is similar to find from T.3047 in Stratum X (Loud 1948:Pl. 225:6). A silver pin was placed perpendicularly above a bronze toggle pin, together forming a “t” shape, on the right ribs. An assemblage of hundreds of identical white seashells was found in a line across the pelvis, oriented east-west. The shells may have decorated a belt or beaded textile. A strikingly similar example, identified as a headband, was excavated from T.2121 by the Oriental Institute team and attributed to Stratum IX (Loud 1948:Pl. 227:4).

a. b.

Figure 54. Selected pieces of decorated bone found inside Tomb 50, prior to cleaning and restoration. (a.) and carved reliefs of bovine figures (b.). Photos by A. Prins. Courtesy of the Megiddo Expedition.

The body of Individual 2 was elaborately decorated with *in situ* gold jewelry, including a gold bracelet on the right wrist, a gold torque around the neck just below the mandible, and a gold headband just north of the dislocated cranium (Figure 56a-b). The head-piece has parallels from T.3095 (Stratum XII), T.5250 (Stratum XI), and T.4055 (Stratum XI) (Loud 1948:Pl. 227:1-3). Each piece of jewelry was made of a single piece of gold. The clasp of the torque was decorated on both ends, having been formed into the shape of a stylized duck-head and incised with geometric motifs. Only the headband has clear parallels from the southern Levant; both the bracelet and torque are so far unprecedented in the jewelry repertoire of the region (B. Sass pers. comm.).

Like the other primary inhumations, the body of Individual 3 was also impressively decorated with gold, silver, and dozens of beads of in different colors and materials, including black stone, white shell, and blue faience. The beads were located on and near the chest region, with some having scattered away from the body to the east. Two silver rings were found *in situ* on the phalanges of the right hand. Three additional silver rings were found on the chest region of the skeleton. A silver spiral-shaped pin was found on the right scapula of Individual 2. A parallel to this pin shape comes from Megiddo Stratum IX Tomb 5040a (Loud 1948:Pl.22:64). Lastly, two ring-shaped gold brooches with a central green stone or bone bead attached with gold wire, identical to the brooch found with Individual 1, were found on the body of Individual 3, on the right shoulder and below the cranium (Figure 57).

Figure 55. Bronze beads *in situ* around both ankles of Individual 1. Photo b A. Prins. Courtesy of the Megiddo Expedition.

a. b.

Figure 56. Gold torque (16/H/63/AR10) adorning Individual 2, in situ (a) and after removal (b). Photos by A. Prins. Courtesy of the Megiddo Expedition.

Figure 57. Gold brooch with green bead (16/H/64/AR11) associated with Individual 3; this is one of three identical such brooches found inside Tomb 50. Photo by A. Prins. Courtesy of the Megiddo Expedition.

Funerary Sequence of Tomb 50

Beyond its impressive architecture and assemblage, Tomb 50 raises several intriguing questions: what was the order of interment? How many funerary events took place inside the tomb? Why were these individuals buried together? Spatial, stratigraphic, and taphonomic evidence can answer several of these questions.

Interment Phases. Based on the deposition of the human skeletal material, two or three major inhumation events occurred in the funerary sequence of Tomb 50. The first inhumation episode involved the primary inhumation of six or more individuals inside the chamber. The second event involved both the secondary inhumation of these same individuals, and the primary inhumation of Individuals 1, 2, and 3. An intermediary stage may have occurred in between the two major episodes of inhumation that involved disturbance and re-positioning of the original primary inhumations.

The human skeletal remains were delineated spatially into three areas: the back (northwest), center, and front (southeast) of the tomb chamber. The secondary inhumations were located exclusively in the back third of the chamber, with no unassociated bones straying beyond this spatial boundary. It is possible that these six individuals were originally placed in the chamber as primary inhumations and were repositioned as secondary inhumations later, resulting in significant disarticulation and co-mingling of individual skeletons. Although the bodies were haphazardly deposited in the back of the chamber, the bones were carefully collected from the front and center of the tomb. Even so, approximately 133 skeletal elements were found in the southern half of tomb that could not be associated with the primary inhumations of Individuals 1, 2 and 3 (see Table 61). These bones belonged to unidentified adult and subadult individuals in similar proportions to the elements found in the back of the chamber, which provides evidence that the original primary inhumations were placed toward the front half of the chamber. It is worth noting that the sediment below the main layer of deposition in the center and front of the burial chamber was relatively clean of finds, indicating that these areas were thoroughly cleaned in preparation for the second major episode of deposition: the primary inhumations of Individuals 1, 2, and 3 (Figure 58).

The six co-mingled bodies were pushed toward the back of the chamber, likely in a single event without subsequent disturbance. The majority of the secondary inhumations were completely disarticulated, with the bones scattered so that spatial relationships ceased to exist between bones belonging to a single body. Long bones and crania in particular were deposited at haphazard angles or were arranged in ways that made no anatomical sense (Figure 48). Yet, the individual bones were generally complete rather than fragmented. Therefore, re-positioning occurred infrequently and minimally, over one or two episodes, and caused little damage to the bones themselves. In contrast, bones of secondary inhumations that were repeatedly handled turn to bone meal, as was the case in Tomb 100.

Figure 58. Tomb 50 chamber interior after removal of burial deposits, before exposure of mudbricks. Facing northwest. Photo by A. Prins. Courtesy of the Megiddo Expedition.

Post-Interment Phase. The taphonomic evidence suggests that most corpses in Tomb 50 were fully decomposed at the time of repositioning. However, three isolated cases of partial articulations of the upper body may indicate that several individuals had not fully decomposed at the time of secondary inhumation. These included a scapula-humerus articulation, scapula-clavicle articulation, and one fragmented cranium and mandible with associated teeth and several vertebrae (Individual 4). Additionally, two cases were identified in which grave goods could be associated with human bone. An assemblage of bronze beads was deposited in a straight line next to a femur and tibia, as if an anklet had come unstrung. The second case involved a bronze toggle pin sitting in place on a left scapula, perhaps having fastened a garment at the shoulder. These associated finds demonstrate that some of the bodies—or at least body wrappings—were partially intact during re-positioning.

The three examples of partial articulation among the secondary disposals in Tomb 50 introduce two possibilities regarding the order of deposition of the six individuals in the back of the chamber. In the first scenario, all of the corpses were buried as primary inhumations at the same time. The corpses were also re-positioned together, but several bodies retained some flesh remaining as a result of being shrouded, which can slow the rate of decomposition (Nawrocki 2008: 54; Carter and Tibbett 2008: 41-43). Alternatively, the three cases of partially articulated individuals could point to a temporal differentiation between two groups of co-mingled dead in terms of the time that elapsed between their deaths and secondary disposals. In the second scenario, these three persons had died more recently than the others, just weeks or months prior to repositioning. With less time to decompose, some flesh remained on part of the bodies, which were not disturbed a second time. This explanation accounts for at least three major stages of deposition in the funerary sequence, although each stage in the sequence may have encompassed multiple instances of opening the chamber to deposit bodies and grave goods. In this second scenario, the stages of the sequence can be broken down as follows: the first stage involved the burial of the first set of primary inhumations of at least three individuals at once. The intermediary stage saw additional inhumation of three more individuals. The third stage occurred several weeks or months later and involved two major events: the re-positioning of all existing corpses from the front and center of the chamber to the back of the chamber, and the additional primary inhumations of Individuals 1, 2, and 3.

Individuals 1, 2, and 3 were not disturbed after inhumation. Each body was complete, in articulation, and ornamented with jewelry. The abundance of *in situ* pins and brooches on or near the scapula of Individuals 1 and 3 indicates that the corpses were clothed and/or shrouded with organic textiles that decomposed in place. All three of the individuals were buried in very close spatial proximity within the small chamber. The crania of Individuals 1 and 3 were almost touching. The entire bodies of Individuals 2 and 3 were touching. Individual 2 was placed directly on top of the body of Individual 3. Separate depositions of these individuals in different funerary events probably would have caused noticeable disturbance to the earlier corpse(s). Therefore, it is likely that the three primary inhumations were interred together in a single funeral, in which case they all died within a very short interval of time.[70] Movement inside the tomb would have been severely restricted after burial of the three primary inhumations and their grave goods, which may explain why the tomb was not used again.

One final point concerns the fill above the tomb. A dense accumulation of faunal remains and a rich assemblage of restorable vessels were recovered in the Level H-15 room above the tomb at an elevation of 155.0 m asl, which was flush with the highest elevation of the tomb's *dromos* in the south. The accumulation ran up to and over the *dromos*, which may have been partially exposed during Level H-15 and could indicate an awareness of the tomb below. The finds included intact, *in situ* Cypriot and local decorated vessels and a Cypriot zoomorphic figurine (Figure 59). These deposits may have been related to the tomb below, echoing the situation of fill and surface deposits in Room 12/K/88 above Tomb 100.

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[70] Results of the pathologies and health status of the individuals in Tomb 50, derived from osteological analysis and isotopic analyses, are forthcoming.

Figure 59. Level H-15 Room 14/H/87: architectural remains and surfaces with *in situ* ceramic assemblage that sealed Tomb 50. The top of the highest *dromos* stones is visible in the southeast (bottom right corner of photo). Photo by A. Prins. Courtesy of the Megiddo Expedition.

Summary and Conclusions: Tomb 50

The act of disarticulating the original nine or more human bodies inside the burial chamber was an important step in the funerary sequence of Tomb 50. The process of secondary inhumation had significant physical and social implications for the dead. Repositioning resulted in severe anatomical disorder. Secondary deposition erased any indicators of discrete, articulated bodies as well as associations of specific grave goods with particular individuals in most cases. Such a practice eradicated the existence of individually identifiable human bodies, which irrecoverably changed the social status of the dead. Further, the human bones were mixed with non-human bones that consisted predominately of disarticulated bones of caprines (Sapir-Hen pers. comm.). As a result, the human bodies became indistinguishable both from each other and from the bodies of large non-human fauna such as sheep and goats (see Chapters 4 and 7 for discussion of the meaning of fauna in Bronze Age burials). Such radical acts of disarticulation would have been a meaningful way to distinguish the “old” dead from the “new” dead, Individuals 1, 2, and 3.

Summary and Conclusions: Funerary Sequences

This chapter has reconstructed the funerary sequences involved in death and burial practices of the 23 individuals interred in Tomb 100, which was compared with the sequences and taphonomic analysis of Burial 16/H/45 and Tomb 50 in Building 14/H/87. Each phase of the funerary sequence was highly ritualized, involved the living (mourners and survivors) and the dead (corpses, skeletons, and disarticulated bones), grave goods and likely supernatural beings. In Tomb 100, and to an extent in Tomb 50, the entire sequence of pre-interment, interment and post-interment phases was repeated for each successive burial over a prolonged period of ca. 150 years, as indicated by a number of factors, including the stratigraphy of Building 12/K/15 and internal stratigraphy of Tomb 100, with its six layers of deposition; radiocarbon dates; and pottery and artifact typologies.[71] Important funerary rituals in all phases of the funerary sequence likely involved ritually charged materials such as light, incense, perfumed oils, and offerings of food and drink.

The pre-interment phase initiated the funerary sequence immediately following biological death. After death, the corpse occupied a liminal status among the living while being prepared for burial. This stage involved preparing the corpse through shrouding and decoration and the acquisition of grave goods most of which were sourced from household assemblages (see Chapters 4 and 7). Mourning rituals probably began during this phase and likely encompassed many archaeologically invisible practices that were conducted away from the eventual burial locus.

Next, interment comprised primary deposition of the corpse and grave goods. In most cases, primary and subsequent disposal occurred inside each of the chamber tombs, which served as the permanent burial space. Mourning rituals were probably continued during this stage, which in Tomb 100 involved light and scent as the body and its materials were deposited and arranged in specific ways. At the end of this stage, the dead achieved complete social death, which could occur before active decay was over or long after reaching complete, dry bone skeletonization. The entire sequence encompassed a transitional phase in which the dead were transformed physically and socially from their biographical identities into a socially deceased and decomposed body.

Lastly, the post-interment phase encompassed any and all activities carried out at the grave-site following primary inhumation. In the multiple-successive disposals of the chamber tombs, the interment and post-interment phases would have overlapped in all cases following the first, foundational burial; each new inhumation necessitated some form of handling and interaction with earlier corpses and their original funeral kits, whether scattering or removing bones and grave goods. Repeated fragmentation of bones, disarticulation of skeletal elements and scattering of the grave goods eliminated all identifiable features of any single individual, whose

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[71] For details of the dating and stratigraphy of Building 12/K/15, see the excavation reports in Martin et al. 2018; Martin, Cradic, and Kalisher 2018; Martin and Cradic 2018.

bones became incorporated into the household's ancestral group. The differing degrees of fragmentation and bone movement correlate with the intensity, duration, and frequency of manipulation of the skeletal remains inside the chamber tombs.

The funerary sequence in shared and re-used burial spaces of Tomb 100, Tomb 50, and Burial 16/H/45 involved repeated handling, relocation, and dismemberment of human skeletal remains. Bodies and their original funerary kits were broken and scattered throughout the chamber tombs. Evidence of modification to the corpse even in simple pit Burial 16/H/45 attests to the intentionality and ritual significance of secondary corpse disposal after burial.

In Tomb 100 and Tomb 50, the intentional fragmentation and intermixing of discrete bodies into a jumbled, incoherent heap was the key mechanism that transformed named individuals into corporate, nameless ancestors. Likewise, the stacking and heaping of the skeletal remains of Individual 2, even before full decomposition, demonstrates that re-arrangement of bodies was a meaningful practice that was shared across burial types and contexts. Re-positioning of bodies necessitated close interactions with the dead at multiple intervals after death, even before the dry bone stage. Interactions with the bodies of the buried dead impacted the extended personhood status of those individuals who were handled after inhumation. The first step toward ancestorhood was accomplished during post-interment episodes of secondary and/or compound disposal in which individual bodies were dismembered and scattered. For the multiple-successive burial chambers, the additional practice of intermixing these disarticulated skeletal remains, which were heaped in the back of the tombs, completed the process of transformation. Blurring the lines between individual bodies and breaking up the anatomical order of a discrete body constituted ritualized means of blurring identities after death. Intermixing of scattered, disarticulated remains provided a way to incorporate the deceased into a new, shared ancestral identity. For the chamber tomb, the new household ancestors were commemorated collectively with feasts, the residues of which were deposited inside and outside the tomb for a prolonged period of time as is especially evident in the case of Tomb 100. The process may have ceased for Individual 2 in Burial 16/H/45, given the absence of evidence for ongoing commemoration or marking of the grave-site, or commemoration occurred in another location.

Ancestor veneration transformed and extended the personhoods of the deceased long after biological death. The dead interred in Tomb 100 and Tomb 50 belonged to shared household lineages whose joint commemoration ensured their continual care and feeding at the hands of their descendants residing in Buildings 12/K/15 and Building 14/H/87. The tombs served as focal points within their respective buildings, as evidenced by the burials located in close proximity to both of these chamber tombs. These simple pit and jar burials may have played an important role in the long-term spatial recognition of the tombs within the house, as well as the elevated ancestral status of those interred in the chamber tombs relative to the status of the dead after burial in the unmarked burials.

In the case of Tomb 100, at the end of LB I, the household residents sealed the tomb with fill, marked it with plaster, and abandoned the burial site. Level K-9 Room 08/89 was constructed directly above Tomb 100. Its limestone pillar base may have served as a marker of the burial location below the floor. Yet, these occupants chose neither to continue the tradition of subfloor burial, which ceased during this period, nor to carry on active care and feeding of the dead. Instead, they may have remembered the deceased implicitly, through everyday activities carried out in the room, which contained a sloping floor that dipped around the tomb capstones. Similarly, the special nature of the ceramic assemblage in Room 14/H/87 above Tomb 50 may have served the same purpose; like Tomb 100, the physical vestiges of the tomb hidden below were visible through sloping of the floor and even a few protruding stones of the *dromos*. Whatever the case, the sealed tombs were never disturbed despite frequent robbing of stones from nearby walls and features. The tombs' place in the house, household and household lineage remained untouched throughout antiquity.

CHAPTER 9 – CONCLUSIONS

The purpose of this study is to address the status of the dead after burial in the context of the Middle and Late Bronze Age Levant, which were periods of significant mortuary diversity that exhibited a high degree of complexity involving the corporeal remains of the deceased. Previous research has focused on material culture and architecture as proxies for the status of the dead during life, which does not adequately address the most pertinent and motivating aspect of a burial: the corpse as a body and as a person. In secondary and co-mingled burial contexts, the skeletal remains have traditionally been interpreted as being pushed aside to make room for subsequent inhumations. This explanation assumes that the body is no longer important because it is disturbed and fragmented. Such an interpretation misses the opportunity to investigate the ritualized performances that were involved in the sweeping aside of earlier inhumations as well as the social meaning of continued handling of the dead after burial. My study has posed four research questions in response to these problems: (1) What is the status of the dead after burial? (2) What roles do the corpse play in funerary sequence? (3) What do textual sources and mortuary practices reveal about relationships between the post-mortem body and person? and (4) Under what circumstances does personhood continue or transform after death?

To address these questions, I have employed mortuary archaeology and ancient textual sources to contextualize the social and ritual roles of the dead in the Bronze Age Near East. This project expands understanding of Bronze Age society, specifically the dead as persons and as bodies within the cultural milieu of the second millennium B.C.E. The results of this study show that certain ways of handling human remains are closely linked to personhood outcomes after death and burial. Textual evidence demonstrates that burial through inhumation was a necessary condition for commemoration. Commemoration facilitated the transformation of the dead into posthumous beings such as deities and ancestors. In contrast, improper burial or lack of care and feeding of the dead could result in dangerous roving ghosts. Textual sources from the ancient Near East support the findings from the three taphonomic case-studies from second millennium B.C.E. Megiddo, which reveal that compound disposal in shared burial spaces was the primary pathway to ancestorhood after burial. The transformation occurred over an extended ritual sequence that transformed living, biographical persons into a collective group of ancestors who occupied a special status within the membership of the household in which they were buried.

The body is particularly relevant in the context of the Bronze Age Levant, which operated around the household as the primary social unit. Membership within the co-habitational group included the living and the dead. Household members shared space during their lives and afterlives, which created an enchained and intergenerational "memory community" (McAnany 2010: 136) that was perpetuated through rituals of corporeal fragmentation. Intramural chamber tombs such as Tomb 100 in Building 12/K/15 served as a repository for a specific group of members selected from the wider household community, who were otherwise buried in subfloor pit and jar burials elsewhere in the house. Given the demographic similarities between those inhumed in the multiple-successive mortuary locus of Tomb 100 and those inhumed in individual pit and jar burials within the same building, I demonstrate that the selection of burial context was not based on visible factors of rank such as wealth, health, age, or sex. The profiles of each burial population reflect expectations for extended families or co-habitational groups of the Bronze Age Levant. Therefore, those who were continually re-visited in Tomb 100 occupied a distinct status within the household and may represent a specific lineage group who were specially commemorated in the months, years, and decades after burial.

Methods and Results

Below, I summarize the key findings and methods of my study and its contributions to methodology and theory of funerary archaeology of the ancient Near East.

Results

My study has contributed to explaining the high variability of burial practices in the mortuary record of the Middle and Late Bronze Age, which is connected to the status of the dead after burial. In the ancient Near East, this connection is based around a close intersection between corporeality and posthumous personhood. In some cases, mortuary practices carried out by living survivors purposefully facilitated corporeal fragmentation to the extent that no single individual remained intact. The practice of breaking up and intermixing of discrete bodies blurred the lines between individual bodies and persons after death. The erasure of discrete identities and bodies allowed for the emergence of the posthumous collective group.

The role of the corpse in the funerary sequence varied according to body disposal methods, the degree of corporeal manipulation, and the temporal and ritual extent of the funerary sequence. These variables are related to the complexity of a funerary sequence, which is measured through the number of stages, episodes of deposition, and intervals of time involved in the funerary sequence. My results show that long-term commemoration extends the personhood of the dead after burial. Commemoration involves close and continuing interactions between the living and the dead through deposition of offerings, marking of the grave-site, and handling of human remains after burial. Time is an especially important factor for determining the degree and intensity of commemoration. Following from this result, I conclude that only certain persons were selected for commemoration, which is related to the scale of time over which a given person or group of persons were memoralized. It is these two factors combined, time and commemoration, that determines posthumous pesonhood outcomes. Variables of biological sex, age, health status, and wealth were not major factors for determining post-mortem personhood status. Rather, selection for commemoration and transformation of personhood from a living person, to a dead person, to an ancestor, was based on membership within a lineage group.

The results of this study bring renewed attention to the dynamic ritual practices related to becoming an ancestor, challenging the traditional perspective of Bronze Age burials as static or functional, particularly in regard to co-mingled inhumations in subfloor household contexts. The pushing aside of previously inhumed bodies fulfilled much more than a functional role of creating space within the shared tomb chamber. I demonstrate that the repeated handling of the dead at multiple intervals after death involved sequential rituals that created new posthumous identities. The transformation of the dead body in extended sequences of funerary rituals echoed the transformation of the dead person. Each new inhumation involved interaction with previously inhumed bodies, creating an iterative and referential ritual cycle that encompassed acts of remembering and forgetting. The literal incorporation of the bodies belonging to multiple individuals facilitated the social incorporation of the dead into a collective group of ancestors.

The Funerary Sequence of the Bronze Age Levant

In this study, I have created a new model of funerary practices in the ancient Near East that evaluates the status of the dead in extended funerary sequences. Using methods derived from funerary taphonomy, I have reconstructed the sequential performance of funerary activities at three major stages after death: (1) pre-interment preparations, which comprise selecting the burial space, gathering grave goods, and preparing the corpse for inhumation; (2) interment phase, which encompasses the deposition and positioning of the corpse and grave goods inside the burial; and (3) post-interment activities, which can include any activities associated with continued visitation of the grave-site, such as deposition of offerings involved in care and feeding of the dead, and re-visitation of burials for secondary and compound disposals.

Mortuary archaeology can test for all stages of the three-stage model. The correlates enumerated above are not exhaustive for all of the variables of the funerary sequence. Rather, these criteria are starting points that represent possible vestiges of specific practices based on expectations from the textual record of the ancient Near East. The *kispum* rituals, for example, can serve as a basis for evaluating how and when personhood may extend beyond death by comparing textual references and mortuary practices. In the funerary sequence model, the *kispum* rituals apply to the post-interment stage, during which the final transformations of personhood take place. The dead depended on continual physical sustenance and rituals of commemoration to be performed by living descendants in order to extend their personhoods after death.

I have illustrated the funerary sequence model using the case study of Megiddo's Tomb 100, a masonry-constructed chamber tomb that was used for multiple-successive inhumations over a period of ca. 150 years. Each new inhumation directly involved the previously inhumed remains, meshing together the stages of the funerary sequence of different persons within a single mortuary context. I have demonstrated that regular encounters with decaying corpses at various stages of decomposition served as a way for the living to interact with the various phases of social and biological death.

Funerary Taphonomy

This study has advanced understanding of the diversity of deathways in the Bronze Age Levant using innovative methods of funerary taphonomy combined with traditional mortuary archaeology parameters of context, individuality, age, sex, and body disposal methods. Funerary taphonomy is an analytical tool that employs detailed and standardized observations of burial space, body, and context to evaluate the dynamic processes of decomposition and modification to bodies after burial. Using these criteria, I have identified body disposal methods (primary, secondary, and compound) and analyzed taphonomic indices at the high-resolution scale of discrete burial contexts.

My project contributes a Bronze Age perspective to existing literature in prehistoric archaeology of the Near East and Europe that employs high-resolution methods to reconstruct sequences of deposition in burials. Funerary taphonomy constitutes the first step toward evaluating the degree of mortuary diversity and complexity on the basis of the number of stages and depositional episodes involved in a given funerary sequence as well as the duration and temporal intervals of these stages. Other key criteria to take into account include the range of materials used in a given stage or substage, context and location, and the estimated number of funerary participants. Together, these parameters inform on the level and time-scale involved in the planning, investment, and performance of funerary rituals.

Deathways and Afterlives in the Ancient Near East

Death is relevant, universal, and transformative. Death impacts human bodies and persons in irrecoverable ways. Although measures may be taken to mitigate the inevitable signs of physical decay of a corpse or to enliven the surface of a cadaver, the deceased can never return to their former corporeal state or inhabit their original body in the same way as when they were alive. Body disposal therefore accomplishes several important goals. Burial and other disposal methods remove the physical remains of the dead from the realm of the living and satisfy social obligations to the person and their body. Body disposal methods, such as mummification in Egypt, may also be a means of expressing beliefs about an afterlife or facilitating the journey to the Netherworld.

In the ancient Near East, out of biological death emerged new posthumous social categories: deceased persons who were transformed into embodied or disembodied ancestors, deified dead, and ghosts. Ancient textual sources from a variety of genres reference burial, mourning, and commemoration, providing new insight into relationships between the post-mortem body and the emergence of new personhoods after death and burial. The dead could simultaneously exist both within and beyond their bodies, at once physically inside the tomb as bone (Akkadian *eṣemtu*) while also existing as non-corporeal, supernatural beings such as ancestors and ghosts (Akkadian *eṭemmu*) in the Netherworld (Jacquet 2012: 123; MacDougal 2014: 107-12). Personhood may not have extended beyond the life course at all for the majority of persons in unmarked and undisturbed primary inhumations whose grave-sites lacked evidence of ongoing commemoration.

Archaeological evidence from the second millennium B.C.E. Levant supports the textual evidence that personhood was not bracketed between the cradle and the grave. Interaction with the dead after burial could be achieved through curation of bodies and effigies, erection of funerary monuments, locating the dead within inhabited living spaces, and re-visitation grave-sites for deposition of offerings or handling of the human remains. In residential burials, the burial assemblages and other material deposits, such as ceramic stoppers and faunal remains, closely resemble household assemblages. Therefore, it is likely that many of the materials included the burial assemblage were sourced from the household, rather than having been acquired specifically for a funerary purpose. Like the human remains, these materials also underwent transformations of meaning and function once they were deposited in the funerary realm. A burial space like a chamber tomb could be considered a repository for bodies and objects, which were taken out of daily circulation of the world of the living and instead transferred to the world of the dead. The burial assemblages and other offering deposits were ritualized through their involvement in the funerary sequence.

Personhood and Embodiment in the Ancient Near East

Theoretical frameworks of personhood and embodiment contribute new insights into the transformation of posthumous bodies and social status in ways that have not been previously considered in Levantine archaeology. The society Bronze Age Levant, which was organized around the household, can be characterized as operating around dividual personhood, specifically fractal and partible personhood which involved divisibility and exchange within household networks that incorporated the living and the dead. The roles of the body and person were linked to the extent that corporeal fragmentation in funerary rituals facilitated the transformation of personhood of the dead.

The variety of body disposal methods evident in the second millennium B.C.E. Levant represents an innovation in beliefs and practices during the periods of the Middle and Late Bronze Age. Secondary and co-mingled inhumations were experimentations with corporeality in death that allowed new embodiments of death to emerge in ways that challenged the integrity of the whole body. Fragmentation of a whole body into body parts was an act of radical transformation that introduced new relationships between the original body and the new fragments. The “bounded integrity of the body” was irrecoverably disrupted (Casella and Croucher 2011: 213; Chapman and Gaydarska 2007: 6). Corporeal fragmentation symbolized relationships of dividual personhood, particularly fractality and partibility. These dividualities allow for the divisibility and exchange of bodies, objects, and substances within networks of personhood and embodiment. In the context of the Bronze Age Levant, living and dead persons were enchained through their household lineages, which were reproduced through bodies. In death, these relationships were re-imagined in ways that involved the transformation, fragmentation, and intermixing of individual bodies and persons. As a result, the bodies of the dead took on new social roles and achieved collective ancestorhood.

Future Research

Beyond this project’s case studies, the combined funerary taphonomy and funerary sequence approach can be applied broadly to mortuary contexts across the ancient Near East and beyond. Funerary taphonomy has wide applicability for mortuary archaeology worldwide and can also be applied, with limitations, to archival materials and museum collections. As I demonstrated in Chapter 6, examination of archival and legacy materials, particularly photographs and illustrations, can draw out entirely new details and interpretations of burials excavated with different methods and at levels of resolution than those in use in the field today.

The funerary sequence model is particularly useful for disentangling the complexities involved in co-mingled inhumations in shared and re-used burial spaces. Similar mortuary contexts in the Levant stand out as likely candidates for future research regarding the funerary sequence, such as T.498 at Tel Kabri, which parallels Tomb 100 in terms of construction, individuality (MNI: 23), body disposal methods, and the richness of its burial assemblage (n= 339 vessels) (see Table 32). Like Tomb 100, this intramural masonry-constructed chamber tomb contained multiple-successive and co-mingled inhumations, was entered through a flat slab threshold (via a vertical shaft), was in use for a long period of time spanning the MB I-II periods, and exhibited evidence of post-interment deposits outside of the tomb chamber, including several intact and broken lamps (Kempinski 2002: 51-53). Likewise, T.1025, T.4663, T.8096, and T.187at Tel Dan have potential for the funerary sequence model to elucidate the stages of deposition involved in each multiple-successive chamber tomb (Ilan 1996; also see Table 32). Although these examples derive from subfloor household contexts, the funerary sequence model can be applied to burials of all types and body disposal methods using funerary taphonomy methods. Such an approach could be particularly fruitful for the hundreds of rock-cut chamber tombs found in extramural contexts spanning the entire Bronze Age. I expect the findings of future studies concerning the performance of the funerary sequence and its implications for posthumous personhood to differ depending on the specific contexts and contents of each burial.

The field of funerary taphonomy can continue to advance with the aid of high-resolution and precise documentation methods, such 3D modeling and photogrammetry, which improve the accuracy and resolution of archaeological contexts (Berggren et al. 2015). These documentation techniques allow researchers to re-visit the burial context in three dimensions, which is especially useful for creating accurate reconstructions of context, body positioning, and the order of deposition down to individual elements or fragments. Tracing plans from geo-rectified orthophotos is more precise than hand drawings and represents a major step forward in documentation of burial contexts compared to manual means (Bria and DeTore 2016; Ellis 2016; Prins 2016).

The human body contains a wealth of valuable information and represents the next frontier in mortuary archaeology research from a number of perspectives. In terms of theory, the frameworks of embodiment and corporeality can be applied to a broader dataset including art historical and textual sources. Figural representations of human and animal bodies in different media from the Bronze Age Levant such as painted pottery, sculpture and figurines, and incised objects such as decorated stele and bone inlays may provide new insights into the role of the body in different contexts. Similarly, the literary record of the ancient Near East is an excellent source of information concerning ontologies of the human body, alive and dead.

In terms of method, study of the body could be further expanded to evaluate embodiment during life beyond standard biological profiles. Scientific techniques of isotopic analysis, residue analysis, and ancient DNA are beginning to become routine sampling procedures in excavations. Isotopic analysis and residue analysis of dental calculus evaluates mobility and diet of an individual human or animal throughout life, which provides insight into relationships among the dead in terms of how their localities in life merged or diverged (Stockhammer 2016). In this vein, mobility also provides a means of testing patterns of patri- and matri-locality. In a matrilocal system, it would be expected that adult males originated from outside the local area, whereas in a patrilocal society, adult female individuals may have been born and raised through adolescence or early adulthood in another locality or region. Likewise, the diversity of male and female lineages derived from ancient DNA analysis could inform on patrilocal or matrilocal social organization as well as other aspects of identity and kinship which are relevant to the *bêt ʼāb* household society of the Bronze Age Levant (Brody and King 2013; Knipper et al. 2017).

Conclusions

In this study, I have integrated multiple lines of archaeological and historical evidence including burial context, architecture, and osteology in order to reconstruct the sequences of deposition and performance of funerary ritual in the second millennium B.C.E. Levant. This study is the first of its kind to approach Bronze Age Levantine mortuary contexts explicitly in terms of deeply contextualized funerary taphonomy, particularly concerning co-mingled inhumations. It is also the first to address the status of the dead *after* burial in the Bronze Age Levant. Taken together, funerary taphonomy and the funerary sequence inform on key issues in ancient Near Eastern society. Death, dying, personhood, and embodiment are dynamic and accumulative processes of social transformation that can be measured based on patterns of deposition that are grounded in the mortuary archaeology record.

These findings expand our understanding of the Bronze Age Levant, and the belief systems of the ancient Near East more broadly. My study contributes significantly to explanations of diversity in death and burial, particularly in relation to personhood and embodiment. I demonstrate the mechanisms behind dynamic and long-term relationships between living and dead at the scale of the household and evaluate the implications of residential burial and social memory in the society of the Bronze Age Levant. Ritualized transformations of personhood after death, which were performed by the living household members, occurred at specific transitional stages in the extended funerary sequence. The dead were active members of the household whose posthumous existences had to be reconciled with the realities of the decaying bodies below the floor. The operative mechanism in subfloor household burials was to incorporate the bodies and personhoods of the dead, achieving a collective body of corporate ancestors. The specific persons selected for this posthumous role occupied an elevated status in the household that allowed their personhoods to be prolonged as part of the extended human life course. These persons belonged to a special, perhaps foundational, household lineage that inhabited a privileged social and physical space in the architecture of the house and organization of the household.

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APPENDIX

LEVANTINE BURIALS FROM THE SECOND MILLENNIUM B.C.E.

Masonry-Constructed Chamber Tombs

Table 32. Comparative Table of Masonry-Constructed Chamber Tomb Architecture in the MB I-LB II Levant (adapted from Martin and Cradic 2018:Table 7). * Interior measurements, ** Identification as chamber tomb questionable

Site	*Period*	*Stratum*	*Chamber size (m)**	*Chamber shape*	*Construction*	*Entry type*	*Entry size (m)*	*Roof*	*Context*	*MNI*	*No. vessels*	*Source*
Tell Abu Hawam T.5	LB II	N/D	N/D **Sq. m**: N/D	Rectangular	Fieldstone	None	N/A	Slab roof	Cemetery	N/D	N/D	Gonen 1992a: 35, Table 4; 81, fig. 10; Anati 1959: fig.2
Tell el-'Ajjul Tomb 1816	LB	N/D	3.3 x 1.9 **H**: N/D **Sq. m**: 6.27	Rectangular	Fieldstone	*Dromos*	**L**: 2.8 **W**: 1.0	Slab	Eighteenth Dynasty Cemetery	N/D	N/D	Gonen 1992a: 80-82; Petrie 1934: Pl. 58
Tell el-'Ajjul Tomb 1764	LB	N/D	N/D	Rectangular	Rock-cut and slabs	None?	N/D	Gabled with slabs	Eighteenth Dynasty Cemetery	N/D	N/D	Petrie 1934: Pl. 65
Tell el-'Ajjul Tomb 419 “Governor’s Tomb”	LB II	N/D	4.3 x 1.32 **H**: 1.47 **Sq. m**: 5.68	Rectangular	Fieldstone and *kurkar* slabs	Stepped *dromos*	**L**: 2.5 **W**: 1.1	Gabled vault with slabs	Lower Cemetery	6	26	Gonen 1992a: 80-81; Petrie 1933: 5, Pls. 6-13, 48
Tell el-'Ajjul, Tomb 1969	LB II	N/D	3.5 x 1.5 **H**: N/D **Sq. m**: 5.25	Rectangular	Slabs	Stepped *dromos*	**L**: 2.1 **W**: 1.0	Missing; N/D	Lower Cemetery	N/D	N/D	Gonen 1992a: 80-82; Petrie 1934: Pl. 58
Tell el-'Ajjul Tomb 1037	LB II	N/D	3.0 x 1.8 **H**: N/D **Sq. m**: 5.4	Rectangular	Slabs	Stepped *dromos*	**L**: 2.6 **W**: 1.2	Slab	Eighteenth Dynasty Cemetery	N/D	N/D	Gonen 1992a: 80-82; Petrie 1932: 15, Pl. 53
Alalakh Room 17	MB II	VII	**H**: 1.65 **Sq. m**: N/D	Square	Basalt slabs, cement, fieldstone	Doorway, shaft,	*Doorway* **W**: 0.85 **H**: 1.07	Timber and plaster	Intramural palatial	5	3	Woolley 1953

						stepped *dromos*						
Alalakh, Tomb 03-3017	LB IB-LB IIA	IV	1.5 x 0.78 **H**: 0.7 **Sq. m**: 1.17	Curvilinear	Fired and unfired bricks, plastered	None	N/A	Brick barrel vault	Necropolis ?	4	13	Yener & Yazicioğlu 2010: 27-28; Mullins 2010: 51; Boutin 2010; Yener 2013: 266
Aphek Tomb 1200	LB II	X13/ X12	2.0 x 3.0 **H**: N/D **Sq. m**: 6	Apsidal	Fieldstone	None	N/D	Not preserve d	Extramural	8	41	Gadot 2009: 84–87; Gonen 1992a: 156
Tel Burga unnamed	MB I	N/D	2.0 × 2.0 **H**: 1.5 **Sq. m**: 4.0	Rectangular	Medium fieldstones, preserved 7 courses high	Shaft	**W**: 1.25 **H**: 1.5	Fieldston e	UID	6	47	Golani 2011
Dan T.23	MB I	XII	1.75 × 0.6 **H**: 0.34 **Sq. m**: 1.05	Irregular, somewhat rectangular	Fieldstone	UID	UID	Slabs	Intramural	1	1	Ilan 1996
Dan T.1025	MB I	XII	2.15 × 1.35 **H**: 0.95 **Sq. m**: 2.9	Rectangular	Fieldstones and basalt slabs	Shaft/acces s corridor	**L**: 0.7 **W**: 0.6 **H**: 0.48	Slabs	Intramural domestic	4	32	Ilan 1996
Dan T.4244	MB I	XII	0.85 × 0.64 **H**: 0.4 **Sq. m**: 0.54	Rectangular	Fieldstone	N/D	N/D	Slabs	Intramural domestic	1	1	Ilan 1996
Dan T.8096	MB II-III	XI-IX	1.65 × 1.78 **H**: 2 ***Sq. m***: 2.94	Rectangular	Fieldstone, slabs and flagstone	Access corridor	**L**: 0.6 **W**: 0.6 **H**: 0.6	Corbelle d with slabs	Intramural domestic?	5	31	Ilan 1996
Dan T.4663	MB II	X	3.75 × 1.8 **H**: 2 **Sq. m**: 6.75	Rectangular	Fieldstone	Shaft, access corridor	*Shaft* **L**: 1.5 **W**: 1 **H**: 1.28 *Access corridor* **L**: 0.5 **W**: 0.65 **H**: 0.85	Corbelle d with slabs	Intramural domestic	None	17	Ilan 1996

Dan T.187b	MB III	IX	1.76 × 0.78 **H**: 0.9 **Sq. m**: 1.37	Rectangular	Fieldstone and basalt slab	None	N/A	Corbelled with slabs	Intramural domestic	8	10	Ilan 1996
Dan T.371b-c	MB III	IX	0.91 × 0.5 **H**: 0.27 **Sq. m**: 0.46	Rectangular	Fieldstone	None	N/A	Slabs	Intramural domestic	4	4	Ilan 1996
Dan T.8185b	MB III	IX	1.75 × 0.75 **H**: 1 **Sq. m**: 1.31	Rectangular/ trapezoidal	Fieldstone	None	N/A	Corbelled	Intramural	None	1	Ilan 1996
Dan T.387 "Mycenaean Tomb"	LB II	VIIB	2.3 x 2.1 **H**: 2.4 **Sq. m**: 4.83	Rectangular	Fieldstone	None?	N/D	Corbelled with slabs	Intramural	30	108	Ben-Dov 2002
Kabri T.502	MB I	4	0.85 × 0.7 **H**: 0.5 **Sq. m**: 0.6	Ovoid	Fieldstone	None	N/A	Slabs	Intramural	2	10	Kempinski 2002
Kabri T.503	MB I	4	N/D × 0.65 **H**: 0.85 **Sq. m**: N/D	Rectangular?	Fieldstone	None	N/A	Slabs	Intramural	2	17	Kempinski 2002
Kabri T.498	MB I-II	N/D	3.2 × 1.8 **H**: 1.4 **Sq. m**: 5.76	Rectangular	Fieldstone	Vertical slab	**W:** 0.5 **H:** 0.7	Slabs	Intramural	23	339	Kempinski 2002
Kabri T.984**	MB I-II	4?	1.45 × 1.15 **H**: N/D **Sq. m**: 1.67	Rectangular	Fieldstone	None?	N/A	Not preserved	Intramural	8	87	Kempinski 2002
Palmaḥim T.8	LB	N/D	1.75 x 0.6 **H**: 0.65 **Sq. m**: 1.05	Rectangular	Cut into bedrock and lined with slabs	None	N/A	Slabs	Cemetery	1	6	Yannai et al. 2013
Palmaḥim T.11	LB	N/D	1.8 x 0.55 **H**: 0.6 **Sq. m**: 0.99	Rectangular	Cut into bedrock and lined with slabs	None	N/A	Slabs	Cemetery	1	6	Yannai et al. 2013
Palmaḥim T.12	LB	N/D	1.4 x 0.5 **H**: 0.6 **Sq. m**: 0.7	Rectangular	Cut into bedrock and lined with slabs	None	N/A	Slabs	Cemetery	None	6	Yannai et al. 2013
Palmaḥim T.13	LB	N/D	2.0 x 0.75 **H**: 0.8 **Sq. m**: 1.5	Rectangular	Cut into bedrock and lined with slabs	None	N/A	Slabs	Cemetery	4	13	Yannai et al. 2013
Palmaḥim T.15	LB	N/D	1.8 x 0.85 **H**: 0.95	Rectangular	Cut into bedrock and	None	N/A	Slabs	Cemetery	None	1	Yannai et al. 2013

			Sq. m: 1.53		lined with slabs							
Palmaḥim T.16	LB	N/D	1.4 x 0.5 **H**: 0.5 **Sq. m**: 0.7	Rectangular	Cut into bedrock and lined with slabs	None	N/A	Slabs	Cemetery	1	1	Yannai et al. 2013
Palmaḥim T.19	LB	N/D	1.8 x 0.8 **H**: 0.8 **Sq. m**: 1.44	Rectangular	Cut into bedrock and lined with slabs	None	N/A	Slabs	Cemetery	9	1	Yannai et al. 2013
Palmaḥim T.20	LB	N/D	1.8 x 0.75 **H**: 0.6 **Sq. m**: 1.35	Rectangular	Cut into bedrock and lined with slabs	None	N/A	Slabs	Cemetery	5	1	Yannai et al. 2013
Palmaḥim T.21	LB	N/D	0.9 x 0.5 **H**: 0.5 **Sq. m**: 0.45	Rectangular	Cut into bedrock and lined with slabs	None	N/A	Slabs	Cemetery	5	1	Yannai et al. 2013
Palmaḥim T.22	LB	N/D	1.9 x 0.8 **H**: 0.8 **Sq. m**: 1.52	Rectangular	Cut into bedrock and lined with slabs	None	N/A	Slabs	Cemetery	7	1	Yannai et al. 2013
Palmaḥim T.23	LB	N/D	1.8 x 0.8 **H**: 0.75 **Sq. m**: 1.44	Rectangular	Cut into bedrock and lined with slabs	None	N/A	Slabs	Cemetery	3	2	Yannai et al. 2013
Tell Tweini TWE-A-00954	MB I	8C-D?	N/D	N/D	Fieldstone	None	N/A	Corbelled	Intramural	1	1	Hameeuw and Jans 2008
Tell Tweini TWE-A-00170	MB II	8A-B?	2.65 × 2.3 **H**: 1.5 **Sq. m**: 6.1	Ovoid	Fieldstone	Shaft, access corridor	*Shaft* **W**: 0.9 **H**: 1.6 *Access corridor* **L**: 0.75 **W**: 0.4 **H**: 0.65	Corbelled	Intramural	58	158	Hameeuw and Jans 2008
Tall Sūkās T.IV	MB II	17	2.7 × 1.9 **H**: N/D **Sq. m**: 5.13	Ovoid	Fieldstone	None?	N/A	Rubble	Intramural	17+	86	Thrane 1978; Alexandersen 1978

Table 33. Masonry-Constructed Chamber Tomb Architecture from Middle-Late Bronze Age Ugarit (data after Marchegay 1999; after Martin and Cradic 2018:Table 8). * SM = Sophie Marchegay catalogue number; Roman numerals indicate the tomb number originally assigned by C. Schaeffer, ** Tomb robbed or destroyed in antiquity, *** interior measurements

Burial	*Period*	*Chamber size (m)****	*Chamber shape*	*Construction*	*Entry type*	*Entry size (m)*	*Roof*	*Context*	*MNI*	*No. vessels*
T.1246/ 402	End of MB	1.71 × 1.13 **H**: 1.4 **Sq. m**: 2.52	Rectangular	Fieldstone and slabs	*Dromos*	**L**: 1.7 **W**: 0.8	Corbelled	Intramural domestic	3	60
SM10/ XXXVI*	MB II through 14th cent.	2.5 × 2 **H**: 1.4 **Sq. m**: 5	Rectangular	Fieldstone, cut blocks and slabs; re-use of marine anchors as building blocks for door	Stepped *dromos*	**L**: 1.6-1.7 **W**: 0.8-0.9 **H**: 1.0-1.1	Corbelled	Intramural	18	UID
SM4/LIII	MB II; 17th/16th through 14th cent.	2.1 × 1.75 **H**: N/D **Sq. m**: 3.68	Rectangular	Fieldstone	Access corridor	**L**: 0.72 **H**: 1.0	N/D	Intramural	12+	230
SM65/LIV	MB II; 17th cent.	2.65 × 1.6 **H**: 1.6 **Sq. m**: 4.24	Rectangular	Fieldstone	Access corridor	**L**: 0.55 **H**: 1.0	Slabs	Intramural	8	117
LV/SM63	MB; 18th-16th cent.	2 × 1.7 **H**: 1.5 **Sq. m**: 3.4	Rectangular	Fieldstone	Access corridor	**L**: 0.6 **W**: 0.75	Slabs	Intramural	4-5	121
SM7/ XXXIV-57	MB I-II; constructed 19th cent.	1.57 × 1.31 **H**: 1.9 **Sq. m**: 2.06	Rectangular	Fieldstone	*Dromos*	**L**: 1.02 **W**: 0.85	Slabs	Intramural	N/D	N/D
SM17/ Tombe Hyksos pt 19	MB II-III	N/D	N/D	Fieldstone	N/D	N/D	Slabs	Intramural	1	65
SM21/XLII I	End MB II-early LB III	N/D	N/D	Fieldstone	N/D	N/D	Slabs	Intramural	N/D	9
SM22/ LXXV	MB II or III; 17th or 16th cent.	**H**: 2.25	N/D	Fieldstone	N/D	N/D	Slabs	Intramural	Multi ple	71
SM26/ LXXXVI	MB II	N/D	N/D	Fieldstone	*Dromos*	**H**: 0.7	Slabs	Intramural	Multi ple	27
SM42/III	MB II-LB	1.8 × 1.5 **H**: N/D **Sq. m**: 2.7	Rectangular	Fieldstone	Access corridor	**L**: 0.5 **W**: 0.5	Slabs	Cemetery?	8	44
SM55	MB?	2.1 × 1.7	Rectangular	Fieldstone	Access corridor	N/D	Slabs	Intramural	N/D	N/D

		H: 1.6 **Sq. m**: 3.57								
SM58/ LXXIX	MB-LB; 16th-14th cent.	N/D	Rectangular	Fieldstone	N/D	N/D	Slabs	Intramural	N/D	13
SM59/ LXXVII	MB-LB; 16th-14th cent.	2.4 × 1.4 **H**: N/D **Sq. m**: 3.36	Rectangular	Fieldstone	Access corridor	**L**: 0.6 **W**: 0.55	Slabs	Intramural	N/D	23
SM61/LVI	MB II; 17th cent.	2.7 × 1.75 **H**: 1.7 **Sq. m**: 4.73	Rectangular	Fieldstone, worked slabs	*Dromos*	**L**: 1.5	Corbelled with slabs	Intramural	Multi ple	72+
SM62/LVII	MB II; 18th-17th cent.	1.8 × 1 **H**: 1 **Sq. m**: 1.8	Rectangular	Fieldstone	Access corridor	**L**: 0.6 **W**: 0.6-0.7 **H**: 0.6	Slabs	Intramural	Multi ple	71
SM69/LX V	MB	N/D	Rectilinear	Fieldstone	N/D	N/D	Slabs	UID	9	78
SM101**	MB or LB?	N/D	N/D	Slabs	*Dromos*	N/D	Slabs	Intramural	N/D	N/D
SM104	MB-LB	2 × 1.4 **H**: N/D **Sq. m**: 2.8	Rectangular	Fieldstone	N/D	N/D	Slabs	Intramural	N/D	6
SM106/ XVII	MB or LB	1.8 × 1.8 **H**: N/D **Sq. m**: 3.24	Square	Fieldstone	Access corridor	**L**: 0.5 **W**: 0.5	Slabs	Intramural	N/D	N/D
SM107/XI	MB or LB?	3 × 1.85 **H**: N/D **Sq. m**: 5.55	Trapezoidal	Fieldstone	*Dromos*?	N/D	Slabs	Intramural	N/D	1?
SM108**	MB or LB?	N/D	N/D	N/D	N/D	N/D	Slabs	UID	N/D	2
SM109	MB or LB?	2.75 × 1.4 **H**: N/D **Sq. m**: 3.85	Rectangular	Fieldstone	Access corridor	**W**: 0.6	Slabs	Intramural	N/D	3?
SM110/ LXXXII	End of MB through LB	2.1 × 1.85 **H**: 1.5 **Sq. m**: 3.88	Rectangular	Fieldstone	UID	N/D	Slabs	Intramural	N/D	1?
SM113**	MB or LB?	N/D	N/D	N/D	N/D	N/D	N/D	Intramural	N/D	1?
SM115**	MB or LB?	N/D	N/D	N/D	N/D	N/D	Slabs	Intramural	N/D	1?
SM117	MB II-III through 14th or 13th cent.	N/D	Rectangular	Fieldstone	N/D	N/D	Slabs	Intramural	N/D	8
SM122/ LXXX	15th-14th cent.	N/D	N/D	N/D	*Dromos*?	N/D	Slabs	UID	N/D	12
SM125/ LXXXI	MB or LB I-II	N/D	Rectangular	N/D	N/D	N/D	Slabs	Intramural	N/D	5

SM126**	MB or LB?	N/D	N/D	N/D	*Dromos*?	N/D	N/D	UID	N/D	N/D
SM127	MB or LB?	N/D	N/D	N/D	N/D	N/D	Slabs	Intramural	N/D	1?
SM128**	MB or LB?	N/D	Rectangular?	N/D	N/D	N/D	N/D	Intramural	N/D	1?
SM130	MB (Stratum 2)	N/D	N/D	N/D	N/D	N/D	N/D	Intramural	N/D	28
SM131/XII	MB or LB?	N/D	Rectangular	Fieldstone	*Dromos*	N/D	Corbelled with slabs	Intramural	N/D	N/D
SM134	MB or LB?	N/D	N/D	Irregular slabs	*Dromos*?	N/D	Slabs	Intramural	N/D	N/D
SM135**	MB or LB?	N/D	N/D	N/D	N/D	N/D	N/D	Intramural	N/D	2?
SM136	MB or LB?	N/D	N/D	Fieldstone?	N/D	N/D	Slabs	Intramural	N/D	N/D
SM141/ LXXXIII	MB or LB?	N/D	Rectangular	N/D	*Dromos*	N/D	Slabs	Intramural	N/D	7
SM158/III**	MB or LB	N/D	Rectangular	Fieldstone	*Dromos*	N/D	Monoliths	Intramural	2?	N/D
SM204/604 **	15th-13th cent.	2.45 × 2.14 **H**: N/D **Sq. m**: 5.24	Rectangular	Cut blocks	*Dromos*	**L**: 3.5 **W**: 3.2 **H**: 1.65	Corbelled with slabs	Intramural palatial	N/D	N/D
SM204/605 **	15th-13th cent.	2.5 × 2.13 **H**: N/D **Sq. m**: 5.325	Rectangular	Cut blocks	*Dromos*	**L**: 3.5 **W**: 3.2 **H**: 1.65	Corbelled with slabs	Intramural palatial	N/D	N/D
SM205/603	15th-13th cent.	3.5 × 2.85 **H**: 2.55 **Sq. m**: 9.97	Rectangular	Cut blocks	*Dromos*	**L**: 3.5 **W**: 1.6	Corbelled with slabs	Intramural palatial	1?	UID
SM206	15th-13th cent.	UID × 1.7 **H**: 1.8 **Sq. m**: UID	UID	Fieldstone	Access corridor	**L**: 0.8	Slabs	Intramural palatial	UID	N/D
SM207	MB or LB?	2.7 × 1.9-2.0 **H**: 1.75-1.8 **Sq. m**: 5.13	Rectangular	Fieldstone	*Dromos*	**L**: 1.56 **H**: 0.97	Slabs	Intramural palatial	N/D	N/D
SM306/VIB	18th-15th cent.	2.8 × 1.3 **H**: 1.7+ **Sq. m**: 3.64	Rectangular	Fieldstone	*Dromos*	**L**: 1.5 **W**: 1	Slabs	Intramural	Multiple?	66
SM317/VIII	MB? (Stratum 2)	N/D	N/D	Fieldstone?	N/D	N/D	Slabs?	Intramural	N/D	3?
SM507/VIC	End MB or beginning LB?	N/D	UID	Fieldstone	N/D	N/D	Slabs	Intramural	N/D	N/D
SM509/XA	End MB through LB	2.8 × 1.0 **H**: N/D **Sq. m**: 2.6	Rectangular	Fieldstone	Access corridor	**L**: 0.8 **W**: 0.8	Corbelled with slabs	Intramural	N/D	2
SM612	MB through LB I?	N/D	N/D	Fieldstone	N/D	N/D	Slabs	Intramural	N/D	2

SM615	MB with reuse at end of LB	N/D	N/D	Fieldstone	Access corridor	**L**: 0.8 **W**: 0.7	Slabs	Intramural	N/D	89
SM618	MB II-III to beginning LB I	N/D	Rectangular	Fieldstone	Access corridor (circular)	N/D	Slabs	Intramural	6	108

Stone- and Brick-lined Pit Burials

Table 34. Stone-lined Pit Burials in the Middle–Late Bronze Levant (after Martin, Cradic, and Kalisher 2018:Table 13).

Site	*Burial no.*	*Period*	*Shape and dimensions (m)*	*Stone lining*	*MNI*	*Location*	*Source*
Sidon	Burial 12	MB I, Phase 1	Rectangular; 2.1 × 1 (ext.)	3 courses, 1 row	1	Extramural, cemetery	Doumet-Serhal 2004: 90-97; Ogden and Schutkowski 2004: 162
Sidon	Burial 16	MB I, Phase 1	Rectangular; 1.5 × 0.6 × 0.5 (ext.)	2 courses, 1 row	No human remains	Extramural, cemetery	Doumet-Serhal 2004: 91-101
Sidon	Burial 9	MB I, Phase 1	Rectangular; 2.05 × 0.8-1.2 × 0.8 (ext.)	1 course, 1 row	1	Extramural, cemetery	Doumet-Serhal 2004: 92-102; Ogden and Schutkowski 2004: 162
Sidon	Burial 19	MB I, Phase 2	Rectangular; 0.96 × 0.63 (ext.), 0.7 × 0.4 (int.)	1+ course, 1 row	1	Extramural, cemetery	Doumet-Serhal 2004: 92-105; Ogden and Schutkowski 2004: 163
Sidon	Burial 4	MB II/III, Phase 5	Rectangular; 1.8 × 1.25 (ext.)	2 courses, 1 row	2	Extramural, cemetery	Doumet-Serhal 2004: 129-139; Ogden and Schutkowski 2004: 160
Sidon	Burial 69	MB I	Rectangular; dimensions N/D	N/D	1	Extramural, cemetery	Doumet-Serhal 2010: 118
Sidon	Burial 78	MB I	Rectangular; dimensions N/D	N/D	1	Extramural, cemetery	Doumet-Serhal 2010: 118
Kabri	T.984	MB I-II	Rectangular; 2.5 × 1.7 (ext.?)	"A few" courses; rows N/D	8	Intramural, domestic	Scheftelowitz and Gershuny 2002: 32-33; Faerman *et al*. 2002: 383-391
Kabri	T.902	MB II	Oval; ca. 2.5 × 1.5 (ext.)	N/D	33	Intramural, domestic	Scheftelowitz and Gershuny 2002: 33-34; Faerman *et al*. 2002: 383-391
Tell el-Far'ah (N)	Tombe AJ	MB II	Rectangular; ca. 0.6 × 0.55 (ext.), ca. 0.4 × 0.35 (int.)	Lined on three sides with medium fieldstones, SW side made of earth; 1-2 courses, 1 row	1	Intramural	Mallet 1973: 77-78; Pl. XXV

Hazor	T.8	MB III	Oval; 1.5 × 0.7 (int.?)	1 course, 1 row	1	Intramural, domestic	Yadin *et al*. 1960: 83
Lachish	Grave 9028	MB II/III	Rectangular; 1.5 × 0.75 × 0.6 (int.)	Bordered by walls on two sides; 2 courses, 1 row	10	Extramural, cemetery	Singer-Avitz 2004: 985
Lachish	Grave 9100	LB	Rectangular; 2.7 × 2.35 × 0.4 (int.); 2 chambers with stone partition	Lined on all four sides; 2 courses, 1-2 rows; stone and mud floors	1	Extramural, cemetery	Singer-Avitz 2004: 987-988
Ta'anach	Burial 38	MB III/LB I	Oval; ca. 2.5 × 1.3 (ext.), ca. 2 × 0.7 (int.)	1 course? 1 row	1	Intramural, domestic	Lapp 1969: 28-29
Ta'anach	N/D	MB III	N/D	N/D	2	Intramural, domestic	Lapp 1969: 22
Palmaḥim	Tomb 1	LB II	Rectangular; 1.23 × 0.5 (ext.), 1.05 × 0.35 (int.)	1 course, 1 row of large, dressed *kurkar* slabs lining 4 sides	N/D	Extramural, cemetery	Yannai *et al*. 2013: 11-12
Palmaḥim	Tomb 2	LB II	Rectangular; 2.2 × 0.9 (ext.), 1.9 × 0.6	1 course, 1 row of large, dressed *kurkar* slabs lining 4 sides	3	Extramural, cemetery	Yannai *et al*. 2013: 12-14
Palmaḥim	Tomb 4	LB II	Rectangular; 1.2 × 0.7 (ext.), 1.1 × 0.5 (int.)	1 course, 1 row of large, dressed kurkar slabs lining 4 sides	No human remains	Extramural, cemetery	Yannai *et al*. 2013: 12, 14-16
Palmaḥim	Tomb 6	LB II	Rectangular; 1.8 long, width N/D (int.)	1 course, 1 row of small, dressed *kurkar* stones lining E wall, parts of S and N sides	No human remains	Extramural, cemetery	Yannai *et al*. 2013: 12, 17
Palmaḥim	Tomb 17	LB II	Rectangular; ca. 2.1 × 0.9 (ext.), ca. 1.9(?) × 0.6 (int.)	1 course, 1 row of large, dressed *kurkar* slabs	No human remains	Extramural, cemetery	Yannai *et al*. 2013: 12, 30-31
Palmaḥim	Tomb 18	LB II	3 × 1 m (int.)	1 course, 1 row of dressed *kurkar* slabs lining sides, but preserved only on N side	2	Extramural, cemetery	Yannai *et al*. 2013: 12, 32-33

Table 35. Levantine Brick-lined Pit Burials, MB I–Iron I (after Martin, Cradic, and Kalisher 2018:Table 14).

Site	*Burial no.*	*Period*	*Grave type*	*Shape and dimensions (m)*	*Brick lining*	*Roof*	*MNI*	*Location*	*Source*
Jericho	Tomb HAR	MB I	Chamber	Rectangular; 2.4 × 1.9 (ext.), 1.8 × 1.2 × 0.6 (int.)	3+ courses, 1 row	Vaulted(?) mudbrick roof	6	Intramural (palace?)	Kenyon 1981: 349-350; Fig. 5; Pls. 188-189, 328a
Jericho	Tomb D.641	MB I	Pit?	Square; 1.7 × 1.7 (ext.), 1.4 × 1.3 (int.)	1 row	Mudbrick roof	2 (adult female, young female)	Intramural (palace?)	Nigro 2009: 370-372; Massafra 2013
Herzeliya	Multiple examples	MB I	N/D	N/D	N/D	N/D	N/D	Cemetery	Gophna 1978: 21
Sidon	Burial 16	MB I	Pit	Rectangular; 1.5 × 0.6 × 0.5 m (int.)	1 row, 1 course (vertical)	No evidence	Grave found empty	Cemetery	Doumet-Serhal 2004
Sidon	Burial 55	MB I	Pit	Rectangular; 1.4 × 0.7 (ext.), 1 × 0.35 × 0.35–0.5 m (int.)	1 row	No evidence	1 (juvenile, 8y)	Cemetery	Doumet-Serhal 2007
Lachish	Grave 9002	MB I/II or early MB II	Pit	Rectangular; 2.6 × 1.7 (ext.), 1.8 × 0.9 × 0.25 (int.)	1 course, 1 row	Layer of pebbles	3 (incl. 1 male adolescent, 1 child)	Cemetery	Singer-Avitz 2004
Lachish	Grave 9003	MB II/III	Pit?	Rectangular; 3.1 × 1.8 (ext.), 2.3 × 1.3 × 0.8 (int.)	1 course, 1-2 rows	No evidence	1	Cemetery	Singer-Avitz 2004
Lachish	Grave 9009	MB	Pit?	Rectangular; 3 × 2.5 (ext.), 2 × 1 (int.)	1-3 rows	No evidence	Grave found empty	Cemetery	Singer-Avitz 2004
Lachish	Grave 9014	MB	Pit	Rectangular; 1.8 × 1.5 (ext.), 1.1 × 1 (int.)	1 row	No evidence	Grave found empty	Cemetery	Singer-Avitz 2004
Aphek	N/D (1 example)	MB II/III	N/D	N/D	N/D	N/D	N/D	N/D	Kochavi 1989: 52
Pella	Tomb F.107	MB II	Pit?	Rectangular; N/D	1 row	N/D	2 (adults, 1 female)	Intramural	Bourke, Sparks and Shroder 2006: 22

Ashkelon	Burial 38.53. F169	LB I	Pit	Rectangular; 1.7 × 1.3 (ext.), 1.1 × 0.5 (int.)	3 courses, 1 row	Wooden boughs, plastered over with white lime	1 (young adult female)	Intramural (courtyard in front of house)	Brody 2008
Ashkelon	Burial 38.63. F116	LB I	Pit	Rectangular; 1.1 × 0.6 (ext.), 0.8 × 0.3 (int.)	2 courses, 1 row	Flat brick roof	1 (child)	Intramural (courtyard in front of house)	Brody 2008
Palmaḥim	Tomb 3	LB IIA/B	Pit	Rectangular; 2.2 x ? (ext.), 1.9 × ? (int.)	1 row	N/D	2	Cemetery	Yannai *et al*. 2013: 14
Deir el-Balaḥ	T.1405	LB IIB	Pit	Rectangular; 1.2(+) × 0.4 × 0.6 (int.)	1 row	No evidence	1	Cemetery	Lipton 2010: 39-40; Fig. 1.34
Tell es-Sa'idiyeh	Multiple examples	LB IIB-Iron I	Mostly pits (deep)	Mainly 2.2 × 1.5 (ext.), depth: 0.5–1	1 row, 2-8 courses	Occasionally (brick, possible wooden beams in case of Tomb 101)	Generally Multiple (predominantly adult)	Cemetery	Pritchard 1980; Tubb 1988; 1990; Tubb and Dorell 1991; Green 2006: 428-430
Tell es-Sa'idiyeh	Multiple examples	LB IIB-Iron I	Pits (shallow)	Mainly 2 × 1 m (ext.), depth: 0.3–0.5	1 row, 1-2 courses	Occasionally (brick)	Generally single (predominantly adult)	Cemetery	Pritchard 1980; Tubb 1988; 1990; Tubb and Dorell 1991; Green 2006: 428-430
Azor	5-7 examples	Iron I	Pits	Rectangular or tapered; e.g., 1.75 × 0.65 (ext.), 1.6 × 0.35 × 0.3 (int.) (D76)	1 course, 1 row	Layer of bricks(?)	Single adult interments (male and female)	Cemetery	Ben-Shlomo 2008

BURIALS FROM MEGIDDO

Database of Megiddo Burials

Table 36. Masonry-Constructed Chamber Tomb Architecture at MB II–LB I Megiddo (after Martin and Cradic 2018:Table 6).
* Stratigraphic affiliations of the tombs follow the original assignations of their respective excavators, ** Interior measurements, *** uncertain identification

Burial	*Period*	*Stratum**	*Chamber size (m)***	*Chamber shape*	*Construction*	*Entry type*	*Entry size (m)*	*Roof*	*Context*	*MNI*	*No. vessels*
T.3130***	MB I	XIIIA	ca. 1.25 x 0.75 **H**: N/D **Sq. m**: 0.94	Ovoid	Fieldstone?	N/D	N/D	N/D	Intramural	N/D	5
T.3095	MB II	XII	1.7 × 1.4 **H**: 1.2 **Sq. m:** 2.08	Ovoid	Fieldstone	Access corridor	**L**: 0.8 **W**: 0.65	Slabs	Intramural domestic	Multiple	38
T.3110	MB II	XI	Ca. 2.2 × 1.1 **H**: N/D **Sq. m**: ca. 2.42	Rectangular	Fieldstone	N/D	N/D	N/D	Intramural domestic	Multiple	17
T.3075	MB II	XI	1.85 × 1.2 **H**: 0.9 **Sq. m**: 2.08	Rectangular	Fieldstone	Threshold sealed with slab	**W**: 0.6	Slabs?	Intramural domestic	Multiple	24
T.3080	MB II	XI	Ca. 1.6 × 0.9 **H**: N/D **Sq. m**: ca. 1.44	Rectangular	Fieldstone	N/D	N/D	Slabs?	Intramural domestic	Multiple	14
T.3085	MB II	XI	***Upper chamber*** 1.4 × 1.4 **H**: 1 **Sq m**: 1.57 ***Lower chamber*** 1.15 × 1.05 **Sq m**: 1.18	Two levels of chambers, upper (east): ovoid; lower (west): rectangular	Fieldstone and hewn blocks	N/D	N/D	Corbelled(?) (single course) with slabs	Intramural domestic	Multiple	30
T.2129	MB II	XI	Ca. 1.5 × 0.9 **H**: N/D **Sq. m**: ca. 1.35	Rectangular	Fieldstone	N/D	N/D	Slabs?	Intramural domestic	Multiple	5
T.4098	MB II	XI	2.6 × 1.78 **H**: 1.6 **Sq. m**: 4.25	Rectangular	Fieldstone; arched doorway	Shaft, access corridor	**L**: 0.6 **W**: 0.55 **H**: 1.15	Corbelled, interior gabling	Intramural domestic	No human remains	No finds

T.4055	MB II	XI	1.5 × 1.25 **H**: 0.9 **Sq. m**: 1.72	Rectangular	Fieldstone	Access corridor	**L**: 0.7 **W**: 0.55	Corbelled(?) with slabs	Intramural domestic	Multiple	22
T.3175	MB II	XI	2 × 1.3 **H**: 1 **Sq. m**: 2.28	Ovoid	Fieldstone	Access corridor (off-axis)	**L**: 0.9 **W**: 0.45	Slabs	Intramural domestic	Multiple	19
T.51 (Eastern slope)	MB II/III	-	1.9 × 1.3 **H**: 0.9 **Sq. m**: 2.54	Rectangular	Fieldstone	*Dromos* with step	**L**: 1.15 **W**: 0.75	Slabs	Cemetery?	No human remains	24
T.3070	MB III	X	1.85 × 1.55 **H**: 1.1 **Sq. m**: 2.87	Irregular; rectangular with curved corner	Fieldstone; interior support pillar	Access corridor sealed with stone?	**L**: 0.7 **W**: 0.5	Slabs; support pillar inside chamber	Intramural domestic	Multiple	59
T.50	MB II-III	H-16	1.5 x 2.35 **H:** 1.15 **Sq. m:** 3.53	Rectangular	Fieldstone; earthen mortar	*Dromos*, stepped threshold	**Not fully excavated**	Gabled with monumental slabs	Intramural palatial?	9	26
T.100 (Area K)	MB III-LB I	K-10	1.7 × 1.5 **H**: 1.4 **Sq. m**: 2.2	Rectangular	Fieldstone; dry masonry	Threshold sealed with slab	**W**: 0.5 **H**: 0.5	Corbelled with slabs	Intramural domestic	23	61
Grab-kammer I	MB III-LB I	Stratum 2	2.6 × 2.15 **H**: 1.6 **Sq. m**: 5.59	Rectangular	Fieldstone	Shaft, *dromos*, blocked with stone	**L**: 1.6 **W**: 0.8 **H**: 0.7	Corbelled with slabs	Intramural palatial?	6	57+
Grab-kammer II	MB III-LB I	Stratum 2	1.47 × 1.15 **H**: 1.2 **Sq. m**: 1.69	Rectangular	Fieldstone; earthen mortar	*Dromos*, sealed with blocking stone	**L**: 1.2 **W**: 0.5 **H**: 0.65	Corbelled with slabs	Intramural palatial?	12	28
Chamber f	LB I-Iron I	Stratum 2	5.5 × 3.6 **H**: 2.75 **Sq. m**: 19.8	Rectangular	Fieldstone and roughly hewn blocks, plastered	*Dromos* and arched doorway with ashlar blocks	**L**: 2.75 **W**: 1.5 **H**: 1.25	Corbelled with slabs, gable-like shape	Intramural palatial	No human remains	No finds

Table 37. Burial Assemblages in Masonry-Constructed Chamber Tombs (after Martin and Cradic 2018:Table 5). * Stratigraphic affiliations of Oriental Institute chamber tombs follow Loud's (1948) original assignations.

Burial	*Stratum*	*Bowls*	*Jugs*	*Juglets*	*Storage jars*	*Lamps*	*Others*	*Total*	*Small finds*
T.51	Eastern slope	8 (33.3%)	1 (4.2%)	11 (45.8%)	2 (8.3%)	2 (8.3%)	0 (0%)	24	4 amethyst scaraboids, 2 steatite scarabs, 1 bronze toggle pin, 1 bead, bone inlays, 1 three-legged basalt bowl
T.3095	XII*	15 (39.5%)	4 (10.5%)	13 (34.2%)	3 (7.9%)	2 (5.3%)	1 (2.6%)	38	5 steatite scarabs, 1 bronze butt of staff or spear(?), 1 bronze toggle pin, 1 gold headband, 1 alabaster jar, bone inlays
T.3110	XI	8 (47.1%)	1 (5.9%)	8 (47.1%)	0 (0%)	0 (0%)	0 (0%)	17	4 steatite scarabs, 1 bronze toggle pin
T.3075	XI	9 (37.5%)	4 (16.7%)	9 (37.5%)	1 (4.2%)	1 (4.2%)	0 (0%)	24	2 steatite scarabs, 1 bronze blade
T.3080	XI	6 (42.9%)	1 (7.1%)	6 (42.9%)	0 (0%)	1 (7.1%)	0 (0%)	14	8 steatite scarabs, 1 bronze toggle pin
T.3085	XI	10 (33.3%)	2 (6.7%)	14 (46.7%)	3 (10%)	1 (3.3%)	0 (0%)	30	2 steatite scarabs, 1 amethyst scarab, 1 bronze toggle pin, bone inlays
T.2129	XI	1 (20%)	1 (20%)	3 (60%)	0 (0%)	0 (0%)	0 (0%)	5	None
T.4055	XI	8 (36.4%)	4 (18.2%)	6 (27.3%)	1 (4.5%)	3 (13.6%)	0 (0%)	22	7 steatite scarabs, 2 bronze blades, 1 bronze strainer, 3 bronze toggle pins, 1 gold headband, bone inlays
T.3175	XI	5 (26.3%)	3 (15.8%)	9 (47.4%)	0 (0%)	2 (10.5%)	0 (0%)	19	3 steatite scarabs, 1 green stone scarab, 1 bronze blade, 3 bronze toggle pins, bone inlays, 1 faience bead
T.3070	X	23 (39%)	8 (13.6%)	18 (30.5%)	4 (6.8%)	5 (8.5%)	1 (1.7%)	59	8 steatite scarabs, 1 bronze blade (fragmentary), bone inlays, beads (carnelian, crystal, faience, glass), 1 alabaster jug
Grabkammer II	MB III–LB I	6 (21.4%)	6 (21.4%)	10 (35.7%)	1 (3.6%)	4 (14.3%)	1 (3.6%)	28	Multiple scarabs, 4 alabaster vessels, Multiple bronze artifacts (among them 2 anklets, blades and rings), 1 gold ring, beads, bone artifacts (including bone inlays), flint artifacts
Total		*99 (35.4%)*	*35 (12.5%)*	*107 (38.2%)*	*15 (5.4%)*	*21 (7.5%)*	*3 (1.1%)*	*280*	

Table 38. Stone-Lined Pit Burials (after Martin, Cradic, and Kalisher 2018:Table 4.12). * Interior dimensions, unless mentioned otherwise, ** Dimensions estimated according to scale bar on original photo.

Burial no.	*Stratum/ period*	*Shape and dimensions (m)**	*Stone lining*	*MNI*	*Age-at-death*	*Body treatment*	*Location/ context*	*Source*
N/D	1st-2nd Layer	Jar burial inside partial ring of small fieldstones built into corner of two walls; dimensions unknown	N/D	2?	Subadult (all)	Primary	Intramural: *Mittelburg*, Sq. Q/21-22	Schumacher 1908: 18-19; Abb. 14-15; Tafel IV
Grave a	3rd Layer (Cat. I)	Oval; dimensions unknown	1-3 courses, 1 row	N/D	N/D	N/D	Intramural: *Nordburg* “necropolis,” Sq. L 23	Schumacher 1908: 55-56; Tafel XIIA
Grave d	3rd Layer (Cat. I)	Oval; 0.55 diameter, 0.4 high	3 courses, 1 row	1	Subadult	Primary	Intramural: *Nordburg* “necropolis,” Sqs. L/23-24	Schumacher 1908: 57-58, Abb. 65; Tafel XIIA
Grave e	3rd Layer (Cat. I) (MB)	Rectangular; 1.3 × 0.7	1-2 courses, 1 row	2	Subadult (all)	Primary	Intramural: *Nordburg* “necropolis,” Sq. L 23	Schumacher 1908: 54-57; Abb. 62; Tafel XIIA
Grave f	3rd Layer (Cat. I) (MB)	Circular; >1 m (estimated from photo), dimensions not provided	1 course, 1 row	3	Subadult (all)	Secondary?	Intramural: *Nordburg* “necropolis,” Sq. M 22	Schumacher 1908: 55-57; Abb. 63-64; Tafel XIIA
N/D	3rd Layer (Cat. I)	Jar burial inside ring of small fieldstones; dimensions unknown	N/D	1	Subadult	Primary	Intramural: *Nordburg*, Sq. N 21	Schumacher 1908: 41; 54, No. 1; Tafel XIIA
N/D	3rd Layer (Cat. II)	Circular; 2.1 m long	1-2 courses, 1 row	Multiple (4+)	Adult (all?)	Co-mingling? Disarticulated	Intramural: *Nordburg* “necropolis,” Sq. M 23	Schumacher 1908: 58-60, No. 7; Abb. 67-68; Tafel XIIA
N/D	3rd Layer (Cat. II)	N/D	Ring of fieldstones	1	N/D	N/D	Intramural: *Nordburg*, Sq. K 22	Schumacher 1908: 60, No. 8; Abb. 45; Tafel XIIA
N/D	3rd Layer (Cat. II)	N/D	Ring of fieldstones	1	N/D	N/D	Intramural: *Nordburg*, Sq. K 22	Schumacher 1908: 60, No. 9; Tafel XIIA

N/D	3rd Layer (Cat. II) (MB)	N/D; bowl burial surrounded by fieldstones	Ring of fieldstones	1	Subadult	Primary	Intramural: *Nordburg*, Sq. L 23	Schumacher 1908: 60-61, No. 10; Abb. 74; Tafel XIIA
N/D	3rd Layer (Cat. II) (MB)	N/D; bowl burial surrounded by fieldstones	Ring of fieldstones	1	Subadult	Primary	Intramural: *Nordburg*, Sq. L 23	Schumacher 1908: 60, No. 10; Tafel XIIA
N/D	3rd Layer (Cat. II)	Circular ring of stones; 1.65 × 0.8 × 0.3-0.4	1 course, 1 row of large, worked blocks	1	Subadult	Primary	Intramural: *Nordburg*, Sqs. K-I/23	Schumacher 1908: 60-63, No. 11; Abb. 75; Tafel XIIA
T.244	MB?	Rectangular; ca. 1.5 × 0.6**	1 course, 1 row	1	UID	UID (disturbed)	Eastern slope cemetery	Guy and Engberg 1938: 56-57, 140; Fig. 59
T.251	MB	Dimensions unknown	N/D	3	1 adult, 2 subadults	Primary	Eastern slope cemetery	Guy and Engberg 1938: 57-59, 140; Fig. 61
T.1178	LB I	Curvilinear; ca. 1.5 × 1.2	N/D	2	1 adult, 1 subadult	Primary	Eastern slope cemetery	Guy and Engberg 1938: 99-100, 141; Fig. 121
T.50	MB, LB II (reuse)	Pit lined with fieldstones; dimensions unknown	N/D	N/D	N/D	N/D	Eastern slope cemetery	Guy and Engberg 1938: 54; 141
T.37 M	LB I	Jar burial in stone-lined pit in floor of rock-cut Tomb 37 with mixed material	N/D	1	Subadult (infant)	Primary	Eastern slope cemetery	Guy and Engberg 1938: 80-81, 140; Figs. 92-93
T.3146	XIIIA	Square; ca. 1 × 1.1 (int.); 1.5 × 1.7 (ext.)	1-2 courses, 1 row	1	Adult	Primary	Intramural: Area BB	Loud 1948: 121, Fig. 296
T.5062	XIIIA	Jar burial inside oval ring of stones; dimensions unknown	1 course, 1 row	1	Subadult (infant)	Primary	Intramural: Area BB	Loud 1948: 122, Fig. 300
T.5252	XIIIA	Rectangular; ca. 1 × 0.7	1(?) course, 1 row	1	Subadult	Primary	Intramural: Area BB	Loud 1948: 122, Fig. 301
T.5090	XIIIA	Irregular (curvilinear built into linear wall?); dimensions unknown	1(?) course, 1 row	1	Subadult	Primary	Intramural: Area BB	Loud 1948: 122, Fig. 303
T.5106	XII	Round; dimensions unknown	1 course, 1 row	1	Subadult	Primary	Intramural: Area BB	Loud 1948: 123, Fig. 304
T.5142	XII	Irregular curvilinear (teardrop shape); ca. 2.2 × 0.8**	1-2 courses, 1 row	3	Adult (all)	Primary (1), secondary? (2)	Intramural: Area BB	Loud 1948: 123, Fig. 305

T.5137	XII	Rectangular; ca. 1.3 × 0.6**	3(+) courses, 1(?) row	1	Adult	Primary	Intramural: Area BB	Loud 1948: 123, Fig. 309
T.5267	XII	Rectangular; ca. 1.4 × 1.3 (int.); 2 × 2 (ext.)**	1(+) course, 1 row	Multiple	Adult?	Co-mingling? Disarticulated	Intramural: Area BB	Loud 1948: 123, Fig. 311
T.3084	XII	Curvilinear; ca. 1(+) × 0.8**	1(+) course, 1 row	1	UID	Primary	Intramural: Area BB	Loud 1948: 124, Fig. 314
T.2135	XII	Rectangular? ca. 1.4 × 1**	N/D	1	Adult	Primary	Intramural: Area BB	Loud 1948: 124, Fig. 315
T.5259	XII	Curvilinear; ca. 1.5 × 1**	1(+) course, 1 row	2	1 adult, 1 N/D	1 Primary (adult); 1 secondary?	Intramural: Area BB	Loud 1948: 124, Fig. 316
T.5050	XI	Oval? Dimensions unknown	N/D	1	Subadult	Primary	Intramural: Area BB	Loud 1948: 126, Fig. 326
T.2026	XI	Circular ring of stones; ca. 0.8-0.85 diameter**	N/D, 1 row	1	Subadult	Primary	Intramural: Area CC	Loud 1948: 126, Fig. 325
T.3048	X	Rectangular; ca. 1.2(+) × 0.8 (int.); 1.6(+) × 1.2 (ext.)	2-3(+) courses, 1 row	Multiple	N/D	Co-mingling? Disarticulated	Intramural: Area BB	Loud 1948: 128, Fig. 339
T.2028	X	Irregular shape; ca. 0.6 × 0.5 (int.); 0.9 × 0.7 (ext.)**	N/D, 1-2 rows	1	Subadult	Primary	Intramural: Area CC	Loud 1948: 128, Fig. 340
T.3169	IX	Rectangular; ca. 1.2 × 0.8 (int.); 1.8 × 1.3 (ext.)**	1(+) course, 1 row	Multiple	At least 1 subadult	Primary	Intramural: Area AA	Loud 1948: 131, Fig. 352
T.5040A-B	IX	Rectangular; ca. 1.2 × 0.8 (int.)	N/D	2	2 adults	Primary	Intramural: Area BB	Loud 1948: 132, Fig. 361
T.2017	IX	Rectangular; 0.65(+) × 0.4**	1 course?, 1(+) row	1	Subadult	Primary	Intramural: Area CC	Loud 1948: 132, Fig. 360
T.3094	VIIB	Curvilinear; ca. 1.9 × 0.6 m (int.); 2.3 × 2.1 (ext.) **	1 course, 1 row	N/D	N/D	N/D	Intramural: Area AA	Loud 1948: 134, Fig. 372

Table 39. Jar Burials (after Martin, Cradic, and Kalisher 2018:Table 4.15).

Burial no.	*Stratum/ period*	*Location*	*MNI*	*Body treatment*	*Age*	*Notes*	*Source*
T.4105	XIII	Area AA, Sq. K 8	1	Primary	Infant, likely under 1 year		Loud 1948: 121, Fig. 294; Fig. 378
T.2120	XIII	Area CC, Sq. S 10	1	Primary	Infant	Poorly preserved	Loud 1948: 121, Fig. 297; Fig. 407
Room 5063	XIII	Area BB, Sqs. N/12-13	1	Primary	Infant	No tomb number provided	Loud 1948: 122, Fig. 298; Fig. 397
T.5062	XIII	Area BB, Sq. N 12	1	Primary	Infant, likely under 1 year	Jar burial in stone-lined pit	Loud 1948: 122, Fig. 300; Fig. 397
T.3058	XI	Area BB, Sq. O 15	1	Primary	Subadult	Jar burial in pit containing single primary adult inhumation; jar burial not visible in photograph	Loud 1948: 125, Fig. 318; Fig. 399
T.2027	X	Area CC, Sq. R 10	N/D	N/D	N/D	Not fully published	Kassis 1973: 19, Table 1
T.2029	X	Area CC, Sq. R 10	N/D	N/D	N/D	Not fully published	Kassis 1973: 19, Table 1
T.2034	X	Area CC, Sq. Q 10	N/D	N/D	N/D	Not fully published	Kassis 1973: 19, Table 1
T.3029	X	Area BB, Sq. O 14	1	Primary	Infant, likely under 1 year	Jar burial in pit burial containing single primary subadult inhumation	Loud 1948: 127, Fig. 331; Fig. 400
T.3026A	X	Area BB, Sq. O 14	1	Primary	Child	In pit containing two jars, each with single child inhumation; originally given one locus number	Loud 1948: 127, Fig. 333; Fig. 400
T.3026B	X	Area BB, Sq. O 14	1	Primary	Child	In pit containing two jars, each with single child inhumation; originally given single locus number	Loud 1948: 127, Fig. 333; Fig. 400
T.3030	X	Area BB, Sq. O 15	N/D	N/D	N/D	Not fully published	Kassis 1973: 19, Table 1
T.3033	X	Area BB, Sq. O 14	N/D	N/D	N/D	Not fully published	Kassis 1973: 19, Table 1
T.3034	X	Area BB, Sq. O 15	N/D	N/D	N/D	Not fully published	Kassis 1973: 19, Table 1

T.3035	X	Area BB, Sq. O 15	N/D	N/D	N/D	Not fully published	Kassis 1973: 19, Table 1
T.3046	X	Area BB, Sq. O 14	N/D	N/D	N/D	Not fully published	Kassis 1973: 19, Table 1
T.3050	X	Area BB, Sq. O 14	N/D	N/D	N/D	Not fully published	Kassis 1973: 19, Table 1
T.3052	X	Area BB, Sq. O 14	N/D	N/D	N/D	Not fully published	Kassis 1973: 19, Table 1
T.3054	X	Area BB, Sq. O 14	1	Primary	Infant, likely under 1 year		Loud 1948: 128, Fig. 338; Fig. 400
T.4007	X	Area AA, Sq. K 7	N/D	N/D	N/D	Not fully published	Kassis 1973: 19, Table 1
T.4018	X	Area AA, Sq. K 7	N/D	N/D	N/D	Not fully published	Kassis 1973: 19, Table 1
T.4106	X	Area AA, Sq. K 8	1	Primary	Infant	Jar burial in pit with two subadult inhumations under jar	Loud 1948: 128, Fig 336; Fig. 380
T.5244	X	Area BB, Sq. M 12	N/D	N/D	N/D	Not fully published	Kassis 1973: 20, Table 1
Room 4004	IX	Area AA, Sq. L 7	2	Primary	2 infants, both likely under 1 year	Two infants sharing single jar	Loud 1948: 132, Fig. 357; Fig. 381
T.2165	IX	Area BB, Sq. N 15	1	Primary	Infant, likely under 1 year		Loud 1948: 132, Fig. 358; Fig. 401
T.247	MB	Sq. S 15	1	Primary	Infant	Eastern Slope cemetery	Guy and Engberg 1938: 57; 140
T.253	MB	Sqs. R-S/15	1	Primary?	Subadult	Eastern Slope cemtery	Guy and Engberg: 59; 140
T.257	MB III/ LB I	Sq. S 15	1	Primary	Subadult	Eastern Slope cemetery Cooking-pot burial	Guy and Engberg: 60-61; 140
T.645	MB	Sq. R 4	1	Unknown	Subadult	Eastern Slope Cemetery Poorly preserved	Guy and Engberg.: 61-62; 140
T.37 K 4	LB I	Sqs. U-V/19	1	Primary?	Subadult	Eastern Slope cemetery Jar burial in pit in floor of rock-cut T.37 with mixed material; indeterminable body position. Poorly preserved	Guy and Engberg: 80; 140
T.37 M	LB I	Sqs. U-V/19	1	Primary	Infant	Eastern Slope cemetery Jar burial in stone-lined pit in floor of rock-cut T.37 with mixed material	Guy and Engberg: 80-81; 140
N/D	1st-2nd Layer	*Mittelburg*	2?	Primary	Subadult (all)	Jar burial inside a stone-lined pit built into a corner; jar contained remains of at	Schumacher 1908: 18-19; Abb. 14-15; Tafel IV

						least two infants, with second jar used as lid	
N/D	1st-2nd Layer	Eastern edge of mound	1	Primary	Subadult		Schumacher 1908: 25; Abb. 23
N/D	3rd Layer (Cat. I)	*Nordburg*, Sq. N 21	1	Primary	Subadult	Surrounded by small fieldstones	Schumacher 1908: 41; 54, No. 1; Tafel XIIA
N/D	3rd Layer (Cat. I) (MB)	*Nordburg*, Sq. N 24	1	Primary	Subadult	Jar burial (*s'*) embedded in Wall *s*	Schumacher 1908: 44-46; 54, No. 2; Abb. 41-42; Tafel XIIA
N/D	3rd Layer (Cat. II) (MB)	*Nordburg*, Sq. L 23	1	Primary	Subadult	Bowl burial containing remains of neonate or fetus	Schumacher 1908: 60-61, No. 10; Abb. 74; Tafel XIIA
N/D	3rd Layer (Cat. II) (MB)	*Nordburg*, Sq. L 23	1	Primary	Subadult	Bowl burial containing remains of infant	Schumacher 1908: 60, No. 10; Tafel XIIA

Overview of Burials from Area K Building 12/K/15

Table 40. Burial Assemblages in Pit and Jar Burials in Building 12/K/15 (after Martin, Cradic, and Kalisher 2018:Table 4.6). * These items formed components of necklaces, ** The occasional, small animal bones in the backfilling of burial pits were excluded.

Burial	*Ceramic Vessel*	*Scarab/ scaraboid*	*Earring*	*Bead*	*Pin*	*Stone vessel*	*Bone inlay*	*Other item*	*Faunal remains***
10/K/83	1								
10/K/88	2			6*					
10/K/118	3								
12/K/27									
12/K/59									
12/K/89	1							8 ceramic stoppers	Caprines, red deer
12/K/96	5				1				
14/K/49	5	1			2				Caprines, deer
14/K/59									
14/K/66	4		1						
14/K/67	2		2						
14/K/103									
14/K/175	2								
14/K/200 Upper	1	1*		>8*		1	Small inlays of box, long stripe of additional(?) box	Kohl stick, Small faience plate	
14/K/200 Lower	4		4	8*	2		4 inlay stripes of box, fragmented	2 shells (perforated)*	Caprines, gazelle, large mammal

Table 41. Pottery in Pit and Jar burials in Building 12/K/15 (after Martin, Cradic, and Kalisher 2018:Table 4.6). *Burial containers and covers are excluded.

Burial	*Bowls*	*Jugs*	*Juglets*	*Jars*	*Total*
10/K/83*	-	-	1	-	1
10/K/88	-	-	2	-	2
10/K/118	-	-	3	-	3
12/K/27	-	-	-	-	0
12/K/59	-	-	-	-	0
12/K/89	1	-	-	-	1
12/K/96	1	2	2	-	5
14/K/49	1	2	2	-	5
14/K/59	-	-	-	-	0
14/K/66	2	-	2	-	4
14/K/67	-	-	2	-	2
14/K/103	-	-	-	-	0
14/K/175	-	-	2	-	2
14/K/200	2	2	1	-	5
Total	*7 (23%)*	*6 (20%)*	*17 (57%)*	*0 (0%)*	*30 (100%)*

Table 42. Burial Assemblage (artifacts) in Tomb 100 by excavation locus (after Martin and Cradic 2018:Table 1).

Locus	*Ceramic vessels*	*Bronze objects*			*Silver objects*	*Stone vessels*	*Scarabs*	*Bone inlays*	*Beads*
		Pins	Daggers	Plates	Rings				
10/K/102	43	1+	1	3	-	-	1	Multiple	1
10/K/120	12	5+	-	-	1	1	1	Multiple	-
10/K/121	6	2	1	-	1	1	1	Multiple	-
10/K/122	-	-	-	-	-	-	1	Multiple	-
Total	*61*	*8*	*2*	*3*	*2*	*2*	*4*	*Multiple*	*1*

Table 43. Burial Assemblage (vessels) in Tomb 100 by excavation locus (after Martin and Cradic 2018:Table 3).

Locus	*Bowls*	*Jugs*	*Juglets*	*Storage jars*	*Lamps*	*Other*	*Total*
10/K/102	3	12	10	2	13	3	*43*
10/K/120	2	-	9	-	1	-	*12*
10/K/121	-	1	5	-	-	-	*6*
Total	*5 (8%)*	*13 (21%)*	*24 (39%)*	*2 (3%)*	*14 (23%)*	*3 (5%)*	*61 (100%)*

Table 44. Tomb 100: Long Bone Inventory and Age Distribution in Subadults (data after Faerman and Smith 2018:Table 1).

Bone	*Infants <2 years*	*Children 2-6 years*	*Juveniles 7-12 years*	*Adolescents 13-17 years*	*Unknown*	*Total*
Right humerus	1		1	1	3	6
Left humerus		1	1	1	1	4
Right ulna	1	1	1	2	1	6
Left ulna		1		1	3	5
Right radius				2	0	2
Left radius		1	1	2	1	5
Right femur	1	2		2	1	6
Left femur	1	1	1	2	0	5
Right tibia		2		2	1	5
Left tibia		3		1	0	4
Right fibula		3		1	0	4
Left fibula		1		1	0	2

Table 45. Tomb 100: Long Bone Inventory and Age and Sex distribution in Adults (data after Faerman and Smith 2018:Table 2).

Bone	*Males*	*Females*	*Unknown*	*Total*
Right humerus		3	4	7
Left humerus		1	6	7
Right ulna			6	6
Left ulna			10	10
Right radius		1	6	7
Left radius	1	2	2	5
Right femur	3	3	3	9
Left femur	2	4	4	10
Right tibia			8	8
Left tibia			10	10
Right fibula			6	6
Left fibula			6	6

Table 46. Skeletal Completeness of Individuals in Pit and Jar burials, Building 12/K/15 (data after Faerman 2018).

Burial	*Individual*	*Age Class*	*Age (years unless specified)*	*Sex*	*Skeletal completeness and articulation*
10/K/83	1	Neonate	ca. 8 months gestational (premature)	UID	Complete; articulated
10/K/88	1	Child	2.5-3	UID	Incomplete; partial articulation
10/K/118	1	Infant	0-1 months	UID	Complete; articulated
	2	Child	3.5-4	UID	Complete?
	3	Adolescent	14-16	Male	Incomplete; not in articulation
12/K/27	1	UID	UID	UID	Articulated
12/K/89	1	Adult	25-30	Male	Complete; articulated
12/K/96	1	Adult	25-30	Female	Mostly complete; articulated
14/K/49	1	Adult	40+	Female	Incomplete; partial articulation
	2	Adult	20-25	Male	Complete; articulated except for legs
14/K/59	1	Infant	1-1.5	UID	Incomplete; partial articulation
14/K/66	1	Infant	8-9 months	UID	Complete; articulated
14/K/67	1	Infant	1.5-2	UID	Incomplete; articulated
14/K/103	1	Infant	1-2 months	UID	Complete; articulated
14/K/175	1	Infant	1.5-2	UID	Mostly complete; articulated
	2	Infant	1.5-2	UID	Mostly complete; articulated?
14/K/200	1	Juvenile	8-9	UID	Mostly complete; partial articulation
	2	Juvenile	10.5-11.5	UID	Complete; articulated

Table 47. Inventory of Postcranial Remains for Incomplete Individuals in Pit and Jar burials, Building 12/K/15 (data incomplete; data after Faerman 2018).

Burial	*Individual*	*Age Class*	*Age (years)*	*Sex*	*Articulation*	*Bone*	*Side*
10/K/88	1	Child	2.5-3	UID	Partial	Vertebral arches	N/D
						Ribs	N/D
10/K/118	3	Adolescent	14-16	Male	Not in articulation	No postcranial bones	--
14/K/49	1	Adult	40+	Female	Partial	Humerus	R
						Humerus	L
						Radius	R
						Ulna	R
						Femur	R
						Tibia	R
						Fibula	R
						Patella	L
						Hand bones, misc.	N/D
						Distal radius	L
						3rd metacarpal	R
						5th metacarpal	R
						Foot bones, misc.	N/D
12/K/59	1	Adult	UID	UID	Not in articulation	Femur	R
						Femur	L
						Pelvis	N/D
						Sacrum	N/D

12/K/96	1	Adult	40+	Female	Articulated	Humerus	R
						Humerus	L
						Ulna	R
						Ulna	L
						Radius	R
						Radius	L
						Pelvis (fragmentary)	N/D
						Vertebrae	All?
						Ribs	All?
						Hand bones	All?
						Foot bones	All?
14/K/59	1	Infant	1-1.5	UID	Partial	Femur	R
						Humerus	R
						Vertebrae	N/D
						Ribs (fragmentary)	N/D
						Ilium	R
						Ilium	L
14/K/67	1	Infant	1.5-2	UID	Incomplete; articulated	Ribs	N/D
						Vertebrae	N/D
14/K/200	1	Juvenile	8-9	UID	Mostly complete; partial articulation	Humerus	L
						Femur	L
						Femur	R
						Tibia	L
						Fibula	L
						Hand bones	All?
						Foot bones	All?
						Ribs	All?
						Vertebrae	All?
						Scapula	N/D
						Pelvis	N/D

Table 48. Taphonomic Indices, Building 12/K/15.

Burial	*Individual*	*Skeletal Completeness*	*Breakage of bones*	*Disarticulation*	*Surface Modification*	*Taphonomic Index*
10/K/83	1	10	10	10	9	39
10/K/88	1	5	4	7	10	26
10/K/100	All (23 MNI)	3	2	2	4	11
10/K/118	1	10	8	8	10	36
	2	10	8	5	10	33
	3	4	5	5	3	17
12/K/27	1	10	10	10	7	37
12/K/59	1	5	10	8	10	33
12/K/89	1	10	10	10	10	40
12/K/96	1	8	8	8	10	34
	2	5	8	6	10	29
14/K/49	1	8	9	10	10	37
	2	8	8	6	10	32
14/K/59	1	4	7	8	10	29
14/K/66	1	10	7	10	10	37
14/K/67	1	6	6	6	9	27
14/K/103	1	9	8	10	10	37
14/K/175	1	10	8	10	10	38
	2	10	8	10	10	38
14/K/200	1	4	10	8	10	32
	2	10	8	10	10	38

Catalogue of Area K Burials: Level K-10, Building 12/K/15
(adapted from Martin, Cradic, and Kalisher 2018)

Simple Pit Burials

Burial 10/K/88
This burial yielded the remains of a 2.5–3 year-old child in a poor state of preservation. The cranium entirely crushed, presumably from the weight and pressure of the fill of the burial pit (Figure 60). The post-cranial remains were better preserved and in articulation (Figures 61-62).

Finds. Six beads and two juglets were recovered within the jumble of cranial remains.

Taphonomic Index: 26

Notes. Although the skeletal inventory does not list any long bones, the left femur and left fibula are clearly visible in Figure 62 below.

Figure 60. Burial 10/K/88 cranial remains.

Figure 61. Exposure of vertebrae, Burial 10/K/88.

Figure 62. Lowest exposure, Individual 1, Burial 10/K/88.

Burial 12/K/27
This is a simple inhumation of an individual of undetermined age (older subadult or young adult) who was inhumed in a left lateral flexed position. The individual was articulated and complete upon exposure, although the bones were soft and crumbly when removed from the pit (Figure 63).

Finds. No finds are associated with this burial.

Taphonomic Index: 37

Figure 63. Individual 1, Burial 12/K/27.

Burial 12/K/59
Locus 12/K/59 is the burial of an adult of undetermined age. The skeletal inventory is incomplete because only the pelvis and lower limbs of the skeleton was exposed in articulation, but were very poorly preserved (Figure 64). The upper portion, if still *in situ*, runs into the northeastern section of the area, buried under meters of debris.

Finds. No finds are associated with this burial.

Taphonomic Index: 33

Figure 64. Individual 1, Burial 12/K/59.

Burial 12/K/89

The burial of a well-preserved, fully articulated adult male, 25–30 years of age, was exposed in alongside a wall foundation (Figures 65-66). The skeleton lay in a supine flexed position, with both legs bent to the left (east). The head and upper body were also facing left, toward the wall. The arms were flexed across the upper body, with the hands resting on the torso. Skeletal remains of a caprine, in partial articulation, were found to the immediate anatomical left of the hands and mouth.

Finds. The only ceramic offering, a bowl, was placed on top of the faunal remains. The bowl covered the individual’s hands and was leaning against the front of the skull. A thin layer of phytoliths was encountered adhering to several of the long bones. It is possible that these are remains of clothing wrapped around the individual’s body. The debris removed during the articulation of the skeleton contained as many as eight ceramic stoppers.

Taphonomic Index: 40

Figure 65. Individual 1, Burial 12/K/89.

Figure 66. Cranial remains, Individual 1, Burial 12/K/89.

Burial 12/K/96

Two adult skeletons were found near the edge of the mound, interred parallel to each other alongside the southeastern closing wall of the Building 12/K/15. Neither of the two skeletons was found complete, probably due to erosion at the edge of the *tell*. Both bodies were articulated and represent primary inhumations. The northwestern individual (Individual 1) was an adult female, 20–25 years old, who was interred in a supine position, with the legs flexed to the left (Figure 67). Both arms were flexed upwards. The right hand rested on the chest. The left upper arm and hand were not found *in situ*. The southeastern individual (Individual 2), was less complete but could be positively identified as an adult female, 40+ years old, who was also interred in a supine position (Figure 68).

Finds. Five ceramic vessels were found in the narrow space between the two crania. The only non-ceramic object associated with this grave is the head of a bronze toggle pin found in the area of the upper body of the northwestern individual.

Taphonomic Index, Individual 1: 34
Taphonomic Index, Individual 2: 29

Figure 67. Individual 1, Burial 12/K/96.

Figure 68. Individual 2 on right; cranium of Individual 1 on left, Burial 12/K/96.

Burial 14/K/59
The burial of an infant, 1-1.5 years of age, was placed alongside the exterior face of the foundation of the southeastern closing wall of Building 12/K/15 (Figure 69). The bones were fragile and the cranium was crushed, likely due to the pressure and weight of the fill of the pit.

Finds. No associated finds.

Taphonomic Index: 29

Figure 69. Individual 1, Burial 14/K/59.

Burial 14/K/66
Locus 14/K/66 is the burial of an infant, ca. 8–9 months old, in a simple pit (Figure 70). The skeleton was articulated but fragile.

Finds. Four pottery vessels can be associated with the individual in Burial 14/K/66: two juglets and two bowls. A gold earring was also found on the upper ribcage, in the immediate vicinity of the skull.

Taphonomic Index: 37

Figure 70. Individual 1, Burial 14/K/66.

Burial 14/K/67
This is the shallow burial of an infant, 1.5–2 years old, located just northwest of Burial 14/K/66, perpendicular to the latter and at the same elevation. This primary inhumation was articulated and in a moderate state of preservation (Figure 71).

Finds. Two dipper juglets were placed next to the cranium. Two gold earrings were found *in situ*, one in the left ear area and one in the right ear area of the infant's cranium.

Taphonomic Index: 27

Notes. The bones of the right and left arms are visible in the photo but are not listed in the skeletal inventory, which uses the osteology report as its source (Faerman 2018).

Figure 71. Individual 1, Burial 14/K/67 (southwest of Individual 1, Burial 14/K/66).

Burial 14/K/103
The fairly well-preserved skeleton of an infant, 1–2 months old, was found in a shallow pit below the floor of Building 12/K/15 (Figure 72).

Finds. No finds could be securely associated with this burial.

Taphonomic Index: 37

Figure 72. Individual 1, Burial 14/K/103.

Stone-Lined Pits

Burial 14/K/200

Burial 14/K/200 is a stone-lined pit that measured ca. 0.5 m deep. The pit contained a roughly rectangular stone lining with external measurements of 1.6 × 1.3 m, and inner measurements of 1.0 × 0.7 m. The pit was constructed of a row of slabs and contained smaller fieldstones that were wedged in between the slabs (Figures 73-74).

The pit yielded two superimposed inhumations, referred to as upper (Individual 1) and lower (Individual 2), who were separated by layer of debris ca. 0.1 m thick. The upper burial was that of child, 8-9 years old, who was in a poor state of preservation. Only the cranium and torso remain. The lower burial was a primary inhumation of a subadult, ca. 10.5-11 years old, who was located at the bottom of the pit. The legs were flexed to the right, and the right arm was flexed across the pelvis.

Finds. A rich collection of finds was associated with each individual. Finds associated with Individual 1 included an assemblage of beads, including a fluted, melon-shaped bead made of gold. The individual was also buried with a frit scarab with a gold bezel. Other finds in the assemblage included a dipper juglet, gypsum stone vessel with a calcite lid, kohl stick, faience platelet, and a collection of incised bone inlays.

Individual 2 was found with two pairs of earrings on the cranium, a bronze toggle pin on the upper left torso, and the head of a second bronze pin on the right side of the upper body. Pieces of incised bone inlays of a wooden box were found on the torso. In addition to these finds, an assemblage of seven gold beads, shell beads, and crystals that were located along the upper torso, possibly the remains of a necklace. Ceramic vessels comprise a bowl located to the right of the head; a large platter placed on top of the right arm; and two jugs, one resting to the left of the upper body and one immediately left of the pelvis. Finally, the bones of at least two caprines were found next to the body, and one animal bone (rib) was found inside the bowl.

Taphonomic Index, *Individual 1*: 32
Taphonomic Index, *Individual 2*: 38

Figure 73. Individual 2, Burial 14/K/200.

Figure 74. Individual 2, Burial 14/K/200.

Brick-Lined Pit

Burial 14/K/49

Burial 14/K/49 is a brick-lined pit that was exposed on three sides. Its full extent is not known. Of the sides that were exposed, it measured ca. 1.90 m long and 0.7 m wide, with inner measurements of ca. 1.65 m × 0.6 m. The pit contained the inhumations of two individuals, an adult male 20-25 years old (Individual 1), and an adult female 40+ years old (Individual 2). Individual 1 was placed in a supine position, with only the upper body (cranium to pelvis) in articulation. The arms were flexed across the torso, with the right hand resting on the sternum Figure 75). The remains of Individual 2 consisted of cranial fragments, fragmentary long bones, and hand and foot bones.

Finds. Five ceramic vessels have been found in the grave, including a jug and a juglet, which were placed next to the cranium of Individual 1. Three vessels were associated with the fragmentary remains of Indiviudal 2. Additional grave goods include a fragmented bronze pin found *in situ* near the left shoulder of Individual 1. Additonally, a scarab and head of a bronze pin were associated with Indiviudal 2. The burial contained faunal remains of a caprine in partial articulation, which were found left of the pelvis of Individual 1. Bones of a sheep and red deer were found among the fragmentary remains of Individual 2.

Taphonomic Index, Individual 1: 37
Taphonomic Index, Individual 2: 32

Figure 75. Individual 1, Burial 14/K/49.

Jar Burials

Burial 10/K/83

A newborn was inhumed in a shoulder-handled jug. The rim and neck of the jar had been cut to create an opening ca. 12 cm wide to insert the body. The neonate was placed into the jug legs first in a right lateral flexed position. The skeleton was nearly complete and well-preserved (Figure 76).

Finds. A dipper juglet was found inside the burial container.

Taphonomic Index: 39

Figure 76. Individual 1, Burial 10/K/83.

Burial 10/K/118

A pithos contained the poorly preserved remains of three individuals. Its opening—0.15 m wide at the rim and 0.14 m at the narrowest part of the neck—was sealed with a body sherd of a second pithos. The vessel contained skeletal remains of a neonate (Individual 1), a 3.5–4 year-old child (Individual 2), and a 14–16 year-old adolescent male (Individual 3). The bones of the infant and child were intermingled (Figure 77). Individual 3 is represented by fragmentary cranial remains that may be related to a jumble of disarticulated bones to the west, possibly representing a disturbed burial (Figure 78).

Finds. The pithos contained three ceramic vessels, a mug, and two dipper juglets.

Taphonomic Index, Individual 1: 36
Taphonomic Index, Individual 2: 33
Taphonomic Index, Individual 3: 17

Figure 77. Burial 10/K/118 with bone jumble to the west.

Figure 78. Cranial remains of Individual 2, Burial 10/K/118.

Burial 14/K/175

A jar burial contained the remains of two superimposed infants, each 1–2 months old, who were inserted feet-first into the pot (Figure 79-80). The opening of the storage jar was covered by a krater, which was used as a lid.

Finds. Two vessels were found next to the jar, a dipper juglet and a cylindrical juglet with double-stranded handle.

Taphonomic Index, Individual 1: 38
Taphonomic Index, Individual 2: 38

Figure 79. Individual 1, Burial 14/K/175.

Figure 80. Individual 2, Burial 14/K/175.

Masonry-Constructed Chamber Tomb

Burial 10/K/100

Tomb 100, a rectangular masonry-constructed chamber tomb, was constructed of fieldstone masonry and covered with a roof built of boulders and slabs which formed a corbelled vault. The chamber measured ca. 1.4 m high from floor to ceiling, 1.5 m wide, and 1.7 m long (see Figures 18-19, 37). The tomb was accessed through a narrow threshold ca. 0.55 m wide in the northwest that was sealed with a flat slab placed upright that blocked the entrance.

The tomb contained an MNI of 23 whose remains were scattered and fragmented in a dense accumulation ca. 0.60 m thick of bone debris. The individuals were inhumed in a series of compound disposals, although the chamber likely served as the primary locus of decomposition, with all subsequent disturbances occurring within the confines of the chamber. The tomb's individuals were comprised of all age ranges, and (where identifiable) male and female individuals were represented in nearly equal proportions.

Finds. The grave goods were rich and varied and included a ceramic assemblage of 61 vessels—most of which were found *in situ* and complete—as well as three scarabs, two bronze knives, two stone vessels, and dozens of strips and fragments of decorated bone inlays (Tables 42-43).

Notes. The tomb was constructed and accessed below the habitation surfaces of Room 12/K/88 in Building 12/K/15. The fill surrounding the tomb was comprised of mudbrick debris and a rich quantity of fragmented faunal bones as well as an assemblage of 40 ceramic stoppers (see Chapter 8 for discussion). The tomb's use likely spanned the entire habitation phase of the courtyard house, based on the density and quantity of its finds as well as the chronology of the grave goods. The ceramic assemblage indicates that the tomb dates to the MB III-LB I periods (ca. 1600-1450 B.C.E.; Table 49). The tomb was sealed with a plaster floor of Building 12/K/15. The room of the subsequent structure of Level K-9 sealed the tomb with a pillar base and floor that was constructed above the southeastern part of the chamber.

Table 49. Calibrated Radiocarbon dates, Tomb 100 (adapted from Toffolo et al. 2014:Table 3).

Locus	*Lab No.*	*Sample type*	*14C age* ± yr BP	*Calibrated range* ±1σ	*Calibrated range* ±2σ
10/K/102	RTK-6401	Olive seed	3290±55	1626 (68.2%) 1501	1727 (0.3%) 1723 1691 (95.1%) 1443
10/K/120	RTK-6402	Olive seed	3335±50	1683 (43.6%) 1605 1585 (24.6%) 1536	1740 (95.4%) 1505

Overview of Burials from Area H Building 14/H/87

Table 50. Burial Assemblage from Burial 16/H/45.

Burial	*Ceramic vessel*	*Scarab/ Scaraboid*	*Ring/ Earring*	*Bead*	*Pin*	*Stone vessel*	*Bone inlay*	*Other items*	*Faunal remains*
16/H/45	2 bowls 2 jugs 1 juglet	0	0	2 gold rosettes 1 shell hair bead?	1 bronze pin 1 gold pin	0	0	1 bronze fragment 1 ceramic stopper 1 faience fragment	2-3 ovicaprid crania; postcranial bones
Total	5	0		3	2	0	0	3	ND*

Table 51. Pottery from Burial 16/H/45.

Vessel	*Level*	*Date*	*Type*	*Ware*	*Decoration*	*Description*	*Notes*
16/H/45/VS1	H-15	MB III/ LB I	Bowl	Eggshell Ware	Burnished white slip, no paint	Wheel-made carinated bowl with ring base	Placed upside down on top of mouth of VS2; south of right femur of Individual 1
16/H/45/VS2	H-15	LB I	Jug		Red painted	Wheel-made globular jug. Painted, diamond-shaped geometric motifs over entire vessel exterior	Below VS1; south of right femur of Individual 1
16/H/45/VS3	H-15	LB I	Jug	Bichrome	Red and black painted	Large wheel-made globular jug. Painted geometric and figural motifs. Zigzag four-parallel line pattern bordered vertically painted bands (parallel in Bietak 2001: 191-192, Fig. 10, No. 19)	Immediately west of VS1 and VS2; south of right side of lower torso of Individual 1
16/H/45/VS4	H-15	LB I	Cooking pot		None	Wheel-made carinated bowl/cooking pot	Between Individual 1 and Individual 2
16/H/45/VS5	H-15	LB I	Juglet		None	Dipper juglet	Juglet SW of cranium, Individual 1

Table 52. Burial Assemblage from Tomb 50.

Pottery	*Scarab*	*Ring*	*Bead*	*Pin*	*Stone vessel*	*Bone inlay*	*Other items*	*Faunal remains*
4 plates 7 bowls 2 jugs 7 juglets 4 jars 2 lamps	1 inscribed scaraboid, Hyksos?	1 gold hoop earring 5 silver rings	3 assemblages, bronze beads 1 assemblage, shell beads (Individual 1) 1 assemblage, shell, faience, and stone beads (Individual 2)	5 silver pins 2-3 bronze pins	2 jars, calcite/ alabaster	Dozens of pieces; 3+ assemblages of incised inlays	3 gold brooches with green bead 7 bags of metal fragments (bronze, silver) 4 ceramic stoppers	10+ articulated or partially articulated individuals; hundreds of disarticulated postcranial bones. Mostly ovicaprids. Some bovine, fish, and rodent bones
26	1	6	1	8	2	ND*	14	ND*

Table 53. Distribution of Vessels by Class in Burials of Building 14/H/87.

Burial	*Level*	*Plate*	*Bowls*	*Jugs*	*Juglets*	*Jars*	*Lamps*	*Total*
16/H/45	H-15	0	2 (40%)	2 (40%)	1 (20%)	0	0	5 (100%)
Tomb 50	H-16	4 (15%)	7 (27%)	2 (8%)	7 (27%)	4 (15%)	2 (8%)	26 (100%)
Total	All	4 (13%)	9 (29%)	4 (13%)	8 (26%)	4 (13%)	2 (6%)	31 (100%)

Table 54. Summary of Individuals, Building 14/H/87.

Burial	*Level*	*Date*	*Burial Type*	*Individual*	*Disposal*	*Age*	*Sex*	*Articulation*	*Position*	*Orientation*
16/H/45	H-15	LB I	Simple Pit	1	Primary	Adult	UID	Articulated, well preserved	Supine flexed, arms flexed and hands resting on torso. Cranium facing upward.	W-E
16/H/45	H-15	LB I	Simple Pit	2	Secondary	Adult	UID	Disarticulated	Long bones stacked and intermingled with sheep/goat bones. Cranium facing NE.	W-E
16/H/50	H-16	MB II-III	Chamber	1	Primary	Adult	Female	Articulated, well preserved	Right lateral flexed, arms flexed and hands resting on torso. Cranium facing west.	N-S
16/H/50	H-16	MB II-III	Chamber	2	Primary	Adult	Male	Articulated, some disturbance and softening of bones	Supine, legs flexed to the left, arms flexed and hands resting on torso. Cranium facing upward.	E-W
16/H/50	H-16	MB II-III	Chamber	3	Primary	Child, 8-10 years	UID	Articulated, bones soft and not well preserved	Supine, splayed legs, arms extended away from body.	W-E
16/H/50	H-16	MB II-III	Chamber	4	Secondary	UID	UID	Disarticulated	UID	E-W?
16/H/50	H-16	MB II-III	Chamber	5-9	Secondary, comingling	Adult (all)	UID	Disarticulated	Scattered and co-mingling	Scattered and co-mingling

Table 55. Preliminary Skeletal Inventory (incomplete), Burial 16/H/45 (osteological analysis conducted by Rachel Kalisher).

Locus	*Element*	*Side* R=Right, L=Left, M=Midline, U= Unknown	*Age* 1= Adult, 2= Subadult, N/D = no data	*Age Range* N/D = no data	*Sex* M= Male F= Female N/D = no data
16/H/045	Medial Cuneiform	R	1	N/D	N/D
16/H/045	Intermediate Cuneiform	R	1	N/D	N/D
16/H/045	Lateral Cuneiform	R	1	N/D	N/D
16/H/045	Mt 4	R	1	N/D	N/D
16/H/045	Proximal Pedal Phalanx Ray 1	L	1	N/D	N/D
16/H/045	Distal Pedal Phalanx Ray 1	L	1	N/D	N/D
16/H/045	Proximal Pedal Phalanx Ray 2-5	U	1	N/D	N/D
16/H/045	Intermediate Pedal Phalanx Ray 2-5	U	1	N/D	N/D
16/H/045	Intermediate Pedal Phalanx Ray 2-5	U	1	N/D	N/D
16/H/045	Distal Pedal Phalanx Ray 2-5	U	1	N/D	N/D
16/H/045	Distal Pedal Phalanx Ray 2-5	U	1	N/D	N/D
16/H/045	Mandibular M2	R	N/D	N/D	N/D
16/H/045	Navicular	R	N/D	N/D	N/D
16/H/045	Temporal	L	N/D	N/D	N/D
16/H/045	Temporal	R	N/D	N/D	N/D
16/H/045	Mandibular M2	R	N/D	N/D	N/D

Table 56. Tomb 50: Skeletal Inventory, Individual 1 (osteological analysis conducted by Rachel Kalisher).

Individual and Locus	*Element*	*Side* R=Right L=Left M=Midline U= Undetermined
Ind. 1, 16/H/062	Calcaneus	L
Ind. 1, 16/H/062	Talus	L
Ind. 1, 16/H/062	Cuboid	L
Ind. 1, 16/H/062	Navicular	L
Ind. 1, 16/H/062	Medial cuneiform	L
Ind. 1, 16/H/062	Intermediate cuneiform	L
Ind. 1, 16/H/062	Lateral cuneiform	L
Ind. 1, 16/H/062	MT1	L
Ind. 1, 16/H/062	MT2	L
Ind. 1, 16/H/062	MT3	L
Ind. 1, 16/H/062	MT4	L
Ind. 1, 16/H/062	MT5	L
Ind. 1, 16/H/062	Proximal pedal phalanx, ray 1	L
Ind. 1, 16/H/062	Proximal pedal phalanx, ray 2-5	L
Ind. 1, 16/H/062	Distal pedal phalanx, ray 1	L
Ind. 1, 16/H/062	Intermedate pedal phalanx, ray 2-5	
Ind. 1, 16/H/062	Distal pedal phalanx, ray 2-5	
Ind. 1, 16/H/062	Foot sesamoid	
Ind. 1, 16/H/062	Radius	L
Ind. 1, 16/H/062	Ilium	L
Ind. 1, 16/H/062	Ischium	L
Ind. 1, 16/H/062	Pubis	L
Ind. 1, 16/H/062	Femur	L
Ind. 1, 16/H/062	Patella	L
Ind. 1, 16/H/062	Tibia	R
Ind. 1, 16/H/062	Fibula	R
Ind. 1, 16/H/062	Ischium	R
Ind. 1, 16/H/062	Ilium	R
Ind. 1, 16/H/062	Sacrum	
Ind. 1, 16/H/062	Coccyx	
Ind. 1, 16/H/062	Femur	R
Ind. 1, 16/H/062	Patella	R
Ind. 1, 16/H/062	Humerus	L
Ind. 1, 16/H/062	Mandible	M
Ind. 1, 16/H/062	Mandibular M2	L
Ind. 1, 16/H/062	Mandibular M1	L
Ind. 1, 16/H/062	Mandibular P4	L
Ind. 1, 16/H/062	Mandibular P3	L
Ind. 1, 16/H/062	Mandibular C1	L
Ind. 1, 16/H/062	Mandibular I1	L
Ind. 1, 16/H/062	Mandibular I1	R
Ind. 1, 16/H/062	Mandibular C1	R
Ind. 1, 16/H/062	Mandibular P3	R
Ind. 1, 16/H/062	Mandibular P4	R
Ind. 1, 16/H/062	Distal pedal phalanx, ray 2-5	U

Ind. 1, 16/H/062	Proximal pedal phalanx, ray 2-5	U
Ind. 1, 16/H/062	Vertebral centra fragments	
Ind. 1, 16/H/062	C2	M
Ind. 1, 16/H/062	C3	M
Ind. 1, 16/H/062	C4	M
Ind. 1, 16/H/062	C5	M
Ind. 1, 16/H/062	C6	M
Ind. 1, 16/H/062	C7	M
Ind. 1, 16/H/062	Typical cervical vertebrae	M
Ind. 1, 16/H/062	Atlas	M
Ind. 1, 16/H/062	T12	M
Ind. 1, 16/H/062	L1	M
Ind. 1, 16/H/062	L2	
Ind. 1, 16/H/062	Talus	R
Ind. 1, 16/H/062	Navicular	R
Ind. 1, 16/H/062	Cuboid	R
Ind. 1, 16/H/062	Mt 1	R
Ind. 1, 16/H/062	Proximal pedal phalanx, ray 1	R
Ind. 1, 16/H/062	Distal pedal phalanx, ray 1	R
Ind. 1, 16/H/062	Medial cuneiform	R
Ind. 1, 16/H/062	Intermediate cuneiform	R
Ind. 1, 16/H/062	Lateral cuneiform	R
Ind. 1, 16/H/062	MT 5	R
Ind. 1, 16/H/062	Foot sesamoid	U (R?)
Ind. 1, 16/H/062	Talus	R
Ind. 1, 16/H/062	Proximal pedal phalanx, ray 2-5	
Ind. 1, 16/H/062	Intermediate pedal phalanx, ray 2-5	
Ind. 1, 16/H/062	Distal pedal phalanx, ray 2-5	
Ind. 1, 16/H/062	MT 4	R
Ind. 1, 16/H/062	MT 3	R
Ind. 1, 16/H/062	MT 2	R
Ind. 1, 16/H/062	Metatarsal head	R?
Ind. 1, 16/H/062	MC 1	L
Ind. 1, 16/H/062	Triquetral	L
Ind. 1, 16/H/062	Pisiform	L
Ind. 1, 16/H/062	Proximal hand phalanx ray 1	U
Ind. 1, 16/H/062	Intermediate hand phalanx, ray 2-5	
Ind. 1, 16/H/062	Distal hand phalanx ray 2-5	
Ind. 1, 16/H/062	Distal hand phalanx ray 1	L
Ind. 1, 16/H/062	Proximal hand phalanx ray 2-5	L
Ind. 1, 16/H/062	MC 2	L
Ind. 1, 16/H/062	MC 3	L
Ind. 1, 16/H/062	MC 4	L
Ind. 1, 16/H/062	MC 5	L
Ind. 1, 16/H/062	Capitate	L
Ind. 1, 16/H/062	Lunate	L
Ind. 1, 16/H/062	Scaphoid	L
Ind. 1, 16/H/062	Ulna	L
Ind. 1, 16/H/062	Floating rib	
Ind. 1, 16/H/062	Intermediate hand phalanx, ray 2-5	U
Ind. 1, 16/H/062	Distal hand phalanx ray 2-5	U
Ind. 1, 16/H/062	Ribs	L
Ind. 1, 16/H/062	Tibia	L

Ind. 1, 16/H/062	Fibula	L
Ind. 1, 16/H/062	Scapula	L
Ind. 1, 16/H/062	Clavicle	L
Ind. 1, 16/H/062	Maxillary M3	R
Ind. 1, 16/H/062	Maxillary M2	R
Ind. 1, 16/H/062	Maxillary P3	R
Ind. 1, 16/H/062	Maxillary I1	R
Ind. 1, 16/H/062	Maxillary I1	L
Ind. 1, 16/H/062	Maxillary P4	L
Ind. 1, 16/H/062	Maxillary M1	L
Ind. 1, 16/H/062	Maxillary M3	L
Ind. 1, 16/H/062	Sternal body	M
Ind. 1, 16/H/062	Ribs	R
Ind. 1, 16/H/062	Rib 1	R
Ind. 1, 16/H/062	MC 1	R
Ind. 1, 16/H/062	MC 2	R
Ind. 1, 16/H/062	MC 3	R
Ind. 1, 16/H/062	MC 4	R
Ind. 1, 16/H/062	MC 5	R
Ind. 1, 16/H/062	Trapezoid	R
Ind. 1, 16/H/062	Capitate	R
Ind. 1, 16/H/062	Hamate	R
Ind. 1, 16/H/062	Lunate	R
Ind. 1, 16/H/062	Pisiform	R
Ind. 1, 16/H/062	Triquetral	R
Ind. 1, 16/H/062	Proximal hand phalanx ray 1	R
Ind. 1, 16/H/062	Proximal hand phalanx ray 2-5	R
Ind. 1, 16/H/062	Distal hand phalanx ray 1	R
Ind. 1, 16/H/062	Distal hand phalanx ray 2-5	R
Ind. 1, 16/H/062	Manubrium	M
Ind. 1, 16/H/062	Frontal	M
Ind. 1, 16/H/062	Parietal	R
Ind. 1, 16/H/062	Parietal	L
Ind. 1, 16/H/062	Temporal	R
Ind. 1, 16/H/062	Temporal	L
Ind. 1, 16/H/062	Occipital	M
Ind. 1, 16/H/062	Sphenoid	M
Ind. 1, 16/H/062	Ethmoid	M
Ind. 1, 16/H/062	Vomer	M
Ind. 1, 16/H/062	Maxilla	R
Ind. 1, 16/H/062	Maxilla	L
Ind. 1, 16/H/062	Zygomatic	R
Ind. 1, 16/H/062	Zygomatic	L
Ind. 1, 16/H/062	Inferior nasal concha	R
Ind. 1, 16/H/062	Inferior nasal concha	L
Ind. 1, 16/H/062	Maxillary M1	R

Table 57. Tomb 50: Skeletal Inventory, Individual 2 (osteological analysis conducted by Rachel Kalisher).

Individual and Locus	*Element*	*Side* R=Right L=Left M=Midline U= Undetermined
Ind. 2, 16/H/063	Frontal	M
Ind. 2, 16/H/063	Parietal	R
Ind. 2, 16/H/063	Parietal	L
Ind. 2, 16/H/063	Temporal	R
Ind. 2, 16/H/063	Temporal	L
Ind. 2, 16/H/063	Occipital	M
Ind. 2, 16/H/063	Zygomatic	L
Ind. 2, 16/H/063	Ethmoid	M
Ind. 2, 16/H/063	Maxilla	R
Ind. 2, 16/H/063	Maxilla	L
Ind. 2, 16/H/063	Sphenoid	M
Ind. 2, 16/H/063	Maxillary I1	L
Ind. 2, 16/H/063	Maxillary I2	R
Ind. 2, 16/H/063	Maxillary C	L
Ind. 2, 16/H/063	Maxillary I2	L
Ind. 2, 16/H/063	Maxillary P3?	L
Ind. 2, 16/H/063	Maxillary P3	R
Ind. 2, 16/H/063	Maxillary P4	L
Ind. 2, 16/H/063	Maxillary P4	R
Ind. 2, 16/H/063	Maxillary M1	L
Ind. 2, 16/H/063	Maxillary M3?	R
Ind. 2, 16/H/063	Maxillary M2	L
Ind. 2, 16/H/063	Maxillary M2	R
Ind. 2, 16/H/063	Mandible	M
Ind. 2, 16/H/063	Mandibular M3	R
Ind. 2, 16/H/063	Mandibular M2	R
Ind. 2, 16/H/063	Mandibular M1	R
Ind. 2, 16/H/063	Mandibular P4	R
Ind. 2, 16/H/063	Mandibular P3	R
Ind. 2, 16/H/063	Mandibular C1	R
Ind. 2, 16/H/063	Mandibular I2	R
Ind. 2, 16/H/063	Mandibular I1	R
Ind. 2, 16/H/063	Mandibular I1	L
Ind. 2, 16/H/063	Mandibular I2	L
Ind. 2, 16/H/063	Mandibular C1	L
Ind. 2, 16/H/063	Mandibular P3	L
Ind. 2, 16/H/063	Mandibular P4	L
Ind. 2, 16/H/063	Mandibular M1	L
Ind. 2, 16/H/063	Mandibular M2	L
Ind. 2, 16/H/063	Mandibular M3	L
Ind. 2, 16/H/063	Humerus	L
Ind. 2, 16/H/063	Radius	L
Ind. 2, 16/H/063	Ulna	L
Ind. 2, 16/H/063	Humerus	R
Ind. 2, 16/H/063	Radius	R

Ind. 2, 16/H/063	Ulna	R
Ind. 2, 16/H/063	Manubrium	M
Ind. 2, 16/H/063	Sternal body	M
Ind. 2, 16/H/063	Scapula	L
Ind. 2, 16/H/063	Clavicle	L
Ind. 2, 16/H/063	Scapula	R
Ind. 2, 16/H/063	Clavicle	R
Ind. 2, 16/H/063	Ilium	R
Ind. 2, 16/H/063	Ischium	R
Ind. 2, 16/H/063	Pubis	R
Ind. 2, 16/H/063	Ilium	L
Ind. 2, 16/H/063	Ischium	L
Ind. 2, 16/H/063	Pubis	L
Ind. 2, 16/H/063	Sacrum	M
Ind. 2, 16/H/063	Coccyx	M
Ind. 2, 16/H/063	Rib	R
Ind. 2, 16/H/063	Rib 1	R
Ind. 2, 16/H/063	Rib 2	R
Ind. 2, 16/H/063	Rib1	L
Ind. 2, 16/H/063	Rib 2	L
Ind. 2, 16/H/063	Rib	L
Ind. 2, 16/H/063	C1	M
Ind. 2, 16/H/063	C2	M
Ind. 2, 16/H/063	C3	M
Ind. 2, 16/H/063	C4	M
Ind. 2, 16/H/063	C5	M
Ind. 2, 16/H/063	C6	M
Ind. 2, 16/H/063	C7	M
Ind. 2, 16/H/063	T1	M
Ind. 2, 16/H/063	T2	M
Ind. 2, 16/H/063	T3	M
Ind. 2, 16/H/063	T4	M
Ind. 2, 16/H/063	T5	M
Ind. 2, 16/H/063	T6	M
Ind. 2, 16/H/063	T7	M
Ind. 2, 16/H/063	T8	M
Ind. 2, 16/H/063	T9	M
Ind. 2, 16/H/063	T10	M
Ind. 2, 16/H/063	T11	M
Ind. 2, 16/H/063	T12	M
Ind. 2, 16/H/063	L1	M
Ind. 2, 16/H/063	L2	M
Ind. 2, 16/H/063	L3	M
Ind. 2, 16/H/063	L4	M
Ind. 2, 16/H/063	L5	M
Ind. 2, 16/H/063	Scaphoid	R
Ind. 2, 16/H/063	Scaphoid	L
Ind. 2, 16/H/063	Hamate	R
Ind. 2, 16/H/063	Hamate	L
Ind. 2, 16/H/063	Trapezium	R
Ind. 2, 16/H/063	Trapezoid	R
Ind. 2, 16/H/063	Pisiform	R
Ind. 2, 16/H/063	Lunate	L

Ind. 2, 16/H/063	MC1	R
Ind. 2, 16/H/063	MC1	L
Ind. 2, 16/H/063	MC2	R
Ind. 2, 16/H/063	MC2	L
Ind. 2, 16/H/063	MC3	R
Ind. 2, 16/H/063	MC3	L
Ind. 2, 16/H/063	MC4	R
Ind. 2, 16/H/063	MC4	L
Ind. 2, 16/H/063	MC5	R
Ind. 2, 16/H/063	MC5	L
Ind. 2, 16/H/063	Proximal hand phalanx, ray 1	R
Ind. 2, 16/H/063	Proximal hand phalanx, ray 1	L
Ind. 2, 16/H/063	Proximal hand phalanx, ray 2-5	U
Ind. 2, 16/H/063	Intermediate hand phalanx, ray 2-5	U
Ind. 2, 16/H/063	Distal hand phalanx, ray 1	R
Ind. 2, 16/H/063	Distal hand phalanx, ray 1	L
Ind. 2, 16/H/063	Distal hand phalanx, ray 2-5	U
Ind. 2, 16/H/063	Femur	L
Ind. 2, 16/H/063	Femur	R
Ind. 2, 16/H/063	Tibia	R
Ind. 2, 16/H/063	Fibula	R
Ind. 2, 16/H/063	Tibia	L
Ind. 2, 16/H/063	Fibula	L
Ind. 2, 16/H/063	Proximal pedal phalanx, ray 1	R
Ind. 2, 16/H/063	Proximal pedal phalanx, ray 1	L
Ind. 2, 16/H/063	Proximal pedal phalanx, ray 2-5	U
Ind. 2, 16/H/063	Calcaneus	R
Ind. 2, 16/H/063	Talus	R
Ind. 2, 16/H/064	Typical rib	R
Ind. 2, 16/H/064	Talus	R
Ind. 2, 16/H/064	Medial cuneiform	L
Ind. 2, 16/H/064	Calcaneus	L
Ind. 2, 16/H/064	Tibia	L
Ind. 2, 16/H/064	Fibula	U

Table 58. Tomb 50: Skeletal Inventory, Individual 3 (osteological analysis conducted by Rachel Kalisher).

Individual and Locus	*Element*	*Side* R=Right L=Left M=Midline U= Undetermined
Ind. 3, 16/H/064	Frontal	M
Ind. 3, 16/H/064	Nasal	R
Ind. 3, 16/H/064	Nasal	L
Ind. 3, 16/H/064	Sphenoid	M
Ind. 3, 16/H/064	Parietal	R
Ind. 3, 16/H/064	Parietal	L
Ind. 3, 16/H/064	Temporal	L
Ind. 3, 16/H/064	Temporal	R
Ind. 3, 16/H/064	Zygomatic	R
Ind. 3, 16/H/064	Occipital	M
Ind. 3, 16/H/064	Maxillary DC1	R
Ind. 3, 16/H/064	Maxilla	R
Ind. 3, 16/H/064	Maxilla	L
Ind. 3, 16/H/064	Maxillary M3	R
Ind. 3, 16/H/064	Maxillary M2	R
Ind. 3, 16/H/064	Maxillary M1	R
Ind. 3, 16/H/064	Maxillary P4	R
Ind. 3, 16/H/064	Maxillary P3	R
Ind. 3, 16/H/064	Maxillary I2	R
Ind. 3, 16/H/064	Maxillary I1	L
Ind. 3, 16/H/064	Maxillary C1	L
Ind. 3, 16/H/064	Maxillary P3	L
Ind. 3, 16/H/064	Maxillary P4	L
Ind. 3, 16/H/064	Maxillary M1	L
Ind. 3, 16/H/064	Maxillary DM2	L
Ind. 3, 16/H/064	Maxillary DM1	L
Ind. 3, 16/H/064	Mandible	M
Ind. 3, 16/H/064	Mandibular M2	R
Ind. 3, 16/H/064	Mandibular M1	R
Ind. 3, 16/H/064	Mandibular P4	R
Ind. 3, 16/H/064	Mandibular P3	R
Ind. 3, 16/H/064	Mandibular C1	R
Ind. 3, 16/H/064	Mandibular I2	R
Ind. 3, 16/H/064	Mandibular I1	R
Ind. 3, 16/H/064	Mandibular I1	L
Ind. 3, 16/H/064	Mandibular I2	L
Ind. 3, 16/H/064	Mandibular DM2	L
Ind. 3, 16/H/064	Mandibular M2	L
Ind. 3, 16/H/064	Mandibular P3	L
Ind. 3, 16/H/064	Mandibular P4	L
Ind. 3, 16/H/064	Mandibular M2	L
Ind. 3, 16/H/064	Mandibular M3	L
Ind. 3, 16/H/064	Palatine	R
Ind. 3, 16/H/064	Pubis	L
Ind. 3, 16/H/063	Pubis	R

Ind. 3, 16/H/064	Ischium	L
Ind. 3, 16/H/063	Ischium	R
Ind. 3, 16/H/064	Ilium	L
Ind. 3, 16/H/063	Ilium	R
Ind. 3, 16/H/064	Patella	R
Ind. 3, 16/H/064	Femur	L
Ind. 3, 16/H/064	MT2	L
Ind. 3, 16/H/064	MT3	L
Ind. 3, 16/H/064	MT4	L
Ind.3, 16/H/063	MT1	R
Ind.3, 16/H/063	MT2	R
Ind.3, 16/H/063	MT3	R
Ind.3, 16/H/063	MT4	R
Ind.3, 16/H/063	MT5	R
Ind.3, 16/H/063	Distal foot phalanx, ray 1	L
Ind.3, 16/H/063	Cuboid	R
Ind.3, 16/H/063	Navicular	R
Ind.3, 16/H/063	Lateral cuneiform	R
Ind.3, 16/H/063	Medial cuneiform	R
Ind.3, 16/H/063	Distal foot phalanx, ray 1	R
Ind. 3, 16/H/064	Proximal foot phalanx, ray 2-5	U
Ind. 3, 16/H/064	Proximal foot phalanx, ray 1	U
Ind. 3, 16/H/064	Tibia	R
Ind. 3, 16/H/064	Fibula	R
Ind. 3, 16/H/064	Femur	R
Ind. 3, 16/H/064	Scapula	R
Ind. 3, 16/H/064	Scapula	L
Ind. 3, 16/H/064	Clavicle	R
Ind. 3, 16/H/064	Coccyx	M
Ind. 3, 16/H/064	Sacrum	M
Ind. 3, 16/H/064	Humerus	L
Ind. 3, 16/H/064	Humerus	R
Ind. 3, 16/H/064	Radius	R
Ind. 3, 16/H/064	Ulna	R
Ind. 3, 16/H/064	Ulna	L
Ind. 3, 16/H/064	Tibia	R
Ind. 3, 16/H/064	Fibula	R
Ind. 3, 16/H/064	Calcaneus	L
Ind. 3, 16/H/064	Talus	L
Ind. 3, 16/H/064	Navicular	L
Ind. 3, 16/H/064	Cuboid	L
Ind. 3, 16/H/064	MT 5	L
Ind. 3, 16/H/064	Intermediate cuneiform	L
Ind. 3, 16/H/064	Lateral cuneiform	L
Ind. 3, 16/H/064	Capitate	R
Ind. 3, 16/H/064	MC 3	R
Ind. 3, 16/H/064	MC 2	R
Ind. 3, 16/H/064	Hamate	R
Ind. 3, 16/H/064	MC 4	R
Ind. 3, 16/H/064	MC 5	R
Ind. 3, 16/H/064	MC 1	R
Ind. 3, 16/H/064	Trapezium	R
Ind. 3, 16/H/064	Scaphoid	R

Ind. 3, 16/H/064	Trapezoid	R
Ind. 3, 16/H/064	Proximal hand phalanx, ray 2-5	R
Ind. 3, 16/H/064	Distal hand phalanx, ray 2-5	R
Ind. 3, 16/H/063	Proximal hand phalanx, ray 2-5	
Ind. 3, 16/H/063	Intermediate hand phalanx, ray 2-5	
Ind. 3, 16/H/063	Distal hand phalanx, ray 2-5	
Ind. 3, 16/H/064	C2	M
Ind. 3, 16/H/064	Typical cervical vertebrae	
Ind. 3, 16/H/064	Typical thoracic vertebrae	
Ind. 3, 16/H/064	Typical lumbar vertebrae	
Ind. 3, 16/H/064	Hamate	L
Ind. 3, 16/H/064	Mandibular C1	L
Ind. 3, 16/H/064	Maxillary I2	R
Ind. 3, 16/H/064	Typical ribs	
Ind. 3, 16/H/064	Rib 1	R
Ind. 3, 16/H/064	Rib 2	R
Ind. 3, 16/H/064	Proximal hand phalanx, ray 2-5	R
Ind. 3, 16/H/064	Intermediate hand phalanx, ray 2-5	R
Ind. 3, 16/H/064	Medial cuneiform	L
Ind. 3, 16/H/064	Calcaneus	R
Ind. 3, 16/H/064	Talus	R

Table 59. Inventory of Teeth, Co-Mingling Individuals, Tomb 50 (osteological anaylsis conducted by Rachel Kalisher).

Locus	*Element*	*Side* R= Right L=Left U= Unknown	*Age* 1= Adult 2= Subadult 3= Unknown	*Age Range*	*Sex* M = Male F = Female
16/H/065	Mandibular C	L	1		
16/H/065	Mandibular C	L	1		
16/H/065	Mandibular C	L	2?		
16/H/065	Mandibular M1	L	1		
16/H/065	Mandibular M2	L	1		
16/H/065	Mandibular M3	L	1		
16/H/065	Mandibular P3	L	1		
16/H/065	Mandibular P4	L	1		
16/H/065	Mandibular P4	L	1		
16/H/065	Mandibular P4	L	1		
16/H/065	Maxillary C	L	1		
16/H/065	Maxiilary I1	L	1		
16/H/065	Maxillary I1	L	2		
16/H/065	Maxillary I1	L	1		
16/H/065	Maxillary M1	L	1		
16/H/065	Maxillary M1	L	1		
16/H/065	Maxillary M2	L	2		
16/H/065	Mandibular C	R	1		
16/H/065	Mandibular C	R	1		
16/H/065	Mandibular C	R	1		
16/H/065	Mandibular I2	R	1		
16/H/065	Mandibular M1	R	1		
16/H/065	Mandibular M2	R	1		
16/H/065	Mandibular M3	R	1		
16/H/065	Mandibular P4	R	1		
16/H/065	Mandibular P4?	R	1		
16/H/065	Maxillary C	R	2?		
16/H/065	Maxillary C	R	1		
16/H/065	Maxillary I1	R	1		
16/H/065	Maxillary I1	R	1		
16/H/065	Maxillary I1	R	1		
16/H/065	Maxillary I2	R	1		
16/H/065	Maxillary I2	R	1		
16/H/065	Maxillary M1	R	1		
16/H/065	Maxillary M1	R	1		
16/H/065	Maxillary M1	R	1		
16/H/065	Maxillary M2	R	1		
16/H/065	Maxillary M2	R	1		
16/H/065	Maxillary M2	R	1		
16/H/065	Maxillary M2	R	1		
16/H/065	Maxillary P3	R	1		
16/H/065	Maxillary P4	R	1		
16/H/065	Maxillary P4	R	1		
16/H/065	Mandibular P4?	U			
16/H/065	Maxillary I2?	R?			

Table 60. Skeletal Inventory: Co-mingled Individuals, Tomb 50 (Locus 16/H/65) (osteological analysis conducted by Rachel Kalisher).

Locus	*Element*	*Side* R=Right L=Left M=Midline U= Unknown	*Age* 1= Adult 2= Subadult 3= Unknown	*Age Range*	*Sex* M= Male F= Female
16/H/065	Ilium	R	1		
16/H/065	Ilium	L	1		
16/H/065	Ischium	R	1		
16/H/065	Zygomatic	R	1		
16/H/065	Parietal	L	1		
16/H/065	Occipital	M	1		
16/H/065	Temporal	L	1		
16/H/065	Sphenoid	M	1		
16/H/065	Radius	L	1		
16/H/065	MC4	L	1		
16/H/065	MT3	L	1		
16/H/065	MC3	R	1		
16/H/065	Clavicle	L	1		
16/H/065	Rib	L	1		
16/H/065	MC2	R	1		
16/H/065	Rib	R	2?		
16/H/065	Intermediate Cuneiform	L	1		
16/H/065	Scapula	L	1		
16/H/065	Humerus	R	1		
16/H/065	Scapula	L	1		
16/H/065	Humerus	R	1		
16/H/065	MC1	R	1		
16/H/065	Ulna	L	1		
16/H/065	MC1	L	1		
16/H/065	Calcaneus	R	1		
16/H/065	MC3	L	1		
16/H/065	Clavicle				
16/H/065	Navicular	L	1		
16/H/065	MC5	L	1		
16/H/065	MT4	L	1		
16/H/065	Rib	L	1		
16/H/065	Manubrium		1		
16/H/065	Sacrum	M	1		M?
16/H/065	Fibula	L	1		
16/H/065	Ulna	U	1		
16/H/065	Fibula	R	1		
16/H/065	Rib 1	U	1		
16/H/065	Hamate	R	1		
16/H/065	Talus	L	1		
16/H/065	Humerus	L	1		
16/H/065	MC5	R	1		
16/H/065	Patella	L	1		
16/H/065	Patella	R	1		
16/H/065	Maxilla	R	1		
16/H/065	Maxilla	L	1		

16/H/065	MC2	R	1		
16/H/065	C1	M	1		
16/H/065	Patella	L	1		
16/H/065	Rib 1	L	1		
16/H/065	MT3	R	1		
16/H/065	C1	M	1		
16/H/065	MT1	L	1		
16/H/065	C1	M	1		
16/H/065	Cuboid	L	1		
16/H/065	C2	M	1		
16/H/065	Scaphoid	L	1		
16/H/065	MC2	R	1		
16/H/065	Radius	L	1		
16/H/065	Scapula	R	2		
16/H/065	MC2	L	1		
16/H/065	Rib 1	L	1		
16/H/065	Medial Cuneiform	R	1		
16/H/065	MT5	L	1		
16/H/065	Ischium	R	1		
16/H/065	Tibia	L	1		
16/H/065	Tibia	L	1		
16/H/065	Tibia	R	1		
16/H/065	Mandible	M	1		
16/H/065	Sacrum	M	1		
16/H/065	Frontal	M	1		
16/H/065	Maxilla	L	1		
16/H/065	Maxilla	L	1		
16/H/065	Radius	L	1		
16/H/065	Mandible	R	1		
16/H/065	Ulna	L	1		
16/H/065	MC4	L	1		
16/H/065	Sternum	M	1		
16/H/065	Ulna	L	1		
16/H/065	Maxilla	R	1		
16/H/065	Zygomatic	R	1		
16/H/065	Mandibular C	R	1		
16/H/065	Talus	R	1		
16/H/065	Rib	R	1		
16/H/065	Zygomatic	L	1		
16/H/065	Mandible	L	1		
16/H/065	Radius	R	1		
16/H/065	Ulna	L	1		
16/H/065	C2	M	1		
16/H/065	Ulna	R	1		
16/H/065	Ilium	R	1		F?
16/H/065	Mandibular M1	R	1		
16/H/065	Clavicle	R	1		
16/H/065	Ulna	L	1		
16/H/065	Ulna	R	1		
16/H/065	Tibia	R	1		
16/H/065	Humerus	L	1		
16/H/065	Ischium	L	1		
16/H/065	Femur	R	1		

16/H/065	Maxilla	R	1		
16/H/065	Tibia	R	1		
16/H/065	Femur	R?	1		
16/H/065	Humerus	L	1		
16/H/065	Temporal	R	1		
16/H/065	Calcaneus	L	1		
16/H/065	Temporal	L	1		
16/H/065	Fibula	U	1		
16/H/065	Ulna	R	1		
16/H/065	Humerus	R	1		
16/H/065	Mandible	R	1		
16/H/065	Os Coxa	L	1		
16/H/065	Ulna	R	1		
16/H/065	Frontal	M	1		
16/H/065	Fibula	R	1		
16/H/065	Frontal	M	1		
16/H/065	Zygomatic	R	1		
16/H/065	Femur	R	1		
16/H/065	Tibia	L	1		
16/H/065	Femur	U	1		
16/H/065	Ilium	L	1		
16/H/065	Thoracic Vertabre	1			
16/H/065	Ilium	R	1		
16/H/065	Femur	R	1		
16/H/065	Tibia	L	1		
16/H/065	Sacrum	M	1		
16/H/065	Ilium	L	1		
16/H/065	Rib 11/12	R	1		
16/H/065	Mt1	R?	1		
16/H/065	Mandible	R	1		
16/H/065	Frontal	L	1		
16/H/065	Thoracic Vertabre	M	1		
16/H/065	Sacrum S1	R	1		
16/H/065	Fibula	U	1		
16/H/065	Patella	R	1		
16/H/065	Frontal	M	1		
16/H/065	MC5	L	1		
16/H/065	Metacarpal	U	1		
16/H/065	Mandible	R	1		
16/H/065	Clavicle	L	1		
16/H/065	Temporal	R	1		
16/H/065	Fibula	R	1		
16/H/065	Temporal	R	1		
16/H/065	MC1	L	1		
16/H/065	Rib	R	1		
16/H/065	T1	M	1		
16/H/065	Rib	L	1		
16/H/065	Rib	L	1		
16/H/065	Patella	L	1		
16/H/065	Maxilla	U	1		
16/H/065	Sphenoid	M	1		
16/H/065	Tibia	U	1		
16/H/065	Os Coxa	L	1		

16/H/065	Lumbar Vert	M	1		
16/H/065	Cervical Vert	M	1		
16/H/065	Cervical Vert	M	1		
16/H/065	Mandible	R	1		
16/H/065	Mandibular P4	R	1		
16/H/065	Rib	R	1		
16/H/065	Sacrum	M	1		
16/H/065	Radius	L	1		
16/H/065	Thorasic Vertebra	M	1		
16/H/065	Lumbar Vert	M	1		
16/H/065	Rib	L	1		
16/H/065	Radius	L	1		
16/H/065	Mandible	L	1		
16/H/065	Frontal	R	1		
16/H/065	Clavicle	L	1		
16/H/065	Frontal	L	1		
16/H/065	Sacrum	L	1		
16/H/065	Ilium	L	1		F?
16/H/065	Femur	U	1		
16/H/065	Sacrum S1	U	1		
16/H/065	Tibia	L	1		
16/H/065	Lumbar Vert	U	1		
16/H/065	Ulna	L	1		
16/H/065	Ilium	U	1		
16/H/065	Temporal	L?	1		
16/H/065	Fibula	L	1		
16/H/065	Sacrum	M	1		
16/H/065	Trapezoid	R	1		
16/H/065	Thorasic Vertebra	R	1		
16/H/065	Femur	L	1		
16/H/065	Femur	L	1		
16/H/065	Tibia	R	1		
16/H/065	Tibia		1		
16/H/065	Femur	L	1		
16/H/065	Ulna	L	1		
16/H/065	Radius	L	1		
16/H/065	Humerus	R	1		
16/H/065	Fibula	L	1		
16/H/065	Tibia	R	1		
16/H/065	Lateral Cuneiform	R	1		
16/H/065	Thoracic Vertebra	M	1		
16/H/065	Patella	R	1		
16/H/065	Tibia	R	1		
16/H/065	Fibula	L	1		
16/H/065	Fibula	L	1		
16/H/065	Sacrum	M	1		
16/H/065	Fibula	U	1		
16/H/065	Talus	L	1		
16/H/065	Scapula	L	1		
16/H/065	Mandible	M	1		
16/H/065	Calcaneus	U	1		
16/H/065	Tibia	R	1		
16/H/065	Scapula	R	1		

16/H/065	MC2	R	1		
16/H/065	Fibula	U	1		
16/H/065	L1-3	M	1		
16/H/065	Sacrum	M	1		
16/H/065	MT1	L	1		
16/H/065	MT1	R	1		
16/H/065	MT1	L	1		
16/H/065	MT1	L	1		
16/H/065	MT1	L	2		
16/H/065	Hamate	L	1		
16/H/065	Ulna	R	1		
16/H/065	Calcaneus	L	1		
16/H/065	Scapula	L	1		
16/H/065	Talus	L	1		
16/H/065	Frontal	M	1		
16/H/065	Ischium	R	1		
16/H/065	Temporal	L	1		
16/H/065	Clavicle	R	1		
16/H/065	Humerus	R	1		
16/H/065	Humerus	L	1		
16/H/065	Ilium	L	1		
16/H/065	Tibia	R	1		
16/H/065	MT5	R	1		
16/H/065	Humerus	R	1		
16/H/065	Clavicle	L	1		
16/H/065	Radius	U	1		
16/H/065	Ulna	R	1		
16/H/065	Humerus	R	1		
16/H/065	Frontal	M	1		
16/H/065	Ulna	L	1		
16/H/065	Scapula	R	1		
16/H/065	MT4	R	1		
16/H/065	Sternal Body	M	1		
16/H/065	Mandible	L	1		
16/H/065	Mandible	R	1		
16/H/065	Scapula	R			
16/H/065	Ulna	R			
16/H/065	Intermediate Cuneiform	R			
16/H/065	Scapula	R			
16/H/065	Humerus	L			
16/H/065	Ilium	R	1		M?
16/H/065	Cuboid	L	1		
16/H/065	Calcaneus	L	1		
16/H/065	Humerus	R	1		
16/H/065	Clavicle	L	1		
16/H/065	MT4	L	1		
16/H/065	Scapula	R	2		
16/H/065	Scaphoid	L	1		
16/H/065	Sternal Body	M	1		
16/H/065	Ilium	U			
16/H/065	Zygomatic	L	1		
16/H/065	Mandible	L	1		
16/H/065	Mandibular M1	L	1		

16/H/065	Mandibular M2	L	1		
16/H/065	Mandibular P3	L	1		
16/H/065	Mandibular P4	L	1		
16/H/065	Maxillary M3	R			
16/H/065	Mandibular C	L			
16/H/065	Typical Cervical Verteba	M			
16/H/065	Ilium	R	1		
16/H/065	Typical Cervical Verteba	M	1		
16/H/065	Talus?	L	2?		
16/H/065	Tibia	L	1		
16/H/065	Tibia	R			
16/H/065	Calcaneus	R			
16/H/065	Femur	L	1		
16/H/065	Talus	R	1		
16/H/065	Femur	R	1		
16/H/065	Ilium	R	1		
16/H/065	Ilium	L	1	40-44 years	F
16/H/065	Humerus	L	1		
16/H/065	Clavicle	L	1		
16/H/065	Scapula	L	1		
16/H/065	Humerus	L	1		
16/H/065	Humerus	R	1		
16/H/065	C7		1		
16/H/065	Upper Thoracic	1			
16/H/065	Sacrum S1	M	1		
16/H/065	Scapula	R	1		
16/H/065	Humerus	L	1		
16/H/065	Humerus	R	1		
16/H/065	Tibia	L	1		
16/H/065	Ulna	L	1		
16/H/065	Proximal Pedal Phalanx Ray 1	U	2	Older child. Ind 3?	
16/H/065	Maxillary M3	L	1		
16/H/065	Maxillary M2	L	2-Jan		
16/H/065	Mandibular M2	R			
16/H/065	Maxilla	R			
16/H/065	Temporal	L			
16/H/065	Tibia	L	1		
16/H/065	Patella	R	1		
16/H/065	Typical Cervical Verteba	1			
16/H/065	Mandible	M	1		M?
16/H/065	Femur	U	1		
16/H/065	Humerus	L	1		
16/H/065	Femur?	R	2?		
16/H/065	Mandible	R	1		
16/H/065	Ischium	R	1		
16/H/065	Maxillary P3	L	1		
16/H/065	Mandible	R	1		F?
16/H/065	Maxillary M1	L	1		
16/H/065	S1	M	1		
16/H/065	Humerus	L	1		
16/H/065	Fibula	U	1		

16/H/065	Ulna	R	1		
16/H/065	Humerus	R	1		
16/H/065	Parietal	L	1		
16/H/065	Rib 10	R	1		
16/H/065	C7	M	1		
16/H/065	Mc 2	R	1		
16/H/065	Scapula	R	1		
16/H/065	Scapula	R	1		
16/H/065	Scapula	R	1		
16/H/065	Scapula	R	1		
16/H/065	Clavicle	L	1		
16/H/065	Clavicle	R	1		
16/H/065	Clavicle	U	1		
16/H/065	Frontal	R	1		
16/H/065	Temporal	R	1		
16/H/065	Scapula	R	2		
16/H/065	T10/T11	M	1		
16/H/065	Frontal	M	1		
16/H/065	Parietal	R	1		
16/H/065	Temporal	L	1		
16/H/065	Parietal	L	1		
16/H/065	Occipital	M	1		
16/H/065	Temporal	R	1		
16/H/065	Nasal	L	1		
16/H/065	Mc 3	R	1		
16/H/065	Temporal	R	1		M
16/H/065	Occipital	M	1		M
16/H/065	Parietal	L	1		M
16/H/065	Mandible	L	1		M
16/H/065	Frontal	M	1		M
16/H/065	Parietal	R	1		M
16/H/065	Mandibular M3	R	1		
16/H/065	Mandibular M2	R	1		
16/H/065	Mandible	R	1		
16/H/065	Mandibular P3	L	1		
16/H/065	Mandibular P3	R	1		
16/H/065	Mandibular P4	R	1		
16/H/065	Mandibular M2/3	L	1		
16/H/065	Calcaneus	R	1		
16/H/065	Rib 1	L	1		
16/H/065	Radius	U	1		
16/H/065	Lumbar Vert		1		
16/H/065	Proximal Hand Phalanx Ray 2-5		1		
16/H/065	Mandibular C	R	1		
16/H/065	Mandibular M2	R	1		
16/H/065	Intermediate Pedal Phalanx Ray 2-5				
16/H/065	Distal Pedal Phalanx Ray 2-5				
16/H/065	Tibia	L	1		
16/H/065	Triquetral	R	1		
16/H/065	Radius	U	2?	8-12?	
16/H/065	Femur		2		

16/H/065	Ulna	L	2	5-8 years	
16/H/065	Patella	L	1		
16/H/065	Calcaneus	L	1		
16/H/065	Navicular	R	1		
16/H/065	Clavicle	R	1		
16/H/065	Clavicle	R	1		
16/H/065	Proximal Hand Phalanx Ray 2-5		1		
16/H/065	Proximal Pedal Phalanx Ray 1		1		
16/H/065	Intermediate Hand Phalanx Ray 2-5		1		
16/H/065	Lumbar Vert		1		
16/H/065	Ilium	L	1		
16/H/065	Proximal Pedal Phalanx Ray 2-5		1		
16/H/065	T12	M	1		
16/H/065	MC 2	L	1		
16/H/065	Distal Hand Phalanx Ray 2-5		1		
16/H/065	Medial Cuneiform	L	1		
16/H/065	Fibula	L	1		
16/H/065	Rib 11/12	L	1	Older	
16/H/065	Lunate	L	1		
16/H/065	Lunate	L	1		
16/H/065	Lunate	L	1		
16/H/065	Lunate	R	1		
16/H/065	Lunate	R	1		
16/H/065	Triquetral	R	1		
16/H/065	Triquetral	L	1		
16/H/065	Proximal Hand Phalanx Ray 2-5		1		
16/H/065	Intermediate Hand Phalanx Ray 2-5		1		
16/H/065	Distal Hand Phalanx Ray 2-5		1		
16/H/065	Distal Pedal Phalanx Ray 1		1		
16/H/065	Intermediate Pedal Phalanx Ray 2-5		1		
16/H/065	Distal Pedal Phalanx Ray 1		1		
16/H/065	Intermediate Pedal Phalanx Ray 2-5		1		
16/H/065	Distal Hand Phalanx Ray 2-5		1		
16/H/065	Zygomatic	L	1		
16/H/065	Maxilla	U	1		
16/H/065	Mandible	L	1		
16/H/065	Vertebrae				
16/H/065	Mandible?	R			
16/H/065	Humerus	L	2	Child	
16/H/065	Trapezoid	L	2		
16/H/065	Unfused Vertebral Centrum		2	3-5 years	
16/H/065	Metatarsal Head		2		
16/H/065	Typical Rib	L	2		
16/H/065	Mandibular P3	R	1		
16/H/065	Ilium	R			
16/H/065	Humerus	R	1		
16/H/065	Femur	R	1		
16/H/065	Occipital	M	1		

16/H/065	Parietal	R	1		
16/H/065	Frontal	R	1		
16/H/065	Temporal	R	1		
16/H/065	Zygomatic	L	1		
16/H/065	Medial Cuneiform	L	1		
16/H/065	Calcaneus	R	1		
16/H/065	Cuboid	R	1		
16/H/065	Talus	R	1		
16/H/065	Thoracic Vertebrae		2	3-6 years	
16/H/065	Fibula	R	1		
16/H/065	Femur	R	1		
16/H/065	Humerus	R	1		
16/H/065	Ulna	L	1		
16/H/065	Fibula	U	1		
16/H/065	Tibia	R	1		
16/H/065	Femur	R	1		
16/H/065	Ischium	L	1		
16/H/065	Ischium	R	1		
16/H/065	Ilium	L	1		
16/H/065	Sphenoid		1		
16/H/065	Pubis	L	1		F
16/H/065	Tibia?	L	1		
16/H/065	Scapula	L	1		
16/H/065	Scapula	L	1		
16/H/065	Patella		1		
16/H/065	Typical Thoracic Vertebrae		1		
16/H/065	Typical Lumbar Vertebrae		1		
16/H/065	T12		1		
16/H/065	Intermediate Hand Phalanx Ray 2-5	1			
16/H/065	Proximal Hand Phalanx Ray 2-5	1			
16/H/065	Clavicle		1		
16/H/065	Mandibular I1	R	1		
16/H/065	Mandibular I1	L	1		
16/H/065	Tibia	R	1		
16/H/065	Tibia	R	1		
16/H/065	Femur	R	1		
16/H/065	Scapula	L	1		
16/H/065	Patella	L	1		
16/H/065	Frontal	R	1		
16/H/065	Frontal	R	1		
16/H/065	Talus	L	1		
16/H/065	Medial Cuneiform	R	1		
16/H/065	Talus	R	1		
16/H/065	Medial Cuneiform	L	1		
16/H/065	Temporal	R	1		
16/H/065	Tibia	U	1		
16/H/065	Radius	U	1		
16/H/065	Lumbar Vert	M	1		
16/H/065	Sphenoid	L	1		
16/H/065	Cuboid	L	1		
16/H/065	Frontal	R	1		
16/H/065	Occipital		1		

16/H/065	Radius	L	1		
16/H/065	Ilium	R	1		
16/H/065	C2	M	1		
16/H/065	Sacrum		1		
16/H/065	Maxilla	L	1		
16/H/065	Ilium	L	1		
16/H/065	Lumbar Vert		1		
16/H/065	Tibia	R	1		
16/H/065	Femur	U	1		
16/H/065	Femur	U	1		
16/H/065	Occipital	M	1		
16/H/065	Fibula	U	1		
16/H/065	Mt 4	L	1		
16/H/065	Mt 3	L	1		
16/H/065	Mt 2	L	1		
16/H/065	Mt 1	L	1		
16/H/065	Mt 1	R	1		
16/H/065	Mt 2	R	1		
16/H/065	Mt 5	R	1		
16/H/065	Proximal Pedal Phalanx Ray 1	U	1		
16/H/065	Intermediate Hand Phalanx Ray 2-5		1		
16/H/065	Maxilla	L	1		
16/H/065	Proximal Hand Phalanx Ray 2-5		2	5-8 years	
16/H/065	Triquetral	L	1		
16/H/065	Distal Hand Phalanx Ray 2-5	U	1		
16/H/065	Typical Rib Frags		1		
16/H/065	Talus	U	1		
16/H/065	Lumbar Vert	U	1		
16/H/065	Temporal	U	1		
16/H/065	Fibula	R	1		
16/H/065	Mandibuar C	R	1		
16/H/065	Mandibular C	L	1		
16/H/065	Mandibular M2	L	1		
16/H/065	Femur	R	2		
16/H/065	Navicular	L	1		
16/H/065	Navicular	R	1		
16/H/065	Centrum		2		
16/H/065	Scaphoid	R	1		
16/H/065	MT1	L?	1		
16/H/065	MT5	L	1		
16/H/065	Scaphoid	R			
16/H/065	Intermediate Hand Phalanx Ray 2-5				
16/H/065	Intermediate Cuneiform	R	1		
16/H/065	MT 3	R	1		
16/H/065	Intermediate Cuneiform	L	1		
16/H/065	Radius	R	1		
16/H/065	Lower Thoracic		1		
16/H/065	Maxillary P3	L	1		
16/H/065	Maxillary C	R	1		
16/H/065	Hamate	R	1		
16/H/065	Capitate	R	1		

16/H/065	Trapezoid	L	1		
16/H/065	Mandible	L	1		
16/H/065	Calcaneus	R	1		
16/H/065	Clavicle	R	1		
16/H/065	Radius	U	1		
16/H/065	C1 Atlas	L	1		
16/H/065	C2 Axis	M	1		
16/H/065	T10	M	1	Older adult	
16/H/065	Typial Cervical				
16/H/065	Lateral Cuneiform	R	1		
16/H/065	Lateral Cuneiform	L	1		
16/H/065	Intermediate Cuneiform	R	1		
16/H/065	MC 5	L	1		
16/H/065	MT 4	R	1		
16/H/065	Proximal Hand Phalanx Ray 2-5	U	1		
16/H/065	Proximal Pedal Phalanx Ray 1	U	1		
16/H/065	Intermediate Hand Phalanx Ray 2-5		1		
16/H/065	Distal Hand Phalanx Ray 2-5		1		
16/H/065	Proximal Pedal Phalanx Ray 2-5		1		
16/H/065	Intermediate Pedal Phalanx Ray 2-5		1		
16/H/065	Distal Pedal Phalanx Ray 1		1		
16/H/065	Vertebrae		1		
16/H/065	Sphenoid?		1		
16/H/065	Scapula?		1		
16/H/065	Maxillary P3	L	1		
16/H/065	Mandibular M1/M2	L	1		
16/H/065	Hamate	L	1		
16/H/065	Ilium	R	2	Young Child	
16/H/065	Distal Hand Phalanx Ray 2-5		1		
16/H/065	Proximal Hand Phalanx Ray 2-5		1		
16/H/065	Mandibular I2	R	1		
16/H/065	Maxillary P3	R	1		
16/H/065	Clavicle	R	1		
16/H/065	Scapula	R	1		
16/H/065	Temporal	L	1		
16/H/065	Capitate	L	1		
16/H/065	Ilium	L	1		
16/H/065	Fibula	U	1		
16/H/065	Temporal	L	1		
16/H/065	Scapula	R	1		
16/H/065	Scapula	R	1		
16/H/065	Parietal	L	1		
16/H/065	Maxilla	R			
16/H/065	Ilium	R	1		
16/H/065	Distal Hand Phalanx Ray 2-5	U	1		
16/H/065	Mandibular I1	R	1		
16/H/065	Vertebrae				
16/H/065	Radius	U			

16/H/065	Proximal Hand Phalanx Ray 2-5	U			
16/H/065	Parietal	U	1		
16/H/065	Capitate	R	1		
16/H/065	Occipital	M	1		
16/H/065	Capitate	R	1		
16/H/065	Rib 1	L			
16/H/065	Maxilla	R			
16/H/065	Sphenoid	R	1		
16/H/065	Parietal	U			
16/H/065	Intermediate Hand Phalanx Ray 2-5	U	1		
16/H/065	Typical Thoracic Vertebrae	M	2	3-4 years	
16/H/065	Humerus	R	2		
16/H/065	Sphenoid	U	1		
16/H/065	Lumbar Vert	L	1		
16/H/065	Ischium	R	1		
16/H/065	Maxillary I2	R	1		
16/H/065	Maxillary I1	L	1		
16/H/065	Maxillary C	L	1		
16/H/065	Maxillary C	L	1		
16/H/065	Maxillary M1	R	1		
16/H/065	Maxillary M2/M3	R	1		
16/H/065	Maxillary M2/M3	L	1		
16/H/065	Mandibular M11	R	1		
16/H/065	Mandibular M2	R	1		
16/H/065	Mandibular P3	L	1		
16/H/065	Mandibular P4	R	1		
16/H/065	Atlas C1	L	1		
16/H/065	Humerus	R	1		
16/H/065	Lateral Cuneiform	L	1		
16/H/065	Scapula	L	1		
16/H/065	L5? Acromion?	1			

Table 61. Skeletal Inventory, Unassociated Human Remains (front and middle of chamber), Tomb 50 (osteological analysis conducted by Rachel Kalisher).

Locus	*Element*	*Side* R= Right L= Left M= Midline U= Unknown	*Age* 1= Adult 2= Subadult 3= Unknown	*Age range*	*Sex* M= Male F= Female
16/H/062	Proximal hand phalanx ray 2-5	U	2	Neonate?	
16/H/062	Proximal hand phalanx ray 2-5	U	2	Neonate?	
16/H/064	Trapezium	R	1		
16/H/063	Humerus	R	1		
16/H/064	Mc 3	L	1		
16/H/064	Proximal hand phalanx ray 2-5				
16/H/064	Intermediate hand phalanx				
16/H/064	Navicular	R	1	Older	
16/H/064	MT 5	R	1		
16/H/064	MT 3	L	1		

16/H/064	Proximal pedal phalanx ray 1				
16/H/064	Proximal pedal phalanx ray 1				
16/H/064	Proximal pedal phalanx ray 2-5				
16/H/064	Intermediate pedal phalanx ray 2-5				
16/H/064	Distal pedal phalanx ray 2-5				
16/H/063	Fragments	U			
16/H/062	Ischium				
16/H/062	Pubis	R			
16/H/062	Pubis	R			
16/H/062	Typical rib	L	2	Adolescent	
16/H/062	Ulna	R	1		
16/H/063	Typical rib	L	1	Older	
16/H/063	Sacrum?	M	1		
16/H/064	Fibula	L	1		
16/H/063	Coccyx	M	1		
16/H/062	Intermediate cuneiform	R	1		
16/H/062	Hamate	R	1		
16/H/062	Sesamoid				
16/H/062	Lumbar vert				
16/H/064	Talus	L	1		
16/H/064	Talus	L	1		
16/H/064	Calcaneus	R	1		
16/H/064	Patella	R	1		
16/H/064	Navicular	L	1		
16/H/064	Navicular	L	1		
16/H/064	Mandible	R	1		
16/H/064	Mandibular M1	R	1		
16/H/064	Mandibular M2	R	1		
16/H/064	Mandibular M3	R	1		
16/H/064	Femur	U	2	Young child	
16/H/064	Coccyx	M	1		
16/H/064	Proximal pedal phalanx ray 2-5		1		
16/H/064	Distal hand phalanx ray 2-5		1		
16/H/064	Fibula	R	1		
16/H/064	MT 2	L	1		
16/H/064	Ulna	L	1		
16/H/062	Maxillary m2	L	1		
16/H/064	Distal hand phalanx ray 2-5	U	2		
16/H/064	Lower lumbar	M	1	Older	
16/H/064	MT 2	R	1		
16/H/064	Medial cuneiform	R	1?		
16/H/064	Trapezium	R	1		
16/H/064	Metacarpal head	U	1?	Young child; ind. 3?	
16/H/064	Frontal	L	2	Fetus	
16/H/064	Distal hand phalanx ray 1	U	1		
16/H/064	Lunate	R	1		
16/H/064	Distal hand phalanx ray 2-5				
16/H/064	Cuboid	R			
16/H/064	Lower thoracic	M	1	Older	

16/H/064	Talus	L	1		
16/H/064	Medial cuneiform	R	1		
16/H/064	Proximal pedal phalanx ray 1				
16/H/064	Distal pedal phalanx ray 1				
16/H/064	Proximal pedal phalanx ray 2-5				
16/H/063	Patella	R	1		
16/H/063	Cuboid	R	1		
16/H/063	Proximal pedal phalanx ray 2-5	U	1		
16/H/062	Maxillary P3	R	1		
16/H/062	Maxillary M3	R	1		
16/H/062	Clavicle	L	1		
16/H/062	Lateral cuneiform	L	1	Older	
16/H/062	Cuboid	L	1		
16/H/062	MT 3	L	1		
16/H/062	MT 5	L	1		
16/H/062	Medial cuneiform	R	1		
16/H/062	MT 3	R	1		
16/H/062	Proximal pedal phalanx ray 2-5	U	1		
16/H/062	Proximal pedal phalanx ray 1	U	1		
16/H/062	Foot sesamoid	U	1		
16/H/063	Maxillary C	R	1		
16/H/063	Maxillary M1	L	1		
16/H/063	Typical rib		2	Young child; ind. 3?	
16/H/063	Typical rib		2	Infant	
16/H/063	Rib 1		2	Infant	
16/H/062	Distal hand phalanx ray 2-5	U	1		
16/H/062	Mandibular I1	L	1		
16/H/062	MaxillaryC	L			
16/H/062	Metatarsal head	U	1		
16/H/062	Clavicle	L	1	Older	
16/H/062	MT 5	L	1		
16/H/062	Clavicle	R	1		
16/H/062	Radius	R	1		
16/H/062	Talus	R	1		
16/H/062	Navicular	R	1		
16/H/062	Navicular	L	1		
16/H/062	Medial cuneiform	R	1		
16/H/062	Talus	L	1		
16/H/062	MT 1	R			
16/H/062	Ulna	R			
16/H/062	Scapula	R	1		
16/H/062	Rib 1	R	1		
16/H/062	MT 5	R	1		
16/H/062	Trapezium	L	1		
16/H/062	Trapezoid	L	1		
16/H/062	MT 2	R	1	Older	
16/H/062	MT 3	R	1		
16/H/062	MT 1	L	1		
16/H/062	Scaphoid	R	1		

16/H/062	Hamate	L	1		
16/H/062	Intermediate cuneiform	L	1		
16/H/062	Radius	L	1		
16/H/062	Trapezium	R	1		
16/H/062	MC 3	R	1		
16/H/062	Proximal pedal phalanx ray 2-5		1		
16/H/062	Proximal pedal phalanx ray 1		1		
16/H/062	Proximal hand phalanx ray 2-5		1		
16/H/062	Distal hand phalanx ray 2-5		1		
16/H/062	Intermediate pedal phalanx ray 2-5		1		
16/H/062	Mandibular M1	L	1		
16/H/062	Maxillary C	L	1		
16/H/062	Mandibular I1	L	1		
16/H/062	Typical cervical vertebrae	R	1		
16/H/062	Rib 2	R	1		
16/H/062	Femur		2	4-6 years	
16/H/062	Humerus	R	2	3-5 years?	
16/H/062	Typical rib	L	2		
16/H/062	Tibia	L	2	Fetus	
16/H/062	Maxillary C	R	1		
16/H/062	Temporal	R	1		
16/H/062	Typical rib	R	2		
16/H/062	Typical rib	R	2		
16/H/062	Ilium	U			
16/H/062	Ilium	U			

Table 62. Skeletal Inventory, Human Remains in Mudbrick below Main Deposit (Locus 16/H/68), Tomb 50 (osteological analysis conducted by Rachel Kalisher).

Locus	*Element*	*Side* R= Right L= Left U= Unknown	*Age* 1= Adult 2= Subadult 3= Unknown	*Age Range*	*Sex* M= Male F= Female
16/H/68	Humerus	L	2	Child	
16/H/68	MT 1	R	1		
16/H/68	Navicular	L	1		
16/H/68	MT 5	R	1		
16/H/68	MT 3	L	1		
16/H/68	MT 4	R	1		
16/H/68	Cuboid	R	1		
16/H/68	MT 2	R	1		
16/H/68	MTt 5	L	1		
16/H/68	Cuboid	L	1		
16/H/68	Femoral head	U	1		
16/H/68	Capitate	L	1		
16/H/68	Capitate	R	1		
16/H/68	Scaphoid	L	1		
16/H/68	MT 3	R	1		
16/H/68	Lateral cuneiform	L	1		
16/H/68	C1 atlas	R	1		
16/H/68	Intermediate cuneiform	R	1		
16/H/68	Intermediate cuneiform	L	1		
16/H/68	Lateral cuneiform	L	1		
16/H/68	Lumbar vertebrae	U	2		
16/H/68	Vert frags		1		
16/H/68	Rib frags		1		
16/H/68	Typical rib	L	1		
16/H/68	Proximal pedal phalanges	U	1		
16/H/68	Intermediate pedal phalanx ray 2-5		1		
16/H/68	Distal pedal phalanx ray 2-5		1		
16/H/68	Proximal hand phalanx ray 2-5		1		
16/H/68	Distal hand phalanx ray 2-5		1		
16/H/68	Metacarpal shaft		1		
16/H/68	Maxillary I2	R	2		
16/H/68	Typical rib		2		
16/H/68	Scapula	R	2	Child	
16/H/68	MC 1	U	2		
16/H/68	Proximal hand phalanx ray 1		2		
16/H/68	Proximal hand phalanx ray 2-5		2		
16/H/68	Intermediate pedal phalanx ray 2-5		2		

Catalogue of Area H Burials

Burial 16/H/45 (Level H-15; 154.54-154.18 m)

Simple pit burial 16/H/45 contained the remains of two adult individuals at elevations of 154.25-154.47 m. The oval pit measured ca. 0.66 m deep and ca. 1.0 m wide north to south, extending from the southern wall of Chamber 55. The pit was sealed with earth and may have been marked at the top with two light gray mudbricks, one in the east and one in the south. A row of fieldstones oriented east-west may have marked the northern extent of the pit. Individual 2 was squeezed into a narrow space only 0.23 m wide between Individual 1 and this row of stones (Figures 40-43).

The burial contained two adult individuals of undetermined sex. Individual 1 is a primary inhumation, oriented west-east (head to the west), laid in a supine flexed position, with legs to the right (south). Both hands were carefully bent and placed together at the center of the upper torso. Part of the left side of the body of Individual 1 overlies the disarticulated remains of Indiviual 2, who was inhumed secondarily with long bones loosely stacked and the cranium and displaced mandible placed on top, above which were placed intermixed human and faunal remains. Some areas of partial articulated were observed.

Finds. The burial contained an assemblage of five ceramic vessels, including two decorated wares imported from Cyprus, as well as two beads, a ceramic stopper, two pins, faunal remains, and fragments of bronze and faience (Tables 50-51). The finds were placed among and between both of the individuals; the grave goods can therefore be considered to have been shared among both inhumations.

Notes. The pit belongs in Level H-15 and was cut into habitation surfaces of Room 14/H/87. The norther edge of the pit abutted the southern wall of Chamber 55, an enigmatic stone-lined pit that may be a disturbed stone-lined pit or stone-built shaft burial based on isolated finds of human bones, ceramic vessels, and large quantity of restorable pottery (Figure 13).

Tomb 50 (Burial 16/H/50)

Tomb 50 is a monumental masonry-constructed chamber tomb that dates to the MB II-III period. The *dromos* was filled with rubble and has not yet been excavated. The narrow passage slopes downward from south to north, leading to a rectangular burial chamber ca. 1.5 m wide x 2.35 m long x 1.15 m high from the ceiling to the main depositional layer. The chamber’s gabled roof consisted of four massive limestone slabs sitting on top of slightly corbelled interior walls constructed of unworked medium fieldstones.

The chamber contained at least nine individuals who were inhumed in a variety of ways (primary, secondary, and co-mingling) over a span of several decades (see Chapters 6, 8). Three individuals were identified as primary inhumations, Individuals 1, 2, and 3, while the remaiing six (or more) were secondary and co-mingling disposals, having been disturbed and moved around inside the chamber from their original places of decomposition at least once. The secondary inhumations were located in the rear (north) of the chamber, and the primary inhumations were in the front left (west) and center. They were likely the last individually interred before the tomb was sealed. The tomb was not disturbed.

Finds. The burial assemblage contained 26 ceramic vessels and dozens of artifacts of various high quality materials that fall under two contextual categories: (1) body decoration found on the skeletons; and (2) the main assemblage of grave goods clustered along the east wall of the chamber (Tables 52-53; Figures 49-50). This latter category is difficult to associate with any particular individual and may have been intended as a collective offering for all of the dead interred inside Tomb 50. Two of these vessels, a Middle Cypriot II Red-on-Red decorated bowl (16/H/62/VS16) and a large, globular Middle Cypriot III White Painted jug (16/H/62/VS3), were imported from Cyprus (M. Martin pers. comm.). Two calcite or alabaster stone vessels, either imported from Egypt or of local manufacture, were among the main eastern assemblage of ceramic vessels. One faience scaraboid, likely made locally, was found among the co-mingling individuals in the back of the tomb.

Notes. Tomb 50 is the only feature so far exposed that belongs with Level H-16, so its stratigraphic context is not yet fully understood. The chamber was built on top of a thick mudbrick structure, likely the Stratum XII city wall; the mudbricks are identical in size and composition to the Stratum XII city wall excavated in Area K (R. Homsher, pers. comm.; Figure 14).

The tomb was sealed by three distinct layers of fill and surface accumulations that span Level H-16 through Level H-15, terminating in the surfaces of Room 14/H/87 in Level H-15 Building 14/H/87 (Figure 59). The lowest layer excavated thus far consisted of a dense, hard-packed dark brown sediment with few finds. This lowermost fill covered the lower courses of the tomb structure. This fill likely represents constructional material and therefore belongs to Level H-16. Above this layer, an interim lens of beaten earth surfaces was detected that contained flat-lying restorable pottery and faunal bones, particularly mandibles. This layer, which was deposited after the sealing of the tomb, may represent post-burial ritual deposits during the early phase of Level H-15, when the area was still being used as a monumental funerary complex. Lastly, the uppermost layer consisted of sloping surfaces that belong to the terminal phase of Level H-15. The patchy floors were made of beaten earth on which sat layers of phytolith, ash, *tabun* material, a basalt grinding stone, restorable pottery and complete (but crushed) Late Bronze I vessels, including a Cypriot zoomorphic vessel. The floors were preserved sloping toward the south, up to but not covering the very topmost stones of the dromos. Burial 16/H/45 was cut into these surfaces in the north, where they abutted Chamber 55.

Burials from Area J

Table 63. Burial Assemblage, Area J Burials (data after Adams and Cradic 2018).

Burial	*Pottery*	*Scarab*	*Ring*	*Bead*	*Pin*	*Stone vessel*	*Bone inlay*	*Other items*
94/J/65	4	0	0	0	0	0	0	0
98/J/77	N/D	0	0	0	0	0	0	Stone macehead
98/J/69	0	0	0	0	0	0	0	0
98/J/83	0	0	0	0	0	0	0	0
98/J/88	7	0	0	0	0	0	0	Lathe Flywheel
00/J/104	0	0	0	4	0	0	0	0
04/J/56	2	0	0	0	0	0	0	Ground stone fragment
04/J/75	3	1	0	0	1	0	0	0
04/J/86	2	0	0	0	0	0	0	0
06/J/08	0	0	0	0	0	0	0	0
06/J/37	0	0	0	0	0	0	0	0
06/J/75	1	0	0	0	0	0	0	0
06/J/107	5	0	0	1	0	0	0	Basalt macehead; loom weight; ground stone fragments
06/J/129	2	0	0	0	0	0	0	0
10/J/100*	0	0	0	0	0	0	0	0
10/J/113*	2	0	0	0	0	0	0	0
10/J/126*	0	0	0	0	0	0	0	0
10/J/136	N/D	0	0	0	0	0	0	0
10/J/171	2	0	0	0	0	0	0	0
10/J/172	0	0	0	0	0	0	0	0
10/J/190	0	0	0	0	0	0	0	0
Total	31	1	0	5	1	0	0	6 misc. items

Table 64. Distribution of Vessels by Class, Area J Burials (data after Adams and Cradic 2018). *count does not include burial container for jar burials

Burial	*Level*	*Plate*	*Bowls*	*Jugs*	*Juglets*	*Jars*	*Lamps*	*Other/UID*	*Total*
94/J/65	J-8/J-7	0	3	0	1	0	0	0	4
98/J/88	J-10	0	3	2	2	0	0	0	7
04/J/56	J-8-J-10	0	1	0	0	1	0	0	2
04/J/75	J-11/J-12	0	2	0	1	0	0	0	3
04/J/86	J-12-J-13	0	0	0	2	0	0	0	2
06/J/75	J-11-J-12	0	0	0	0	0	0	1	1
06/J/107	J-12-J-13	0	3	0	1	1	0	0	5
06/J/129*	J-8-J-10	0	1	0	0	0	0	1	2
10/J/113*	J-9	0	0	1	1	0	0	0	2
10/J/171	J-8-10	0	0	1	1	0	0	0	2
Total	All	0 (0%)	13 (43%)	4 (13%)	9 (30%)	2 (7%)	0 (0%)	2 (7%)	30 (100%)

Table 65. Summary of Area J Burials (after Adams and Cradic 2018:Table 2).

Burial	*Level*	*UoC Stratum*	*Period*	*Burial Type*	*Individual*	*Disposal*	*Age*	*Sex*	*Position*	*Orientation*
10/J/126	J-8	XIV	MB I	Jar	1	Primary	Subadult	N/D	UID	SE-NW
10/J/172	J-8	XIV	MB I	UID	1	UID	UID	UID	UID	UID
10/J/190	J-8	XIV	MB I	Stone-lined pit	1	Primary	Subadult	N/D	Supine flexed	N-S
00/J/104	J-8-J-10	XIV-XIII	MB I	Shaft?	1	Primary	Subadult 3 years	N/D	N/D	N/D
10/J/171	J-8-J-10	XIV-XIII	MB I	Shaft?	1	UID	N/D	N/D	N/D	N/D
98/J/83	J-8-J-10	XIV-XIII	MB I	Simple pit	1	UID	N/D	N/D	N/D	N/D
10/J/100	J-9	XIV	MB I	Jar	1	Primary	Subadult	UID	Left lateral flexed	NE/SW
10/J/113	J-9	XIV	MB I	Jar	1	Primary	Subadult	N/D	Individuals placed next to each other inside storage jar	E-W
10/J/113	J-9	XIV	MB I	Jar	2	Primary	Subadult	N/D	Individuals placed next to each other inside storage jar	E-W
94/J/65	J-8-J-10	XIV-XIII	MB I	Simple pit	1	Primary	Adult?	N/D	N/D	N/D
98/J/77	J-10	XIIIA	MB I	Simple pit	1	UID	N/D	N/D	N/D	N/D
98/J/88	J-10	XIIIA	MB I	Shaft	1	UID	Adult	N/D	N/D	N/D
06/J/129	J-8- J-10	XIV-XIII	MB I-II	Simple pit	1	Primary	Adult	Female	N/D	N/D
10/J/136	J-10 or later	XIII or later	MB I	Shaft	0	--	--	--	--	--
98/J/69	J-8-J-10	XIV-XIII	MB I	Stone-lined pit	1	UID	N/D	N/D	N/D	N/D
06/J/107	J-12-J-13	XI-X	MB II-III	Shaft	1	Primary	Adult	Female	Supine flexed	N-S
04/J/56	J-8-J-10	XIV-XIII	MB I-II	Simple pit	1	Primary	Adult	UID	N/D	NE-SW
96/J/26	J-11- J-12	XII-XI	MB II	Hypogeum	1	UID	UID	UID	UID	UID
06/J/37	J-11- J-12	XII-XI	MB II	Hypogeum	1	Primary	Adult 18-25 years	Female	UID	S-N
06/J/37	J-11- J-12	XII-XI	MB II	Hypogeum	2	Primary	Subadult 15-18 years	UID	Supine?	S-N
06/J/37	J-11- J-12	XII-XI	MB II	Hypogeum	3	Primary	Adult 25-30 years	Male	UID	S-N
06/J/37	J-11- J-12	XII-XI	MB II	Hypogeum	4	Primary	Mature adult	Male	UID	UID
04/J/75	J-11- J-12	XII-XI	MB II	Hypogeum	1	Primary	Adult	Female	Right lateral flexed	N-S

04/J/75	J-11-J-12	XII-XI	MB II	Hypogeum	2	Primary	Subadult 8-9 years	UID	Right lateral flexed	N/S
04/J/86	J-12-J-13	XI-X	MB II-III	Shaft	1	Primary	Subadult 5-6 years	UID	Supine flexed?	S-N
06/J/8	J-12-J-13	XI-X	MB III	Simple pit	1	Primary	Mature adult	Male	Supine, right arm extended	E-W?
06/J/8	J-12-J-13	XI-X	MB III	Simple pit	2	Primary	Young adult	UID	UID	UID
06/J/75	J-11-J-12	XII-XI	MB II	Hypogeum	1	Primary	Young adult	Female	UID	N-S?
06/J/75	J-11-J-12	XII-XI	MB II	Hypogeum	2	Primary	Subadult 14-15 years	UID	UID	N-S?

Table 66. Skeletal Inventory of Human Remains from Area J (data after Sameora 2013; Sameora and Adams 2018).

Burial	*Level*	*Burial Type*	*Individual*	*Age*	*Sex*	*Cranial*	*Post-cranial*
10/J/126	J-8	Jar	1	Subadult	N/D	N/D	N/D
10/J/172	J-8	UID	1	UID	UID	N/D	N/D
10/J/190	J-8	Stone-lined pit	1	Subadult	N/D	N/D	N/D
00/J/104	J-8-J-10	Shaft?	1	Subadult 3 years	N/D	Skull fragments and teeth	N/D
10/J/171	J-8-J-10	Shaft?	1	N/D	N/D	N/D	N/D
98/J/83	J-8-J-10	Simple pit	1	N/D	N/D		
10/J/100	J-9	Jar	1	Subadult	UID	N/D	N/D
10/J/113	J-9	Jar	1	Subadult	N/D	N/D	N/D
10/J/113	J-9	Jar	2	Subadult	N/D	N/D	N/D
94/J/65	J-8-J-10	Simple pit	1	Adult?	N/D	N/D	N/D
98/J/77	J-10	Simple pit	1	N/D	N/D	N/D	N/D
98/J/88	J-10	Shaft	1	Adult	N/D	N/D	N/D
06/J/129	J-8-J-10	Simple pit	1	Adult	Female	Dental: Mandible	Vertebra (f) Ribs (f) Left and right Upper Limb (f): humerus, radius, ulna, phalanges Pelvic bones (f) Left and right Lower Limb (f): femur, fibula, talus, tarsal, metatarsal, phalanges
10/J/136	J-10 or later	Shaft	0	--	--	N/D	N/D
98/J/69	J-8-J-10	Stone-lined pit	1	N/D	N/D	N/D	N/D
06/J/107	J-12-J-13	Shaft	1	Adult	Female	Cranial: left and right temporal Dental: maxilla and mandible	Left and right Upper Limb (f): vertebra, ribs, scapula, humerus, ulna, radius, carpal, netacarpal, phalanges Pelvis (f) Left and right Lower Limb (f): femur, tibia, fibula, patella, tarsal, metatarsal and phalanges
04/J/56	J-8-J-10	Simple pit	1	Adult	UID	N/D	Left and right lower limb (f): tibia, fibula, tarsal (navicula, cuneiform) metatarsal, phalanges
96/J/26	J-11-J-12	Hypogeum	1	UID	UID	N/D	N/D

06/J/37	J-11-J-12	Hypogeum	1	Adult 18-25 years	Female	Cranial (f): Maxilla Note: Three mandibles also found, but not specified by individual	Vertebra, Scapula, Clavicle, Ribs Left and right Uupper Limb (f): humerus, ulna, carpals, metacarpals, phalanges pelvic bones (f) Left and right Lower Limb (f): femur, patella, tibia, fibula, tibia, tarsal, metatarsal, phalanges* *Not specified which elements belong with which individual
06/J/37	J-11-J-12	Hypogeum	2	Subadult 15-18 years	UID	Cranial (f): maxilla	See above*
06/J/37	J-11-J-12	Hypogeum	3	Adult 25-30 years	Male	Cranial (f): maxilla	See above*
06/J/37	J-11-J-12	Hypogeum	4	Mature adult	Male	Cranial (F): maxilla	See above*
04/J/75	J-11-J-12	Hypogeum	1	Adult	Female	Cranial (f): left orbit, zygomatic, temporal (left and right petrous portion), occipital Dental: complete dentition	Vertebra, Scapula, ribs Upper Limb (f): long bones, carpals, metacarpals, phalanges Lower limb (f): pelvis, femur.
04/J/75	J-11-J-12	Hypogeum	2	Subadult 8-9 years	UID	Cranial (f): frontal (left and right orbit), temporal (left and right petrous portion), occipital Dental: complete dentition	Clavicle, ribs Upper limb (f): humerus, radius, ulna, carpal pelvis Lower limb (f): femur, tibia, fibula
04/J/86	J-12-J-13	Shaft	1	Subadult 5-6 years	UID	Cranial (f): ossicles, frontal, parietal, temporal and occipital Dental: complete dentition: mixed including deciduous and permanent teeth	Vertebrae (f) Ribs (f) Sternum and manubrium Left and right: clavicle, scapula Left and right Upper Limb: humerus, radius, ulna, metacarpals and phalanges Pelvic bones: left and right pubis and ischium Left and right Lower Limb: femur, tibia, fibula, tarsal, metatarsal and phalanges

06/J/8	J-12-J-13	Simple pit	1	Mature adult	Male	Cranial (f): Cranial vault Dental: upper teeth and lower canine	Left Clavicle Ribs (f) Left and right upper limb (f): humerus, radius, metacarpals, phalanges Pelvic bone (f): ilium Lower limb: femur, right patella
06/J/8	J-12-J-13	Simple pit	2	Young adult	UID	Cranial vault	N/D
06/J/75	J-11-J-12	Hypogeum	1	Young adult	Female	Cranial: right and left orbits Right and left temporal Dental: mandible Note: not specified which elements belonged to which individual	Hyoid (f) Scapula (f) Ribs (f) Vertebra(f) Fibula (f) Tarsal Note: not specified which elements belong to which individual
06/J/75	J-11-J-12	Hypogeum	2	Subadult 14-15 years	UID	Mandible; See above*	See above*

Oriental Institute Burials

Table 67. Oriental Institute Burials by Type. SP = simple pit; SLP = stone-lined pit; MC = masonry-constructed chamber; UID = unidentified.

Stratum	*Tomb*	*Area*	*Square*	*Age*	*Burial Type*	*Shape, Dimensions, Masonry*	*MNI*	*Notes*
XVIII	4052	BB	O14	Adult	SP	UID	1	Inside building complex
XVII	4002A	BB	N15	Adult	SP	UID	2	Outside building 3177
XVII	4002B	BB	N15	Subadult	SP	UID	2	Outside building 3177
XVII	4044	BB	O14	Adult	SP	UID	1	Inside building complex, east of round altar
XV	5167	BB	N11	Adult	SP	UID	2	Inside fragmentary building? W of T. 5175
XV	5167	BB	N11	Subadult	SP	UID	2	Inside fragmentary building? W of T.5175
XV	5175	BB	N12	Adult	SP	UID	1	Maybe inside fragmentary building? E of T.5167
XIV	5121	BB	M12	Adult	SLP	UID	1	
XIV	5181	BB	N12	Adult	SLP	UID	2	Described as burials in wall, but on plan looks like stone-lined pit
XIV	2152	BB	N14	Adult	SP	UID	1	Burial type identified from Chicago locus register 1927-1935 sheet 32: "Open burial" (corresponds to simple pit); no additional info provided on age
XIV	3138	BB	O13	UID	SLP?	UID	UID	
XIV	3143	BB	O14	Adult	SP	UID	1	
XIV	3144	BB	O14	Adult	SP	UID	1	
XIV	3148	BB	O14	Adult	UID	UID	1	
XIV	3149	BB	O14	Adult	UID	UID	1	
XIV	3150	BB	O14	Adult	UID	UID	1	
XIV	3157	BB	O15	Adult	SP	UID	1	
XIV	4016	BB	O16	Adult	SP	UID	1	Not on plan; photo shows skeleton placed east of wall
XIV	5118	BB	N11	Subadult	UID	UID	UID	
XIV	5128	BB	M11	Subadult	SP	UID	UID	

XIV	5130A	BB	M12	Adult	SP	UID	2	
XIV	5130B	BB	M12	Adult	SP	UID	2	
XIV	5158	BB	N12	Subadult	SP	UID	UID	
XIV	5171	BB	M12	Subadult	SP	UID	1	Inside fragmentary building
XIV	5177	BB	M12	Adult	SP	UID	1	
XIV	5188	BB	M11	Subadult	SP	UID	1	Inside room
XIV	5275	BB	M13	Subadult	Jar	UID	UID	
XIIIB	5114	BB	M12	UID	SP	UID	UID	Inside (fragmentary) building
XIIIB	5148	BB	N12	Adult	SP	UID	UID	
XIIIB	5268	BB	M13	Subadult	Jar	UID	UID	
XIIIA	2146	BB	N14	Subadult	SLP?	UID	1	
XIIIA	2151	BB	N15	UID	Jar	UID	UID	NW corner of unnumbered room in east of area
XIIIA	3093	BB	O14	Adult	SP	UID	2	
XIIIA	3093B	BB	O14	Subadult	SP	UID	2	
XIIIA	3118	BB	O14	Subadult	Jar	UID	UID	Inside unnumbered room
XIIIA	3125	BB	O14	UID	SP	UID	Multiple?	
XIIIA	3127	BB	O14	Adult	SP	UID	1	
XIIIA	3130	BB	N14	UID	UID (MC?)	UID	UID	Inside courtyard?
XIIIA	3132	BB	O13	Subadult	Jar	UID	2?	
XIIIA	3134	BB	O14	Subadult	SP	UID	1	
XIIIA	3140	BB	O14	Subadult	SP	UID	1	
XIIIA	3141	BB	O14	Adult	SP	UID	1	
XIIIA	3146	BB	N15	Adult	SLP	1-2 courses, 1 row Square ca. 1.0 x 1.1 (int) 1.5 x 1.7 (ext)	1	N wall of unnumbered room bordering city wall
XIIIA	4010	BB	N13	Subadult	Jar	UID	UID	
XIIIA	5062	BB	N12	Infant	Jar in SLP	Oval jar, ca. 70 cm. long	1	Near southern wall of unnumbered room in W of area
XIIIA	Room 5063	BB	N12-13	Infant	Jar	Oval jar, ca. 50 cm. long	1	Room 5063

XIIIA	5075	BB	M12	Subadult	Jar	UID	UID	In SE corner of unnumbered room, in same room as T.5094
XIIIA	5084	BB	N12	Subadult	Jar	UID	UID	
XIIIA	5088	BB	M13	Subadult	Jar	UID	1	Building not preserved in this part of Area BB
XIIIA	5090	BB	M12	Subadult	SLP	1(?) course, 1 row Irregular Dimensions unknown	1	Center of unnumbered room
XIIIA	5094	BB	M12	Adult	SP	UID	1	Near northern wall of unnumbered room with T.5075
XIIIA	5102	BB	N12	Adult	SP	UID	1	Near threshold in W of unnumbered room containing burials T.5052, 5105
XIIIA	5103	BB	N12	Subadult	Jar	UID	1	Inside room, E of T.5102 (separate room, to the S, from T.5104)
XIIIA	5104	BB	N12	Subadult	SP	UID	1	Inside room (separate room to the N from T.5103)
XIIIA	5105	BB	N12	Subadult	Jar	UID	UID	In NE corner of unnumbered room containing T. 5102, T.5052
XIIIA	5113	BB	N12	Subadult	Jar	UID	UID	Inside room. Note that T.5113 is affiliated with Str. XIIIA but locus register notes that is against Wall 5093, which belongs to Str. XIIIB (below)
XIIIA	5152	BB	N12	Subadult	SLP?	UID	UID	Inside room
XIIIA	5252	BB	M13	Subadult	SLP	1(?) course, 1 row Rectangular ca. 1.0 x 0.70 m (int) ext. UID	1	Building not preserved in this part of Area BB
XIII	4088	AA	L7	Adult	SP	UID	1	SE corner of Room 4087; Inside building, along S wall of Rm. 4087
XIII	4095	AA	K7	Adult	SP	Burial along small wall, possibly marked with row of 4 small fieldstones? Dimensions of pit UID	1	
XIII	4105	AA	K8	Infant under 1 year	Jar	Oval jar, ca. 80 cm. long	1	NW interior corner of city gate
XIII	4112	AA	K8	Adult	SLP?	UID	UID	Below city wall
XIII	2119	CC	S10	Subadult	SP	UID	1	
XIII	2120	CC	S10	Infant	Jar	Oval jar, ca. 50 cm. long	1	Near N/S wall of unnumbered building in N of area, S. of T.2119

XII	4091	AA	L7	Subadult	SP	UID	2	Along W wall of unnumbered room
XII	4091B	AA	L7	Adult	SP	UID	2	Along W wall of unnumbered room
XII	2031	BB	M13	Subadult	Jar	UID	2	Outside building 5263?
XII	2031	BB	M13	Subadult	SP?	UID	2	Outside building 5263?
XII	2135	BB	N14	Adult	SLP	Rectangular? ca. 1.4 x 1.0 m (int) ext. UID	1	Center of unnumbered room
XII	2138	BB	N15	Subadult	SP	UID	1	W of city wall
XII	2142	BB	N14	Subadult	SP?	UID	UID	Inside room, S of T.2135, T.2147
XII	2147	BB	N14	UID	Jar	UID	UID	Inside room, S of T.2135, N. of T. 2142
XII	3084	BB	O15	UID	SLP	1(+) course, 1 row Curvilinear ca. 1.0(+) x 0.8 (int) ext. UID	1	Along N wall of unnumbered room
XII	3086	BB	O15	UID	SP	UID	UID	
XII	3092	BB	O15	Subadult	MC	1(+) course, 1(+) row Oval ca. 70 cm. long, ca. 40 cm. wide	1	W of city wall
XII	3095	BB	O13	UID	MC	4+ courses, 1-2 rows Rectangular chamber with narrow dromos to side Chamber: ca. 1.8 m long, 1 m wide. Dromos ca.1.5m long, 0.4 m wide	Multiple	Inside room
XII	3111	BB	N15	Adult	SP	UID	Multiple?	W of city wall
XII	3114	BB	O15	Subadult	UID	UID	1?	
XII	3117	BB	O13	Subadult	Jar	UID	UID	Inside room
XII	3122	BB	O15	UID	SP	UID	2	W of city wall
XII	3122	BB	O15	UID	Jar	UID	2	W of city wall
XII	3123	BB	O14	UID	SP	UID	Multiple?	Near T.3137
XII	3128	BB	N14	Subadult	SP	UID	1	Outside (E) of domestic building
XII	3129	BB	O13	UID	SLP	UID	UID	Inside room

XII	3133	BB	O13	Subadult	Jar	UID	1	
XII	3145	BB	O14	Subadult	SP	UID	1	
XII	5067	BB	N12	Adult	SP	UID	2	Inside room
XII	5067B	BB	N12	Adult	SP	UID	2	Inside room
XII	5068	BB	M12	Subadult	SP	UID	UID	
XII	5106	BB	M12	Subadult	SLP	1 course, 1 row Round Dimensions unknown	1	
XII	5111	BB	M12	Subadult	Jar	UID	UID	
XII	5112	BB	M12	Subadult	Jar	UID	UID	
XII	5137	BB	M13	Adult	SLP*?	3(+) courses, 1(?) row Rectangular ca. 1.30 x 0.60 (int) ext. UID	1	
XII	5242	BB	M13	Subadult	SP	UID	UID	Inside building
XII	5142	BB	M12	Adult	SLP	1-2 courses, 1 row Irregular curvilinear (teardrop shape) ca. 2.2 x 0.8 (int) ext. UID	3	Along W wall of unnumbered room
XII	5142B	BB	M12	Adult	SLP	1-2 courses, 1 row Irregular curvilinear (teardrop shape) ca. 2.2 x 0.8 (int) ext. UID	3	Along W wall of unnumbered room
XII	5142C	BB	M12	Adult	SLP	1-2 courses, 1 row Irregular curvilinear (teardrop shape) ca. 2.2 x 0.8 (int) ext. UID	3	Along W wall of unnumbered room
XII	5241	BB	M13	Subadult	Jar	UID	UID	Building 5226 is Str. XI
XII	5255	BB	M13	Subadult	SP	UID	1	
XII	5257	BB	M13	Subadult	Jar	UID	UID	Inside room or stone-lined pit?
XII	5259	BB	M13	Adult	SLP	1(+) course, 1 row Curvilinear	2	

						ca. 1.5 x 1.0 interior (int) ext. UID		
XII	5259B	BB	M13	UID	SLP	1(+) course, 1 row; Curvilinear; ca. 1.5 x 1.0 interior (estimated from scale photo); ext. UID	2	
XII	5261	BB	M13	Adult	SP	UID	3	NE of wall
XII	5261B	BB	M13	UID	SP	UID	3	NE of wall
XII	5261C	BB	M13	UID	SP	UID	3	NE of wall
XII	5267	BB	M13	Adult	SLP	1(+) course, 1 row Rectangular ca. 1.40 x 1.3 m (int) 2.0 x 2.0 m (ext)	2	
XII	5267B	BB	M13	Adult	SLP	1(+) course, 1 row Rectangular ca. 1.40 x 1.3 m (int) 2.0 x 2.0 m (ext)	2	
XII	5274	BB	M13	UID	SP	UID	2	
XII	2125	CC	S10	Adult	SP	UID	1	Burial in mudbrick (city wall?)
XI	2144	AA	K8	Adult	SP	UID	3	Inside room
XI	2144	AA	K8	Adult	SP?	UID	3	
XI	2144	AA	K8	Adult	SP?	UID	3	
XI	3175	AA	K7	UID	MC	4(+) courses, 1-2 rows (variable sizes of fieldstones; average width 0.35-0.40 m wide. Curvilinear chamber with small dromos. Corbelled vaulting. Part of chamber deeper, stepped down from dromos. ca. 3.40 m long x 1.62 m wide (int.) 4.15 m long x 2.37 m (ext) wide;	Multiple	Inside room Measured in the field, August 2016
XI	4055	AA	L7	UID	MC	3(+) courses, 1-2 rows (varying sizes of	Multiple	Inside room

						fieldstones). Corbelled vaulting? Rectangular Ca. 1.10 x 2.10 m (int) 2.25 x 1.75 m (ext)		
XI	4070	AA	K7	Subadult	SP	UID	UID	Inside room; masonry-constructed/stone-lined pit?
XI	4071	AA	L7	Subadult	Jar	UID	1	Inside room
XI	4072	AA	L7	Subadult	Jar	UID	1	Not on plan or in *Megiddo II* locus register
XI	4098	AA	K8	UID	MC	3(+) courses, 1-3 rows (varying sizes of fieldstones). Rectangular chamber with oval opening; 2 chambers connected by arched threshold comprised of two large fieldstones leaning inward Corbelled vaulting. ca. 4 m x 3.75 m ; ca. 2.25m long, 2 m wide (int) 4 m x 3.75 m (ext)	UID	
XI	2129	BB	N15	Multiple	MC	2(+) courses, 1(+) rows Oval ca. 1.5m long, 0.90 m wide	Multiple	Inside room
XI	3058	BB	O15	Subadult	Jar	UID	2	Inside room
XI	3058	BB	O15	Adult	SP	UID	2	Inside room
XI	3064	BB	O14	Subadult	Jar	UID	UID	Inside room, N of T.3090, W of masonry-constructed T.3085
XI	3072	BB	O14	Subadult	SP	UID	UID	Inside room
XI	3075	BB	O14	UID	MC	4+ courses, 1+ rows; Retangular chamber ca. 1.5m long, 1 m wide (int)	Multiple	Inside room
XI	3076	BB	O14	UID	SP	UID	UID	Inside room
XI	3080	BB	O15	UID	MC	3(+) courses, 1 row ca. 1.5m long, 1 m wide (int)	Multiple	Inside room

XI	3081	BB	O15	Subadult	SP	UID	UID	
XI	3082	BB	O14	Subadult	Jar	UID	2	Inside room
XI	3082	BB	O14	Subadult	Jar	UID	2	Inside room
XI	3083	BB	O15	Subadult	Jar	UID	UID	Inside room
XI	3085	BB	O15	UID	MC	3(+) courses of medium fieldstones, 1(+) row Oval chamber; short, narrow, curving dromos ca. 1.5 m long, 1 m wide (int)	Multiple	Inside room 3053
XI	3085	BB	O14	UID	MC	Double chamber; multiple courses, corbel vaulted roof	Multiple	Inside room
XI	3107	BB	N14	Subadult	SP	UID	1	Inside room, W of T.3120
XI	3110	BB	N14	Subadult	MC	UID	Multiple?	Inside room
XI	3120	BB	N14	Subadult	UID	UID	2	Inside room, E of T.3107
XI	3120	BB	N14	Subadult	UID	UID	2	Inside room, E of T.3107
XI	5041	BB	N12	Child, likely 3-5 years	SP	UID	1	Inside room
XI	5046	BB	N12	Subadult	SP	UID	1	
XI	5050	BB	N12	Child	SLP*	Oval? Dimensions unknown	1	
XI	5053	BB	N12	Subadult	Jar	UID	UID	Inside room
XI	5086	BB	M13	Subadult	Jar	UID	1	Inside room
XI	5086	BB	M13	Subadult	Jar	UID	1	Inside room
XI	5133	BB	M12	Adult	SP	UID	2	
XI	5133	BB	M12	Adult	SP	UID	2	
XI	5230	BB	M13	Subadult	Jar	UID	1	Inside room, but several meters SE from T.5231
XI	5231	BB	M13	Subadult	Jar	UID	1	Inside room, but several meters NW from T.5230
XI	5234	BB	M13	Subadult	Jar	UID	UID	Inside room
XI	5248	BB	M13	Subadult	SP	UID	UID	Inside room, SE corner immediately E of T.5249
XI	5249	BB	M13	Adult	SP	UID	1	Inside room, W of T.5248
XI	5250	BB	M12	Adult	SP	UID	1	

XI	5271	BB	M13	Subadult	SP	UID	UID	Inside room
XI	2026	CC	S10	Child, likely 2-4 years	SLP	1 row Circular ring of stones ca. 0.80-0.85 diameter (int) ext. UID	1	
X	2140	AA	K8	Subadult	UID	UID	1?	Not on plan
X	3139	AA	K6	UID	SLP?	UID	UID	Inside room
X	3170	AA	K7	Subadult	Jar	UID	1?	Inside room
X	4007	AA	K7	Subadult	SP	UID	1	Inside room in building (palace?)
X	4018	AA	K7	Subadult	Jar	UID	UID	Inside room 4021
X	4043	AA	L6	Subadult	SP	UID	Multiple (3+)	Inside room
X	4043	AA	L6	Subadult	SP	UID	Multiple (3+)	Inside room
X	4043	AA	L6	Child, likely 3-5 years	SP	UID	Multiple (3+)	Inside room
X	4051	AA	K7	Subadult	SP	UID	3	Inside room
X	4051	AA	K7	Adult	SP	UID	3	Inside room
X	4051	AA	K7	Adult	SP	UID	3	Inside room
X	4073	AA	L7	Adult	SP	UID	1	Not on plan or in *Megiddo II* locus register
X	4106	AA	K8	Infant	Jar	UID	1	
X	4106	AA	K8	Child	SP	UID	2	
X	4106	AA	K8	Child	SP	UID	2	
X	2126	BB	N15	Adult	SP	UID	1	Inside room
X	3026	BB	O14	Child	Jar	UID	1	Inside room; Chicago locus register (1936): "Burials below floor of room E of T. 3013"
X	3026	BB	O14	Child	Jar	UID	1	Inside room; Chicago locus register (1936): "Burials below floor of room E of T. 3013"
X	3029	BB	O14	Child, likely 4-7	SP	UID	1	Inside room, Eof T.3050, same room as T.3065
X	3029	BB	O14	Newborn-Infant, likely	Jar	UID	1	Inside room, E of T.3050, same room as T.3065

				under 1 year				
X	3030	BB	O15	Subadult	Jar	UID	1	Inside room, just north of T.3048
X	3033	BB	O14	Subadult	SP	UID	1	Inside room
X	3034	BB	O15	Subadult	Jar	UID	1	NW corner of room. SW of T. 3035 (in different room)
X	3035	BB	O15	Subadult	Jar	UID	1	Inside room, north of T.3042. NE of T. 3034 (in different room)
X	3039	BB	O15	UID	UID	UID	UID	Inside room, north of T.3055
X	3040	BB	O15	Subadult	Jar	UID	1	In alley between buildings? In E of area
X	3042	BB	O15	UID	SLP	UID	UID	Inside room, S of T.3035
X	3046	BB	O14	Subadult	Jar	UID	1	Inside room
X	3047	BB	O14	Adult	SP	UID	1	NE corner of unnumbered room
X	3047	BB	O14	UID	SP	UID	1	NE corner of unnumbered room
X	3048	BB	O15	Multiple	SLP	2-3+ courses, 1 row Rectangular ca. 1.20(+) x 0.80 m (int) 1.6(+) x 1.2 (+) m (ext)	Multiple	NW corner of unnumbered room just S. of T.3030; Chicago locus register (1936): "Stone grave on edge of tell"
X	3050	BB	O14	Subadult	Jar	UID	1	Inside room with T.3029, 3065.
X	3052	BB	O14	Subadult	Jar	UID	UID	NW corner of room
X	3054	BB	O14	Infant, likely under 1 year	Jar	UID	1	Inside room or corridor; S. of T.3060
X	3055	BB	O14	Subadult	SP	UID	1	Chicago locus register (1936): "Burial in Rm two below 3011"
X	3056	BB	O14	Adult	SP	UID	1	Inside room
X	3059	BB	O14	UID	UID	UID	UID	Chicago locus register (1936): "Burial 1/2 way up wall in Rm W of 3018"
X	3060	BB	O14	Subadult	SP	UID	UID	Inside room, N. of T.3054.
X	3063	BB	O14	UID	UID	UID	UID	Inside room or shaft? Chicago locus register (1936): "Burial in 'chimney'"
X	3065	BB	O14	UID	SP	UID	UID	Inside room; N of T.3029, 3050

X	3066	BB	O15	UID	SLP	UID	2	Inside room, N of T.3035, T.3042, same room as T.3039
X	3070	BB	O14	UID	MC	3(+) courses, 2(+) rows Kidney-bean shaped chamber with narrow dromos ca. 1.8m long, 1m wide (int.)	Multiple	Inside room
X	3074	BB	O14	Adult	SP	UID	1	Inside room
X	5240	BB	M12	Adult	SP	UID	1	Inside room, W of T.5244
X	5244	BB	M12	Subadult	Jar	UID	UID	Inside room, E of T.5240
X	2027	CC	R10	Subadult	Jar	UID	1	NE corner of unnumbered room
X	2028	CC	R10	Child	SLP	1-2 rows Irregular rectilinear shape ca. 0.60 x 0.50 (int) 0.9 x 0.7 m (ext)	1?	NE corner of unnumbered room; same room, adjacent to S of T.3030
X	2029	CC	R10	Subadult	Jar	UID	1	NE corner of unnumbered room
X	2034	CC	Q10	Infant	Jar	Storage jar ca 40 cm. x 35 cm?	UID	N end of S Trench
IX	3169	AA	K7	Multiple	SLP	1+ course, 1 row Rectangular ca. 1.2 x 0.8 (int) 1.8 x 1.3 m (ext)	Multiple	Inside palace? W of T.3173
IX	3169	AA	K7	Child, likely 3-6	SLP	1+ course, 1 row; Rectangular ca. 1.2 x 0.8 (int.) 1.8 x 1.3 m (ext.)	Multiple	Inside palace? W of T.3173
IX	Room 4004	AA	L7	Infant, likely under 1 year	Jar	Bottom half of jar ca. 40 cm. long, 30 cm. wide	2	Inside room
IX	Room 4004	AA	L7	Infant, likely under 1 year	Jar	Bottom half of jar ca. 40 cm. long, 30 cm. wide	2	Inside room
IX	2117	BB	N15	Adult	SP	UID	1	Inside room, N of T.2121 and T.2123
IX	2118	BB	N15	Infant	SP?	UID	1	Not on plan

IX	2127	BB	N15	Adult	SP?	UID	1	Inside room, NE of T.2132
IX	2097	BB	N14	Subadult	SP	UID	1	Described as "open grave (child)" in Chicago locus register 1927-1935, sheet 30
IX	2107	BB	N14	Subadult	SP?	UID	1	Outside building? E of T.2097 and T.2098
IX	2108	BB	N15	Adult	SP	UID	1	Inside narrow room, W of T.2109
IX	2109	BB	N15	Subadult	SP	UID	2	Inside narrow room, E of T.2108
IX	2109	BB	N15	Adult	SP	UID	2	Inside narrow room, E of T.2108
IX	2121	BB	N15	Subadult	SP	UID	1	Inside room, N of T.2123 and S of T.2117
IX	2123	BB	N15	Subadult	SP?	UID	UID	Inside room, N of T.2121, T.2117
IX	2165	BB	N15	Infant, likely under 1 year	Jar	Jar ca. 45 cm long, 35 cm wide	1	Inside unnumbered room with plaster floor
IX	3013	BB	O14	Adult	SP	UID	4	Inside room
IX	3013	BB	O14	Subadult	SP	UID	4	Inside room
IX	3013	BB	O14	Subadult	SP	UID	4	Inside room
IX	3013	BB	O14	Child	SP	UID	4	Inside room
IX	3017	BB	N14	Subadult	SP	UID	1	E (outside) of wall of Building 5012
IX	3018 A	BB	O14	UID	SP	UID	Multiple	Inside room
IX	3018 B	BB	O14	UID	SP	UID	Multiple	Inside room
IX	3018 C	BB	O14	Adult	SP	UID	Multiple	Inside room
IX	3018 D	BB	O14	Adult	SP	UID	Multiple	Inside room
IX	3018 E	BB	O14	Adult	SP	UID	Multiple	Inside room
IX	3018 E	BB	O14	Adult	SP	UID	Multiple	Inside room
IX	3018 F	BB	O14	Adult	SP	UID	Multiple	Inside room
IX	3024	BB	O14	Subadult	Jar	UID	UID	Inside room with large basin/silo
IX	3025	BB	O15	UID	SP	UID	1	Inside room; along N wall of unnumbered room.

IX	3027	BB	O14	Adult	SP	UID	1	Inside narrow room, W of T.3028. Chicago locus register (1936): "Tomb W and below T. 3016"
IX	3028	BB	O15	Adult	SP	UID	1	Inside narrow room, E of T.3027. Chicago locus register (1936): "Tomb E of T. 3027"
IX	5013	BB	N12	Subadult	SP	UID	Multiple	East of T.5040A-B. Chicago locus register (1938-1939): "Burials in Rm S of 5012"
IX	5013	BB	N12	UID	SP	UID	Multiple	East of T.5040A-B
IX	5040	BB	N12	Adult	SLP*	N/D; only lower burial was built Rectangular ca. 1.1 x 0.80 m wide (int.) ext. UID	2	Built against S wall of Room 5012, W of T.5013. Chicago locus register (1938-1939): "Burial W of 5013"
IX	5040 B	BB	N12	Adult	SP	5040B (upper burial?) is simple pit	2	Built against S wall of Room 5012; just west of T.5013
IX	2004	CC	S10	Adult	SP	UID	1	
IX	2009	CC	R10	Adolescent, likely between 11-16	SP	UID	1	
IX	2010	CC	R10	UID	SP	UID	1?	
IX	2011	CC	S10	UID	SP	UID	UID	Burial type identified from Chicago locus register 1927-1935 sheet 24
IX	2015	CC	R10	Adult	UID	UID	UID	Burial type unknown, likely simple pit. Identification of age from Chicago locus register 1927-1935 sheet 24
IX	2017	CC	R10	Infant	SLP (partial)	1 course?, 1+ row; Rectangular 0.65(+) x 0.4 m (int.)	1?	Along W wall of unnumbered room
IX	2033	CC	Q10	Infant	Jar	Storage jar ca. 32 cm long x 30 cm. wide (int.) 35 cm. wide (ext.).	1	Not on plan N. end of S. Trench
VIII	2099	BB	N15	Infant	SP	UID	UID	
VIII	2104	BB	N15	Adult	SP	UID	4	Inside room
VIII	2104	BB	N15	Adult	SP	UID	4	Inside room
VIII	2104	BB	N15	Child, likely 6-11	SP	UID	4	Inside room

VIII	2104	BB	N15	Child, likely 2-4 years	SP	UID	4	Inside room
VIII	2106	BB	N15	Adult	SLP?	UID	5	Inside small room? "Above" T. 2110, under T.2108
VIII	2106	BB	N15	Subadult	SP	UID	5	Inside small room? "Above" T. 2110, under T.2108
VIII	2106	BB	N15	Subadult	SP	UID	5	Inside small room? "Above" T. 2110, under T.2108
VIII	2106	BB	N15	Subadult	SP	UID	5	Inside small room? "Above" T. 2110, under T.2108
VIII	2106	BB	N15	Subadult	SP	UID	5	Inside small room? "Above" T. 2110, under T.2108
VIII	2110	BB	N15	Adult	SP	UID	2?	Inside small room? "Below" T.2106
VIII	3004	BB	N14	Child	SP	UID	2	Inside room; N of T.3006
VIII	3004	BB	N14	Child	SP	UID	2	Inside room; N of T.3006
VIII	3005	BB	O14	Adult	SP	UID	3	Inside room, cutting into cobble pavement?
VIII	3005	BB	O14	Subadult	SP	UID	3	Inside room, cutting into cobble pavement?
VIII	3005	BB	O14	Subadult	SP	UID	3	Inside room, cutting into cobble pavement?
VIII	3006	BB	O14	Adult	SP	At least ca. 1.4 m long, 0.5 m wide	UID	Inside room S of T.3004, cutting into cobble pavement?
VIII	3014	BB	O14	Adult	SP	UID	1	Inside room, W of T.3015
VIII	3015	BB	O14	Multiple	SP	UID	Multiple	Inside room, E of T.3014. SE of T.3016
VIII	3016	BB	O15	Adult	SP?	UID	UID	Inside room NE of T. 3015 & T.3014
VIII	3018 A	BB	O14	Adult	SP	UID	3	Inside room
VIII	3018 B	BB	O14	Adult	SP	UID	3	Inside room
VIII	3018 B	BB	O14	Adult	SP	UID	3	Inside room
VIII	2016	CC	R10	Adult	SP?	UID	2	Inside room(?) with pavement
VIII	2016	CC	R10	Subadult	SP?	UID	2	Inside room(?) with pavement

VIIB	3094	AA	L6	N/D	SLP	1 course, 1 row Curvilinear ca. 1.9 x 0.6 m int. 2.3 x 2.1 m ext.	N/D	

Table 68. Oriental Institute Burials: Disposal Method and Osteological Information. UoC = University of Chicago; OIM = Oriental Institute Museum

Tomb	*Age*	*MNI*	*Body Treatment*	*Body Position*	*References*
4052	Adult	1	Primary	Supine flexed Legs to right, head to E	Loud 1948: Fig. 280, 391 UoC locus register (1937), sheet 46, OIM Archives UoC field negative 4251-4252, February 21, 1938, OIM Archives
4002A	Adult	2	Primary	Prone? Legs flexed	Loud 1948: Fig. 281, 392 UoC locus register (1937), sheet 44, OIM Archives UoC field negatives 4060-4063, December 23, 1937, OIM Archives
4002B	Subadult	2	Primary	UID	Loud 1948: Fig. 281, 392 UoC locus register (1937), sheet 44, OIM Archives UoC field negatives 4060-4063, December 23, 1937, OIM Archives
4044	Adult	1	Primary	Right lateral flexed	Loud 1948: Fig. 283, 393 UoC locus register (1937), sheets 44, 46, OIM Archives UoC field negative 4196, January 26, 1938, OIM Archives
5167	Adult	2	Secondary?	UID Head to east	Loud 1948: Fig. 285, 394 UoC locus register (1938), sheet 61, OIM Archives
5167	Subadult	2	Primary?	Left lateral flexed Head to E	Loud 1948: Fig. 285, 394 UoC locus register (1938), sheet 61, OIM Archives
5175	Adult	1	Primary	Supine Head to N	Loud 1948: Fig. 284, 394 UoC locus register (1938), sheet 61, OIM Archives
5121	Adult	1	Primary	Supine flexed Legs flexed right and positioned behind body at 45 degree angle Head to E	Loud 1948: 120: Fig. 286; Fig. 395 UoC locus register (1938), sheet 61, OIM Archives
5181	Adult	2	UID Disartculated	UID	Loud 1948: 120: Fig. 287; Fig. 395 UoC locus register (1938), sheet 61, OIM Archives
2152	Adult	1	Primary	Left lateral flexed	Loud 1948: Fig. 395 UoC locus register 1927-1935, sheet 32, OIM Archives UoC field negative 2543, April 29, 1936, OIM Archives OIM field diary 1936: page 75, OIM Archives
3130	UID	UID	UID	UID	Loud 1948: Fig. 397; UoC locus register (1937), OIM Archives
3138	UID	UID	UID	UID	Loud 1948: Fig. 395 UoC locus register (1937), OIM Archives
3143	Adult	1	UID	UID	Loud 1948: Fig. 395 UoC locus register (1937), OIM Archives

3144	Adult	1	UID	UID	Loud 1948: Fig. 395 UoC locus register (1937), OIM Archives
3148	Adult	1	UID	UID	Loud 1948: Fig. 395 UoC locus register (1937), OIM Archives UoC field negative 3785, March 31, 1937. OIM Archives. UoC field diary 1937: 32. OIM Archives
3149	Adult	1	UID	UID	Loud 1948: Fig. 395 UoC locus register (1937), OIM Archives
3150	Adult	1	UID	UID	Loud 1948: Fig. 395 UoC locus register (1937), OIM Archives
3157	Adult	1	UID	UID	Loud 1948: Fig. 395; Chicago locus register (1937), OIM Archives
4016	Adult	1	Primary	Left lateral flexed Head to N	Loud 1948: 120: Fig. 288; Fig. 395 UoC locus register (1937), sheet 44, OIM Archives UoC field negatives 4130-4132, January 11, 1938, OIM Archives UoC field diary 1938: 15-16, OIM Archives
5118	Subadult	UID	UID	UID	Loud 1948: Fig. 395 UoC locus register (1938), sheet 61, OIM Archives
5128	Subadult	UID	UID	UID	Loud 1948: Fig. 395 UoC locus register (1938), sheet 61, OIM Archives
5130A	Adult	2	Primary	Supine	Loud 1948: 120. Fig. 292; Fig. 395 UoC locus register (1938), sheet 61, OIM Archives
5130B	Adult	2	Primary	Supine flexed Legs flexed to left	Loud 1948: 120. Fig. 292; Fig. 395 UoC locus register (1938), sheet 61, OIM Archives
5158	Subadult	UID	UID	UID	Loud 1948: Fig. 395 UoC locus register (1938), sheet 61, OIM Archives
5171	Subadult	1	UID	UID	Loud 1948: 120: Fig. 291; Fig. 395 UoC locus register (1938), sheet 64, OIM Archives
5177	Adult	1	Primary	Left lateral flexed Head to S	Loud 1948: 120: Fig. 290; Fig. 395 UoC locus register (1938), sheet 61, OIM Archives
5188	Subadult	1	Primary	Supine flexed	Loud 1948: 120: Fig. 289; Fig. 395 UoC locus register (1938), sheet 61, OIM Archives
5275	Subadult	UID	UID	UID	Loud 1948: Fig. 395 UoC locus register (1938), sheet 68, OIM Archives
5114	UID	UID	UID	UID	Loud 1948: Fig. 396 UoC locus register (1938), sheet 59, OIM Archives
5148	Adult	UID	UID	UID	Loud 1948: Fig. 396 UoC locus register (1938), sheet 61, OIM Archives
5268	Subadult	UID	UID	UID	Loud 1948: Fig. 396 UoC locus register (1938), sheet 67, OIM Archives

2146	Subadult	1	UID	UID	Loud 1948: Fig. 397 UoC locus register 1927-1935, sheet 32, OIM Archives
2151	UID	UID	UID	UID	Loud 1948: Fig. 397 UoC locus register 1927-1935, sheet 32, OIM Archives
3093	Adult	2	Primary	Supine extended	Loud 1948: 121, Fig. 293; Fig. 397 UoC locus register (1937), OIM Archives UoC field negative 3775, March 3, 1937, OIM Archives UoC field diary 1937: 23(?), OIM Archives
3093B	Subadult	2	Primary?	ND	Loud 1948: 121, Fig. 293; Fig. 397
3118	Subadult	UID	UID	ND	Loud 1948: Fig. 397 UoC o locus register (1937), OIM Archives
3125	UID	Multiple ?	UID	UID	Loud 1948: Fig. 397 UoC locus register (1937), OIM Archives
3127	Adult	1	UID	UID	Loud 1948: Fig. 397 UoC locus register (1937), OIM Archives
3132	Subadult	2?	UID	UID	Loud 1948: Fig. 397 UoC locus register (1937), OIM Archives
3134	Subadult	1	UID	UID	Loud 1948: Fig. 397 UoC locus register (1937), OIM Archives
3140	Subadult	1	UID	UID	Loud 1948: Fig. 397 UoC locus register (1937), OIM Archives
3141	Adult	1	UID	UID	Loud 1948: Fig. 397 UoC locus register (1937), OIM Archives
3146	Adult	1	Primary	Left lateral flexed	Loud 1948: 121, Fig. 296 UoC locus register (1937), OIM Archives UoC field negative 3784, March 31, 1937, OIM Archives UoC field diary1937: 32, OIM Archives
4010	Subadult	UID	UID	UID	Loud 1948: Fig. 397 UoC locus register (1937), sheet 43B, OIM Archives
5062	Infant	1	Primary	Right lateral extended Head to NE	Loud 1948: 122, Fig. 300; Fig. 397 UoC locus register (1938), sheet 59, OIM Archives
Room 5063	Infant	1	Primary	Supine extended	Loud 1948: 122, Fig. 298; Fig. 397
5075	Subadult	UID	UID	UID	Loud 1948: Fig. 397; UoC locus register (1938), sheet 59, OIM Archives
5084	Subadult	UID	UID	UID	Loud 1948: Fig. 397 UoC locus register (1938), sheet 59, OIM Archives
5088	Subadult	1	UID	UID	Loud 1948: Fig. 397 UoC locus register (1938), OIM Archives

5090	Subadult	1	Primary	Supine extended	Loud 1948: 122, Fig. 303 UoC locus register (1938), sheet 59.45, 59, OIM Archives
5094	Adult	1	Primary	Supine flexed Legs to right (east) Head to E	Loud 1948: 122, Fig. 299; Fig. 397 UoC locus register (1938), sheet 59.10, 59, OIM Archives
5102	Adult	1	Primary	Left lateral flexed Head to West	Loud 1948: 122, Fig. 302; Fig. 397 UoC locus register (1938), sheet Level 59.85, 59, OIM Archives
5103	Subadult	1	UID	UID	Loud 1948: Fig. 397 UoC locus register (1938), sheet 59.70, 59, OIM Archives
5104	Subadult	1	UID	UID	Loud 1948: Fig. 397 UoC locus register (1938), sheet 59.75, 59, OIM Archives
5105	Subadult	UID	UID	UID	Loud 1948: Fig. 397 UoC locus register (1938), sheet 59.75, 59, OIM Archives
5113	Subadult	UID	UID	UID	Loud 1948: Fig. 398 UoC locus register (1938), sheet 59, OIM Archives
5152	Subadult	UID	UID	UID	Loud 1948: Fig. 397 UoC locus register (1938), sheet 61, OIM Archives
5252	Subadult	1	Primary	Right lateral flexed	Loud 1948: 122, Fig. 301 UoC locus register (1938), sheet 65, OIM Archives
4088	Adult	1	Primary	Right lateral flexed Head to E	Loud 1948: 121, Fig. 295; Fig. 378 UoC locus register (1937), sheet 48, OIM Archives UoC field negative 4509, April 12, 1938, OIM Archives
4095	Adult	1	Primary	Right lateral hyperflexed	Loud 1948: Fig. 397 UoC locus register (1937), sheet 47, OIM Archives
4105	Infant under 1 year	1	Primary	Supine extended	Loud 1948: 121, Fig. 294; Fig. 378 UoC locus register (1937), sheet 48, OIM Archives UoC field negative 4553, April 20, 1938, OIM Archives
4112	Adult	UID	UID	UID	Loud 1948: Fig. 397 UoC locus register (1937), sheet 48, OIM Archives
2119	Subadult	1	Primary	Right lateral flexed	Loud 1948: Fig. 407 UoC locus register 1927-1935, OIM Archives sheet 24 UoC field negative A2370, April 9, 1936, OIM Archives
2120	Infant	1	Primary	UID Head to W, facing S	Loud 1948: 121, Fig. 297; Fig. 407 UoC locus register 1927-1935, sheet 30, OIM Archives UoC field negative 2374, April 9, 1936, OIM Archives
4091	Subadult	2	Primary	Right lateral flexed	Loud 1948: 123, Fig. 306; Fig. 378 UoC locus register (1937), sheet 48, OIM Archives UoC field negative 4521-4522, April 12, 1938, OIM Archives
4091B	Adult	2	Primary	Left lateral flexed	Loud 1948: 123, Fig. 306; Fig. 378

2031	Subadult	2	UID	UID	Loud 1948: Fig. 398 UoC locus register 1927-1935, sheet 26, OIM Archives UoC field negatives 2071, 2072, November 24, 1935, OIM Archives
2031	Subadult	2	UID	UID	Loud 1948: Fig. 398 UoC locus register 1927-1935, OIM Archives sheet 26 UoC field negatives 2071, 2072, November 24, 1935, OIM Archives
2135	Adult	1	Primary	Left lateral flexed	Loud 1948: 124, Fig. 315; Fig. 398 UoC field negatives 2539-2540, April 29, 1936, OIM Archives UoC field diary 1936: 75, OIM Archives
2138	Subadult	1	Primary	UID	Loud 1948: 124, Fig. 312; Fig. 398 UoC locus register 1927-1935, sheet 32, OIM Archives UoC field negative 2541, April 29, 1936, OIM Archives
2142	Subadult	UID	UID	UID	Loud 1948: Fig. 398 UoC locus register 1927-1935, OIM Archives sheet 32 UoC field negative 2438, April 15, 1936, OIM Archives
2147	UID	UID	UID	UID	Loud 1948: Fig. 398 UoC locus register 1927-1935, sheet 32, OIM Archives
3084	UID	1	Primary	Left lateral flexed	Loud 1948: 124, Fig. 314; Fig. 398 UoC locus register (1937), OIM Archives UoC field negative 3762, March 3, 1937, OIM Archives UoC field diary 1937: 23(?), OIM archives
3086	UID	UID	UID	UID	Loud 1948: Fig. 398 UoC locus register (1937), OIM Archives
3092	Subadult	1	Primary	Right lateral flexed Head to north	Loud 1948: 124, Fig. 317; Fig. 398 UoC locus register (1937), OIM Archives UoC field negative 3774, March 3, 1937, OIM Archives UoC field diary 1937: 23(?), OIM Archives
3095	UID	Multiple	UID	UID	Loud 1948: 87, 89: Figs. 202-205; 92; Fig. 398 UoC locus register (1937), OIM Archives UoC field negatives 3777-3780, March 3, 1937, OIM Archives UoC field diary 1937: 24-25, OIM Archives
3111	Adult	Multiple ?	UID	UID	Loud 1948: Fig. 398 UoC locus register (1937), OIM Archives
3114	Subadult	1?	UID	UID	Loud 1948: Fig. 398 UoC locus register (1937), OIM Archives
3117	Subadult	UID	UID	UID	Loud 1948: Fig. 398 UoC locus register (1937), OIM Archives
3122	UID	2	UID	UID	Loud 1948: Fig. 398 UoC locus register (1937), OIM Archives
3122	UID	2	UID	UID	Loud 1948: Fig. 398

					UoC locus register (1937), OIM Archives
3123	UID	Multiple ?	UID	UID	Loud 1948: Fig. 398 UoC locus register (1937), OIM Archives
3128	Subadult	1	UID	UID	Loud 1948: Fig. 398 UoC locus register (1937), OIM Archives
3129	UID	UID	UID	UID	Loud 1948: Fig. 398 UoC locus register (1937), OIM Archives
3133	Subadult	1	UID	UID	Loud 1948: Fig. 398 UoC locus register (1937), OIM Archives
3145	Subadult	1	Primary	Supine flexed Legs to right	Loud 1948: 123, Fig. 310; Fig. 398 UoC locus register (1937), OIM Archives, UoC field negative 3783, March 31, 1937, OIM Archives
5067	Adult	2	Primary	Supine flexed Legs to right (E) Head to east	Loud 1948: 124, Fig. 313; Fig. 398 UoC locus register (1938), sheet 59, OIM Archives
5067B	Adult	2	Primary	Supine flexed Legs to right (E) Head to East	Loud 1948: 124, Fig. 313; Fig. 398 UoC locus register (1938), sheet 59, OIM Archives
5068	Subadult	UID	UID	UID	Loud 1948: Fig. 398 UoC locus register (1938), sheet 59, OIM Archives
5106	Subadult	1	Primary	Left lateral flexed, head to west	Loud 1948: 123, Fig. 304; Fig. 39 UoC locus register (1938), sheet 59, OIM Archives
5111	Subadult	UID	UID	UID	Loud 1948: Fig. 398 UoC locus register (1938), sheet 59, OIM Archives
5112	Subadult	UID	UID	UID	Loud 1948: Fig. 398 UoC locus register (1938), sheet 59, OIM Archives
5137	Adult	1	Primary	Left lateral flexed, head to west	Loud 1948: 123, Fig. 309; Fig. 398 UoC locus register (1938), sheet 61, OIM Archives
5242	Subadult	UID	UID	UID	Loud 1948: Fig. 398 UoC locus register (1938), sheet 65, OIM Archives
5142	Adult	3	Primary	Supine extended Head to N	Loud 1948: 123, Fig. 305; Fig. 398 UoC locus register (1938), sheet 61, OIM Archives
5142B	Adult	3	UID	UID	Loud 1948: 123, Fig. 305; Fig. 398
5142C	Adult	3	UID	UID	Loud 1948: 123, Fig. 305; Fig. 398
5241	Subadult	UID	UID	UID	Loud 1948: Fig. 398 UoC locus register (1938), sheet 65, OIM Archives
5255	Subadult	1	Primary	Supine extended	Loud 1948: 123, Fig. 308; Fig. 398 UoC locus register (1938), sheet 65, OIM Archives
5257	Subadult	UID	UID	UID	Loud 1948: Fig. 398

					UoC locus register (1938), sheet 65, OIM Archives
5259	Adult	2	Primary	Supine flexed to left Nead to NW	Loud 1948: 124, Fig. 316; Fig. 398 UoC locus register (1938), sheet 67, OIM Archives
5259B	UID	2	UID	Head to NW	Loud 1948: 124, Fig. 316; Fig. 398
5261	Adult	3	Primary	Left lateral flexed Head to E	Loud 1948: 123, Fig. 307; Fig. 398 UoC locus register (1938), sheet 67, OIM Archives
5261B	UID	3	UID Disarticulated	UID	Loud 1948: 123, Fig. 307; Fig. 398
5261C	UID	3	UID Disarticulated	UID	Loud 1948: 123, Fig. 307; Fig. 398
5267	Adult	2	UID Disarticulated	UID	Loud 1948: 123, Fig. 311; Fig. 398
5267B	Adult	2	UID Disarticulated	UID	Loud 1948: 123, Fig. 311; Fig. 398
5274	UID	2	UID	UID	Loud 1948: Fig. 398 UoC locus register (1938), sheet 67, OIM Archives
2125	Adult	1	Primary	Supine extended	Loud 1948: Fig. 407 UoC field negatives 2388-2390, April 9, 1936, OIM Archives.
2144	Adult	3	Primary	Supine flexed	Loud 1948: Fig. 379 UoC locus register 1927-1935, sheet 33, OIM Archives UoC field negatives 2437, April 15, 1936, 2542, April 29, 1936, OIM Archives. UoC field diary 1936: 71(?), OIM Archives
2144	Adult	3	UID	UID	Loud 1948: Fig. 379 UoC locus register 1927-1935, sheet 33, OIM Archives UoC field negatives 2437, April 15, 1936, 2542, April 29, 1936, OIM Archives UoC field diary 1936: 71(?), OIM Archives
2144	Adult	3	UID	UID	Loud 1948: Fig. 379 UoC locus register 1927-1935, sheet 33, OIM Archives UoC field negatives 2437, April 15, 1936, 2542, April 29, 1936, OIM Archives UoC field diary 1936: 71(?). OIM Archives
3175	UID	Multiple	Secondary, co-mingling	UID	Loud 1948: 16: Fig. 32; 17: Fig. 34; Fig.379 UoC locus register (1937), OIM Archives UoC field negatives 3793-3795, April 19, 1937, OIM Archives UoC field diary 1937: 39, OIM Archives
4055	UID	Multiple	Secondary, co-mingling	UID	Loud 1948: 16: Fig. 32; 17: Fig. 33; Fig.379 UoC locus register (1937), sheets 45, 47, OIM Archives

					UoC field negatives 4257-4260, February 11, 1938, OIM Archives. UoC field diary 1938: 30-31, OIM Archives
4070	Subadult	UID	UID	Left lateral flexed	Loud 1948: Fig. 379 UoC locus register (1937), sheet 47, OIM Archives UoC field negative 4453, March 30, 1938, OIM Archives UoC field diary 1938: 38, OIM Archives
4071	Subadult	1	Primary	UID Head at opening of jar	Loud 1948: Fig. 379 UoC locus register (1937), sheet 47, OIM Archives UoC field negative 4455-4556, March 30, 1938, OIM Archives UoC field diary 1938: 38, OIM Archives
4072	Subadult	1	Primary	Supine extended	UoC locus register (1938), sheet 47, OIM Archives UoC field diary (1938), page 38, OIM Archives UoC field negative 4458, March 30, 1938, OIM Archives
4098	UID	UID	UID	UID	Loud 1948: 18: Figs. 29-31; Fig. 379 UoC field negative 4497, April 10, 1938, 4525-4527, April 12, 1938, OIM Archives UoC field diary 1938: 43, OIM Archives
2129	Multiple	Multiple	Secondary, co-mingling	UID	Loud 1948: 126, Fig. 327; Fig. 299 UoC locus register 1927-1935, sheet 32 UoC field negative A2369, April 9, 1936, OIM Archives UoC field diary 1936: 62-63(?), OIM Archives
3039	UID	UID	UID	UID	Loud 1948: Fig. 400 UoC field negative 3722. January 30, 1937, OIM Archives
3058	Subadult	2	Primary	Supine extended Legs splayed	Loud 1948: 125, Fig. 318; Fig. 399 UoC locus register (1936), OIM Archives UoC field negatives 3736-3737. February 13, 1937, OIM Archives UoC field diary 1937: 17, OIM Archives
3058	Adult	2	Primary	Left lateral flexed Head to N	Loud 1948: 125, Fig. 318; Fig. 399 UoC locus register (1936), OIM Archives
3059	UID	UID	UID	UID	Loud 1948: Fig. 400 UoC locus register (1936), OIM Archives
3063	UID	UID	UID	UID	Loud 1948: Fig. 400 UoC locus register (1936), OIM Archives
3064	Subadult	UID	UID	UID	Loud 1948: Fig. 399 UoC locus register (1936), OIM Archives
3072	Subadult	UID	UID	UID	Loud 1948: Fig. 399 UoC locus register (1936), OIM Archives UoC field negative 3754, February 15, 1937, OIM Archives UoC field diary 1937: 20, OIM Archives
3075	UID	Multiple	UID	UID	Loud 1948: 92, 93: Fig. 214; 94: Fig. 216-217; Fig. 399

					UoC locus register (1936), OIM Archives UoC field negative 360, March 3, 1937. OIM Archives UoC field diary 1937: 19-21, OIM Archives.
3076	UID	UID	UID	UID	Loud 1948: 125, Fig. 323; Fig. 399 UoC locus register (1936), OIM Archives UoC field negative 3758, February 18, 1937, OIM Archives UoC field diary 1937: 20, OIM Archives
3080	UID	MULTP LE	Primary, secondary	UID	Loud 1948: 92, 94: Fig. 215; Fig. 399 UoC locus register (1936), OIM Archives UoC field negative 3761, March 3, 1937, OIM Archives UoC field diary 1937: 34, OIM Archives
3081	Subadult	UID	UID	UID	Loud 1948: Fig. 399 UoC locus register (1937), OIM Archives
3082	Subadult	2	UID	UID	Loud 1948: Fig. 399 UoC locus register (1937), OIM Archives
3082	Subadult	2	UID	UID	Loud 1948: Fig. 399 UoC locus register (1937), OIM Archives
3083	Subadult	UID	UID	UID	Loud 1948: Fig. 399; UoC locus register (1937), OIM Archives
3085	UID	Multiple	UID	UID	Loud 1948: 94: Fig. 215; Fig. 399 UoC locus register (1937), OIM Archives UoC field negatives 3764-3773, March 3 and March 7, 1937, OIM Archives UoC field diary, 1937: 24, OIM Archives
3085	UID	Multiple	UID	UID	Loud 1948: 92, 93: Fig. 214; 94: Fig. 215; 95: Fig. 218-223; Fig. 399
3107	Subadult	1	UID	UID	Loud 1948: Fig. 399 UoC locus register (1937), OIM Archives
3110	Subadult	Multiple ?	UID	Right lateral flexed	Loud 1948: 125, Fig. 320; Fig. 399 UoC locus register (1937), OIM Archives UoC field negative 3782, March 7, 1937, OIM Archives
3120	Subadult	2	UID	UID	Loud 1948: Fig. 399 UoC locus register (1937), OIM Archives
3120	Subadult	2	UID	UID	Loud 1948: Fig. 399 UoC locus register (1937), OIM Archives
5041	Child, likely 3-5 years	1	Primary	Supine flexed Legs fallen to the right	Loud 1948: 125, Fig. 322; Fig. 399; UoC locus register (1938), sheet 56, OIM Archives
5046	Subadult	1	UID	UID	Fig. 399 UoC locus register (1938), sheet 56, OIM Archives

5050	Child	1	Primary	Supine flexed Legs fallen to side	Loud 1948: 126, Fig. 326 UoC locus register (1938), sheet 56, OIM Archives
5053	Subadult	UID	UID	UID	Loud 1948: Fig. 399 UoC locus register (1938), sheet 56, OIM Archives
5086	Subadult	1	UID	UID	Loud 1948: Fig. 399; UoC locus register (1938), OIM Archives
5086	Subadult	1	UID	UID	Loud 1948: Fig. 399 UoC locus register (1938), OIM Archives
5133	Adult	2	UID	UID	Loud 1948: 125, Fig. 321; Fig. 399 UoC locus register (1938), sheet 59, OIM Archives
5133	Adult	2	UID	UID	Loud 1948: 125, Fig. 321; Fig. 399 UoC locus register (1938), sheet 59, OIM Archives
5230	Subadult	1	UID	UID	Loud 1948: Fig. 399 UoC locus register (1938), sheet 65, OIM Archives
5231	Subadult	1	UID	UID	Loud 1948: Fig. 399 UoC locus register (1938), sheet 65, OIM Archives
5234	Subadult	UID	UID	UID	Loud 1948: Fig. 399 UoC locus register (1938), sheet 65, OIM Archives
5248	Subadult	UID	UID	UID	Loud 1948: Fig. 399 UoC locus register (1938), sheet 65, OIM Archives
5249	Adult	1	Primary	Supine flexed Legs to right Head to NW	Loud 1948: Fig. 324, 399; UoC locus register (1938), sheet 65, OIM Archives
5250	Adult	1	Primary	Left lateral flexed Head to S	Loud 1948: 125, Fig. 319; Fig. 399 UoC locus register (1938), sheet 65, OIM Archives
5271	Subadult	UID	UID	UID	Loud 1948: Fig. 399 UoC locus register (1938), sheet 67, OIM Archives
2026	Child, likely 2-4 years	1	Primary	Right lateral flexed*	Loud 1948: 126, Fig. 325; Fig. 407
2140	Subadult	1?	UID	UID	Loud 1948: 165, 192 UoC locus register 1927-1935. OIM Archives
3139	UID	UID	UID	UID	Loud 1948: Fig. 380 UoC locus register (1937), OIM Archives
3170	Subadult	1?	UID	UID	Loud 1948: Fig. 380 UoC locus register (1937), OIM Archives UoC field negative 3791, April 18, 1937, OIM Archives UoC field diary 1937: 36. OIM Archives
4007	Subadult	1	Primary	Right lateral flexed	Loud 1948: Fig. 380

					UoC locus register (1937), sheet 45, OIM Archives UoC field negative 4078, December 28, 1937, OIM Archives
4018	Subadult	UID	UID	UID	Loud 1948: Fig. 380 UoC locus register (1937), sheet 45, OIM Archives
4043	Subadult	Multiple (3+)	Primary	UID	Loud 1948: Fig. 328; Fig. 380 UoC locus register (1937), sheet 45, OIM Archives UoC field negatives 4206-4210, February 1, 1938, OIM Archives
4043	Subadult	Multiple (3+)	Primary	UID	Loud 1948: Fig. 328; Fig. 380 UoC locus register (1937), sheet 45, OIM Archives
4043	Child, likely 3-5 years	Multiple (3+)	Primary	Supine flexed Legs fallen to side	Loud 1948: Fig. 329; Fig. 380 UoC locus register (1937), sheet 45, OIM Archives
4051	Subadult	3	Primary	Head to NW	Loud 1948: Fig. 337; Fig. 380 UoC locus register (1937), sheets 45-46, OIM Archives UoC field negative 4240, February 17, 1938, OIM Archives
4051	Adult	3	Primary	Head to N	Loud 1948: Fig. 337; Fig. 380
4051	Adult	3	Primary	Head to NW	Loud 1948: Fig. 337; Fig. 380
4073	Adult	1	Primary	Supine extended Legs not complete, right leg out to right of body, left leg extended?	UoC locus register (1938), sheet 47, OIM Archives UoC field negative 4454, March 30, 1938. OIM Archives UoC field diary (1938), page 38, OIM Archives.
4106	Infant	1	Primary	UID	Loud 1948: Fig. 336; Fig. 380 UoC locus register (1937), sheet 47, OIM Archives UoC field negative 4558, April 21, 1938, OIM Archives
4106	Child	2	UID	UID	Loud 1948: Fig. 336; Fig. 380
4106	Child	2	UID	UID	Loud 1948: Fig. 336; Fig. 380
2126	Adult	1	Primary	Right lateral flexed Head to S	Loud 1948: 334; Fig. 400 UoC field negative 2372, April 9, 1936, OIM Archives UoC field diary 1936: pages 59-64(?), OIM Archives
3026	Child	1	Primary	Supine	Loud 1948: Fig. 333; Fig. 400 UoC locus register 1927-1935, OIM Archives UoC field negative 3714, January 24, 1937, field negative 3715, January 24, 1937, OIM Archives UoC field diary1937: 12, OIM Archives
3026	Child	1	Primary	Supine flexed Legs fallen to side	Loud 1948: Fig. 333; Fig. 400 UoC locus register 1927-1935, OIM Archives UoC field negative 3714, January 24, 1937, field negative 3715, January 24, 1937, OIM Archives UoC field diary1937: 12, OIM Archives

3029	Child, likely 4-7	1	Primary	Right lateral flexed	Loud 1948: Fig. 331; Fig. 400 UoC field negative 3719, January 24, 1937, OIM Archives UoC field diary 1937: 12, OIM Archives
3029	Newborn - Infant, likely under 1 year	1	Primary	Right lateral flexed*	Loud 1948: Fig. 331; Fig. 400 UoC locus register (1926). OIM Archives
3030	Subadult	1	UID	UID	Loud 1948: Fig. 400 UoC locus register (1936), OIM Archives
3033	Subadult	1	Primary	Supine flexed Lgs to left	Loud 1948: Fig. 400 UoC field negatives 3727-3729, January 30, 1937, OIM Archives UoC field diary 1937: 13, OIM Archives
3034	Subadult	1	Primary	UID Head at opening of jar	Loud 1948: Fig. 400 UoC locus register (1936), OIM Archives UoC field negative 3721, January 30, 1937, OIM Archives UoC field diary 1937: 13. OIM Archives
3035	Subadult	1	UID	UID	Loud 1948: Fig. 400 UoC locus register (1936), OIM Archives
3040	Subadult	1	UID	UID	Loud 1948: Fig. 400 UoC locus register (1936), OIM Archives
3042	UID	UID	UID	UID	Loud 1948: Fig. 400 UoC locus register (1936), OIM Archives
3046	Subadult	1	UID	UID	Loud 1948: Fig. 400 UoC locus register (1936), OIM Archives
3047	Adult	1	Primary	Right lateral flexed	Loud 1948: Fig. 335; Fig. 400 UoC locus register (1936), OIM Archives UoC field negative 3723, February 4, 1937, OIM Archives
3047	UID	1	Primary?	UID	Loud 1948: Fig. 335; Fig. 400
3048	Multiple	Multiple	UID Disarticulated	UID	Loud 1948: Fig. 339; Fig. 400 UoC locus register (1936), OIM Archives; UoC field negatives 3724-3726, February 7, 1937, OIM Archives UoC field diary 1937: 15, OIM Archives
3050	Subadult	1	UID	UID	Loud 1948: Fig. 400 UoC locus register (1936), OIM Archives
3052	Subadult	UID	UID	UID	Loud 1948: Fig. 40 UoC locus register (1936), OIM Archives
3054	Infant, likely	1	Primary	Left lateral flexed	Loud 1948: Fig. 338; Fig. 400 UoC locus register (1936), OIM Archives UoC field negative 3730, February 10, 1937, OIM Archives

	under 1 year				UoC field diary 1937: 16, OIM Archives
3055	Subadult	1	Primary	Right lateral flexed	Loud 1948: Fig. 330, 400 UoC locus register (1936), OIM Archives UoC field negative 3732, February 10, 1937, OIM Archives
3056	Adult	1	Primary	Supine flexed Legs to right	Loud 1948: Fig. 400; UoC locus register (1936), OIM Archives UoC field negative 3732, February 11, 1937, OIM Archives UoC field diary 1937: 17, OIM Archives
3060	Subadult	UID	Primary	Supine flexed Legs to left	Loud 1948: Fig. 400 UoC locus register (1936), OIM Archives
3065	UID	UID	UID	UID	Loud 1948: Fig. 400 UoC locus register (1936), OIM Archives
3066	UID	2	UID	UID	Loud 1948: Fig. 400 UoC locus register (1936), OIM Archives
3070	UID	Multiple	Secondary	UID	Loud 1948: 87, 92, 93: Fig. 214; 97: Fig. 227; 98: Fig. 230-235; Fig. 399 UoC locus register (1936), OIM Archives UoC field negatives 3738-3753, February 13-15, 1937, OIM Archives UoC field diary 1937: 14-20, OIM Archives
3074	Adult	1	Primary	Supine flexed Legs to right	Loud 1948: Fig. 400 UoC locus register (1937), OIM Archives UoC field negative 3759, February 18, 1937, OIM Archives
5240	Adult	1	Primary	Supine hyperflexed Legs to left Head to S	Loud 1948: Fig. 332; Fig. 400 UoC locus register (1938), sheet 65, OIM Archives
5244	Subadult	UID	UID	UID	Loud 1948: Fig. 400 UoC locus register (1938), sheet 65, OIM Archives
2027	Subadult	1	UID	UID	Loud 1948: Fig. 407; UoC locus register 1927-1935, OIM Archives sheet 24
2028	Child	1?	Primary	Right lateral flexed*	Loud 1948: Fig. 340; Fig. 400 UoC locus register 1927-1935, OIM Archives sheet 24
2029	Subadult	1	UID	UID	Loud 1948: Fig. 407 UoC locus register 1927-1935, OIM Archives sheet 24
2034	Infant	UID	UID	UID	Loud 1948: Fig. 407 UoC locus register 1927-1935, sheet 24 UoC field negatives 2076, 2077, Nov. 28, 1935, OIM Archives
3169	Multiple	Multiple	Primary	UID	Loud 1948: Fig. 352; Fig. 381 UoC field negatives 3789-3790, April 18, 1937, OIM Archives

3169	Child, likely 3-6	Multiple	Primary	Left lateral flexed	Loud 1948: Fig. 352; Fig. 381 UoC locus register (1937), OIM Archives
Room 4004	Infant, likely under 1 year	2	Primary	UID	Loud 1948: Fig. 367; Fig. 381
Room 4004	Infant, likely under 1 year	2	Primary	UID	Loud 1948: Fig. 367; Fig. 381
2117	Adult	1	Primary	Right lateral flexed	Loud 1948: Figs. 341, 342; Fig. 401 UoC field diary, 1936: pages 62-63(?), OIM Archives UoC field negatives 2367a, 2368, March April 9, 1936, OIM Archives
2118	Infant	1	Primary	Right lateral flexed	Chicago field negative 2534, April 29, 1936. OI website: B-2534.1920x1200 UoC field diary (1936), p.75, OIM Archives
2127	Adult	1	Primary	Supine	Loud 1948: Fig. 401 UoC locus register 1927-1935, sheet 30 UoC field negative 2538, April 29, 1936, OIM Archives UoC field diary 1936: 75, OIM Archives
2097	Subadult	1	UID	UID	Loud 1948: Fig. 401 UoC locus register 1927-1935, sheet 30, OIM Archives
2107	Subadult	1	UID	UID	Loud 1948: Fig. 401 UoC locus register 1927-1935, sheet 30, OIM Archives
2108	Adult	1	Primary	Supine flexed Legs to right side Head to E	Loud 1948: Fig. 345; Fig. 401 UoC locus register 1927-1935, sheet 30 UoC field negatives A2274, March 19, 1936, 2291, March 23, 1936, OIM Archives
2109	Subadult	2	Primary	Supine flexed*	Loud 1948: Fig. 348; Fig. 401 UoC field negative 2293, March 23, 1936, OIM Archives
2109	Adult	2	Primary	Left lateral flexed Head to W	Loud 1948: Fig. 348; Fig. 401
2121	Subadult	1	UID	UID	Loud 1948: Fig. 359; Fig. 401 UoC field negative 2371, April 9, 1936, OIM Archives UoC field diary 1936: pages 62-63(?), OIM Archives
2123	Subadult	UID	UID	UID	Loud 1948: Fig. 401 UoC locus register 1927-1935, sheet 30, OIM Archives
2165	Infant, likely	1	Primary	Supine	Loud 1948: Fig. 358; Fig. 401 UoC field negative 2535, April 39, 1936, OIM Archives

	under 1 year				UoC field diary 1936: 75. OIM Archives
3013	Adult	4	Primary?	UID	Loud 1948: Fig. 347; Fig. 401 UoC field negative 3706, January 10, 1937, OIM Archives UoC field diary 1937: 7, OIM Archives
3013	Subadult	4	Primary?	UID	Loud 1948: Fig. 347; Fig. 401
3013	Subadult	4	Primary?	UID	Loud 1948: Fig. 347; Fig. 401
3013	Child	4	Primary?	Supine flexed*	Loud 1948: Fig. 347; Fig. 401
3017	Subadult	1	Primary	Right lateral hyperflexed	Loud 1948: Fig. 401 UoC locus register 1927-1935, OIM Archives UoC field negative 3709, January 11, 1937, OIM Archives UoC field diary 1937: 8, OIM Archives
3018 A	UID	Multiple	Primary	Right lateral flexed	Loud 1948: Fig. 353; Fig. 401 UoC field negative 3710, January 24, 1937, OIM Archives UoC field diary 1937: 12, OIM Archives
3018 B	UID	Multiple	Primary	Prone? Head to right	Loud 1948: Fig. 353; Fig. 401 UoC field negative 3710, January 24, 1937, OIM Archives UoC field diary 1937: 12, OIM Archives
3018 C	Adult	Multiple	Primary	Left lateral flexed	Loud 1948: Fig. 353; Fig. 401 UoC field negative 3710, January 24, 1937, OIM Archives UoC field diary1937: 12, OIM Archives
3018 D	Adult	Multiple	Primary	Right lateral flexed	Loud 1948: Fig. 354; Fig. 401 UoC field negative 3711, January 24, 193, OIM Archive UoC field diary 1937: 12. OIM Archives
3018 E	Adult	Multiple	Primary	Supine	Loud 1948: Fig. 355; Fig, 401 UoC field negative 3712-3713, January 24, 1937, OIM Archives UoC field diary 1937: 12, OIM Archives
3018 E	Adult	Multiple	Primary	UID	Loud 1948: Fig. 355; Fig. 401
3018 F	Adult	Multiple	Primary	Supine	Loud 1948: Fig. 356; Fig. 401
3024	Subadult	UID	UID	UID	Loud 1948: Fig. 401; UoC locus register, 1927-1935, OIM Archives
3025	UID	1	Primary	Supine flexed	Loud 1948: Fig. 401 UoC ocus register (1936), OIM Archive UoC field negative 3718, January 24, 1937, OIM Archives UoC field diary, 1937: 12, OIM Archives
3027	Adult	1	Primary	Supine	Loud 1948: Fig. 349; Fig. 401 UoC locus register 1927-1935, OIM Archives UoC field negative 3719, January 24, 1937, OIM Archives UoC field diary 1937: 12, OIM Archives

3028	Adult	1	Primary	Supine flexed Legs to left	Loud 1948: Fig. 351; Fig. 401; UoC field negative 3720, January 24, 1937, OIM Archives UoC field diary 1937: 12, OIM Archives
5013	Subadult	Multiple	Primary	Supine flexed Legs to right side	Loud 1948: Fig. 346; Fig. 401; UoC locus register (1938), sheet 55, OIM Archives UoC field negatives 320 1-16, 321 1-17, 322 1-17, 354 2-7, January 16, 17, and February 7, 1939, OIM Archives UoC field diary 1939: 6-7, 11-12, OIM Archives
5013	UID	Multiple	UID Disarticulated	UID	Loud 1948: Fig. 346; Fig. 401 UoC locus register (1938), sheet 55, OIM Archives
5040	Adult	2	Primary	Supine	Loud 1948: Fig. 361; Fig. 401 UoC locus register (1938), sheet 56, OIM Archives
5040 B	Adult	2	Primary	Supine	Loud 1948: Fig. 361; Fig. 401; UoC locus register (1938), sheet 56, OIM Archives
2004	Adult	1	Primary	Supine flexed Legs to right side	Loud 1948: 350; Fig. 408
2009	Adolescent, likely between 11-16	1	Primary	Supine hyperflexed	Loud 1948: 344; Fig. 408
2010	UID	1?	UID	UID	Loud 1948: 348; Fig. 408 UoC locus register 1927-1935, sheet 24, OIM Archives
2011	UID	UID	UID	UID	Loud 1948: Fig. 408 UoC ocus register 1927-1935, sheet 24, OIM Archives
2015	Adult	UID	UID	UID	Loud 1948: Fig. 408 UoC locus register 1927-1935, sheet 24, OIM Archives
2017	Infant	1?	Primary	Supine flexed*	Loud 1948: Fig. 360; Fig. 408
2033	Infant	1	Primary	UID	Chicago field negatives 2076, 2078, Nov. 28, 1935, OIM Archives
2099	Infant	UID	Primary	UID	Loud 1948: Fig. 367; Fig. 402 UoC locus register 1927-1935, sheet 30, OIM Archives
2104	Adult	4	Primary	Right lateral flexed	Loud 1948: Fig. 365; Fig. 402 UoC field negative A2272, March 19, 1936, OIM Archives
2104	Adult	4	Primary	Right lateral	Loud 1948: Fig. 365; Fig. 402 UoC field negative A2272, March 19, 1936, OIM Archives
2104	Child, likely 6-11	4	Primary	Supine flexed	Loud 1948: Fig. 365; Fig. 402 UoC field negative A2272, March 19, 1936, OIM Archives

2104	Child, likely 2-4 years	4	Primary	Supine extended	Loud 1948: Fig. 365; Fig. 402 UoC field negative A2272, March 19, 1936, OIM Archives
2106	Adult	5	Primary?	UID	Loud 1948: Fig. 368; Fig. 402 UoC locus register 1927-1935, sheet 30, OIM Archives UoC field negative 2291, 2294, March 23, 1936, OIM Archives
2106	Subadult	5	Primary?	UID	Loud 1948: Fig. 368; Fig. 402 UoC locus register 1927-1935, sheet 30, OIM Archives UoC field negative 2291, 2294, March 23, 1936, OIM Archives
2106	Subadult	5	Primary?	UID	Loud 1948: Fig. 368; Fig. 402 UoC locus register 1927-1935, sheet 30, OIM Archives UoC field negative 2291, 2294, March 23, 1936, OIM Archives
2106	Subadult	5	Primary?	UID	Loud 1948: Fig. 368; Fig. 402 UoC locus register 1927-1935, sheet 30, OIM Archives UoC field negative 2291, 2294, March 23, 1936, OIM Archives
2106	Subadult	5	Primary?	UID	Loud 1948: Fig. 368; Fig. 402 UoC locus register 1927-1935, sheet 30, OIM Archives UoC field negative 2291, 2294, March 23, 1936, OIM Archives
2110	Adult	2?	Primary	Supine? Head to S	Loud 1948: Fig. 369; Fig. 402 UoC locus register 1927-1935, sheet 30, OIM Archives UoC field negative 2295, March 23, 1936, OIM Archives
3004	Child	2	Primary	Prone extended	Loud 1948: Fig. 370; Fig. 402 UoC locus register, sheet 34 (1936), OIM Archives UoC field negatives 3701, January 3, 1937, OIM Archives UoC field diary 1936: 4, OIM Archives
3004	Child	2	Primary	Supine	Loud 1948: Fig. 370; Fig. 402 UoC locus register, sheet 34 (1936), OIM Archives
3005	Adult	3	Primary	Right lateral flexed*	Loud 1948: Fig. 371; Fig. 402 UoC locus register, sheet 34 (1936), OIM Archives UoC field negative 3702. January 3, 1937, OIM Archives UoC field diary 1936: 4.
3005	Subadult	3	UID	UID	Loud 1948: Fig. 371; Fig. 402
3005	Subadult	3	UID	UID	Loud 1948: Fig. 371; Fig. 402
3006	Adult	UID	Primary	Supine extended	Loud 1948: Fig. 366; Fig. 402 UoC locus register, sheet 34 (1936), OIM Archives UoC field negative 3703, January 3, 1937, OIM Archives UoC field diary 1936: 4 (?), OIM Archives
3014	Adult	1	Primary	UID	Loud 1948: Fig. 402 UoC field negative 3707, January 10, 1937, OIM Archives UoC field diary 1937: 7, OIM Archives

3015	Multiple	Multiple	Primary and secondary	UID	Loud 1948: Fig. 363; Fig. 402 UoC field negative 3708, January 11, 1937, OIM Archives UoC field diary 1937: 8, OIM Archives
3016	Adult	UID	UID	UID	Loud 1948: Fig. 402 UoC locus register 1927-1935, OIM Archives
3018 A	Adult	3	Primary	UID	Loud 1948: Fig. 364; Fig. 402
3018 B	Adult	3	Primary	Supine	Loud 1948: Fig. 364; Fig. 402
3018 B	Adult	3	Primary	UID	Loud 1948: Fig. 364; Fig. 402
2016	Adult	2	UID	UID	Loud 1948: Fig. 408 UoC locus register 1927-1935, sheet 24, OIM Archives
2016	Subadult	2	UID	UID	Loud 1948: Fig. 408 UoC llocus register 1927-1935, sheet 24, OIM Archives
3094	N/D	N/D	N/D	N/D	Loud 1948: 134, Fig. 372 UoC locus register (1937), OIM Archives UoC field negative 3776, March 3, 1937, OIM Archives UoC field diary 1937:24 (?), OIM Archives