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A Landscape of Death: A Comparison of Non-adult to Adult Burials at the Late Bronze Age Site of Tell el-Far'ah (South)

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A LANDSCAPE OF DEATH: A COMPARISON OF NON-ADULT TO ADULT BURIALS AT THE LATE BRONZE AGE SITE OF TELL EL-FAR’AH (SOUTH)

by

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M.A. University of Central Florida, 2018

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Arts in the Department of Anthropology in the College of Sciences at the University of Central Florida Orlando, Florida

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ABSTRACT

This study aims to determine whether there are any differences in the burial practices for non-adults and adults at the Late Bronze Age site of Tell el-Far’ah (South) in modern day Israel. The archaeology of childhood together with various methods of analyses, including geospatial and statistical techniques, were utilized to address the main research question focused on the spatial differences and relationships between non-adult and adult burials. There are missing children in the archaeological record. Tell el-Far’ah (South) is an example of this phenomenon. Reasons vary from taphonomy to potential infanticide. Based on the currently available data, it seems that the people of Tell el-Far’ah (South) understood non-adults as both similar to and dissimilar from adults. In sum, this is not a comprehensive or conclusive study, but rather serves to shed light on the lack of attention in the archaeology of childhood and more generally on the need for greater integration of the anthropological subfields.
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CHAPTER 1: INTRODUCTION

In this thesis, I consider the spatial and statistical analyses of select non-adult and adult burials from the Late Bronze Age site of Tell el-Far’ah (South) in the Negev of modern day Israel. The Late Bronze Age in Canaan roughly dates to ~1500 to 1200 BC. This study aims to shed light on how non-adults were buried and thus viewed in this time and place, how these perceptions differ from Western understandings of non-adults, and more importantly give attention to the scarcely discussed topic of non-adult burials in the Near East. Although the burials analyzed were ground burials, my use of the term “bury” is not limited to ground burials. I use the term “bury” and its related forms in the general sense of all types of body disposal methods. Considering that non-adults are sometimes described as missing, for lack of a better term, from the archaeological record, this study is an attempt to shed light on burial practices associated with non-adults versus adults and show how, spatially, patterns (or not) are present in terms of variables such as grave goods, grave orientations, and age-at-death. This comparative analysis provides an understanding of the perceptions of mortuary landscapes/space and burial practices as they relate to non-adults (or similar) of the ancient inhabitants of the area of the modern nation of Israel.

Objectives of Study

The main issue I will investigate is how the ancient inhabitants of Tell el-Far’ah (South) understood non-adults as similar to or different from adults, in light of their spatial choices for burial within the context of the landscape. The following research questions serve as a guiding
point that show how their understandings of mortuary space are related to their views of non-adults and adults.

Research Question 1: What are the spatial differences and relationships between non-adult and adult burials in Late Bronze Age Tell el-Far’ah (South)? How did the landscape affect the people’s decision to bury non-adults and adults? Are there differences in location, distance between cemeteries and the main site, orientation, and size? What about grave goods? If differences or relationships exist between these variables, what might this suggest about their perceptions of relationships between space, age, death, and the construct of childhood?

Research Question 2: Why did the people of Tell el-Far’ah (South) choose to bury the non-adults and adults that are found at the site in place of other methods of body dispersal like cremation? Was it because of convenience or socio-cultural factors?

Research Question 3: Why has the archaeological record, which is heavily influenced by sampling and research design, thus far yielded a greater number of adult burials than non-adult burials in the Late Bronze Age at Tell el-Far’ah (South)?
Site Background

The site of Tell el-Far‘ah (South) is located in the northern portion of the Negev. It is on the southeastern side of the Philistine Plain. Under the British School of Archaeology, Sir William Matthew Flinders Petrie led the original excavations at Tell el-Far‘ah (South) in 1928 and 1929 (MacDonald, Starkey, and Harding 1932; Petrie 1930). The site was further excavated and surveyed in 1976, 1979, and 2000 (Cohen 1977; Lehman and Schneider 2000). The total area of Tell el-Far‘ah (South) is close to 18,000 m². Its earlier habitation lies in question, but in the 13th and 12th centuries BC there were monumental construction projects like the “Governor’s Residency” (Petrie 1930, 17). There is also evidence of Egyptian influence at the site. Braunstein (2011, 4) notes the Egyptian evidence includes “pottery, scarabs and amulets, and two bowls with Egyptian hieratic inscriptions related to the collection of taxes for Egypt.” Some scholars speculate that Tell el-Far‘ah (South) may have been an Egyptian garrison and tax collection center (Braunstein 2011). Others like Higginbotham (2000) argue that it was an elite Canaanite site, wherein the elites emulated Egyptian culture. Regardless, archaeological evidence suggests Tell el-Far‘ah (South) was a flourishing locale in the Late Bronze Age (Petrie 1930).

Eight cemeteries were recorded by the original excavators (MacDonald, Starkey, and Harding 1932, LX; Petrie 1930, LI) and are located in the north, west, and south of the site. Although there is no indication of how the cemeteries were numbered, they are numbered in the site reports from 100 to 1000. A total of 379 graves were excavated, ranging in date from the Middle Bronze through Roman times. The sample to be analyzed in this thesis includes 212 Late Bronze Age graves that range in date from the 14th to 12th centuries BC. These graves sometimes contain multiple internments. The cemeteries analyzed were: 500, 700, 800, 900, and 1000. The
respective number of graves recorded at each cemetery is: 49, 23, 35, 78, 27. Cemetery 800 is located to the north of the tell, while cemeteries 500 and 700 are located more towards the west of the site. Cemetery 900 is dug right into the western slope of the mound and cemetery 100 is to the north of the tell, between cemeteries 800 and 200.

Petrie (1930, 1) documents that the soil of cemeteries 500, 700, and 800 consists of marl. Cemetery 800 was excavated into the marl slopes to protect the tell, whereas most of the others were dug into the nearby plain. The report notes that the tell shows evidence of construction during two periods, and the second construction had to be reinforced by the excavators with “rammed earth, on the old, deep foundations and broken walls,” since it was destroyed beyond the normal destruction of a tell (MacDonald, Starkey, and Harding 1932, 32). Some secondary sources note that there is a preponderance of non-adult burials in cemetery 900, when there are less than 20 non-adults and over 40 adults recorded in the primary sources. Secondary sources on the site of Tell el-Far‘ah (South) are thus used with caution.

Some of the mortuary variables analyzed from the cemeteries mentioned above include the following: age-at-death, presence/absence of grave goods, grave depth, and orientation of head and face. There was no consideration of specific age and sex information, owing to the fact that it was not reported. Because the sources report skeletal data as “adult,” or “child,” not in biological age categories, this is with what this study will work with.

Late Bronze Age Burials in the Levant

Among the thousands of excavations in the Southern Levant, there have been few Late Bronze Age burials, especially of non-adults (Nagar 2011, 7). The Israeli Antiquities Authority (IAA) has an osteology department that considers the human remains uncovered during IAA
excavations (Nagar 2011, 1). The IAA’s study has specifically shown that of the Bronze Age period excavations there are fragmentary skeletal remains, and no mention is made of Late Bronze Age skeletal remains (Nagar 2011, 7). Although there is a disproportionate number of non-adult to adult burials at Tell el-Far’ah (South), this site has yielded a notable amount of non-adult burials for the chosen time period. The problem of missing non-adults in the mortuary record is not unique to the Levant, it is common in many archaeological contexts throughout the world (Ardren and Hutson 2002; Baxter 2005; Coskunsu 2015; Scott 1999). Because of issues of data acquisition, time, budget, and the publication of sources in languages other than English, this is not a comprehensive study of every non-adult and adult Late Bronze Age burial in Tell el-Far’ah (South). The excavators of Tell el-Far’ah (South) provide little data on how much of the site was sampled. A comprehensive study would require further excavation of the site and reexamination of earlier finds. For the sample with which I am working, there is no specified age-at-death data for 16.5% of the individuals. The age-at-death, among other variables like sex, is not reported in published and accessible data (MacDonald, Starkey, and Harding 1932; Petrie 1930).

Tell el-Far’ah (South) is a valuable site, even with the currently incomplete data, for shedding light on the topic of Late Bronze Age burials in the Levant. This is especially true for non-adult burials. The fact that there is some data on non-adult to adult burials for a Late Bronze Age site in the Southern Levant helps to show how the ancient peoples viewed the mortuary landscape with respect to age-at-death. Missing non-adults in the archaeological record is a common phenomenon, and it is the topic to which I now turn.
CHAPTER 2:
APPROACHES TO CHILDHOOD, ADULTHOOD, AND DEATH IN THE ARCHAEOLOGICAL PAST

The archaeology of childhood is a fairly recent discipline, beginning only in the last 30 years. Before the 1980s there was scarce mention of children in archaeological literature (Baxter 2005). Researchers were interested in other topics, seeing children as belonging to the lesser realm of women (Ardren and Hutson 2002). Philip Aries (1962) was the pioneer in studies of the history of childhood, publishing *Centuries of Childhood: A Social History of Family Life*. He argued that those living in the 20th century West would not have recognized childhood in the past, when parents were detached and indifferent towards their children. This was a necessity because of the high rates of infant mortality (Aries 1962). In the 1970s scholars like deMause (1974), Shorter (1975), and Stone (1977) further espoused Aries’ view, until the 1980s and 1990s when others like Attreed (1983) and Swanson (1990) started to challenge it. We now know, thanks to social archaeologists and historians, that life stages that pertain to childhood were recognized in the past and that many parents loved their children (Lewis 2007). This does not shed light on the children themselves however, but on how adults viewed children.

Although Aries initiated studies on the history of childhood in the 1960s, a concern for children and childhood was not found in archaeology for decades after. The origins of the archaeology of children and childhood also lie in 1990s gender theory. Baxter (2005, 9) discusses how early critiques of gender highlighted the importance of considering women’s roles and all “members of past social groups, including children.” There used to be a heavy male bias in archaeology; gender critiques aimed to counter this imbalance. Lillehammer was one of the
first to consider children in archaeology in this vein. By integrating burial and artefactual analysis with ethnography and osteology Lillehammer (1989) proposed it would be possible to learn about children’s relationship with the world and larger society. Other studies (Crawford 1991; Coulon 1994) slowly advanced the field of childhood archaeology. These studies still viewed children as passive participants in the past and were linked to women’s passive activities (Wilkie 2000). Categorically, children were also a means to consider how the adult category was viewed in the past, not the child category (Derevenski 2000). Children were passive agents within these paradigms, and this remained the case until Wilkie’s (2000) study. Wilkie tried to address this imbalance by analyzing the 18th and 19th century toy industry as a means of demonstrating how children portray themselves and interact with others. There have since been various approaches to the archaeology of childhood, ranging from the theoretical to demographical to technological competence (Baxter 2005).

Although the realm of children in archaeology and bioarchaeology has more recently been explored further, it has been a somewhat arduous process. Early on, descriptive osteological data was included in the addenda of site reports, under the guise of bioarchaeological research (Blakely 1977, 1-2). Another issue with early bioarchaeology was the lack of cooperation and communication between archaeologists and biological anthropologists (Blakely 1977; Buikstra 1991). This is still true for some excavations that cannot or do not invite osteological specialists. In the global archaeological record there is also the previously mentioned issue of “missing children.” Many times, the children are simply not there – not in the archaeological record. We know they were present in the past, the issue is finding them. There needs to be a greater focus and demand for higher quality and higher number of skeletal examples accompanied with
relevant data, especially among and within archaeology (Buikstra 1991, 174). Bioarchaeology needs to continue developing and integrating additional problem-oriented research designs, giving priority to the identification and sampling of mortuary remains (Buikstra 1991). Although this study is not focused on the direct identification and analyzation of skeletal remains, it is my hope that it adds to the corpus of childhood archaeology, especially in a region and time period where such burials in general are rarely analyzed.

**Conceptual Background**

In this section, special attention is given to some of the issues and concepts associated with the archaeology of childhood. They begin with a brief discussion of the concept or issue in question and discuss the terminology in detail. Such an approach helps to set the stage for the study of non-adults.

**Burials**

Most often, the word “burial” (and its other forms) is taken to mean bodily internment in the ground, but this is not always the case. Before discussing the theoretical components associated with burials, I will explain in detail what is meant by the use of the term “burial” in this study. The term “burial” is used in a general and broad sense to refer to various bodily disposal methods that fulfill the need to dispose of a corpse and meet relevant communal and personal needs (Gonen 1992, 9). Some such examples of bodily disposal methods include inhumation burials, cave burials, pit burials, jar burials, foundation burials, shrines, and cremation (Gonen 1992; Lewis 2007; Scott 1999). Infanticide (discussed next) is not included in this definition. Burials may be in a communal cemetery or outside the boundaries of communal burial grounds (Lewis 2007; Scott 1999). This is sometimes the case with child burials. Although
the exact methods and practices associated with each burial type differ, they do involve the removal of a corpse and serve to meet communal and personal needs.

The study of burials not only provides a wealth of information on anthropological information for a given culture(s), but child burials specifically also allow us to uncover the children that are sometimes not easily seen in other archaeological contexts. Child burials provide data on a culture’s social organization and religious beliefs (Wileman 2005). By analyzing the bones of children it is possible to learn about their disease and nutritional status. Children and the elderly are usually the first to show symptoms/indicators of stress in their bones, allowing archaeologists and bioarchaeologists to see subsistence patterns (Wileman 2005). Children may also have been victims of war, and evidence of violent child deaths could suggest a hostile invasion (Wileman 2005). This is not to say however, that burials only tell us of the negative social aspects. Child burials can tell us their level of communal acceptance, parental attachment, religious beliefs, and social status. Children may have been buried with the adult population but they may have been buried with different rituals and/or grave goods (Wileman 2005). They may also have been buried near to dwellings, not communal cemeteries, for example (Scott 1999).

Children found through archaeological practice should not be overlooked in present studies of the past. Children were “social actors, makers and reproducers of cultural life in their own right” (Garwood 2007, 63). Their bodies are not only cultural constructs but symbolic resources that embody culture, nature, identity, and society. Burials help in the interpretation of and study of social transformations (Gilmour 2002). Child burials, even if in the same period and region, do not necessarily have the same functions or equivalent meanings (Garwood 2007, 77).
It should be said, though, that in looking at child burials we are not looking at childhood itself but the burial rites accorded to children. Child burials tell us a great deal about the survivors and mourners as well as about the deceased themselves (Gilmour 2002). This point is especially true when the deceased are different from the rest of the group. Children are akin to artifacts, in that they are “made” by parents/adults and so belong to their makers (Crawford 2007, 90).

Child burial practices have been practiced since early times. In Sunghir, Russia Formicola and Buzhilova (2004) found an Upper Paleolithic (ca. 24,000 BC) burial of two children. The double burial featured one male aged 12 to 13 and one female aged 9 to 10 (Formicola and Buzhilova 2004). Another ancient child (more specifically infant) burial comes from Neanderthal society, dating to the Middle Paleolithic, ca. 50,000 to 60,000 years ago (Hovers, Rak, and Kimbel 1996). This was found in 1992 in the Amud cave in Israel. The 10-month-old infant died and was laid to rest in the cave’s northern wall. Those who buried the infant placed on the hip of the infant a red deer’s jaw. The skeletal remains are incomplete, but it is clear to the researchers that the remains are of a Neanderthal infant. Hovers, Rak, and Kimbel (1996) also mention another Neanderthal infant burial at the Dederiyeh cave in Syria. This infant was buried with a piece of flint, showing that Neanderthal’s purposefully buried their children/offspring and did so on occasions with offerings (Hovers, Rak, and Kimbel 1996). There is a clear practice for burying children, going back to prehistoric times in the Levant.

Infanticide

Although infanticide may not be the focus of this study it is worth discussing briefly, as it is directly related to and part of the mortuary landscape. Infanticide falls within the purview of burials but specifically involves the purposeful killing of infants (Larson 2014; Wileman 2005).
Medically, infanticide is the “deliberate killing of a newborn infant by its mother” (Lewis 2007, 90). The origins of the term are in English and Welsh law but it is not limited to criminal cases; infanticide can also refer to extralegal cases of infanticide (Scott 1999). I use it in the general sense of the intentional killing of infants.

Infanticide may seem like a gruesome practice to some but it is common to all animals. Humans throughout the world have practiced it from the dawn of time (Larson 2014; Lewis 2007; Wileman 2005). Their reasons vary, for example, the infants may have been ill, were suffering, or were born with some unacceptable feature. Infanticide could also have a ritualistic purpose like sacrifice (Scott 1999). However, in terms of infanticide, there might be a more common connection between victims, being female (Larson 2014; Wicker 1998; Wileman 2005). Although some see a sex preference for infanticide, sexing infant remains is fraught with difficulties. Infants have not developed the typical sexual dimorphism present in adult remains. Still, some like Wicker (1998) argue that the lack of women in burials stems from the practice of female infanticide. More relevant to the Southern Levant, Larson (2014) discusses how the ancient Israelites were familiar with infanticide. The Israelites’ neighbors included infanticide as part of their religious rituals (Larson 2014). The story of the sacrifice of Isaac by Abraham is meant to highlight the Israelites’ preference for animals in sacrifice and religious rituals. In more recent times like the 20th and 21st centuries, the victims of infanticide are more often female and some of the most infamous cases come from Nazi Germany (Larson 2014).

Infanticide in the past was commonly practiced. It is, however, difficult to identify in the past (Larson 2014; Lewis 2007; Scott 1999; Wicker 1998; Wileman 2005). If an infant was smothered, for example, it is difficult to find forensic evidence of smothering (Scott 1999). Most
often, we are able to archaeologically identify infanticide from their contexts. For example, infant bones from the same age-at-death may be grouped together in dwelling places (or in sewers as at Ashkelon) and not present in communal cemeteries (Faerman et. al. 1998; Smith and Kahila 1992). Infant bones found in dwelling places is not, though, wholly indicative of infanticide. Infant bones recovered in dwelling places may be the result of infant mortality. Regardless, it is unlikely, as Wileman (2005) reminds, that choosing to commit infanticide was an easy decision. There may have been practical reasons and/or societal pressures that essentially barred parents from keeping an infant.

_Are they “children,” “subadults,” or “non-adults?”_

Up until this point, the term “child” (and its other forms) has been used in this thesis for the sake of mutual understanding. This word, though, is inherently problematic, given that perceptions of what a child is varies not just when talking about archaeological time, but even when talking about current cultures. Throughout the remainder of this thesis, an effort is made to use the term “non-adult” in place of murkier more culturally loaded terms like “child.” The term “non-adult” refers to individuals aged up to 17 years (Lewis 2007). “Non-adult” can be too general of a term, however. When relevant I will use more specific age-based terms such as “infant,” but when referring to the more general category of those less than 17 years of age I will use the term “non-adult.” I should note that this is not how the site reports of Tell el-Far’ah (South) report age categories. Given that the reports date to the 1930s, the focus is on the pottery and dating of the site and burials. The cemetery register and reports list “child” or “children” so as to mark out which burials are not of adults, but fail to say how these age identifications were reached. Based on a brief description of incinerated bones from Cemetery 200 though
cemetery that dates to the Solomonic period), they seem to base age on the size of the femoral head and teeth (Petrie 1930, 13). The only age groups given in the reports are either “child/children” or “adult/adults.” Biological sex is reported for some burials, but again they give no indication, detailed or otherwise, of how that identification was obtained. From reading the reports, it seems that they base the sex of the interred on their culturally biased associations of certain grave goods with a certain sex. For instance, arrowheads in a burial are equated with a male burial. On charred bones, the reports say it is difficult to age and sex but they give no indication how they would normally do this. Because the Tell el-Far’ah (South) site reports do not define/describe what the terms “child” or “adult” mean, I utilize a more biological approach to age. There are three types of age discussed by Halcrow and Tayles (2008), physical/biological age (based on skeletal and dental age), chronological age (time since birth), and social age (based on a cultural category with appropriate norms). There are links between the social and biological, but this is not always the case. I thus utilize Lewis’ (2007) age categories, as her book, *The Bioarchaeology of Children: Perspectives from Biological and Forensic Anthropology*, is the main textbook for this field (Halcrow and Ward 2017). Physiological age, which is with what I am concerned here, is a biological reality that demands the usage of biologically based terms, not cultural ones that are inherently biased and likely to change.

There are, however, some dangers associated with a strict biological focus. Besides non-adult there are other, more specific terms that refer to individuals that are less than 17 years of age. The terms predominantly used in studies pertaining to children, non-adults, infants, adolescents, and cultural practices relating to infanticide include embryo, fetus, perinatal, post-neonatal, and child, among others (Lewis 2007). Given that these categories have a biological
basis, it is easy to succumb to biological determinism (Ardren and Hutson 2006; Halcrow and Tayles 2008). When other categorical terms like “childhood” are considered, though, these are intrinsically linked to culture. Each extreme thus has its benefits and disadvantages.

“Non-adult” then is the term I will use to refer to “children” or “subadults” in the general sense. Lewis (2007, 5-8) uses 17 years of age as a cutoff for non-adults because of biological and physical developments. The benefit of such an approach is that it is based on osteological and physiological age assessments, but it is not without its disadvantages. Some argue that when the term “non-adult” is used, children are subjected to “Otherisation; when children are called “non-adults,” they are considered as different or other when compared to the “standard,” adults (Halcrow and Tayles 2008, 193). This is not how I use this term. Another issue is that biological age does not always correspond with social age and what is associated with adulthood in Western society. For example, modern Western adulthood may not be the same as what is associated with adulthood in Late Bronze Age Canaan. When an individual becomes a fully-fledged adult member of society is determined by each particular culture (Halcrow and Tayles 2008; Harris 2011). Their biological age may be 12 but their social age is that of an independent “adult.” Lewis (2007) also notes this in her example of ancient Roman girls who at the age of 14 went from being a “child” to “wife” and “mother.” In 21st century England it is a different situation. Adulthood is reached in degrees. People undertake milestones like learning to drive at 17 and being of legal age to drink, marry, and vote at 18, each of which reflect their status as fully-fledged members of their society (Lewis 2007, 7). Biological age is thus not synonymous with social age. Still, given that there is no definite data indicating what the social reality was
like in the Late Bronze Age levels of Tell el-Far’ah (South), it is best to work with a biologically-based aging method.

Another term, though not necessarily a cultural construct that is often seen in the literature of archaeology and bioarchaeology is “subadult.” Ortner, Kimmerle, and Diez (1999), Ribot and Roberts (1996) and Saunders, Hoppa, and Southern (1993) are a few who publish archeological and bioarchaeological studies on non-adults using the term “subadult.” This term can also be problematic as it relies on the word “sub,” as in “below”, implying that a hierarchical relationship exists between adults and “subadults” (Halcrow and Tayles 2008; Lewis 2007). “Subadults” suggests that “the study of these remains is somehow less important than that of the adults” (Lewis 2007, 2). Thus, for the reasons outlined in the preceding paragraphs, the term “non-adult” will be used, as it is a broad and less-controversial term.

In contrast to the term “non-adult,” the term “child” is more appropriately understood in light of cultural constructions of life stages. “Child,” “children,” and “childhood” all have strong cultural connotations, much like gender identity (Baxter 2005, 2-3). Gender identity “ascribes culturally specific roles, activities, and behaviors to individuals based on their biological sex.” In a similar manner, childhood is a cultural construct with ascribed roles, behaviors, and activities, based on the individual’s location in the life cycle. What classifies as “childhood” or who is classified as “children” in one culture may not necessarily be considered the same in another culture. Socialization is also intrinsically linked to the cultural constructs of gender and childhood (Baxter 2005). Socialization is the means by which culture is conveyed from generation to generation; it is how people become members of their society and/or culture.
Terms like child and childhood have a biological component, but their cultural aspects cannot be denied.

The term “infant” or “infancy,” in a similar manner, is a cultural construct. In most cultures, individuals in these life stages are often not considered to be full-fledged members of society (Scott 1999). Infants also tend to be “treated differently from adults in both life and death” because of their liminal status (Scott 1999, 1). For example, in ancient Rome, non-adults less than 40 days old were not considered entirely human, and thus could not be buried in a town or settlement (Scott 1999, 1). For those in the Western world, using terms like “infant” is similar to saying “babyhood” (Scott 1999, 2). They are, biologically speaking, under 1 year old.

**Adult**

Although the term “adult” is culturally based like the term “child,” it is a useful term that often refers to individuals that are wholly grown and fully developed. Here it refers to individuals over 17 years of age. The adult age category is not so simply understood, however. Consider, for instance, that the “elderly” are another category and an elderly person is over 17 years of age. “Adult” may then refer to persons over 17 years of age that are independent of their parents and others like children and relatives (Harlow and Laurence 2002).

As was seen with the non-adults, biological determinism seems to be at play. Biological reproductive capabilities (which by and large are in full effect) by the age of 17 seem to dictate who is an adult and who is not. It is interesting to note, however, that the elderly who are beyond their reproductive years and abilities are still considered to be “adults.” There is more to being an adult, then, than pure biology.
Most every human phenomenon may be attributed in one way or another to culture; determining when someone is an adult is no different. Biologically we may say that someone is an adult, given the fact that they are able to successfully procreate at the age of 13. When culture is brought into the milieu this changes. In the United States, for instance, someone who is 13 is considered a “teenager” or maybe even a “young adult” but they are by no means considered to be adults, though they are capable of reproduction. When a person is deemed to be responsible, able to contribute to society, and capable of independence is when they begin to be viewed as “adults.” The cultural and the biological are needed to fully understand what an adult is.

**Missing Non-adults**

Non-adults are everywhere. Without them, humanity would cease to exist. Just as today but more so in the past, before the advent of modern medicine, non-adults were highly susceptible to various illnesses and diseases and their mortality high. This means that they should be found everywhere in the archaeological record. As mentioned earlier however, there is the problem of “missing” non-adults in the global archaeological record. Different scholars have discussed various reasons why this phenomenon is observed such as taphonomy or preservation (e.g., Ardren and Hutson 2006; Lally and Moore 2011; Lewis 2007; Lillie 2008; Scott 1999; Wileman 2005), differential burial practices (e.g., Lally and Moore 2011; Lewis 2007; Lillie 2008; Scott 1999; Wileman 2005), or differing research design (e.g., Ardren and Hutson 2006; Baxter 2005; Kamp 2002; Lewis 2007; Lillie 2008). There should be a greater number of non-adults given how many people in this category died in the past. The reasons for why they did not survive to adulthood vary, but many times illness and/or disease is the cause. Non-adults, especially while infants, are easily susceptible to illness and more likely to succumb, biasing the
archaeological record in favor of non-adults (Lally and Moore 2011). Regardless, some scholars (e.g., Gordon and Buikstra 1981) opine that the small number of recovered non-adult remains is related to taphonomic factors because non-adult skeletal material may have not been well preserved (Scott 1999). A study done by Herring, Saunders, and Boyce (1991) in Ontario, Canada found that the remains of non-adults, including that of infants, were as well preserved as the adult remains. This study shows that at least in some cases the preservation might be the same, and so there would be no need to look for another burial area. The reality, though, is that this may not always be the case. Their findings reaffirm that the missing non-adults may be understood as indirect proof of a separate burial area and/or ritual for non-adult deaths (Becker 1995, 25).

However, the prevailing opinion that children’s skeletal remains do not survive burial conditions has led to the neglect of research and studies focused on the skeletal remains of non-adults (Lewis 2007, 20). Scholars like Brothwell (1986) and Panhuysen (1999) argue that the scarce remains are indicative of the real mortality rates for ancient populations. Cemetery samples show, though, that notable under-representation exists. Lewis (2002) highlights that cemetery samples from Medieval and Post-Medieval England demonstrate that just 12 individuals less than 1 year of age died in a 500-year period.

There are other factors related to taphonomy/skeletal decomposition/deterioration, which might explain why there is a lack of non-adult remains in the archeological record. Other taphonomic, methodological, and cultural factors contribute to this phenomenon of missing non-adults (Lewis 2007, 23). Various studies indicate that there is a correlation between external and internal factors as it pertains to the burial context and body and how the tissue decays (Lewis...
2007, 23). For instance, non-adult remains are easier dispersed than adult remains (Manifold 2012, 53). The crania of non-adults are more fragile and susceptible to damage post-death (Haglund 1997). Holck (2001) has studied how fetal remains burn completely in 20 minutes. The fat composition of infants also affects their mortuary preservation. Infants have white and brown adipose, and this mixture makes them more likely to mummify instead of the usual adipocere formation (Kuzawa 1998). All these reasons point to suggestions as to why the non-adults should not be presumed to have never been there. Factors intrinsic and extrinsic to the body, burial environment and mortuary practices, and research questions, all relate to, influence, and impact the visibility of non-adults in the mortuary record.

In addition, the skeletal morphology of non-adults contributes to their sparseness in the archaeological record. The adult skeleton has a consistent number of 206 bones, but the non-adult skeleton varies from 156 to 332 total bones depending on their developmental age (Lewis 2007, 26). This may make the identification of non-adult remains difficult for researchers not trained in identifying non-adult skeletal remains. At Tell el-Far’ah (South), the excavators did their own identifications. Specialists were not involved in the original excavations for which we have skeletal data. There are now various texts pertaining to the identification of non-adults (e.g., Fazekas and Kosa 1978; Scheuer and Black 2000). There were not available to the excavators in the late 1920s to early 1930s, who also likely did not possess the expertise necessary to identify skeletal remains as non-adult. As an example, consider the following: non-adult bones have greater porosity making the surrounding soil more likely to change color, which in turn makes the bones more difficult to recognize, particularly those of very young individuals (Lewis 2007, 26). Non-adult remains are more fragile and at a higher risk for decay than adult remains. This
not only makes them more difficult to recognize in an archaeological context, but also makes them scatter easier. A further problem exists that non-adult skeletal remains may not be recognized as belonging to a child, particularly a young infant/child, and so may be misidentified as faunal remains (Ingvarsson-Sundstrom 2003; Lewis 2007; Robbins 1977; Wicker 1998). The numbers of non-adult skeletons in the archaeological record in many cases might be hidden in plain in sight, buried elsewhere, or have not been accurately identified.

In addition to taphonomic factors, there are cultural reasons for missing non-adults in the archaeological record. Lewis (2011) further debunks the myth that non-adult remains have not survived. She highlights how many times non-adults are buried in cemeteries apart from where the adults are buried, indicating the status of each in their society. Anglo-Saxon cemeteries, for instance, tend have a random cluster of non-adult burials separate from adult burials (Lewis 2011). Becker (2011) sheds further light on this in his discussion of non-adult cemeteries in Etruscan Italy. He mentions that although he used to think that non-adult remains were not as well preserved as adult remains, the evidence now largely points to a cultural reason – separate burials. Non-adults up the age of 5 in Etruria were buried in cemeteries (or other locales) separate from the adults (Becker 2011). Child mortality was exceedingly high, demanding a separate or non-traditional burial place. This may have been especially for the poor who, in one instance, disposed of an infant corpse in a well (Becker 2011; Wileman 2005). The issue then is not that the non-adults are “gone” from the archaeological record but rather that they have yet to be found.

Differential burial treatment for non-adults is not uncommon. Although not a universal practice, it has been commonly practiced throughout the world in various time periods (Lewis
Children were not always given “adult” burials and may have been disposed of without any mortuary ritual (Robbins 1977; Wicker 1998). Lillie (2008) discusses this point further in his study of visualizing non-adults in the archaeological record. It is interesting to note that in some cases, like in Mesolithic and Neolithic Ukraine, non-adults are given burial rituals identical to that of adults. They are buried with grave goods and ochre is used in rituals, for example (Lillie 2008). Thus depending on the cultural context and specific situations, non-adults may have been buried with and like adults or they may have been buried differently. Taphonomic and cultural reasons, therefore, both contribute to the problem of missing non-adults.

**Mortuary Landscapes During the Late Bronze Age in Canaan**

I now turn to the mortuary landscapes in Late Bronze Age Canaan. The Late Bronze Age in Canaan was a cosmopolitan era. There was much activity from Egypt and other places in Canaan and this is reflected in some of the burial patterns of the time. Indigenous burial types tend to follow three types – pit burials, cave burials, and intramural burials (Ben-Tor 1992; Gilmour 2002; Gonen 1992). Pit burials consisted of pits dug into the earth, sand or rock. Cave burials were burials in well-cut caves or cisterns. Intramural burials consisted of interment below the floor of a house (Ben-Tor 1992; Brody 2008; Gilmour 2002; Gonen 1992; Nataf 2011). Cave and pit burials are found in Canaan well before the Late (and Middle) Bronze Age. There were some common foreign burial types also present in the Late Bronze Age like caves with bench burials. Bench burial caves consisted of bench-style beds that were prepared and fashioned for the dead that were buried in a cave (Gonen 1992, 21; Osborne 2011). Both extramural (like pit burials and bench burial caves) and intramural (like burial below a house floor) were used in the Late Bronze Age, but there were differences in whether individuals or groups were being
interred. Gonen (1992) describes that individuals were typically interred in pits and intramural burials, whereas groups of individuals were typically interred in caves and bench burial caves.

There are not only physical differences between these types of internments but also in burial approaches. Geology and functionality may have played a part in the choice of type of burial, but Cradic (2017) and Gonen (1992) suggest this may be a simplistic a view that downplays cultural preferences for burial type. Pit burials for the most part are distinct in their burial approach from cave burials. Those buried in pits are typically placed in a cist that is put in the earth, rock, or sand. There is some cemetery organization in that the burials are somewhat grouped or clustered. Pit burials are usually at a distance from the main settlement. Only one individual is buried in each pit and there is no reopening or re-use of the pit post-burial. The funerary objects present in pit burials often include a specific type of pottery, featuring local and non-local items and non-ceramics. Some of the funerary objects include large storage jars, Cypriot Monochrome cover bowls, and Cypriot juglets (Gonen 1992). Except for the site of Deir el-Balah, there is no specific vessel type for the actual burial. The funerary objects in pit burials are often a replication of the vessels used by the living (Gilmour 2002; Gonen 1992; Hallote 1994).

Cave burials across Late Bronze Age Canaan share similar characteristics. Among these similarities are the location of the caves in relation to the community settlement, the presence of numerous internments within one cave, mortuary treatment of the dead, and funerary motifs and objects. The caves are typically formless, having no shape and no cemetery organization. Like pit burials, cave internments are often outside and at a distance from the main settlement. As previously mentioned there are often numerous individuals buried in a given cave and as with all
burials with multiple internments, there tends to be post-burial handling of the bones (Cradic 2017, 220; Gonen 1992, 10). Each cave was like a necropolis. Since the caves were usually reused, previous remains were sometimes moved aside or cleared out to make room for more corpses, but this was not always the case. There are many funerary objects found with those interred in caves, including many pottery types and stone objects, most of which are manufactured locally (Gonen 1992).

Intramural burials are somewhat like pit burials. A single individual was interred in pit burials and the burial itself was in a low pit or underneath the floor of a house or courtyard. Because of the nature of this burial type there were not many funerary objects included with the burial. It is worth mentioning that someone who buried a relative in their house would have had a different understanding of the “needs of the deceased and the living” than someone who buried a relative outside the settlement (Gonen 1992, 20). Intramural burials, especially of non-adults, are commonly found throughout the world. Some reasons for this type of burial for non-adults include psychological needs such as warding off an emotional investment in someone who was not a communal member. Some scholars like Gonen (1992) argue that it is not possible to know what the reasons were for intramural burials in Late Bronze Age Canaan, while others such as Brody (2008) highlight ritual components and contend that such burials were highly ritualized. Regardless, this was a common burial method for both non-adults and adults (Brody 2008; Gonen 1992).

The cave bench burial is a particular form of burial that shows foreign influence during this period. Like cave and pit burials, this type was extramural. It shares obvious similarities with non-bench cave burials. There were multiple people interred and all different types of funerary
objects – pottery and non-ceramics – were included. The burial itself as previously described consisted of a cave with benches or beds in the shape and form of benches upon which corpses could be laid. These benches were made around the cave walls. If the benches were wide enough various people could be buried there over time. The older remains would be moved for newer ones. There are not many bench burial caves found during the Late Bronze Age in the Levant. This makes it difficult to discern whether there was any cemetery organization. Cave bench burials are very similar, albeit improved versions of cave burials. Gonen (1992) suggests that they may have been an improvement of the indigenous cave burial to better expedite the removal of old remains and settlement of newly dead. The reason why, she argues, these are considered “foreign” and not indigenous burials is because Cyprus also has bench burials. Waldbaum (1966) highlights that this type of burial is found in Tell el-Far’ah (South), but points to a Mycenaean influence, not Cypriot. According to Waldbaum, these cave bench burials are not indigenous but were brought by the Sea Peoples to Canaan. Whether they originated in Cyprus or Greece, the fact is that cave bench burials do share many similarities with cave burials, differing only in terms of practicality.

**Summary**

This section has shed light on the history of the archaeology (and to a certain extent bioarchaeology) of childhood, the issues associated with various age-based concepts like what a non-adult is, the problem of missing non-adults, and the mortuary landscape in Late Bronze Age Canaan. Decades ago, archaeologists like Petrie wrote countless chapters on “pots not people.” Petrie’s reports on Tell el-Far’ah (South), where most all of the grave/burial/cemetery data is included as an addendum, show this to be true. Buikstra (1991) sheds further light on this issue
in her article “Out of the Appendix and into the dirt.” A bioarchaeological approach is needed when looking at cases such as Tell el-Far’ah (South). Bioarchaeology helps to explain the cultural and biological realities of the past rather than just looking at pots. It also allows us to better investigate non-adults within the context of the broader population of the burials. Non-adults are often missing in the investigations of the past, whether it is due to taphonomic or cultural reasons, and we as researchers should not contribute to this but rather should continue to work on contextualizing non-adults and their social reality in the archaeological past.
CHAPTER 3: MATERIALS AND METHODS

In this section, special attention is given to the where and how of this study. The dataset section considers from where the data was obtained and explains why the primary sources were relied upon solely. The following sections discuss in detail the methods used in preparation for and during the actual analyses. They demonstrate that even with just one archaeological site, it is possible to learn about the Late Bronze Age people’s understanding of non-adults and adults.

Dataset

The data set utilized came mainly from primary sources. The cemetery data discussed in the first volume by Petrie (1930), *Beth Pelet I (Tell Fara)*, and in the second volume by MacDonald, Starkey, and Harding (1932), *Beth Pelet II*, were used for the geospatial and graphical analyses. *Beth Pelet I* (Petrie 1930) was much more helpful, in that it provided maps for each cemetery and more detailed discussions of each cemetery. *Beth Pelet II* (MacDonald, Starkey, and Harding 1932) was more concerned with the prehistory of Tell el-Far’ah (South). The cemeteries discussed in this volume seem to be written from the perspective that the reader already knows where these cemeteries are located and has an overall background knowledge that is not discussed in *Beth Pelet I* (Petrie 1930). Because the location of cemetery 900 is not graphically indicated in the primary sources, the location highlighted in Braunstein (2011, 6) was adapted for use in some of the geospatial analyses. The area is labeled as “900” but does not show the full extent of the cemetery. This limited the extent of analyses executed for cemetery 900. As for cemetery 1000, its exact location has yet to be published (Williams 2016). It was
because of these reasons why I as unable to conduct more thorough geospatial analyses for the cemeteries discussed in *Beth Pelet II*, namely cemeteries 900 and 1000.

**Methods Utilized**

The methods utilized for the analyses performed relied heavily on the tabulation and numerical coding of the raw data contained in the primary sources. For this purpose, Excel spreadsheets were exceedingly helpful. The data was arranged via the following variables:

- Cemetery number
- Grave number
- Age-at-Death – Adult, Non-adult, Other/not specified
- Grave goods – Present/Absent
- North grave dimensions, inches
- East grave dimensions, inches
- Grave depth, inches
- Orientation of head
- Orientation of face

While analyzing the data in terms of statistical and graphical analyses, it was necessary to numerically code some of the above-mentioned variables. When considering the “Age-at-Death – Adult, Non-adult, Other/not specified,” the number 0 was used to indicate adults, the number 1 for non-adults, and the number 2 for other/not specified. To represent the presence/absence of grave goods, the number 0 was assigned for when grave goods were absent and the number 1 was assigned when grave goods were present. If there was no recorded grave dimension, depth,
or orientation, a value of 0 was assigned. For the variables based on orientation, such as the orientation of the face and head, the number 1 was used to code for north, 2 for south, 3 for east, 4 for west, 5 for up, and 0 for no data. Cemetery 800 necessitated a rather different numerical coding. For the orientation of head, north was indicated by the number 1, south by 2, east by 3, west by 4, northwest by 5, and no data by 0. The orientation of face was coded as follows: north as 1, south as 2, east as 3, west as 4, up as 5, northeast as 6, southwest as 7, and no data as 0. The use of coding thus enabled me to carry out a number of graphical and statistical analyses, as discussed in the following paragraphs.

The maps provided by Petrie (1930) were scanned and uploaded to ArcGIS Pro. Once the site was found within ArcGIS Pro (under the modern name of “Sharuhen”), the aerial imagery was used to georectify the site maps recorded by Petrie (1930). It was necessary to georectify the site maps, as they were not projected on a coordinate system. After georectification, the site maps were in the UTM (Universal Transverse Mercator) coordinate system. The site found within ArcGIS Pro, “Sharuhen,” was also verified with the location description mentioned in more current excavations at Tell el-Far’ah (South) by Schneider (2000). Schneider (2000) describes Tell el-Far’ah (South) as being “some 14 miles (22 km) south of Gaza and 16 miles (26 km) west of Beer-Sheva.” This was confirmed with the Measure tool in ArcGIS Pro. Georectification of the various maps provided me with an acceptable means of performing various geospatial analyses within a coordinate system. For the purposes of georeferencing the maps, the georeferencing tool in ArcGIS Pro was used and control points selected.

Once the maps were georectified, geospatial analyses were conducted. The Buffer tool was used to determine the site catchment as pertains to the various Late Bronze Age cemeteries. The
Buffer tool was also helpful in determining an estimate population size at Tell el-Far’ah (South). To better understand the dispersion of cemeteries on the ancient landscape, the distance between each cemetery and the tell itself was measured in ArcGIS Pro via the measure tool.

Other analyses conducted were more statistical than spatial. These included histograms for a visual representation of the age-at-death and presence/absence of grave goods when appropriate. Also utilized were graphs to see the relationship between 2 variables, like age-at-death and north grave dimensions. Tables were also incorporated so as to aid in seeing the relationships between variables and cemeteries.

**Analysis Strategy**

The following table outlines the specific analysis strategy. Table 1 shows the variable of interest, the method taken, and the resulting visual aid. By “resulting visual aid” I mean to say how the analysis is visually displayed, which may be in the form of a histogram, a map, a graph, or table. The reason why such visual aids were chosen is because they allow for an ideal representation of the data and visually show a particular variable’s meaning.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Method</th>
<th>Resulting visual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age-at-death</td>
<td>Statistical analysis</td>
<td>Adult/non-adult/other – histogram</td>
</tr>
<tr>
<td>Grave goods</td>
<td>Statistical analysis</td>
<td>Presence/absence – histogram</td>
</tr>
<tr>
<td>Demography – site catchment</td>
<td>Buffers in ArcGIS</td>
<td>Catchment zones seen on map with the buffer tool</td>
</tr>
<tr>
<td>Variable</td>
<td>Method</td>
<td>Resulting visual</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>--------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Demography – population estimate</td>
<td>Calculate area of catchment sites</td>
<td>Determine population via estimates of persons per hectare</td>
</tr>
<tr>
<td>Burial dimensions</td>
<td>Compare age-at-death to provided north and east grave dimensions and grave depth</td>
<td>Analysis of relationship between age-at-death to burial dimensions as a histogram</td>
</tr>
<tr>
<td>Orientation of burials – head and face orientations</td>
<td>Statistical analysis</td>
<td>Histogram and/or diagram</td>
</tr>
<tr>
<td>Position of cemeteries within site</td>
<td>Spatial analysis</td>
<td>Map</td>
</tr>
<tr>
<td>Distance of cemeteries from each other and from the main settlement</td>
<td>Measure georectified maps in ArcGIS Pro</td>
<td>Analysis of distance in ArcGIS</td>
</tr>
</tbody>
</table>

Table 1: Analysis Strategy

Analyzing such variables demonstrates whether there are spatial and statistical differences between non-adult and adult burials in Late Bronze Age Tell el-Far’ah (South). This analysis helps to highlight whether there are detectable and/or significant differences in age, grave goods, position, distance, orientation, and/or size. It also sheds light on the potential
demographic reality of life in Late Bronze Age Tell el-Far’ah (South). This portion of the analysis helps address research question 1, and so sheds light on what the presence and/or absence of such differences might suggest about their perceptions of space, age, and the construct of childhood.

In addition, research question 2 is addressed when variables like size and location are considered in light of the present cultural data available. Looking at the size of the burials and settlements can show that the inhabitants of Tell el-Far’ah (South) simply had the space to bury their dead, as opposed to other body dispersal methods like cremation. Analyzing the distance between the various cemeteries and main settlement may show that accessibility was a factor in determining where they buried a greater number of non-adults. Taking these variables in consideration with socio-cultural factors, like religion, may help to explain why the people of Tell el-Far’ah (South) buried their dead where they did.

Lastly, analysis of variables such as demographics will help to address my third research question. Why is there such a high preponderance of adult Late Bronze Age burials at Tell el-Far’ah (South) as compared to non-adult burials? Did it have to do with their demographics? Disease? The Late Bronze Age landscape? What might we infer about the ancient people’s understanding of space, age, and death? This analysis approach helps show how the landscape affected the people’s decision to bury their dead in certain locations. The question is: What might this suggest in terms of the people’s perceptions of age and space?

Summary

Throughout this section, I have described the methods and materials that I have used. As mentioned previously, I am working with a limited dataset. The recording methods and foci of
the original excavators was on pots rather than on people. Still, this did not and should bar us from carrying out analyses of the Late Bronze Age cemeteries at Tell el-Far‘ah (South). Even with a dataset such as this, much can be learned about the Late Bronze Age people’s views of non-adults and adults. This is the focus of the next section.
CHAPTER 4: RESULTS

The results of the analyses are presented first by cemetery number followed by the spatial findings. I first consider cemetery 500 and discuss variables such as age-at-death, presence/absence of grave goods, grave dimensions, and orientations. The same is true for cemeteries 700, 800, 900, and 1000. The general spatial findings are ordered via analysis type. Population estimates and catchment zones are considered first, followed by distances to/from cemeteries and the tell, as well as the mean center of all the cemeteries and the site. Such an approach helps to better understand the reality of the site in the Late Bronze Age and the dispersion of such human-made features in the landscape.

A brief discussion of the different cemeteries is needed, to better understand the results of the analyses performed and begin to draw conclusions. Figure 1 shows the relationship of the Late Bronze Age cemeteries (cemeteries 500, 700, 800, and 900) to the site. Cemetery 500 is divided into two subareas, Hyksos and Philistine. The older of the two, the Hyksos side, lies closer and more to the west of the tell. It is identified as Hyksos via the finds of scarabs and other material remains (Petrie 1930, 2). The other subarea of cemetery 500, the Philistine side, is to the north and slightly west of the Hyksos area. The Philistine subarea is identified as such via the material remains of distinctly Philistine wares like Cypriote bowls with a fork-type handle and scarabs (Petrie 1930, 6-7). Cemeteries 100 and 500 were created via digging into the plain (Braunstein 2011, 7). Cemetery 100 is to the north of the site, lying past cemetery 800. Cemetery 100 is not part of the analysis however, as it dates to the Iron Age (see Chapter 3, Dataset, for further details). Cemetery 200, the northernmost cemetery at Tell el-Far’ah (South), also post-
dates the period of this study (Petrie 1930, 11-13). The burials in cemeteries 100 and 200 do however, appear small and haphazardly constructed (Petrie 1930, 11). Cemetery 700, like cemeteries 100 and 500, was the result of digging into the plain. It lies to the west of the site, between cemetery 900 and 500. The graves vary in age, from the Hyksos to as late as Greek times. Cemetery 800 is described by the original excavators as having been excavated into marl slopes directly to the north of the tell to protect the mound. It is mainly of the 19th Egyptian dynasty (ca. 1300-1200 BC). Cemetery 900 is dug right into the western side of the tell and differs from the other cemeteries in that it was created from a large trench excavated in the Middle Bronze Age (MacDonald, Starkey, and Harding 1932, 22; Petrie 1930, 16). This cemetery features large chamber tombs that may have been used to house the remains of the Egyptian elite (Morris 2005). Lastly cemetery 1000 is considered, albeit not fully owing to the manner in which all primary sources document (or rather fail to document) the data. Other researchers have commented on this fact stating that “the topographic position of… [cemetery 1000] has never been published and hence the exact relationship between this group and the known position of the 500 group has been lost” (Williams 2016, 1). Williams (2016, ix) describes Petrie’s general style of reporting as “terse,” resulting in a loss and/or misrepresentation of data. Even though the exact location of cemetery 1000 is not yet published, this does not mean that it has nothing to offer to this study. It is still known to date to the Late Bronze Age and is located in Tell el-Far’ah (South). This unfortunate fact did, though, limit the extent of the analyses and thus results of this study. The following sections thereby consider cemeteries 500, 700, 800, 900, and 1000.
Figure 1: Global Image Showing Relationship of Cemeteries 100, 200, 500, 600, 700, 800, and 900 to Site of Tell el-Far‘ah (South)
General Findings, by Cemetery

Cemetery 500

At cemetery 500, most of those interred were identified as adults. Out of the 48 graves found in cemetery 500, 31 were identified as adult graves, two as non-adult, and 15 as other/not specified. Figure 2 shows the distribution of age-at-death for cemetery 500. Every grave, regardless of the age-at-death, was found with grave goods. The fact that each burial contained grave goods, irrespective of Hyksos or Philistine, adult or non-adult, suggests that the non-adults for which there is data may have been viewed as persons and not as the “Other” or as different from the adult population.

![Cemetery 500: Distribution of Age-at-Death](chart.png)

Figure 2: Cemetery 500, Distribution of Age-at-Death

For cemetery 500, there is not much of a correlation between age-at-death and grave dimensions and orientation of face and head. Figures 3, 4, 5, 6, 7, and 8 display the dimensional
data – north grave dimensions, east grave dimensions, and grave depth – for either adult or other/not specified burials. No such data was recorded for the two non-adult burials in cemetery 500. Most adults had a north grave dimension over 50 inches (Figure 3). This break point was chosen as there are variable dimensions for the adult graves ranging from 17 to 93 inches, but the majority are clustered past the 50-inch mark. There was no such data recorded for the non-adults at cemetery 500. With regards to the east grave dimensions, most were between 20 and 40 inches for adults (Figure 5). As with the north grave dimensions, there was no data recorded for the non-adult burials. In final consideration for cemetery 500, most grave depths were between 20 and 65 inches for adults (Figure 7). For the orientation of head and face, the site reports do not provide any documentation save for grave 534 (an adult) whose head orientation is listed as NW. The site itself is southeast of cemetery 500, meaning that the head of this sole adult was facing in the opposite direction. There was no data recorded for non-adults. It is worth mentioning, however, that a significant portion is recorded as other/not specified (see Figures 4, 6, and 8). These could be non-adults, but their identification is beyond the scope of this study. Most of the dimensional data on the burials listed as other/not specified are close to the numbers for the adult burials, save for grave depth (Figure 8). The data available on adults thus may be understood as a baseline, and so aid future archaeologists and researchers in better understanding how non-adults were viewed in Late Bronze Age Tell el-Far’ah (South).

The lack of attention given to fully and properly identifying the skeletal remains, be they adult or non-adult, speaks volumes of the excavators and archeology as a whole. It is much simpler to merely say “not specified” or “other” than to analyze and identify the remains. Up until the last few decades, archaeology has not paid much attention to skeletal remains. As
discussed in Chapter 2 the focus was not on people but on the material remains. The people, if included in site reports, were included as an addendum or secondary to the pots. In the case of Tell el-Far’ah (South), there is much more data on adult than non-adult burials but non-adults were not entirely disregarded. There is some data on non-adult burials like at cemetery 500, which helps to establish a baseline upon which cemetery 900 can expand. Still, a consideration of all – adults and non-adults, the material, the environmental, the cultural – is needed to fully understand ancient people’s perceptions of adults and non-adults and how these perceptions translated onto the mortuary landscape.

![Figure 3: Cemetery 500, Distribution of North Grave Dimensions for Adult Burials](image)
Figure 4: Distribution of North Grave Dimensions for Other Burials

Figure 5: Cemetery 500, Distribution of East Grave Dimensions for Adult Burials
Figure 6: Cemetery 500, Distribution of East Grave Dimensions for Other Burials

Figure 7: Cemetery 500, Distribution of Grave Depth for Adult Burials
Cemetery 500

None of the current primary sources document any Late Bronze Age non-adult burials. In a case such as this, just as with cemetery 500, it may be used as a baseline and in future studies that can more directly and fully analyze the skeletal remains at Tell el-Far’ah (South). The fact that Late Bronze Age non-adult burials are absent from the primary sources highlights the need for re-examination of the remains and, again, tells of the excavators’ interests. All 23 burials are currently identified as adults, and all were buried with grave goods. The mean north grave dimension was 35 inches (Figure 9). For east grave dimensions the mean was 22 inches (Figure 10). The mean grave depth was 18 inches, as seen from Figure 11. Data was not recorded in the site reports for each one. In such cases, a 0 was assigned. Only one individual was buried with their face in the north orientation, six were facing up, and the remaining 16 are unknown (Figure 12). Figure 13 shows the orientation in which the head was
placed. Out of 23 individuals, there is no data for 15. Of the remaining eight, the head of six were found facing to the east and the face of the other two were found facing to the west. With regards to the relationship between cemetery 700 and the site, the site is east of cemetery 700. This means that for those on which we have data, the main head orientation was towards the site.

Some similarities may be seen when comparing cemeteries 500 and 700. There is no data on the orientation of the face and head for cemetery 500, and so no comparison can be made in this regard. There is a stark difference however, between the north grave dimensions for cemetery 700 and 500, 35 inches and 50 inches respectively. The difference may be cultural (e.g., multiple internments) or perhaps the topography dictated the north grave dimensions. There is more of a correlation with the east grave dimensions. Based on the data currently available, the majority of the burials had mean east grave dimensions of 22 inches and the burials in cemetery 500 ranged from 20 to 40 inches. There is variation as with the north grave dimensions, again perhaps due to topography or culture, but there seems to be a tendency towards the 20-inch mark. The situation with grave depth is similar. The grave depth for the burials in cemetery 500 range from 20 to 65 inches, while the mean of those in cemetery 700 is 18 inches. There may be a religious or geologic reason for these numbers, but the data would suggest that the Late Bronze Age inhabitants of Tell el-Far’ah (South) knew and wanted for the dead to be buried past a certain depth. Consider that keeping corpses close to the surface may have affected the living population’s health and hygiene.

There is no data from cemetery 700 for non-adults but based on the discussion in the preceding paragraph some commonalities between the adult burials in cemeteries 500 and 700 do exist. If the adult results of cemeteries 500 and 700 are used as a baseline and the non-adult data
from cemetery 500 are taken together, the cultural perception of non-adults may be taken to be at least similar. The presence of grave goods in every burial, regardless of age-at-death, suggests that non-adults were not viewed as radically different from adults. The high preponderance of remains that have yet to be identified demonstrates that the original excavators not only were not concerned with learning about the population itself but especially as concerns non-adults. This hearkens back to the antiquated view of non-adults as part of the lesser world of women (Ardren and Hutson 2002).

Figure 9: Cemetery 700, Distribution of North Grave Dimensions
Figure 10: Cemetery 700, Distribution of East Grave Dimensions

Figure 11: Cemetery 700, Distribution of Grave Depth
Figure 12: Cemetery 700, Orientation of Face

Figure 13: Cemetery 700, Orientation of Head
Cemetery 800

As with cemetery 700, there are no recorded non-adults. Just like cemetery 700 however, it may be used as a baseline, it can still shed light on the Late Bronze Age inhabitants of Tell el-Far’ah (South), and certainly speaks of the perceptions of the original excavators. There are 35 recorded individual burials. 34 of these are denoted as adults; only one is not specified/other (Figure 14). All of the burials, as in the previous cemeteries, were found with grave goods. Figure 15 shows the distribution of the north grave dimensions. The mean for the north grave dimensions was found to be 48 inches and the median 60. For the east grave dimensions the mean was 22 inches and the median 19 inches (Figure 16). In Figure 17, we see that the mean for grave depth was 38 inches and the median 33 inches. The histogram for the orientation in which the face was placed for the graves in cemetery 800 can be found in Figure 18. There is no data for 22 out of the 35 recorded burials. Of the remaining 13, four are facing up, two are facing south, and the rest are found in less numbers facing north, east, west, northeast, and southwest. There is not much data for the orientation in which the head was placed. Figure 19 shows that there is no data for 16 of the burials. Of the remaining 19, 14 are facing northwest, three are facing west, and two are facing north. The site is south of cemetery 800.

When considering cemeteries 500, 700, and 800 together, the previous findings hold true. The mean north grave dimension for the burials in cemetery 800 is 48 inches. The mean is 35 and 50 inches for cemeteries 500 and 700 respectively. The east grave dimension are fairly consistent, having a mean of 22 inches in cemeteries 700 and 800 and a range of 20 to 40 inches in cemetery 500. This range for the burials in cemetery 500 may be due to cultural differences and/or the fact that some are dated to an earlier time, namely those in the Hyksos subarea. The
depth of the burials in cemetery 800 have a mean of 38 inches, which is greater than the mean of those in cemetery 700 (18 inches) but between the range of 20 and 60 inches given for the burials in cemetery 500. There is an interesting observation with regards to the placement of the head of those interred. For most of the burials in cemetery 700 the orientation of the head is east. In contrast, the head of most of those in cemetery 800 are facing to the northwest. A concern with the northern direction may be related to the constellations, religion, or culture. Consider that if these are in fact Philistine burials, they have been interred facing in the direction of their homeland that lay to the north of Canaan. This means not that they would have been facing the direction of their actual homeland but rather towards the migration route taken towards the Levant and beyond (Finkelstein 1995; Dothan 1989). The actual homeland of the Sea Peoples was not directly north of Canaan but rather more towards the west, to the Mediterranean Sea.

Cemetery 800 certainly adds to the case of the missing non-adults. Given that skeletal remains in general were not the main concern of the excavators, it does not necessarily mean that non-adults are missing from the landscape but rather that their remains may have been overlooked or disregarded and marked as “not specified/other.” The fact that there are similarities between adult burials in the three cemeteries considered thus far may be taken as an indication of their perceptions of non-adults. The inclusion of grave goods in the non-adult burials in cemetery 500, as well as their inclusion in the same cemetery as adults hints that non-adults may not have been seen as Other. The same cannot be said, though, for the excavators who were not just not concerned with skeletal remains but had negative and biased perceptions of non-adults.
Figure 14: Cemetery 800, Distribution of Age-at-Death

Figure 15: Cemetery 800, Distribution of North Grave Dimensions
Figure 16: Cemetery 800, Distribution of East Grave Dimensions

Figure 17: Cemetery 800, Distribution of Grave Depth
Figure 18: Cemetery 800, Orientation of Face

Figure 19: Cemetery 800, Orientation of Head
Cemetery 900

Cemetery 900 is different from the last two cemeteries considered (700 and 800) in that there are non-adults burials recorded. In Figure 20 we see that there are 17 non-adults burials out of 78, 49 adult burials, and 12 are recorded as other/not specified. Each burial was found with grave goods, just as those in the other cemeteries, regardless of age-at-death. Like seen with cemetery 500, there seems to be no correlation between age-at-death and grave dimensions and depth. Although north grave dimensions were not provided for all of the burials, Figures 21 and 22 show that the north grave dimensions of non-adults fall within the range of adult burials, ca. 10 to 20 inches. A similar observation may be made for the east grave dimensions (Figures 24 and 25), but the range for adults does quite surpass that of non-adults. The range of the east grave dimensions for non-adults is about 20 to 40 inches, whereas that of adults ranges from about 20 to 95 inches. There is no data recorded for the grave depth of non-adult burials and those burials indicated as other/not specified. Figure 27 thus considers the grave depth of adults only. As regards the orientation in which the face was placed for burial, for the non-adult burials for which there is data they are mainly facing upwards or to the east (Figure 28). Most adults are likewise found facing upwards, followed in lesser numbers facing to the east, west, and south. It may be worth mentioning that the site is to the east of the tell, and so the face of many of the non-adult and adult dead would have been facing towards the tell, towards the living. Figure 29 shows that the head of non-adults can be found facing south, north, or west. Most face southwards. No adult was found facing to the west; they were facing north, south, or east. As for the non-adults, the heads of the majority of the adults in cemetery 900 were found facing south.
In the preceding paragraph, brief mention was made of how the results for non-adult burials in cemeteries 900 and 500 are not too dissimilar. In both cemeteries there is no apparent correlation between age-at-death and grave dimensions and depth. This suggests that adults and non-adults were not perceived as needing differential mortuary treatments. When looking at the grave dimensions for all burials in all of the cemeteries thus far analyzed (500, 700, 800, and 900), the north grave dimensions and east grave dimensions do vary somewhat in cemetery 900. In cemetery 900, the range of the north grave dimensions is 10 to 20 inches. Cemetery 700 has a mean north grave dimension of 35 inches and cemetery 800 has a mean of 48 inches. The north grave dimensions in cemetery 500 tend to surpass the 50-inch mark. This difference in north grave dimensions may be practical, as there are more burials recorded at this cemetery than at the others. But there may be other cultural or environmental factors at play, including separate burial site for other people-groups and/or geology. A range of east grave dimensions in cemeteries 500, 700, and 800 have been observed and cemetery 900 is no exception to this. In the past cemeteries (500, 700, 800), they have tended towards 20-40 inches for adults. In cemetery 900, the range of east grave dimensions for non-adults is 20 to 40 inches vs that of adults is 20 to 95 inches. The range of non-adults at cemetery 900 is in line with that of the adults in the other cemeteries and there is some overlap between the dimensions for adults and non-adults, but the range of dimensions given for the adult burials is much greater. Perhaps culture and/or practicality was at play in the minds of the Late Bronze Age inhabitants. Culturally, perhaps some non-adults were to receive differential mortuary treatment via the east grave dimensions. Given all of the data thus far considered and the apparent uniform treatment of adult and non-adult burials in cemeteries 500 and 900, it would seem that practicality directed the choice in differential east grave dimensions. In short, a smaller corpse generally needs a smaller-sized burial. In support of
a uniform perception of non-adults and adults, recall that in cemetery 900 the head of most all non-adults and adults was facing to the south and that the face of most adults and non-adults was facing upwards.

Cemetery 900 thus shows that the missing non-adults are there; they have only yet to be found and/or identified. There are 12 burials listed as “other/not specified” in the site reports, but it constitutes just ca. 15% of the Late Bronze Age burials. There may yet be even more non-adults at cemetery 900 (and presumably in the other cemeteries) but this is something that a well-rounded group of future researchers would need to undertake. A focus on the identification, aging, and even sexing would prove helpful to obtaining a better picture of life and culture at Late Bronze Age Tell el-Far’ah (South).

Figure 20: Cemetery 900, Distribution of Age-at-Death
Figure 21: Cemetery 900, Distribution of North Grave Dimensions for Adult Burials

Figure 22: Cemetery 900, Distribution of North Grave Dimensions for Non-adult Burials
Figure 23: Cemetery 900, Distribution of North Grave Dimensions for Other Burials

Figure 24: Cemetery 900, Distribution of East Grave Dimensions for Adult Burials
Figure 25: Cemetery 900, Distribution of East Grave Dimensions for Non-adult Burials

Figure 26: Cemetery 900, Distribution of East Grave Dimensions for Other Burials
Figure 27: Cemetery 900, Distribution of Grave Depth for Adult Burials
Figure 28: Cemetery 900, Orientation of Face vs Age-at-Death
In final consideration is cemetery 1000. Here, as seen in Figure 23, there are no reported non-adults. Like with cemeteries 700 and 800 where there are no non-adult burials identified this does not mean that cemetery 1000 is of no use to determining how non-adults were viewed at Tell el-Far’ah (South). It can serve as a valuable baseline. Out of the 27 burials reported in the
primary sources 20 are identified as adults and seven as other/not specified. All of the burials were found with grave goods. As with the previous cemeteries, dimensions were not provided for all the burials (denoted by 0). For those that are documented, the range of the dimensions of the northern side of the graves is about 30 to 100 inches (Figure 31). In Figure 32, the range of the eastern side of the graves is about 18 to 85 inches. No data on the northern or eastern grave dimensions were reported for the burials labeled as “other/not specified.” The depth of the graves ranges from 25 to 65 inches for the adult burials for which data was provided (Figure 33). There is no data on the grave depth of those labeled as “other/not specified.” Of the adult burials for which there is data on the orientation in which the face was positioned, they are either facing to west or north (Figure 34). Figure 34 also shows that the head of the adults was either positioned to the west or east.

The results of the burials in cemetery 1000 further support the baselines for adult burials in cemeteries 500, 700, 800, and 900. The range of north grave dimensions (30 to 100 inches), though large, is within the parameters discussed for the other cemeteries that range from 10 to over 50 inches. There the range is large at cemetery 1000 and since the location is yet to be published, perhaps the geology played a part in this. Regardless, the range in east grave dimensions from 18 to 55 inches is in accord with that of all burials considered, including the non-adult burials at cemetery 900 (20 to 40 inches). This shows that adults and non-adults may not have been perceived as requiring different mortuary treatments. The depth of the adult burials in cemetery 1000 (25 to 65 inches) is similar to and in the range (20 to 65 inches) of that in the other cemeteries. Needs based on practicality, such as hygiene, or culture may explain this common grave depth dimension. The data for the orientation of the head and face is limited,
there is no data for the majority (17/20 adults) of the burials at cemetery 1000 but based on the three that are known we see that a head and face placement in the western direction is more common. The orientation of the head and of the face is different from that observed in the other cemeteries. The most common head placement was south in cemetery 900, east in 700, and northwest in cemetery 800. With regards to the face placement, at all cemeteries (700, 800, and 900) analyzed an upwards orientation was most common. Cultural differences may be to explain for this difference in the orientation of the head and face of the dead but given that there is no data for 85% of the adults it would seem that these results are skewed and not representative of all the burials in cemetery 1000.

The lack of data on not just the orientation of the head and face of those at cemetery 1000 but also on the age-at-death further augments the idea that more is learned of the excavators than perhaps of the Late Bronze Age inhabitants at Tell e-Far’ah (South). All of the evidence thus far points to there being no notable differences in the mortuary treatment of adults and non-adults, suggesting that non-adults were not necessarily viewed as “Other” or radically different or less than adults. The same cannot be said about the original excavators of Tell el-Far’ah (South). Not only is there data on a fraction of the total number of Late Bronze Age burials, but the fact that the data is largely concentrated in the appendices of the site reports speaks volumes of the excavators. In cemetery 1000 alone, 7 out of 27 total burials are identified as “other/not specified”; there is no age-at-death data. It is presently unknown of these were non-adults. Even if these were non-adults however, there is not much to be learned about the people of Tell el-Far’ah (South) because there is no data recorded for any of these unidentified burials. It does appear, based on a consideration of all the burials for which there is age-at-death data, that non-adults and adults were not understood as dissimilar. The similar mortuary treatment of the dead
suggests that both non-adults and adults may have been viewed as not the same in age of course but as alike with regards to belonging and being a part of the culture and people-group at the time. Non-adults do not appear to have been Otherized in Late Bronze Age Tell el-Far‘ah (South), unlike for the culture-historical archeologists that excavated the site. Everything, to them, was about the material and not the people.

Figure 30: Cemetery 1000, Distribution of Age-at-Death
Figure 31: Cemetery 1000, Distribution of North Grave Dimensions

Figure 32: Cemetery 1000, Distribution of East Grave Dimensions
Figure 33: Cemetery 1000, Distribution of Grave Depth
Figure 34: Cemetery 1000, Orientation of Face and Orientation of Head vs Age-at-Death

**General Spatial Findings**

Among the geospatial results developed by this study are measures of dispersion, catchment sites, and the position of the cemeteries. As previously mentioned, the location of cemetery 1000 has yet to be published, and so is not part of the geospatial analyses. Figure 1 shows the relative position of the Late Bronze Age cemeteries in relation to the tell itself. Each of the cemeteries is less than 600 meters from the site. Table 3 shows the distance between the
center of each cemetery and the center of the tell. A distance of 400 meters is estimated to be the equivalent of a 5-minute walk (Austin et. al. 2005, 1576). The center of most all of the cemeteries (100, 200, 500, 600, 700, 800, and 900) were thus less than a 10-minute walk from the center of the site. Cemeteries 100, 200, and 800 lie to the north of the site, with cemetery 200 directly north. Cemetery 600, in contrast, is south of the tell. Cemetery 700 is west of the tell and in final consideration cemetery 500 lies more to the northwest of the tell. Relative to the site, all of the cemeteries are downhill.

The area and perimeter of cemeteries 500, 700, and 800 can be found in Table 2. Table 2 also shows the area, perimeter, and population estimate (one based on 250 persons/hectare) of the tell itself. Using the density coefficient of 250 persons/hectare results in a population size of ca. 3100 persons. A density coefficient of 250/ hectare is commonly used for Levantine demographics. There is a small range from about 250 persons/hectare to 300 persons/hectare that is seen for demographic studies in this region (Broshi and Gophna 1984, 42). These numbers are based on excavated places and ethnoarchaeology (Broshi and Finkelstein 1992, 48). Since a density coefficient of 250 persons/hectare is most often seen in Levantine studies, it is the one used in this study.

Both cemeteries where non-adults remains were found, cemeteries 500 and 900, have the largest areas and perimeters. At cemetery 500 the remains of 48 individuals were unearthed, and at cemetery 900 the remains of 78 were found. The area and perimeter of cemetery 900 is more of an estimate, however, as the full extent of the cemetery is not marked in the sources available. The area and perimeter for cemetery 900 were determined via measuring the section labeled as “ditch” in the site maps. For the other cemeteries, the area and perimeter were likewise found via
the “measure” tool in ArcGIS Pro that was set to “meters” for perimeter and “square meters” for area. Regardless, it does not seem that there is a direct relationship between number of interred and area and perimeter of cemetery. Consider that at cemetery 700, the remains of 23 were found versus at cemetery 800 a total of 35 were found, yet cemetery 700 has a larger area and perimeter. A consideration of the area and perimeter of the cemeteries thus allowed for a comparison of cemetery size alone and with respect to number of bodies discovered. The graves do not appear to have been tightly packed but rather spread out. This is especially true with cemeteries 500 and 900, both of which have the highest numbers of bodies and the largest areas and perimeters. A population estimate of 250 persons per hectare is a common measure used in the Levant (Broshi and Gophna 1986, 73), but others do exist and it may be that different populations and/or generations used certain cemeteries when the population was larger and thus had more bodies to inter. That is, that in cemeteries 500 and 900 where we do have non-adult remains the population may have been larger, and naturally had more deaths and thus required larger cemeteries.

<table>
<thead>
<tr>
<th>Item</th>
<th>Area, sq. meters</th>
<th>Perimeter, meters</th>
<th>Population estimate, 250 persons per hectare</th>
</tr>
</thead>
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<td>~323</td>
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</tr>
<tr>
<td>Cemetery 200</td>
<td>~4657</td>
<td>~291</td>
<td>-</td>
</tr>
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<td>~19,547</td>
<td>~607</td>
<td>-</td>
</tr>
<tr>
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<tr>
<td>------</td>
<td>------------------</td>
<td>-------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>Cemetery 900 (western slope of the mound)</td>
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<td>~639</td>
<td>-</td>
</tr>
<tr>
<td>Tell</td>
<td>~123,999</td>
<td>~1423</td>
<td>~3100</td>
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</tbody>
</table>

Table 2: Areas, Perimeters, and Population Estimates

The catchment areas, as seen in Figure 35 with buffers, show that overlap existed between these cemeteries and the site itself. Each buffer was generated at 400 meters. Consider that a 400-meter buffer equates to a 5-minute walk for an average adult (Austin et. al. 2005, 1576). The center of each cemetery was thus about a 5-minute walk away from the center of the tell. This translates to the catchment areas, and sheds light on the burial practices of the people of Tell el-Far’ah (South). It was important to have the adult and non-adult dead within a reasonable walking distance from where the living resided, on the tell. Having both adults and non-adults so close to dwelling places of the living further shows that the living population likely did not distinguish or “Otherize” non-adults but saw it necessary to have both non-adult and adult interred close by.

Each of the buffers meets near to the center of the tell. These buffers relate not just to activities pertaining to the dead but to the living. These are areas in which people would have walked every day while going about their lives. The cemeteries were very much a part of their “backyard.” Cemetery 900 is both closest to the tell and is where most non-adult remains were found. The fact that non-adults were buried in their “backyards” alongside adults further
supports the idea that the Late Bronze Age inhabitants of Tell el-Far’ah (South) did not view non-adults differently than adults.
Figure 35: Map Showing Tell el-Far‘ah (South) with 400-meter Buffers over Cemeteries 500, 700, 800, and 900
Figure 1 (on page 35) shows the global image of Tell el-Far’ah (South) and highlights all of the cemeteries and tell. These bounding polygons were chosen using the cemetery and tell boundaries indicated in the site report maps. The polygons were created as features in ArcGIS Pro. The distance between these cemeteries is listed in Table 3. From this table, a measure of the dispersion of the cemeteries across the landscape may be inferred. The cemeteries are near to each other and although they are not necessarily equally dispersed, they certainly would have affected the landscape and people’s perception of it. Some like cemeteries 100 and 200 are just over ca. 200 meters away from each other. Cemeteries 200 and 600, contrarily, are over ca. 800 meters away from one another. Smaller cemeteries are not closer to each other than to larger cemeteries, but it is interesting to note that cemeteries 100 and 200, both of which are on the smaller end (Table 2), are closest together. This is not to say though, that there is a direct relationship between distance and cemetery size. The two largest cemeteries, 500 and 900, are ca. 437 meters apart.

<table>
<thead>
<tr>
<th>Cemetery</th>
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<td>100 ↔ 500</td>
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<tr>
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<td>600 ↔ 900</td>
<td>~234</td>
</tr>
<tr>
<td>700 ↔ 800</td>
<td>~486</td>
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As seen in Figure 1, the tell and area as a whole were not entirely congested in the Late Bronze Age but death in the form of cemeteries certainly took up a notable portion of the landscape, transforming it into a landscape of death. Certainly the cemetery closest to the tell, since it is on the tell, is cemetery 900. Of particular note and interest to this study is that most non-adult burials (17/19) were found at cemetery 900. It may be due to fortuitous events and processes that we have 17 non-adults from cemetery 900, but it may also be due to the practices and beliefs of the Late Bronze Age people of Tell el-Far`ah (South). Cemetery 900 is the largest of all the cemeteries for which we have a location, it is where most non-adult remains were uncovered, and it is the closest to the site. All of these factors may signal a change in inhabitants or the generational culture, but it may also point to a need or desire for most non-adults to be interred close to their home. The use of the western slope of the tell as a cemetery is somewhat analogous to intramural burials. Intramural-type burials were especially common for non-adults (Chapter 2) but we do not know exactly why intramural burials were popular in Late Bronze Age Canaan. Brody (2008) argues that intramural burials were exceedingly ritualized, but Gonen (1992) says it is not possible to know why people were interred in this fashion. Nonetheless, it can be said that adults and non-adults were buried in cemetery 900, cemetery 900 shares some

<table>
<thead>
<tr>
<th>Cemetery</th>
<th>Distance, meters</th>
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<tr>
<td>800 ↔ 900</td>
<td>~433</td>
</tr>
</tbody>
</table>

Table 3: Distances between Cemeteries 100, 200, 500, 600, 700, 800, and 900
characteristics with intramural burials, intramural burials were a common type of burial for non-adults and adults, and the majority of non-adult burials at Tell el-Far’ah (South) were found in cemetery 900. Perhaps the other non-adults are simply missing or perhaps a good number of them were interred close to the site, to their family and home. If the latter is the case, this would mean that while non-adults received similar treatment to adults (they were buried in the same cemetery with grave goods and no correlation seems to exist between age-at-death and grave dimensions and depth), perhaps they were viewed as different, as special in some way and deserving of a final resting place closer to home.

<table>
<thead>
<tr>
<th>Cemetery ↔ Site</th>
<th>Distance, meters</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 ↔ Site</td>
<td>~475</td>
</tr>
<tr>
<td>200 ↔ Site</td>
<td>~582</td>
</tr>
<tr>
<td>500 ↔ Site</td>
<td>~504</td>
</tr>
<tr>
<td>600 ↔ Site</td>
<td>~275</td>
</tr>
<tr>
<td>700 ↔ Site</td>
<td>~309</td>
</tr>
<tr>
<td>800 ↔ Site</td>
<td>~330</td>
</tr>
<tr>
<td>900 ↔ Site</td>
<td>~135</td>
</tr>
</tbody>
</table>

Table 4: Distances between Cemeteries 100, 200, 500, 700, 800, 900, and Tell
CHAPTER 5:
CONCLUSIONS

As seen from the results in the previous section, it is difficult to see spatial differences and relationships between non-adult and adult burials in Late Bronze Age Tell el-Far’ah (South). The only cemeteries that permit this type of analysis are cemeteries 500 and 900. Approximately 22% of the burials at cemetery 900 were identified as non-adults. There is no difference in the presence/absence of grave goods between the burials of adults and non-adults, as all burials thus far examined show that the dead were laid to rest with grave goods. Based on the dimensions provided for the northern side of the graves, it does not appear that non-adults were treated differently than adults. Consider that although some adult burials exceed the range within which non-adult burials fall, there is an overlap. With regards to the dimensions for the eastern side of the graves, we see that there is some overlap between the adult and non-adult burials too. The excavators failed to document the grave depth for the non-adult burials found in cemetery 900, and so it is unclear whether any differences exist between the grave depth of adult and non-adult burials. It seems that the Late Bronze Age inhabitants of Tell el-Far’ah (South) were more varied in the final facial orientation of their dead. Based on the available data, non-adults were found facing to the east or upwards only, while adults were found facing to these directions and to the south and west. It is interesting to note that the heads of non-adults were found facing north, south, and west – but not east – and that the heads of adults were found facing to the north, south and east – but not to the west (Figure 29). It may be mere coincidence or due to the fact that I am working with a limited dataset, but something does seem to be occurring with regards to the eastern and western directions. This observation could tentatively suggest that the people of Tell
el-Far’ah (South) perceived there to be a difference in the mortuary treatment of adults and non-adults.

Cemeteries 700, 800, and 1000 help to serve as baselines when considering the non-adult burials in cemeteries 500 and 900. The north grave dimensions for adults at all cemeteries range from 10 to over 50 inches. With the east grave dimensions, there is overlap between adults and non-adults. For the non-adults at cemetery 900, the range of east grave dimensions was 20 to 40 inches. This is within the range for adults in all cemeteries (about 18 to 95 inches). There is some overlap here, which may suggest that non-adults were not viewed as radically different from adults, at least as concerns death. Where there is no overlap, the differential burial treatment may have been due to practical matters such as the size difference, on average, that exists between adults and non-adults. Adults are larger and thus require larger burials than non-adults. Grave depth for adults is similar in all cemeteries considered, ca. 20 to 65 inches. At cemetery 900, the majority of adults and non-adults were buried with their heads facing south. We also observed that the face of both non-adults and adults at cemetery 900 tended to be placed upwards. There is a dearth of data on burials generally at Tell el-Far’ah (South). Whether it be with regards to identification, sexing, orientations, or dimensions. While the evidence presently available suggests that non-adults and adults did not necessarily receive differential burial treatments, this question will remain open pending further research.

It is interesting that in the cemeteries where non-adults are currently known to have been interred, cemeteries 500 and 900, the largest areas and perimeters are observed. This is not to say however, that there appears to be a direct relationship between people interred and cemetery size. Cemeteries 700 and 800 are prime examples of this. Cemetery 700 has an area of ca. 8278 square
meters and perimeter of ca. 353 meters, yet only 23 burials were found in it. Cemetery 800, on the other hand, has an area of ca. 3854 square meters and a perimeter of ca. 242 meters, and 35 burials were discovered in it. There was certainly overlap between the catchment areas of the cemeteries and site. Both the adult and non-adult dead were intentionally buried close to the living. The cemeteries were part of their backyard. The relatively high number of non-adults found in cemetery 900 further augments the idea that the Late Bronze Age people of Tell el-Far’ah (South) did not necessarily understand non-adults as different from adults. Also discussed was the notion that perhaps the missing non-adults are in fact lost to time or perhaps they tended to be buried close to their family and home. If this was the case, it would imply that non-adults received a mortuary treatment similar to that of adults (such as with regards to dimensions and placement of the head and neck) but also different. If the missing non-adults were in fact buried close their family and home (like in an intramural burial), perhaps this is because they were understood as different from adults and wanting of a resting place close to their living relatives. Based on the current evidence however, what is known is that the currently recorded non-adult and adult burials do not show significant differences, suggesting that the inhabitants of Tell el-Far’ah (South) did not perceive there to be any notable differences between non-adults and adults.

Although there are two recorded non-adult burials for cemetery 500, the excavators did not provide useful data that would allow for a comparison of adult to non-adult burials in this cemetery. This is not surprising, given that these excavations took place in the late 1920s thru to the early 1930s, when the culture-history school of archaeological thought was dominant. The focus was not on the skeletal remains, on the people, but on the “pots.” If anything, the
numerical and graphical data gathered from all the cemeteries, but especially cemetery 500, shed more light on the excavators themselves than on the makers of the material culture with which they were so fascinated.

We see that these cemeteries were a short distance from the tell. Most were about a 5 to 10-minute walk away. The 400-meter buffers generated show that these cemeteries were very much a part of the landscape in Late Bronze Age Tell el-Far’ah (South). They wanted the dead nearby and the fact that cemetery 900 is cut into the western slope of the tell supports this. It may be that cemetery 900 was viewed as an intramural cemetery en masse. This may also explain why it is the cemetery where most non-adult remains were uncovered. There is a large percentage of unidentified remains at all the cemeteries, however. A good portion of these unidentified remains may be non-adult, and thus it may be that cemetery 900 was selected so close to the tell for practical reasons. Given the size of the tell, there may have been about 3,100 inhabitants at any given time at Tell el-Far’ah (South). At a time when disease and death would have been frequent occurrences, it would have been of the utmost important to have nearby places in which to dispose of dead corpses. It is interesting though, how one of the older cemeteries (500), part of which was used by the Hyksos, is farther from the site than some that date past the Iron Age. Regardless, it seems that the people of Tell el-Far’ah (South) buried the dead thus far uncovered due to practical and socio-cultural factors. With regards to practicality, all of the cemeteries are at a close proximity to the site and socio-culturally, it may be that the inhabitants of Tell el-Far’ah (South) favored burials over other methods of body dispersal like cremation.
Socio-cultural factors may very well explain, however, why we do not see the children in the archaeological record. We know that they are there (as discussed in Chapter 2). The question is, where are they? Cemetery 900 is one of the later cemeteries that dates to the 1200s BC. In the earlier cemeteries, mainly used by the Hyksos and other earlier inhabitants, there is currently not a significant number of identifiable non-adult remains. Perhaps the culture of the inhabitants changed and they started to bury and treat the non-adults as adults, but still with some differences as discussed at the start of this chapter. Then again, maybe taphonomy and time are the culprits in this instance. Infanticide did exist at the time and perhaps the ill and/or suffering infants (that would have died regardless) were drowned or exposed and their corpses disintegrated or were carried away via natural forces like water and wind. If the non-adult are missing because of the practice of infanticide, it may have been due to sacrificial rituals that necessitated the use of non-adults, as was common among the rituals of the Israelites’ neighbors (Larson 2014). If infanticide is to blame for the missing children, it does not necessarily indicate, as discussed in Chapter 2, that it was a remiss decision (Wileman 2005).

**Implications and Future Directions**

Although this study certainly has its limitations, it has not been without its benefits. It has helped to shed light on the burials for which we have data and shows that the mortuary landscape was a part of the people’s daily lives and backyard. The cemeteries were intentionally selected. They wanted the cemeteries within a short walking distance, and cemetery 900 is essentially a part of the tell. This study has also suggested that the Late Bronze Age people of Tell el-Far’ah (South) understood non-adults as different yet somewhat similar to adults. The results from cemetery 900 are key in this regard. Regardless, this study has also highlighted where further
research is needed. Although it has been nearly 100 years from when the site was first excavated and some have carried out surveys and further excavations since, there still remains a great deal of work to be done to better and more fully understand what the reality of life was like for the inhabitants of Tell el-Far‘ah (South), even if only in death. If nothing else however, this thesis shows what not to do with ancient human remains and hopefully will direct future archaeologists and bioarchaeologists to Tell el-Far‘ah (South). Greater integration of the four main anthropological subfields – the cultural, archaeological, biological, and linguistic – is important for every anthropological endeavor. To fully know and understand the human aspect we cannot consider any one facet of life in isolation but rather must attempt to consider the whole.
REFERENCES


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