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# TEL AZEKAH IN ITS SURROUNDINGS BASED ON THE EARLY BRONZE AGE POTTERY 2012-2016

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Submitted as partial fulfilment of the requirements of the degree of

Master of Research

Under the supervision of Dr. Kyle Keimer

## DISCLAIMER

I, Coral Hardwick, declare that the Master of Research (MRES) thesis entitled *Tel Azekah in its Surroundings Based on the Early Bronze Age Pottery* contains no material that has been submitted previously, in whole or in part, for the award of any other academic degree or diploma. Except where otherwise indicated, this thesis is my own work.

Coral Hardwick

Date: 05/10/2017

## ABSTRACT

This thesis will identify the regional and cultural affinities of Tel Azekah during the Early Bronze Age through a comparative typological analysis of the pottery discovered in the first five seasons of excavations at the site (2012-2016). This will involve comparing the Early Bronze Age pottery from Tel Azekah with the sites of Tel Yarmuth, Tell es-Safi/Gath, and Tel Lachish, which are of close proximity to Tel Azekah. This qualitative analysis will look at nuances in shape, manufacturing techniques and finishes to determine the cultural relations of Tel Azekah during the EB III period.

It is expected that the remains of Tel Azekah will show affinity with these sites due to the proximity of the sites and their archaeological similarities in later periods. This study will broaden the understanding of pottery during the Early Bronze Age by contributing to the current typologies and further aid in defining cultural and regional relations of the area.

## ACKNOWLEDGEMENTS

I would firstly like to acknowledge the directors Prof. Oded Lipschitz, Dr. Yuval Gadot and Prof. Manfred Oeming for their continued support and assistance throughout my Masters journey. In addition to this, I would like to thank the remainder of the Tel Azekah team, who have assisted me in understanding stratigraphy and pottery like I never thought imaginable.

To Dr. Kyle Keimer, my supervisor, for his enthusiasm, knowledge and guidance during my Masters journey, which added considerably to my experience and challenged me to grow as an independent thinker. His mentorship was paramount in tailoring a topic consistent with my long-term interests of the Southern Levant and pottery.

To Ortal Haroch and the team at the Computerized Archaeology Laboratory at the Hebrew University of Jerusalem, I extend my utmost thanks for the use of your technology and practices for the digitization and drawing of the pottery included in this thesis.

To Alexandra Wrathall for her unwavering support and friendship through the past few years, and for always providing a couch to sleep on, and for lending an ear when I needed it most. Your love and energy has helped produce this thesis, and I and forever thankful.

Lastly, I wish to acknowledge my family for their support, encouragement and unwavering love, being the bedrock upon which my interests could develop. And most of all for my loving and encouraging partner Ben, whose faithful support during this year, has not gone unnoticed.

Thankyou.

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## **CHAPTER 1 -INTRODUCTION**

Although studies on the Early Bronze Age (EB/EBA) in Southern Levant have not gone unnoticed in recent years, the expanding nature of scholarship and scientific technologies has allowed for further, more concise analyses to be undertaken. Unfortunately, due to the inability to excavate sites down to the Early Bronze Age contexts, coinciding with the profound aim of archaeological investigations in the area focusing on the post-Middle-Bronze-Age contexts that often provide larger quantities of archaeological remains across sites in the Southern Levant, the founding of communities and settlement pattern is often overlooked in scholarship. The site of Tel Azekah, in the central-southern area of the Southern Levant was excavated for five consecutive seasons, from 2012-2016. Unlike surrounding sites such as Tell es-Safi, Tel Lachish and Tel Yarmuth, which all show large archaeological remains dating to the Early Bronze Age; it is unknown how the remains of Tel Azekah situate both chronologically and culturally within this region.

This project will step beyond the historically focused narratives of the post-Middle-Bronze-Age scene, and contribute to the current understanding of the Early Bronze Age pottery typology through the comparative analysis of the pottery of Tel Azekah, Israel. One major benefit of this project is that it will place Tel Azekah within its cultural and regional boundaries, discussing the affinities of the site during the EB period. Typological analysis is a strategy involving descriptive data analysis for the development of a set of related but distinct categories within a culture. This qualitative analysis will look at nuances in manufacture, as well as analysing the shape and decorative techniques that differed between the northern and the southern material cultures. This is the most effective method of analysing cultural affinity during this period, as religion, writing and administration were not developed at this time and therefore limited insight into this period is available through linguistic avenues.

Chapter 1 of this paper will discuss the geographical and cultural context, as well as highlighting the previous research conducted at Tel Azekah. Moving on from this, Chapter 2 will outline the typology to be followed throughout the project analysis, including a short review of the literature used to develop such typologies in the area. This Chapter will focus heavily on the development of pottery across the EB III period, based on the assumed affinity Tel Azekah has with its surroundings. In addition to this, Chapter 2 will also discuss the major differences between the southern material culture and the northern material culture, with a short discussion of the nuances in technology, form and decorative styles. Chapter 3 will outline the sites used for comparison in the project, including a short review of past excavations, stratigraphy and architectural remains. This will allow for a concise and directed analysis of pottery, which will take place in the following Chapter. Chapter 4 will look at the pottery from Tel Azekah, and will be broken into three primary sections. This Chapter will begin with a look at the areas of the site that the EB pottery has been discovered, then moving onto a discussion of the different wares present in the assemblage. Following this, a typological analysis of the types of pottery will be conducted, broken into subsections by vessel form/use. Following this, the final chapter, Chapter 5, will provide a discussion of the Tel Azekah pottery, placing the assemblage within the cultural and chronological setting of the region and concluding on the results of this project.

The Early Bronze Age in the southern Levant dates from 3700 BCE to 2500 BCE following a recent shift from the formerly accepted dates spanning from 3500 BCE to 2300 BCE.<sup>1</sup> Within this period, three distinct cultural phases are present in the material culture, identified as the Early Bronze Age I, II and III (henceforth EB I, EB II, EB III). Following the conclusion made through radiocarbon results by Regev, *et al.*, the EB I spanned from 3700-3050/2950 BCE, the EB II from 3050/2950-2800 BCE, and the EB III from 2800-2500 BCE.<sup>2</sup> The EB IV, or Intermediate Bronze Age, has not been included for discussion in this study as it is often identified as a non-urban period between the EBA and the Middle Bronze Age (MBA), whereby societies disbanded and local variation impacted production and development.<sup>3</sup> The material culture of this period differs greatly from the EB I-III, which show distinct linear development, and for this reason, the EB IV will therefore not be included for further discussion.

<sup>&</sup>lt;sup>1</sup> Amiran, 1969; Mazar, 1992; Miroschedji, 1989; 2000; Philip and Millard, 2000; Greenberg, 2002; Braun and Gophna, 2004; Golani, 2004; Miroschedji, 2006; Yekutieli, 2007; Braun, 2011.

<sup>&</sup>lt;sup>2</sup> Regev, et al., 2012: 558-559.

<sup>&</sup>lt;sup>3</sup> Dever, 1985: 113; Höflmayer, 2017: 4.

## **1.1 GEOGRAPHICAL CONTEXT**

Tel Azekah (formerly Tell Zakariya) is situated on the northern edge of a ridge running north-south across central-southern Israel, through which runs the Elah Valley, bordering the site on three sites.<sup>4</sup> This area is known as the Shephelah, a geographical zone identified according to topography in the north and south, and according to changes in geology in the east and west.<sup>5</sup> The accepted geographical boundaries are shown as the grey area in Figure 1 and are a follows:

- North: The Ayalon and Soreq Valleys;
- South: The Shiqmah Valley;
- East: A valley between the chalky Cenomanian limestone of the Shephelah and the hard Senonian limestone of the Hebron Hills;
- West: The fifth, easternmost *kurkar* ridge on which lays Tell es-Safi/Gath, and where the soil changes to alluvial soil.

Tel Azekah is roughly 4.5 ha in size, and resembles a triangular shape with the base in the southwest and the apex in the northeast. Atop the tel lay a 6m elevated acropolis, approximately 0.6 ha in size, situated in the southeast corner. Tel Azekah has a natural defence system, characterized by three steep sides and connected to a hill range by a low saddle at the southwest point of the site, that rises only 30m from the valley below.<sup>6</sup> The southwest saddle appears to be the only possible point of access to the site in antiquity.

Due to the beneficial position of Tel Azekah surrounded by the winding Elah Valley, a popular trade route in antiquity, the site was widely contested across its occupation, even identified in Biblical writings. The section of the Elah Valley that wraps around Tel Azekah is referenced to as the arena for the battle between David and Goliath (1 Samuel 17:1), with the site also referenced in Jeremiah 34:7, recounting the siege of the Babylonians dating to 586 BCE. These two references prove the importance of the site through history, further validating the importance of investigating its position from its earliest horizon.

<sup>&</sup>lt;sup>4</sup> OIG 14400/12315; NIG 19400/62315, elevation 400m asl; Dagan, 2011: 72.

<sup>&</sup>lt;sup>5</sup> Levy-Reifer, 2012: 557.

<sup>&</sup>lt;sup>6</sup> Dagan, 2011: 72–73.



Figure 1. Area of the Shephelah and wider Southern Levant region with relevant EB sites

Regionally, Tel Azekah is situated between three major Early Bronze Age sites: Tel Yarmuth, Tel Lachish, Tell es-Safi (Figure 2). Tel Yarmuth, undoubtedly the most prominent single-period site dating to the Early Bronze Age III, lays a mere 3.5km to the northeast of Tel Azekah.<sup>7</sup> In addition to this, Tell es-Safi, another site with prominent Early Bronze Age remains, lays only 9km to the west.<sup>8</sup> The third site with extensive Early Bronze Age remains uncovered during both the 1958 and 2004 excavations is Tel Lachish, situated only 18km to the southwest.<sup>9</sup> The later remains at Tel Lachish and Tell es-Safi show strong cultural affinity to Tel Azekah, which prompts scholarship to evaluate these sites under the same cultural standards.

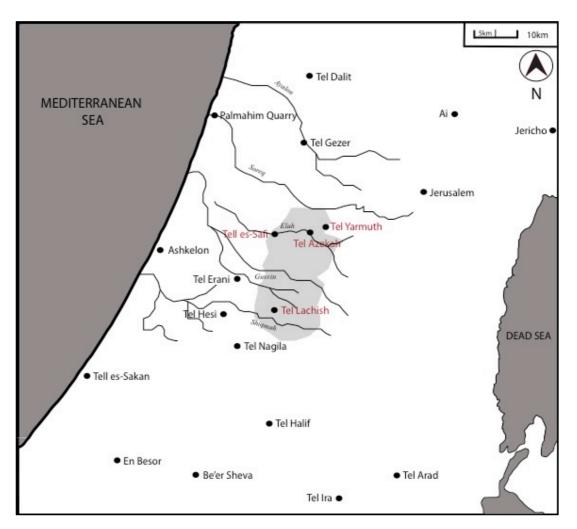


Figure 2. Tel Azekah in relation to three major sites for comparison during the EBA.

<sup>&</sup>lt;sup>7</sup> Miroschedji, 1988.

<sup>&</sup>lt;sup>8</sup> Maeir, 2012.

<sup>&</sup>lt;sup>9</sup> Tufnell, 1958; Ussishkin, 2004.

## **1.2 CULTURAL CONTEXT**

The term culture often varies in archaeological and historical scholarship often requiring heavy classification. In this study, culture refers to the differing ways communities produced material culture, specifically pottery. More specifically, this is indicated by area-specific nuances in the manufacture process, resulting in differentiation of shapes, decoration and manufacturing techniques. In the Southern Levant, the two cultures will henceforth be classified as the southern material culture and the northern material culture.

The area of Tel Dalit is often noted as the liminal border between the two cultures from the EBA, due to a mixture of both cultures evident in the ceramic repertoire.<sup>10</sup> During the earlier periods of the EB, Tel Dalit exhibits the northern culture of the Southern Levant, however, by the EB III at Tel Dalit, many southern cultural elements are identified in the pottery assemblage, perhaps indicating a shift toward the southern culture during this period.

Tel Azekah lies within the parameters of the southern material culture leading to the expectation that it will show affinity with the forms and techniques of this culture. However, there are few examples of sites within the parameters of the southern material culture that show extensive evidence of the northern material culture. Instances such as this are observed in Tel Arad, with evidence of northern, southern and Egyptian material cultures across the EBA.<sup>11</sup> The nuances between these two cultures in terms of pottery will be discussed further in Chapter 2.

Concerning chronology and culture more broadly, due to a significant lack of chronological or historical anchors in the EB Southern Levant foreign comparisons are often used to align this period with those of the Southern Levantine neighbours. It was not until more recently, that radiocarbon dating techniques allowed for more precise chronological phases could be detected.<sup>12</sup> The following provides a concise overview of the relevant chronological and cultural development of settlement size, with the period-specific typology to be discussed later in this paper.

<sup>&</sup>lt;sup>10</sup> Gophna, 1996: 129.

<sup>&</sup>lt;sup>11</sup> Amiran, 1969: 59-66.

<sup>&</sup>lt;sup>12</sup> Regev, et al., 2013.

### 1.2.1 Early Bronze Age I (EB I)

To date, little EB I pottery has been discovered at Tel Azekah, and subsequently the cultural overview of this period will be concise. The EB I spanned almost six centuries from 3700-3050/2950 BCE, with two distinct phases recognized in the archaeological record.<sup>13</sup> The EB IA was the earliest phase, dating from 3700-3400 BCE; the EB IB was the later phase lasting from 3400-3050/2950 BCE. The difference between the early and late periods of the EB I are characterised through pottery analysis, and follow Stager's analysis, which refined the earlier division identified by Wright, of EB IA, IB and IC.<sup>14</sup> The EB I is characterized by the development of social and economic complexity in comparison to the earlier Chalcolithic period. At the opening of the EB I, an increase in the number of settlements in the southern regions can be observed, along with the reorganization of settlements in the north.<sup>15</sup>

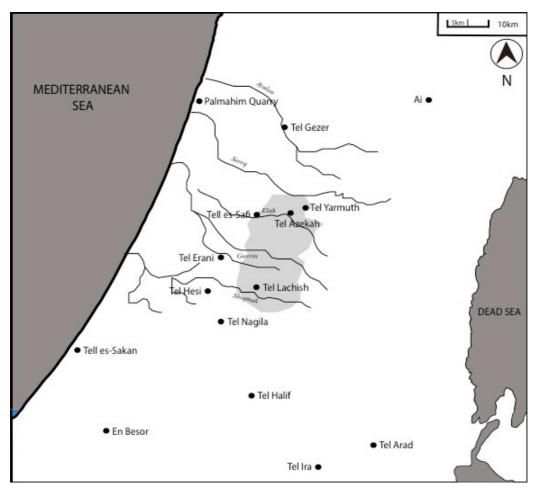


Figure 3. Early Bronze I sites in relation to Tel Azekah.

<sup>14</sup> Stager, 1992; Wright, 1958.

<sup>&</sup>lt;sup>13</sup> Regev, et al., 2013: 558

<sup>&</sup>lt;sup>15</sup> Cohen, 2016: 25.

The primary sites of the EB I in the south of the southern Levant that exhibit pottery characteristic of the period can be seen in Figure 3. Through the EB IB, settlements expanded across the entire Southern Levant, with the southern settlements perhaps influenced by contact with Egyptian neighbours.<sup>16</sup> These settlements are classified as 'villages' by Miroschedji, and noted to rarely exceed 5 hectares, excepting three examples at Tel Yarmuth measuring 16 hectares, and Tel Beth Yerah and Tel Megiddo both measuring 25 hectares.<sup>17</sup> It was concluded by Levy-Reifer in an analysis of Early Bronze Age settlements, that 10 large villages, 12 villages and 22 farmhouses were present during the EB I period.<sup>18</sup> Due to the occurrence of many relatively mid-sized community centres during this period, it can be an indication of the beginnings of 'urbanism' in the south of the Southern Levant.

Many sites exhibiting the southern material culture are exclusive to the early *or* late EB period, meaning they were occupied primarily during the EB I-II or EB II-III. Only few sites show evidence of continual occupation across all periods. For this reason, it is not uncommon for Tel Azekah to currently show no evidence of the EB I in the archaeological record.

<sup>&</sup>lt;sup>16</sup> Cohen, 2016: 27—31; Gophna, 1998: 272; Gophna, 2000; Braun, and van den Brink, 2008; Levy and van den Brink, 2002.

<sup>&</sup>lt;sup>17</sup> Miroschedji, 2013: 309.

<sup>&</sup>lt;sup>18</sup> Levy-Reifer, 2012: 560.

#### 1.2.2 Early Bronze Age II (EB II)

As with the EB I, scarce EB II pottery has been discovered at Tel Azekah, meaning the following overview of the EB II period will be concise. The opening horizon of the EB II was previously relatively dated based on the alignment of serekhs bearing the name of king Narmer of Egypt at Tel Erani and Tel Arad, though this horizon was both unclear and problematic.<sup>19</sup> Following more recent radiocarbon results, the transition from the EB IB to the EB II has been altered and now spans from 3050/2950 BCE to 2800 BCE.<sup>20</sup>

This phase is characterized by vast developments in settlement size, and structure, with cities now being fortified in the Southern Levant, most notably at Tel Yarmuth and Tel Arad.<sup>21</sup> Getzov, Paz and Gophna argued that this period was further characterized by the abandonment of large EB I villages such as Tel Erani, Tell es-Sakan, Tel Halif, etc., for nearby fortified settlements, most notably Tel Arad and Tel Yarmuth.<sup>22</sup> This movement resulted in a high variation in site size, with 'governing centres' to hamlets discovered.<sup>23</sup> Miroschedji complements this by stating that considerable regional variation was apparent in the EB II and III, ranging from large fortified sites noted as regional centres, to villages, hamlets and camps.<sup>24</sup>

Levy-Reifer's concluded that 3 governing centres, four cities, and 10 towns, 24 villages and 47 hamlets were occupied during the EB II period.<sup>25</sup> This brings the total settlements from 44 up to 88, much larger and on a far more size-varied scale. Few sites were vastly larger than the proceeding phase of the EBA, and many observe a period of abandonment at the close of the EB III.<sup>26</sup> The development of societal congregation when compared to the EB I is notable in the EB II period, with sites tending to be either expanded or abandoned.

<sup>&</sup>lt;sup>19</sup> Braun, 2009; Amiran, 1965; 1969b; Regev, et al., 2012.

<sup>&</sup>lt;sup>20</sup> Regev, et al., 2012: 558-559.

<sup>&</sup>lt;sup>21</sup> Miroschedji, 2013: 313.

<sup>&</sup>lt;sup>22</sup> Getzov, Paz and Gophna, 2001.

<sup>&</sup>lt;sup>23</sup> Levy-Reifer, 2012: 560.

<sup>&</sup>lt;sup>24</sup> Miroschedji, 2013: 315.

<sup>&</sup>lt;sup>25</sup> Levy-Reifer, 2012: 560.

<sup>&</sup>lt;sup>26</sup> Levy-Reifer, 2012: 557.

### 1.2.3 Early Bronze Age III (EB III)

The EB III is dated from 2800 BCE to 2500 BCE, and is characterised through cultural developments, easily identified through the introduction of Khirbet Kerak Ware in the north, and through the standardization of vessel shapes in the south.<sup>27</sup> Archaeologically, the EB III period is characterised by the remaining settlements reaching their maximum size before the end of the EB III.<sup>28</sup> This monumentality is attested in the palace of Tel Yarmuth in the south, and the granary of Tel Beth Yerah and the palace of Tel Megiddo in the north.<sup>29</sup> An observational transition between the EB II and EB III is observed in the stratigraphy and pottery of Tel Yarmuth, based on drastic changes in fabrics, surface treatments and vessel shapes.<sup>30</sup>

In addition to this, settlement processes in the centre of the Southern Levant vastly declined, as evident through both the size and remains from sites dating to this period (See Figure 4).<sup>31</sup> Levy-Reifer's concluded that 5 governing centres, two cities and 10 towns, along with 10 villages and 25 hamlets, belonged to the EB III period.<sup>32</sup> This brings the total settlement number back down to 52 in total, lower than the EB II total. The addition of two more sites defined as governing centres illustrates the expansion seen in this period, with cities growing to reach their maximum size of the period, accompanied by the abandonment of smaller sites. Even though the EB III is primarily differentiated due to the material culture, it is to be assumed that this phase also allowed for further community gathering, with smaller community sizes leaving their small villages for the larger and more economically and socially secure fortified settlements reducing the number of sites belonging to the EB III, characterised by lesser numbers of smaller sites. This is complemented by diminished contact with Egypt, which perhaps promoted and intensified urban developments during this period.<sup>33</sup>

<sup>&</sup>lt;sup>27</sup> Regev, et al., 2012: 559; Miroschedji, 2000:

<sup>&</sup>lt;sup>28</sup> Miroschedji, 2003.

<sup>&</sup>lt;sup>29</sup> Tel Yarmuth, Miroschedji, 2003; Tel Megiddo, Adams, 2014; Tel Beth Yerah, Greenberg and Paz, 2006; Mazar, 2001. For wider context of monumental buildings, see Kempinski, 1992.

<sup>&</sup>lt;sup>30</sup> Miroschedji, 2000: 320.

<sup>&</sup>lt;sup>31</sup> Gophna, 1995a: 275—276.

<sup>&</sup>lt;sup>32</sup> Levy-Reifer, 2012: 560.

<sup>&</sup>lt;sup>33</sup> Miroschedji, 2013: 321.

The end of the EB III is marked by the abandonment of the fortified settlements, returning to a system of nomadisation seen in the late Chalcolithic, before a re-urbanisation indicating the beginning of the Middle Bronze I. The reasons for this period of sproadicity is unknown, though numerous hypotheses ranging from Amorite invasion to a combination of climatic, social and political factors have been offered, though these hypotheses have been heavily scrutinized.<sup>34</sup> This terminal period is known as the Early Bronze IV (EB IV), and is better attested in the northern culture of the Southern Levant. Considering that the EB III is differentiated through material culture, a wider understanding of the differences between the EB III and EB II, as well as the sub-phases of the EB III (EB IIIA, IIIB, IIIC) will be highlighted in Chapter 2 of this paper.

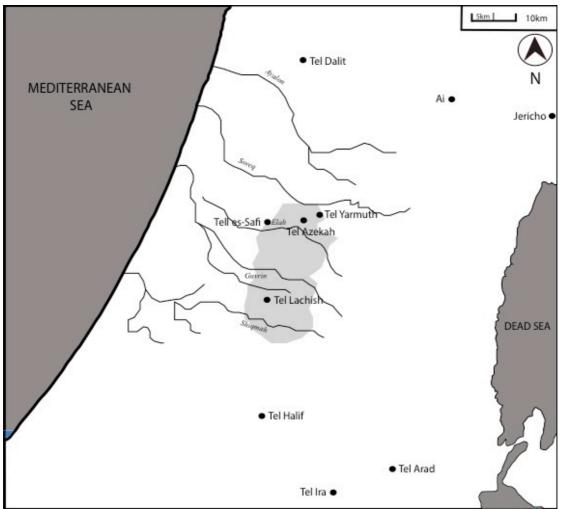


Figure 4. Early Bronze II-III sites closely related to Tel Azekah.

<sup>&</sup>lt;sup>34</sup> For example, Kenyon's hypothesis concerning Amorite invasion was strongly disregarded by Burke due to significant gaps in the archaeological record. Kenyon, 1963; Burke, 2008; Miroschedji, 2009.

## **1.3 PAST EXCAVATIONS/SURVEYS AT TEL AZEKAH**

Tel Azekah was first excavated by Bliss and Macalister in 1898-1899 and published under its Arabic name, Tell Zakariya, after the nearby settlement bearing the same name.<sup>35</sup> These excavations were conducted under the Palestine Exploration Fund for three seasons as a part of the first regional study in the area.<sup>36</sup>

A major aim of these early excavations was to understand the stratigraphy of the site from the current surface to the bedrock, along with understanding both the acropolis and the towers of the site.<sup>37</sup> This was achieved by excavating a series of trenches dug the entire was across the width of the site, backfilled with the soil of the previous trench, providing challenges for future excavations at the site.<sup>38</sup> The results from these excavations were published in four preliminary reports in the *Palestine Exploration Fund* (PEF) Quarterly Statement, followed by a final report published in 1902.<sup>39</sup>

Although these publications did include a typological catalogue of pottery, including some Early Bronze Age forms, the excavation methods of the time provided insufficient stratigraphical or architectural information, and therefore, little is known about the Early Bronze Age context.<sup>40</sup>

The tel and its surroundings were subsequently investigated during an extensive multi-site survey of the Judean Shephelah undertaken by Dagan in the 1990's.<sup>41</sup> Of Dagan's 3285 survey points, 200 included finds dating to the EB period. The survey results at Tel Azekah concluded that Tel Azekah was occupied as early as the EB II-III period, which was mimicked by the discovery of primarily EB III pottery in the 2012-2016 excavations of the Lautenschläger Azekah Expedition.<sup>42</sup>

<sup>&</sup>lt;sup>35</sup> Bliss and Macalister, 1902.

<sup>&</sup>lt;sup>36</sup> Dagan, 2011: 71.

<sup>&</sup>lt;sup>37</sup> See Bliss and Macalister, 1902: 12–27.

<sup>&</sup>lt;sup>38</sup> Dagan, 2011: 75.

<sup>&</sup>lt;sup>39</sup> Bliss and Macalister, 1899a, 1899b, 1899c, 1900; 1902.

<sup>&</sup>lt;sup>40</sup> Bliss and Macalister, 1902: Pls. 43: 7, 9; 45: 18. The pottery dating to the Early Bronze Age was classified as Archaic Ware, or synonymously, as Petrie's Amorite pottery. Dagan, 2011: Table 1

<sup>&</sup>lt;sup>41</sup> Dagan, 2000; 2011: 73-74.

<sup>&</sup>lt;sup>42</sup> Dagan, 2011: 80.

Following Dagan, Emmanuilov again surveyed Tel Azekah in 2009/2010 in preparation for the renewed excavations by the Lautenschläger Azekah Expedition in 2012, under the directorship of Prof. Oded Lipschits (Tel Aviv University), Dr. Yuval Gadot (Tel Aviv University), and Prof. Manfred Oeming (Heidelberg University).<sup>43</sup>

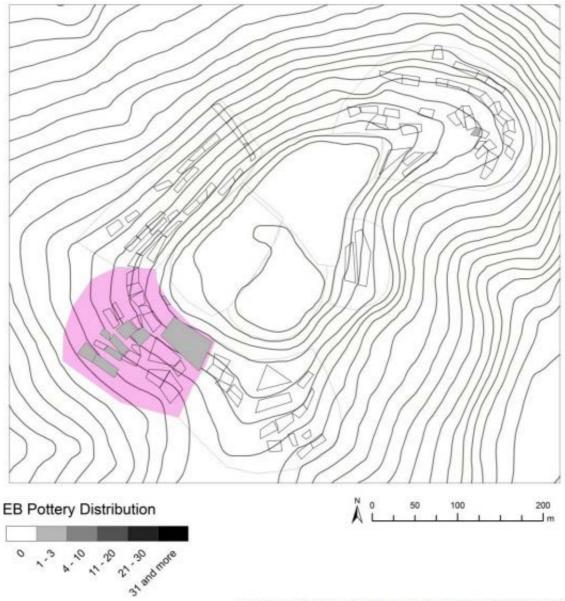
The earliest archaeological material found in survey at Tel Azekah dates to the EB II-III, and was located on the southern slope of the tel, with occupation continuing through the Roman, Byzantine and possibly Early-Islamic Periods.<sup>44</sup> As a result of the recent excavations, it can now be shown that Early Bronze Age material has been discovered not only in Area S1 in the southern part of the site, but also in Area W2 and W3 on the western plateau and slope, and in N1, on the northern plateau. (See Figure 5). Most of the EB contexts are not accompanied by strong archaeological context, however there are few examples, such as a donkey burial in Area S1, which provides at the least, some archaeological context with the pottery remains. The remains from the donkey burial in Area S1 are currently undergoing radiocarbon testing to determine a more precise date, though as the results are yet to be published, limited dating within this paper relies solely on the pottery remains discovered in the burial. The obvious lack of stratigraphical correlation has subsequently shifted the focus of this project from contextual, to cultural, aiming to discuss the cultural affinity of material remains at Tel Azekah, not its extent of the site during the Early Bronze Age.

As shown through this review, Early Bronze Age pottery was discovered in both survey and excavation in all projects at Tel Azekah, further attesting to the prevalence of the period across the tel.<sup>45</sup> The Early Bronze Age has not been a primary focus in the excavations at Tel Azekah, with little evidence of EB remains discovered over the first five years of excavations (2012-2016). In total, over 300 sherds have been utilised to form this study, with 50 sherds illustrated in Plates I-III. These sherds have been compiled to create a typology of the EB pottery seen in Chapter 4 of this paper. In the following Chapter, the development of pottery across the EB period will be summarised, with particular focus on the EB III.

<sup>&</sup>lt;sup>43</sup> Emmanuilov, 2012.

<sup>&</sup>lt;sup>44</sup> Bliss and Macalister, 1902; Dagan, 2011: 80; Emmanuilov, 2012: 63.

<sup>&</sup>lt;sup>45</sup> Dagan, 2011: Table 1.



איור 26: פריסת כלי החרס מתקופת הברונזה הקדומה בתל עזקה

Figure 5. Early Bronze Age pottery distribution found during the 2012 survey of Tel Azekah (Emmanuilov, 2012: 63).

## **CHAPTER 2 COMPARATIVE MATERIAL**

Due to the fragmentary nature of pottery excavated at sites in the Southern Levant, the use of comparative material is the most practical method of typological analysis. Typological analysis involves descriptive data analysis for the development of a set of related, though distinct, cultural categories. To simplify this, the Early Bronze Age pottery discovered at Tel Azekah will be comparatively analysed against surrounding sites to identify the cultural and regional affinities of the site during this period.

This Chapter will present a concise typology of the Early Bronze Age pottery through consultation with previous research, having a particular focus on the three sub-phases of the EB III. Little reference will be made to the earlier periods of the EBA (i.e. the EB I and EB II), due to the lack of material discovered at the site dating to these periods. The southern material culture will then be compared to the northern material culture, and the nuances between the two discussed. This Chapter will introduce the development of pottery during the Early Bronze Age, establishing the foundation for comparison with the Tel Azekah material in Chapter 4.

Even though much work has been done to advance pottery analysis, there is still an abundance of sites with unpublished material that can add to the current dialogue, and further provide information that will assist in understanding pottery production, development and use. The Early Bronze Age pottery of Tel Azekah is a prime example of this, and although, it cannot be assumed that this pottery will cause a shift in dialogue due to the limited remains, its inclusion in the dialogue will contribute to the cultural understanding of the period.

Many issues arise from the use of pottery as primary data in an archaeological or historical investigation. Rice stated that pottery "does not constitute 'data' until it is given meaning with reference to some larger context, such as a question, a hypothesis, or a model".<sup>46</sup> This encapsulates the need for pottery to be analysed to address modest and achievable hypothesis, which is often determined by the quantity and quality of pottery.

<sup>&</sup>lt;sup>46</sup> Rice, 2005: 207.

Further adding to the problematic the use of pottery, as 'data' is the lack of a whole-site dataset, which frequently occurs throughout archaeological excavations as the whole site is not, or cannot, be excavated in its entirety. This in turn, makes the analysed pottery a sample of the entire site, further limiting its use in quantitative analyses.<sup>47</sup> One way this project has overcome such constraints is through the use of a qualitative analysis, due to the limitations of a solely quantitative study from such a fragmentary dataset. This qualitative approach focuses on the nuances in manufacture, as well as analysing the shape and decorative applications that differed between the northern and the southern material cultures. A quantitative analysis requires large amounts of pottery and is usually conducted to explore questions regarding pottery function.

One major constraint of pottery research, especially in the Southern Levant, is the fragmentary nature of excavated pottery. The pottery of Tel Azekah is *extremely* fragmentary in nature, with sherds making up a majority of the assemblage. This will not have a negative impact on this project, as sherd analysis is typical in the publication of pottery assemblages in the Southern Levant. Often times the rim provides enough detail to satisfactorily draw typological conclusions on the vessels, with rim shape, angle, size and manufacturing technique developing across time.

Pottery standardization affected different regions and cultures during the EBA. For example, during the Early Bronze Age I, Grey Burnish Ware is seen to standardize across the region defined as the northern material culture in this project, though not in the area defined as the southern material culture. The standardization of Grey Burnish Ware includes a likeness in fabric, technique and form, and differs from the wares present in the southern material culture during the EB I. This is indicative of separate social and cultural affinities between the two regions, founded during the developing urban landscape of the Southern Levant.

It is often suggested that the development of standardized forms across the southern material culture was the product of state control of production, though little can be inferred from stratigraphy or material remains.<sup>48</sup> In recent years, an increase in studies focused on craft specialization in relation to political complexity has been witnessed, for example through the

<sup>&</sup>lt;sup>47</sup> Rice, 2005: 207.

<sup>&</sup>lt;sup>48</sup> Kramer, 1985: 118.

work of Blackman in the 1990's.<sup>49</sup> The recent emphasis on pottery studies assessing the varying intensities of standardization and organization came with it a new understanding of the EBA in the Southern Levant. The Early Bronze Age is perceived to be less prevalent with political autonomy and more prevalent with cultural complexity, which led with it the adoption of forms and techniques in a gradual manner, epitomised during the EB III with the standardization of vessel shapes.

To trace the foundations of pottery studies, and their development across time, one must first understand the changing focuses of these studies across the past few centuries. Pottery studies appears to be categorised into three broad phases; the 'Art Historical Phase', the 'Typological Phase' and the 'Contextual Phase'.<sup>50</sup> This historiographical phasing was developed by Orton *et al.* in 1993, and highlights the development of pottery studies in terms of subject.<sup>51</sup> The first phase—The Art Historical Phase—concerned much of the work surrounding scholars of the 18<sup>th</sup> and 19<sup>th</sup> centuries. During this period, the primary focus of pottery studies involved categorising pottery according to function, and discussing the observable features of vessels including decoration and shape.<sup>52</sup>

The Typological Phase of pottery studies began during the late 19<sup>th</sup> century, and as mentioned earlier, is an analytical tool used to chronologically align stratigraphy, culture and material remains. This typological method stems from the pioneering work of Flinders Petrie in both Egypt and the Southern Levant, developing the method for early typology studies through the chronological categorisation of forms and stratigraphy. His work from the 1880's to the 1930's helped identify stratigraphy as an important element to be understood within an excavation stemming from the work conducted at Tell el-Hesi in 1891.<sup>53</sup> This method, developed in the early 1900's, was used primarily for periodization, and firmly tied the use of pottery studies to chronology.

Wright achieved further development in 1937, being the first to analyse the pottery from sites in the north of modern Israel, and develop an Early Bronze Age corpus subdivided into four

<sup>&</sup>lt;sup>49</sup> Blackman, *et al.*, 1993; Blackman and Vidale, 1992; Stein and Blackman, 1993.

<sup>&</sup>lt;sup>50</sup> Orton, *et al*, 1993: 3.

<sup>&</sup>lt;sup>51</sup> Orton, et al., 1993.

<sup>&</sup>lt;sup>52</sup> Philip and Baird, 2000: 5.

<sup>&</sup>lt;sup>53</sup> Flinders Petrie, 1891.

periods; the EB I to the EB IV.<sup>54</sup> Differing from Petrie and Albright, Wright was focused on exploiting pottery for ethno-archaeological and economical studies, not for the sole outcome of chronological alignment.<sup>55</sup> Wright's forward thinking allowed for scientific direction to impact pottery studies, moving beyond the stigma of pottery as a single-use artefact. Although this typology was subject to numerous revisions and debate, its core was maintained through to typological studies today. Since this work was published, the Early Bronze Age has been revised into three primary phases, the EB I-III, with Wright's EB IV frequently identified as the Intermediate Bronze Age.

More broadly, Early Bronze Age typological studies were first extensively undertaken by Amiran in 1969 in a work entitled *Ancient Pottery of the Holy Land*.<sup>56</sup> This research identified the basic typological development of most period in Southern Levantine history, including an extensive section on the Early Bronze Age, identifying differences in form, use, style and cultural affinity.<sup>57</sup> The Early Bronze Age material was divided into two categories: the Northern Culture and the Southern Culture, identified through vessel shape. This book has been used confidently as a resource since the 1960's, with only minor changes distinguished between Amiran's typology and the current accepted chronology.

In regards to recent research analysing Early Bronze Age pottery, Miroschedji has led the way in developing a general typology of pottery forms, styles and decorations of the southern material culture, with particular focus on the EB III.<sup>58</sup> The development of a period-specific Early Bronze Age typology is based primarily on the finds from Tel Yarmuth, due to the clean EB stratigraphy found at the site. The publication of the excavations at Tel Yarmuth in 1989 provides the most extensively published EB pottery to date, with the site only being occupied during this period of history. This is atypical for the region, with most sites reoccupied numerous times throughout antiquity. Miroschedji's typology, along with the earlier work of Amiran, provide the backbone to the Southern Levantine typology presented in this Chapter, with reference also made to various excavation publications from surrounding sites. Placing the Early Bronze pottery of Tel Azekah into this typology will help

<sup>&</sup>lt;sup>54</sup> Sites included Tel Megiddo, Tel Beth Shean, Jericho, Ai, Bâb edh-Dhrâ<sup>c</sup>. Wright, 1937.

<sup>&</sup>lt;sup>55</sup> Wright, 1937: 1.

<sup>&</sup>lt;sup>56</sup> First printed in Hebrew in 1963; Reprinted in English in 1969. Amiran, 1969a.

<sup>&</sup>lt;sup>57</sup> Amiran, 1969: 14.

<sup>&</sup>lt;sup>58</sup> Miroschedji, 2000.

to advance and expand the currently accepted conclusions of EB pottery forms, while also situating Tel Azekah within the chronology.

It is important to note that emphasis on pottery studies increased monumentally during the past two decades, which is most apparent through the increase in 'untraditional' pottery studies involving a mixture of hard and soft sciences, drawing on paradigms from both the humanities and sciences.<sup>59</sup> This is known as the 'Contextual Phase' of pottery studies, aimed at explaining historical or cultural hypotheses through the analysis of material remains. This historiographical phase stems from the Typological phase, using the same analytical methods though employing them to answer different questions. While the classification of pottery in an excavation report is a 'typological analysis', the use of the material to address cultural parameters or historical events is a 'contextual analysis'.

To return this discussion to the development of an Early Bronze Age typology, the standardization of vessels in the EB III resulted in the standardization of pottery terminology, with the primary vessels dating to this period being classified under the following types:

- Small hemispherical bowls
- Small bowls with flat base and plain rim
- Deep bowls
- Platters
- Jugs/Juglets
- Twin vessels
- Jars
- Pithoi
- Holemouth jars
- Kraters<sup>60</sup>

One major issue with typological analysis lies in the discussion around holemouth jars. Little development occurs across holemouth jars from Chalcolithic archaeological contexts through the late EB archaeological contexts. It is often assumed that the holemouth sherds of finer material (those being without coarse inclusions) are indicative of a later EB date, however this cannot be accurately relied upon. A study conducted in 2005 by Karasik, Smilansky and

<sup>&</sup>lt;sup>59</sup> Rice,1996a; 1996b.

<sup>&</sup>lt;sup>60</sup> Kraters are also referenced as vats in early excavation reports, with no difference presented between the two terms. The use of the term 'krater' is a result of more recent reports, which tend to defined these vessels as such, and therefore this will be similarly referenced throughout this project.

Beit-Arieh aimed to identify typological differences in holemouth jar through computer analysis.<sup>61</sup> This was a bipartisan study, both testing the limits of computer technologies, and testing the applicability of these technologies to pottery studies.<sup>62</sup> A result of this study was that while little difference could be discerned from the individual assemblages, there were discernible differences between the sites of the northern and southern material cultures.<sup>63</sup> The primary differences were witnessed in rim profiles, with more thick rims found in the Southern Sinai than at Tel Arad. The study by Karasik, Smilansky and Beit-Arieh stresses the use of quantitative and qualitative pottery analysis in the Southern Levant. While little chronological knowledge can be discerned from the holemouths in their archaeological contexts alone, much can be observed across communities.

The terms outlined above will be elaborated upon in the following section, with emphasis placed on the development of surface treatment and vessel shape across the Early Bronze Age. As the Tel Azekah assemblage is almost exclusive to the EB III period, only a brief overview of the EB I and EB II will be summarised.

<sup>&</sup>lt;sup>61</sup> Karasik, Smilansky, and Beit-Arieh, 2005: 29.

<sup>&</sup>lt;sup>62</sup> Karasik, Smilansky, and Beit-Arieh, 2005: 29–30.

<sup>&</sup>lt;sup>63</sup> Karasik, Smilansky, and Beit-Arieh, 2005: 30.

## **2.1 SOUTHERN MATERIAL CULTURE**

#### 2.1.1 EB I Development

The EB I pottery shows great diversity in form and surface treatment that extends beyond the simple classifications it often receives—being of red, painted and burnished types. At the beginning of the EB I, red slip and red burnishing were techniques used on many vessels, including small hemispherical bowls, and small jars. Simultaneously, many wares were characterized by painted decoration, including straight or wavy line designs, often painted with a broad brush. These designs formed patterns often identified as the 'red-on-white' technique, involving the application of red or red-brown paint on a white lime-wash surface. This technique developed later into the Line Painted Group or B-tradition.<sup>64</sup>

The southern culture did not synchronise to the developments that were occurring in the north. In the north we observe the sudden emergence of various wares that indicates chronological change (e.g. Khirbet Kerak Ware, Metallic Ware, etc.). In the south, these changes are far more nuanced, only observed in the slight development of vessel shape, size, decoration or rim profile.<sup>65</sup> For this reason, the typology of the southern culture is far more challenging to discern.

The EB I has been included in this outline to highlight how the foundation of Early Bronze Age forms developed across the EBA. Little emphasis will be placed on the EB I and II typology, except for a brief outline of the wares and forms that developed during the period. The following Table identifies the primary characteristics of vessels according to type, discovered in the southern material culture from the EB I (Table 1). This outline was developed through the use of a combination of research conducted by Miroschedji and Amiran, as well as excavation reports from Tell es-Safi, Tel Yarmuth, and Tel Lachish.<sup>66</sup> This table, and the following ones are supported by no written description of the developments of pottery, as it is assumed that these tables will provide the most concise overview of typological developments without reproducing past work.

<sup>&</sup>lt;sup>64</sup> Schaub, 1982.

<sup>&</sup>lt;sup>65</sup> Yekutieli, 2000

<sup>&</sup>lt;sup>66</sup> Miroschedji, 2000; Amiran, 1969a; Goren and Zuckermann, 2000.

#### Table 1. Characteristic pottery trends of the EB I.

Form	Characteristic	Examples
Small bowl (Hemispherical)	<ul> <li>Small circular bowls with rounded base</li> <li>Often with pinched lip/spout</li> <li>Most with evidence of use as oil lamps (blackened lip)</li> <li>Red painted band along rim, sometimes extending to the interior</li> <li>In the EB IB examples are often seen with indented holes for</li> </ul>	Tel Dalit: Gophna, 1996: Fig. 39.2, 4
	string-secured lids	
Bowls with profiled rim and flat base	<ul> <li>Often V-shaped</li> <li>Sometimes with carinated rim</li> </ul>	
Large deep bowls	• Rounded body with a variety of rims; often inturned or plain	Tel Dalit: Gophna, 1996: Fig. 39.5-11, 14; 43.1; 6.1
Platters/Platter- Bowls	<ul> <li>Platters are common in south, as they are in the north</li> <li>Low inverted, rim with slightly rounded base</li> <li>Sometimes accompanied by a single pierced lug handle</li> <li>Pattern burnishing begins, though will reach a more extensive nature in the EB II</li> </ul>	
Juglets and Jugs	<ul> <li>Were often scarce during the EB I period</li> <li>Globular in shape and had a single high loop handle</li> <li>In EB IB are examples of lemon-shaped bodies</li> </ul>	
Twin Vessels	<ul> <li>Evidence of painted decorations on twin vessels</li> </ul>	
Jars	<ul> <li>Continue the form of the Chalcolithic</li> <li>Ledge handles introduced in the EB I period</li> <li>Some high-necked with loop handles</li> <li>Some with slightly flared, externally folded rim</li> <li>Often accompanied by the use of rope decoration</li> </ul>	Tel Dalit: Gophna, 1996: Fig. 40.6-10, 14; 43.4; 45.3, 5
Pithoi	<ul> <li>Thick-walled with slightly outwardly-inclined rim</li> <li>Heavy envelope ledge handles</li> <li>Flat based with a wide body</li> <li>Sometimes with applied horizontal clay band</li> </ul>	Tel Dalit: Gophna, 1996: Fig. 43.4
Holemouth	<ul> <li>Continue the form of the Chalcolithic</li> <li>Often with thick, coarse rim</li> </ul>	Tel Lachish: Gophna and Blockman, 2004: Fig. 15.2.15; 15.7.5 Tel Dalit: Gophna, 1996: Fig. 41.1-14

### 2.1.2 EB II Development

Pottery from the EB II often provides little chronological indication, and dating the stratigraphy itself requires determining where the EB I and EB III are situated.<sup>67</sup> For this reason, identifying the EB II pottery has become both problematic and unclear. During the EB II, the painted traditions expand to the 'brown-on-light' and 'white-on-red' painting techniques. In addition to this, pattern and net-burnishing patterns can be seen more extensively on platters. The so-called Pseudo-Metallic Ware pottery tradition is also attributed to the EB II period. This assemblage is characterized by a chocolate brown or dark grey colouring of the vessel, often thinned by scraping or through the act of wheel-turning.

This period was also the first in which Abydos Ware, or Red-Polished Ware is discovered in the Southern Levant.<sup>68</sup> First misunderstood and classified as Amorite pottery by Petrie in 1989, this ware is the most common vessels of this type include highly burnished jars with flat bases and high necks with vertical loop handles on their shoulders.<sup>69</sup> Grey Burnished Ware is also discovered in the Southern Levant, though its manufacture is attributed to the Northern Levant and makes its way south through trade and travel.<sup>70</sup> Often times, these wares are observed in the assemblages belonging to the sites of the southern material culture.

The main attributes of EB II pottery forms is outlined in the Table below.<sup>71</sup> Again, this Table is not supported by a written outline, as this Table identifies the development form the EB I forms seen in Table 2.

<sup>&</sup>lt;sup>67</sup> Joffe, 1993: 66. For background see Amiran, 1969a: 58-66.

<sup>&</sup>lt;sup>68</sup> Wright initially called the group 'Abydos Ware' in 1937, though this was revised by Kantor in 1965. Wright, 1937: 58, 70–72; Kantor, 1965: 15.

<sup>&</sup>lt;sup>69</sup> Petrie, 1989: 42, VI; Joffe, 1993: 66.

<sup>&</sup>lt;sup>70</sup> Amiran, 1969a: 61

<sup>&</sup>lt;sup>71</sup> All information in these tables comes from a combination of Miroschedji, 2000; Amiran, 1969a.

#### Table 2. Characteristic pottery trends of the EB II.

Form	Characteristic	Examples
Small bowl (Hemispherical)	<ul> <li>Small circular bowls with rounded base</li> <li>Covered with a red slip on the entire interior and exterior</li> <li>Some with clip for cloth or leather covering</li> <li>Most with evidence of use as oil lamps (blackened lip)</li> </ul>	Tel Yarmuth: Miroschedji, 1988: Pl. 21.1-2; 25:1-2 Tel Dalit: Gophna, 1996: Fig. 48.1, 5; 54.1-2
Deep Bowls	<ul> <li>Red slipped with vertical loop handles</li> </ul>	Tel Yarmuth: Miroschedji, 1988: Pl. 23:4
Bowls with profiled rim and flat base	<ul> <li>Diameter of 17-25cm</li> <li>Often used as lamps</li> <li>Flat based</li> <li>Relatively rare with varied profiles</li> <li>Sometimes covered with red slip</li> <li>Sometimes without slip though with coarse finish</li> </ul>	Tel Yarmuth: Miroschedji, 1988: Pl. 20.3
Large deep bowls	<ul> <li>Relatively common</li> <li>Some with evidence of use as oil lamps (blackened lip)</li> <li>Deep examples often red-slipped with straight profile</li> <li>Classic examples of fine ware or metallic ware</li> </ul>	Tel Yarmuth: Miroschedji, 1988: Pl. 20.4; 23:7- 15 Tel Lachish: Tufnell, 1958: Pl. 58:88-89
Platters/Platter- Bowls	<ul> <li>Most predominant forms of the EB II</li> <li>Huge increase in number from EB I</li> <li>Diameter above 30cm</li> <li>Red slipped on interior and exterior of vessel, often in net pattern</li> <li>Often with inwardly folded rim</li> </ul>	Tel Yarmuth: Miroschedji, 1988: Pl. 23:21-23; 25:11-17 Tel Dalit: Gophna, 1996: Fig. 50.1-7; 53.3; 54.4
Juglets and Jugs	<ul> <li>Relatively few found</li> <li>Examples often have high collar base with narrow platform</li> <li>Body decorated with a vertical annular candle</li> <li>Sometimes with slip or painted decoration</li> </ul>	Tel Yarmuth: Miroschedji, 1988: Pl. 21:15 Tel Lachish: Gophna and Blockman, 2004: Fig.15.2.2; 15.3.12; 15.8.16 Tel Dalit: Gophna, 1996: Fig. 48.9-11; 51.2
Twin Vessels	<ul> <li>Larger than EB I examples, though same form as earlier examples</li> </ul>	
Jars	<ul> <li>Most with brown-red slip</li> <li>Burnished vertically</li> <li>Sometimes with painted decoration</li> <li>Rope decoration now rare</li> </ul>	Tel Yarmuth: Miroschedji, 1988: Pl. 25:18-19; 26:1-2 Tel Lachish: Gophna and Blockman, 2004: Fig. 15.2.11

	Combed decoration exclusive to the northern culture of the	Tel Dalit: Gophna, 1996: Fig. 48.17; 54.11-13;
	Southern Levant	56-57
	<ul> <li>Made of coarse ware</li> </ul>	Tel Yarmuth: Miroschedji, 1988: Pl. 21.16;
Pithoi	<ul> <li>Almost always lime-washed</li> </ul>	21.17
		Tel Dalit: Gophna, 1996: Fig. 48.20; 54.13; 63
	<ul> <li>Lip obliquely folded inwards</li> </ul>	Tel Yarmuth: Miroschedji, 1988: Pl. 26:3-4
	<ul> <li>Collarless with a large opening and very steep neck</li> </ul>	
Vactors	<ul> <li>Often lime-washed</li> </ul>	
Kraters	<ul> <li>Some with thickened rim</li> </ul>	
	<ul> <li>Ovoid kraters are rare</li> </ul>	
	<ul> <li>Shallower than the EB III examples</li> </ul>	
	<ul> <li>General shape always the same: ovoid shoulder, flat base</li> </ul>	Tel Yarmuth: Miroschedji, 1988: Pl. 20.17-20;
	<ul> <li>Sometimes with loop handles, sometimes with a folded lip</li> </ul>	22:1-14; 26:5-9
Holemouth	<ul> <li>Most common with thickened lip</li> </ul>	Tel Lachish: Gophna and Blockman, 2004: Fig.
Holemouth	<ul> <li>Less coarse than EB I examples</li> </ul>	15.2.9-11; 15.3.16
	_	Tel Dalit: Gophna, 1996: Fig. 51.5, 7; 52.3, 4;
		53.10; 55.5; 56; 57; 59; 60

## 2.1.3 EB III Development

The Early Bronze Age III was the culmination of pottery development resulting in the standardization of surface treatment, form and shape internally in the northern and southern material cultures. The pottery of the EB III period also shows evidence of being made of 'superior' manufacture and firing techniques when compared with the earlier EB II examples.<sup>72</sup> This superiority is identified through the use of well-levigated clays, well-fired vessels, and well-smoothed surfaces.<sup>73</sup> Another trend of the EB III is that many vessels, especially smaller-sized juglets, become increasingly coarse in both manufacture and appearance.

Concerning surface treatment, a major development was the widespread appearance of pattern burnishing, primarily on platters and platter bowls in a grid or mesh design. During the early EB III, there are rare examples of red-on-light painted ware with brown-red criss-cross lines applied to light, sometimes white-slipped background. This is not seen in the later phases of the EB III period, as previously outlined in Chapter 1 (EB IIIB-C). Pseudo-Metallic Ware is seen during the EB III period, following its development during the EB II. Instead of the chocolate-brown fine ware of the EB II period, the vessels now exhibit a red-brown colour consistent with the Northern Levantine examples. Khirbet Kerak Ware (KKW) is also observed in the EB IIIB, and not attested during the EB IIIC. Its discovery in Southern Levantine archaeological contexts is attributed to trade and travel to/from the Northern Levant.

The surface treatments involved in pottery manufacture changed markedly from the EB II techniques. This list identifies the primary changes in finishing and manufacturing techniques involved during this period:

• Painted decoration continued scarcely in the EB IIIA, and is then rarely seen in the pottery remains

• Pattern-burnishing became frequent, particularly in platters and platter-bowls, though also witnessed on the exterior of large jugs or small jars

Pattern-combing developed on jars, pithoi and kraters

<sup>&</sup>lt;sup>72</sup> Miroschedji, 2000: 325.

<sup>&</sup>lt;sup>73</sup> Miroschedji, 2000: 327.

• Wheel-combing developed on holemouth jars, small-medium sized jars and coarse bowls

• Lime wash became common on almost all coarse vessels

As many of the sites in the Southern Levant exhibit heavy EB III pottery remains, it is worth noting the differences between the forms of the sub-phases, as distinguishing between them will allow for a more comprehensive outline of the development of pottery. An overview of the developments that surrounded wares across the EBA can be seen in the Table below (Table 3). The following Tables (Table 4-6) outline the development of shapes and forms across the EB IIIA-C periods as a result of the work of Miroschedji in 2000.<sup>74</sup> It is hoped that these tables and figures highlight the nuances across this period, which will provide the basis for comparison with the Tel Azekah assemblage in Chapter 4.

<sup>&</sup>lt;sup>74</sup> More generally, all information in these tables comes from a combination of Miroschedji, 2000; Amiran, 1969a.

### EB IIIA

- Red slip applied over entire bowl or platter in EBII, though in EBIII it only appears on the interior and its exterior rim, as far as the carination
- Disappearance of *all* the diagnostic shapes of the EBII
- General standardization of shapes
- No more chocolate-brown Metallic Ware
- Introduction of various painted wares:
   Strip-Painted red-on-white
   Net or Zigzag Painted brown-on-buff
   'Abydos' Painted brown-on buff
- -'Abydos' painted white-on-red

### EB IIIB

- The use of red burnished slips and especially pattern burnished slips
- Trend towards more coarse wares continues from EB IIIA
- Appearance of 'giant' vessels: platters, platter-bowls and basins
- The diameters of these vessels exceeds 60cm, and grows up to 90cm
- Vessels have superior finish and a more 'attractive' appearance, due to more standardized manufacture and firing techniques

## EB IIIC

- Trend toward more coarse wares is accentuated by the tendency to give vessels a coarser finish
- An increasing frequency of wheelturned vessels, especially bowls
- Great uniformity in the use of the same brown-red coarse ware and the same surface treatment, almost reminiscent of the criteria for mass production
- Jugs and bowls were now wet-smoothed on the wheel or wheel-combed then lime-washed (similar to treatment of large utilitarian vessels in the preceding phases)

## 2.1.3a EB IIIA

Form	Characteristic	Examples
Small bowl (Hemispherical)	<ul> <li>Small circular bowls with rounded or flat base</li> <li>Covered with a red slip on the entire interior and exterior rim only</li> <li>Most with evidence of use as oil lamps (blackened lip)</li> </ul>	Tel Yarmuth: Miroschedji, 1988: Pl. 28:1; 30:1-2; 32:3-4, 6-7 Tel Dalit: Gophna, 1996: Fig. 65.1
Bowls with profiled rim and flat base	<ul> <li>Small circular bowls with rounded or flat base</li> <li>Covered with a red slip on the entire interior and exterior</li> <li>Most with evidence of use as oil lamps (blackened lip)</li> <li>Some string-cut</li> <li>Relatively rare with varied profiles</li> <li>Sometimes covered with red slip on interior and exterior rim of vessel</li> </ul>	Tel Yarmuth: Miroschedji, 1988: Pl. 27:3; 30:6-7; 32:10; 37:6
Large deep bowls	<ul> <li>Relatively common</li> <li>Some with evidence of use as oil lamps (blackened lip)</li> <li>Deep examples often red-slipped with straight profile</li> <li>Classic examples of fine ware or metallic ware</li> <li>Improved in quality to the EB II examples</li> <li>Higher frequency of pattern-burnished interiors</li> <li>Size increased in comparison to the EB II examples</li> </ul>	Tel Yarmuth: Miroschedji, 1988: Pl. 30:8; 32:6-11
Platters/Platter-Bowls	<ul> <li>Different to EB II due to quality, frequency of pattern burnished decoration and size</li> <li>Large is most common.</li> <li>Two types: 1) short rim, triangular, rounded lip, concavity under rim is pronounced; 2) thin, flat, high, vertical, returning rim, concavity more pronounced</li> <li>Diameter above 30cm</li> <li>Red slipped on interior and exterior of vessel</li> </ul>	Tel Yarmuth: Miroschedji, 1988: Pl. 27:6, 8-9; 28:7-10; 30:10-13; 32:15, 17; 33:1-11; 34:14-16; 37:13-15; 38:1-8 Tel Lachish: Gophna and Blockman, 2004: Fig. 15.3.5-7
Juglets and Jugs	<ul> <li>Relatively few found</li> <li>Large examples with handle in the middle of a high profiled neck</li> <li>Some with flattened loop-handle in the middle of body with a cylindrical base</li> </ul>	Tel Yarmuth: Miroschedji, 1988: Pl. 27:5, 7; 31:1-3; 34:1-5; 38:12-15, 17

	<ul> <li>Small, highly-burnished jugs with wide opening and narrow base or wide stump base</li> <li>Piriform examples</li> <li>Sometimes with stand</li> </ul>	
Jars	<ul> <li>Medium-sized examples have a squat body, and a pair of wavy-handles</li> <li>Have a typical rim profile characterized by a slightly elongated thickening due to being folded over</li> <li>Surface may be slightly combed horizontally</li> <li>Often lime-washed, some with red-on-white painted decoration</li> <li>Large examples with large opening and short, flaring neck</li> <li>Most with horizontal loop handles or pillar handles</li> </ul>	Tel Yarmuth: Miroschedji, 1988: Pl. 29:2, 4-5, 7; 31:6-7; 32:12; 34:6-13; 39:13-18
Pithoi	<ul> <li>Narrow, flat base with elongated, ovoid body and flaring neck</li> <li>The profile of the body and neck differs to EB II examples</li> <li>Often includes raised band of finger or stick impressions between neck and shoulder</li> <li>One or two pain raised bands infrequently occur on the bodies of EB IIIA pithoi</li> <li>Almost always lime-washed and often also pattern-combed</li> </ul>	Tel Yarmuth: Miroschedji, 1988: Pl. 29:6, 8-11; 36:13; 39:17 Tel 'Ira: Beit-Arieh, 1999: Fig. 6.9.2-3
Kraters	<ul> <li>Spouted kraters frequently discovered</li> <li>Ovoid in shape with flat base</li> <li>Often with a pair of wavy-handles</li> <li>The interior of the ledge rim is often oblique towards the interior</li> <li>A short cylindrical spout occurs immediately under the rim</li> <li>Frequently lime-washed and pattern combed</li> </ul>	Tel Yarmuth: Miroschedji, 1988: Pl. 29:1; 31:5; 35:1-7; 39:1-3 Tel 'Ira: Beit-Arieh, 1999: Fig. 6.10.7
Holemouth	<ul> <li>Ovoid with flat or rounded base, similar to the EB II examples</li> <li>Less coarse than the EB II examples</li> <li>Often with horizontally combed surface</li> <li>Rim typically thinner than the EB I and EB II examples: often rounded, internally beaded, thickened or bevelled</li> <li>Potter's marks common</li> </ul>	Tel Yarmuth: Miroschedji, 1988: Pl. 27:11-12, 14-20; 36:1-7, 10, 12, 14-15 Tel Dalit: Gophna, 1996: Fig. 65.6-7 Tel 'Ira: Beit-Arieh, 1999: Fig. 6.9.7, 11

Table 4. Characteristic pottery trends of the EB IIIA.

## 2.1.3b EB IIIB

Form	Characteristic	Examples	
Small bowl (Hemispherical)	<ul> <li>Same as EB IIIA, though some with no slip</li> <li>Small circular bowls with rounded or flat base</li> <li>Sometimes occur with no slip on interior or exterior</li> <li>Most with evidence of use as oil lamps (blackened lip)</li> <li>Little difference to EB IIIA examples</li> </ul>	Tel Yarmuth: Miroschedji, 1988: Pl. 42:4; 45:2	
Bowls with profiled rim and flat base	<ul> <li>Inturned rounded rims, frequently oblique towards the interior</li> <li>Often with slight concavity on the exterior</li> <li>Sometimes covered with red slip on interior and exterior rim of vessel</li> </ul>	Tel Yarmuth: Miroschedji, 1988: Pl. 42:5; 45:3	
Large deep bowls	<ul> <li>Rare (primarily restricted to EBIIIA)</li> </ul>	Tel Yarmuth: Miroschedji, 1988: Pl. 41:1	
Platters/Platter-Bowls	<ul> <li>Platter-Bowls</li> <li>Now distinct to platters</li> <li>Become larger in comparison to the EB IIIA examples, often 40-60cm in diameter</li> <li>Thick wall with highly burnished red slip and elaborate decorative patterns</li> <li>May have simple rim or profiled rim <i>Platters</i></li> <li>Platters became 'giant' in size, often 60-90cm in diameter</li> <li>Some with evidence of use as oil lamps (blackened lip)</li> <li>Higher frequency of pattern-burnished interiors</li> <li>Thick wall with highly burnished red slip and elaborate decorative patterns</li> </ul>	Tel Yarmuth: Miroschedji, 1988: Pl. 41:3-5; 42:13-20; 43:1-11; 45:7-9, 11, 13-16 Tel Yarmuth: Ben-Tor, 1975: Fig. 11.1 Tel Lachish: Gophna and Blockman, 2004: Fig. 15.4.1, 5 Tel 'Ira: Beit-Arieh, 1999: Fig. 6.10.1	
Juglets and Jugs	<ul> <li>Relatively few found</li> <li>Highly burnished red slip and infrequent pattern-burnishing on the body</li> <li>Stump bases most common</li> </ul>	Tel Yarmuth: Miroschedji, 1988: Pl. 44:3 Tel Lachish: Gophna and Blockman, 2004: Fig. 15.8.14-15	
Jars	<ul> <li>Few changes to EB IIIA examples</li> <li>Large jars now include profile characterized by short everted rim with 'gutter-like' indent along the top</li> </ul>	Tel Yarmuth: Miroschedji, 1988: Pl. 44: 5-11; 45:20-21 Tel Yarmuth: Ben-Tor, 1975: Fig. 10.3, 6,	

	<ul> <li>Wide opening and short neck, often with combed surface</li> <li>Often with horizontal lug-handles on the shoulder</li> </ul>	9
Pithoi	<ul> <li>Body is less ovoid and more elongated to EB IIIA examples</li> </ul>	Tel Yarmuth: Miroschedji, 1988: Pl. 41:12 (base); 45:17-19 Tel 'Ira: Beit-Arieh, 1999: Fig. 6.10.18
Kraters	<ul> <li>Same characteristics to EB IIIA examples</li> <li>Introduction of kraters with tronconic shaped body</li> <li>Few examples of four-handles wavy-handled arranged in two pairs on opposing sides of the vessel</li> <li>EBIIIA type continues</li> <li>Appearance of large kraters with tronconic body (flat base, straight-angled walls (almost V-shaped)</li> </ul>	Tel Yarmuth: Miroschedji, 1988: Pl. 44:15-22 Tel Yarmuth: Ben-Tor, 1975: Fig. 11.6
Holemouth	<ul> <li>No typological change to the EB IIIA examples</li> </ul>	Tel Yarmuth: Miroschedji, 1988: Pl. 44:12-14; 45:22-23 Tel 'Ira: Beit-Arieh, 1999: Fig. 6.10.2, 4- 6, 10-16

Table 5. Characteristic pottery trends of the EB IIIB.

## 2.1.3c EB IIIC

Form	Characteristic	Examples
Small bowl (Hemispherical)	<ul> <li>Little change to earlier EB III examples</li> <li>Still with red slip on interior and exterior rim only</li> </ul>	Tel Lachish: Gophna and Blockman, 2004: Fig. 15.6.4 Tell es-Safi: Uziel and Maeir, 2012: Pl.11.1.1
Deep Bowls	<ul><li>Few examples of deep bowls with coarse finish</li><li>Often with slightly inturned or out-turned rim</li></ul>	Tel Yarmuth: Miroschedji, 2000: Fig. 18.8.5-7
Bowls with profiled rim and flat base	<ul> <li>With slightly convex, flaring walls</li> <li>Often with coarse finish and no slip</li> <li>Evidence of wheel-manufacture</li> </ul>	Tel Yarmuth: Miroschedji, 2000: Fig. 18.8.2 Tel Lachish: Gophna and Blockman, 2004: Fig. 15.3.2 Tell es-Safi: Uziel and Maeir, 2012: Pl. 11.1.2
Large deep bowls	<ul> <li>Comparable to EB IIIA examples, though still rare</li> <li>'Giant' examples appear less frequently</li> </ul>	Tell es-Safi: Uziel and Maeir, 2012: Pl. 11.1.6
Platters/Platter- Bowls	<ul> <li>Platter-Bowls</li> <li>Some examples with profiled rim, entirely folded on the interior with an oblique top</li> <li>Sometimes with slight concavity on the exterior below the rim</li> <li>Red-burnished slip often on the interior, and wheel-combed lime-wash on the exterior</li> <li>Often with plain profile</li> <li>Platters</li> <li>'Giant' examples seen less frequently</li> <li>Usually lime-washed</li> <li>Sometimes slightly thickened inside</li> <li>20-25cm diameter are comparatively rare</li> <li>Slightly flaring concave wall and plain rim with very flat base</li> </ul>	Tel Yarmuth: Miroschedji, 2000: Fig. 18.8.9-11, 14; 18.10.3 Tel Lachish: Gophna and Blockman, 2004: Fig. 15.6.6-11 Tel 'Ira: Beit-Arieh, 1999: Fig. 6.11.1-2, 9 Tell es-Safi: Uziel and Maeir, 2012: Pl.11.1.5-6; 11.2.8-9
Juglets and Jugs	<ul> <li>Piriform examples often red-burnished with vestigial vertical handle</li> <li>Coarse jugs often lime-washed</li> </ul>	Tel Yarmuth: Miroschedji, 2000: Fig. 18.9.3, 6 Tell es-Safi: Uziel and Maeir, 2012:

	<ul> <li>Small juglets often with pointed base with two large lug handles</li> </ul>	Pl.11.2.4-5, 10
Twin Vessels	With light-brown self-slip and lime-wash	Tel Yarmuth: Miroschedji, 2000: Fig. 18.9.8
	<ul> <li>One type of small jar with barrel-shaped body and short neck</li> </ul>	Tel Yarmuth: Miroschedji, 2000: Fig.
	<ul> <li>Medium-sized examples of piriform shape with large wavy-</li> </ul>	18.9.4-5, 9-12
	handles and small loop-handle	Tel 'Ira: Beit-Arieh, 1999: Fig. 6.11.8 (base)
Jars	<ul> <li>Surface often pattern-combed</li> </ul>	Tell es-Safi: Uziel and Maeir, 2012:
	<ul> <li>Almost always lime-washed</li> </ul>	Pl.11.1.9, 11-13
	<ul> <li>Large jars very coarse with wide opening and short neck</li> </ul>	
	<ul> <li>Sometimes large examples have elongated knobs on the upper</li> </ul>	
	shoulder	
	<ul> <li>All elongated type have pattern-combed body and lime-wash</li> </ul>	Tel Yarmuth: Miroschedji, 2000: Fig.
Pithoi	<ul> <li>No differences in shape to the EB IIIB examples</li> </ul>	18.10.6
1 10101	<ul> <li>Often have potter's mark present</li> </ul>	Tel Lachish: Gophna and Blockman, 2004:
	<ul> <li>Height is constant though neck shape varies</li> </ul>	Fig. 15.2.20-21; 15.8.2-7
	<ul> <li>Often tronconic in shape with pair of wavy-handles</li> </ul>	Tel Yarmuth: Miroschedji, 2000: Fig.
	<ul> <li>Size of vessels is often large, though small and very small</li> </ul>	18.10.4-5
Kraters	examples also occur (minimum diameter of 18.5cm attested)	Tel Lachish: Gophna and Blockman, 2004:
Kiaters	<ul> <li>Few examples of large unspouted kraters with four or six loop-</li> </ul>	Fig. 15.5.2-3; 15.6.13; 15.7.1-3
	handles. These occurred at Tel Yarmuth in Palace B and also had	Tell es-Safi: Uziel and Maeir, 2012:
	elongated knobs on the exterior below the rim	Pl.11.1.7-8
	<ul> <li>Increasing number are wheel-combed and sometimes lime-</li> </ul>	Tel Yarmuth: Miroschedji, 2000: Fig.
	washed	18.10.1-2
	<ul> <li>Some smaller specimens have rounded base and were cooking</li> </ul>	Tel 'Ira: Beit-Arieh, 1999: Fig. 6.11.3, 5-7
Holemouth	pots	Tell es-Safi: Uziel and Maeir, 2012:
	<ul> <li>Large ones with flat base were used as storage vessels and could</li> </ul>	Pl.11.2.1-3, 13-15
	be sunk into the floor	
	<ul> <li>Similar in shape to EB IIIA/B period, perhaps less coarse</li> </ul>	

Table 6. Characteristic pottery trends of the EB IIIC.

## **2.2 NORTHERN MATERIAL CULTURE**

As it is assumed that Tel Azekah will show affinity with the southern material culture, and due to the size of both the northern and southern pottery cultures in the Southern Levant, only the southern material culture will be analysed in depth in this section. In this section a short analysis of important features of the northern material culture will be covered, primarily involving wares and forms that are often discovered in sites belonging to the southern material culture, presumed to be the result of interaction with the communities using the northern material culture.

Grey Burnish Ware (GBW), formerly classified as 'Esdraelon Ware' by Wright in 1937, is observed primarily around the Jezreel Valley during the EB I.<sup>75</sup> The southernmost site concluded to manufacture Grey Burnish Ware is Palmahim Quarry, the northernmost location identified with evidence of 'Egyptianized' sherds during the EB I.<sup>76</sup> This is important to this study as it provides a liminal zone in which pottery traditions of two regions appear together, which could illustrate the unofficial cultural border of these two 'zones'. In addition to GBW, Grain Wash or Band-slip ware was also produced in the EB I.<sup>77</sup> This ware shows synchronisms with the Line Painted Group of the southern culture and is primarily found on larger vessels including holemouth jars and pithoi.<sup>78</sup>

One of the major indications of the northern material culture was the emergence of Khirbet Kerak Ware (KKW) in the EB III, after the site it was first discovered at, Tel Beth Yerah. This ware differed greatly from earlier pottery forms, in quality, manufacture, finishes, decorations, and firing. The most notable characteristic of this pottery is a heavy slip burnished to a high gloss, and lack of wheel-manufacture marks.<sup>79</sup> These vessels make up large numbers at sites in the northern material culture, though it seems more prevalent at Tel Beth Shean, accounting for 60% of the entire EB III pottery from the site.<sup>80</sup> This ware has

<sup>&</sup>lt;sup>75</sup> The primary areas this ware is discovered is the areas of Tel Megiddo, Tel Afula, Abu Zureiq, Khirbet Kerak, Tel Beth Shean and the wider Jezreel Valley region in the northern area of the Southern Levant. Wright, 1937.

<sup>&</sup>lt;sup>76</sup> Braun, 1991: 77.

<sup>&</sup>lt;sup>77</sup> Engberg and Shipton, 1934: 28.

<sup>&</sup>lt;sup>78</sup> Joffe, 1993: 40.

<sup>&</sup>lt;sup>79</sup> Amiran, 1969: 68.

<sup>&</sup>lt;sup>80</sup> At Tel Beth Yerah, the KKW makes up 20-30% of the entire pottery assemblage from the EB III, while at nearby Tel Hazor, it makes up 25% in the early EB III, and only 10% in the later EB III. Philip, 1999: 42.

been found at Tel Lachish in the Shephelah, indicating movement and development of this ware.<sup>81</sup>

Complementing the KKW in the northern material culture was the emergence of Metallic Ware in the EB II-III, formerly known as Combed Ware or 'Abydos Ware'.<sup>82</sup> Sherds of this ware are characterised by being of varying shades of red-to-grey, with a distinctive metallic ring when struck.<sup>83</sup> Typologically, this ware is observed on a wide variety of vessels, including bowls, jugs, jars, and kraters.<sup>84</sup> This ware is seen in sites from the Jordan Valley to the Jezreel Valley, covering most of the area defined as the northern material culture.<sup>85</sup> The southernmost sites with evidence of Metallic Ware are Tel Erani and Tel Arad.<sup>86</sup> As the hub of KKW manufacture appears around Tel Dan, it is often presumed the sites exhibiting the ware further from Tel Dan were not in fact manufactured there, but transported there.<sup>87</sup> To explain this more simply, it is believed that these vessels appear within the southern culture through interaction with the northern counterparts, however this remains understudied.

As outlined throughout this Chapter, nuances in pottery forms, shapes and wares indicated chronological development and can be used to determine cultural and regional affinities during the Early Bronze Age. These developments now form the framework for further comparison in this project, allowing for simple chronological alignment with the tables and figures included in this Chapter. The pottery from Tel Azekah dates to the EB III, and will be discussed primarily against the typologies developed by Miroschedji due to the EB III specificity of the typologies. The following Chapter will elaborate upon these sites, highlighting the excavation aims and techniques, as well as the location of the EB pottery discovered. This will allow for more precise comparisons with the Tel Azekah pottery, which will be undertaken in Chapter 4.

<sup>&</sup>lt;sup>81</sup> Gophna and Blockman, 2004: Fig. 15.2.19

<sup>&</sup>lt;sup>82</sup> Ben-Tor, 1991: 107-109.

<sup>&</sup>lt;sup>83</sup> Greenberg and Porat, 1996: 6.

<sup>&</sup>lt;sup>84</sup> Greenberg and Porat, 1996: Fig. 1-3.

<sup>&</sup>lt;sup>85</sup> Sites where it is primarily found include Tel Megiddo, Tel Beth Yerah, Tel Dan, and sites further north.

<sup>&</sup>lt;sup>86</sup> Also seen at Tel Dalit and 'Ai, which are significantly south of the aforementioned sites of the northern material culture. Greenberg and Porat, 1996: 11. Tel Dalit: Gophna, 1996, Fig. 46.1-2; 48.2, 4, 4; 49.1; 50.1-7.

<sup>&</sup>lt;sup>87</sup> Greenberg and Porat, 1996: 18.

# **CHAPTER 3 COMPARATIVE SITES**

## **3.1 SOUTHERN SITES**

As has been previous stated, two distinct cultural technologies emerged during the Early Bronze Age in the Southern Levant. These two cultures have distinct geographical boundaries, most simply lineated by the site of Tel Dalit. Sites to the south of Tel Dalit, the most notable of which are Tel Yarmuth, Tell es-Safi, Tel Lachish, Tel Halif, and Tel 'Ira (Figure 6), are of the southern material culture. Those above it, including Tel Megiddo, Tel Beth Yerah, Tel Beth Shean and Ai (et-Tell), are of the northern material culture.<sup>88</sup>

This Chapter will discuss four sites that were occupied across one or more phases of the EB period, all of which provide substantial pottery remains uncovered *in situ* for comparative analysis with the Tel Azekah assemblage. The primary focus of this Chapter is to discuss the archaeological contexts associated with pottery from a similar time and material culture as Tel Azekah. Emphasis has been placed on sites exhibiting pottery dating to the EB III, as this period is widely attested at Tel Azekah in both survey and excavation.<sup>89</sup> The sites included in this section are Tel Yarmuth, Tel Lachish, and Tell es-Safi. Inclusion of the first three sites is based on their proximity to Tel Azekah, being the three closest sites with extensive EB remains exposed across multiple seasons of excavations.

Few other sites are also heavily occupied during the Early Bronze Age. The following explains the reasoning behind excluding them as primary comparative sites in this study<sup>90</sup>:

- Tel Erani was an 'Egyptian' stronghold during the Early Bronze Age I, though this site has not been included for stratigraphical analysis here as the pottery of the Tel Azekah assemblage primarily dates to the EB III.<sup>91</sup>
- Tel Arad was a large fortified city in the east during the Early Bronze Age II and was one of the earliest fortified cities in the southern area of the Southern Levant.<sup>92</sup> Tel Arad has not been included for discussion in this section due to the mixture of elements of both the

<sup>&</sup>lt;sup>88</sup> See Chapter 3.2.

<sup>&</sup>lt;sup>89</sup> Dagan, 2011: 80; Emmanuilov, 2012: 63.

<sup>&</sup>lt;sup>90</sup> Although these sites are not included in this chapter for archaeological analysis, the pottery assemblages of these sites will be included comparatively in Chapter 4, though not at the same intensity as the sites included here for further discussion.

<sup>&</sup>lt;sup>91</sup> Brandl, 1986; Kempinski and Gilead, 1991.

<sup>&</sup>lt;sup>92</sup> Amiran, 1978.

northern and southern material cultures in the pottery assemblage, and that primary occupation at the site dates to the EB II.

- Tel Halif also exhibits extensive EB remains primarily dating to the earlier periods of the EB, and will therefore not be included for a similar reason to Tel 'Erani. In addition to this, the stratigraphy of Tel Halif is fragmentarily published and would not contribute to this discussion of EB pottery in an archaeological context.<sup>93</sup>
- Due to the scarcity of *in situ* pottery, Tel 'Ira has not been included for stratigraphical discussion in this Chapter, though will be used for comparison in Chapter 4.

The following section will outline the Early Bronze Age archaeological contexts discovered at these sites, indicating where on the site the different periods of the EB period were discovered, and the extent of the remains in order to outline the comparative material that will be used in the following analysis.

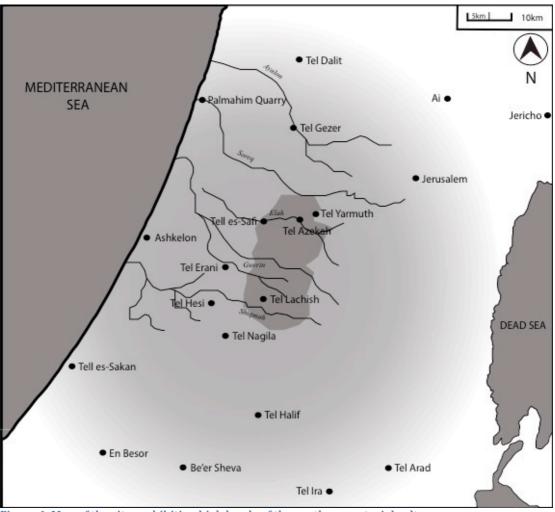


Figure 6. Map of the sites exhibiting high levels of the southern material culture.

<sup>&</sup>lt;sup>93</sup> Dessel, 1988; Jacobs and Borowski, 1993.

#### **3.1.1 TEL YARMUTH**

Excavations are Tel Yarmuth began in 1970 under the directorship of Ben-Tor until 1980, when Miroschedji assumed directorship for another eleven seasons.<sup>94</sup> Four areas excavated at Tel Yarmuth are important to the discussion of EB pottery in its archaeological context: Area B, Area C, Area G, and Area H.<sup>95</sup> Furthermore, EB pottery was discovered in three more Areas associated with the fortification of the site: Area A, Area D and Area E, though these originated from mixed deposits and are therefore not essential to this discussion.<sup>96</sup>

Tel Yarmuth is undoubtedly the most significant site analysed in past studies of Early Bronze Age pottery. This is due to a few reasons, the first of which concerns the continuous archaeological presence from the EB I through the EB III, which is not seen to such an extent at surrounding sites in the Southern Levant. Secondly, the EB structures, noted for their 'monumentality' by Miroschedji, span up to 4500 square metres and have uncovered a vast amount of EB pottery, which was published in the excavation reports of 1989, further used to develop the typology of the southern material culture.<sup>97</sup> EB remains at Tel Yarmuth have been discovered most notably in the lower city, with no evidence of re-occupation observed in the stratigraphy. This has resulted in clean EB contexts, which is uncommon across other sites of the Early Bronze Age.

To break down the stratigraphy of Tel Yarmuth more extensively, the table below aids us in understanding the alignment of the different phases at Tel Yarmuth (Table 7). Concerning the city areas, the EB I is associated with phases B-V, and C-IX, though the archaeological contexts of these phases is unreliable and difficult to associate with architectural remains. The EB II is associated with phases B-IV, C-V/VI/VII/VIII, and G-V and can be associated with few architectural remains, though not to the extent of the EB III phases. Due to the emergence of pottery during the EB III at Tel Azekah, the EB I and EB II phases will not be expanded further.

<sup>&</sup>lt;sup>94</sup> Ben-Tor, 1975; Miroschedji, 1988.

<sup>&</sup>lt;sup>95</sup> For reference, see Miroschedji, 2000: Fig. 18.2.

<sup>&</sup>lt;sup>96</sup> EB remains also discovered in fortification Area F, though not substantial enough, and without satisfactory stratigraphy. Miroschedji, 2000: 319.

<sup>&</sup>lt;sup>97</sup> Miroschedji, 2000: 315; Fig. 18.2.

The EB III is associated with phases B-I/II/III, C-I/II/III/IV, G-II/III/IV, and H-II/III/IV/V, and is the most comprehensive pottery found at the site. Area B provides three phases of EB III occupation, B-I to B-III, and is located on the western fringe of the tel. B-III and B-II both overlay the same areas, with B-II providing no reliable contexts of pottery discovery. B-I is of the most importance at Tel Yarmuth, being associated with Palace B, spanning over 2500m<sup>2</sup>, and occupied for between 50 and 100 years. This palace has produced vast quantities of *in situ* pottery, numbering over 100 pithoi, 6 kraters and several jars. This context differs to the remainder of the site, due to its palatial setting resulting in little pottery used in domestic environments, and larger quantities of highly decorated pottery.

Area C, located north-west of Area B, produced four EB III stratum, numbered C-I to C-IV and shows evidence of extensive buildings associated with both public and private life. Stratum C-IV is of significant importance, noted as the 'White Building' by Miroschedji, and tentatively identified as a temple with few interconnected rooms and courtyards.<sup>98</sup> C-III is a series of domestic contexts with reliable, clean archaeological contexts. C-II represents a large public building, possibly a palace, with decorated pottery from the EB IIIB period. C-I provides little archaeological evidence excepting a few wall foundations and scarce pottery remains.

Area G contains three EB III strata, G-II to G-IV, located to the east of Area B (and Palace B). G-IV provides little understanding of the EB III period, with scarce archaeological finds<sup>99</sup> G-III is comprised of three domestic dwellings and a street with *in situ* pottery discovered on the floors of these dwellings. G-II exposed three consecutive floors, the largest of which produced *in situ* EB III pottery. This assemblage has a high amount of variation, and provides the most diverse pottery assemblage at the site. For this reason, stratum G-II was used most heavily for the development of Miroschedji's EB III pottery typology.

Area H has four EB III stratum, numbering H-II to H-V and comes from the northern part of the Tel. H-III is of importance due to the comprehensive *in situ* pottery discovered atop floors, aligning with stratum G-II and B-I. This phase is noted as an 'industrial' area, perhaps

<sup>&</sup>lt;sup>98</sup> Miroschedji, 2000: 318; Miroschedji, 1996.

<sup>&</sup>lt;sup>99</sup> Miroschedji, 2000: 319.

an oil factory, with many large coarse vessels present and little variation in functionality.<sup>100</sup> The remainder of the phases in Area H are unreliable due to the excavation methods

As identified here, Tel Yarmuth provides a comprehensive amount of *in situ* pottery, resulting in the importance of this site for comparison. Due to the high volume of pottery discovered here, it is important to note the different archaeological contexts in which it has been discovered, spanning from domestic to public spaces.

Table 7. Phases associated with the Early Bronze at Tel Yarmuth. Reproduced from Miroschedji, 2000: Table18.1.

Periods	City Areas				Fortification Areas		
	В	С	G	Н	А	D	Е
<b>EB IIIC</b>	B-I	C-I	G-II	H-II	A-7	D-8	
				H-III			
EB IIIB	B-II	C-II	G-III	H-IV	A-6	D-7	E-4
EB IIIA	B-III	C-III	G-IV	H-V	A-5	D-6	E-3
		C-IV					
EB II	B-IV	C-V			A-4	D-5	E-2
		C-VI	G-V		A-3	D-4	E-1
		C-VII			A-2	D-2-3	
		C-VIII			A-1	D-1	E-0
EB I	B-V	C-IX			A-0	D-0	

No EB remains from this period

## **3.1.2 TEL LACHISH**

Early Bronze Age remains were first uncovered at Tel Lachish in Area 1500 (the North-West Settlement) during the excavations under the directorship of Tufnell in the 1930's.<sup>101</sup> EB remains were also discovered in Cavern/Burial Areas 4000 and 6000, though to a much more limited extent (Table 8). A wide variety of EB pottery was discovered at Tel Lachish in these excavations, with many combed and lime-washed jars attested. In addition to this, large quantities of pattern-burnished platters were also discovered in the burials of Area 1500.

Area 6000 is identified as the site where distinctive kitchenware was unearthed, which differs from the remains discovered in Area 1500 that were of a funerary nature. Due to the early

<sup>&</sup>lt;sup>100</sup> Miroschedji, 2000: 319.

<sup>&</sup>lt;sup>101</sup> Tufnell, 1958: 144-171.

date of the 1958 publication, little was known about the typological development of the Early Bronze Age, resulting in limited chronological focus when compared with the later publications of the site. That being said, this publication provides comprehensive detail of the pottery and its archaeological location from the North-West Settlement, following the EB I-IV classification developed by Wright.

Renewed excavations at Tel Lachish spanned from 1973 to 1994 under the directorship of Ussishkin, and produced even more Early Bronze Age pottery in the new Areas of R, GE, GW, P, S and D (Table 9). In Area R, EB pottery was uncovered mixed with debris of the counter-ramp built in the S-W corner of the site during the Assyrian siege of 701 BCE.<sup>102</sup> This pottery is of the same form and style as the pottery discovered at Tel Yarmuth, as outlined in Chapter 2.

Area D provides the only *in situ* remains from the EB period. Of this material, 10 sherds belong to the EB II, with the remaining 120 belonging to the EB III.<sup>103</sup> In addition to this, numerous sherds of Khirbet Kerak Ware were also discovered at Tel Lachish.<sup>104</sup> This indicates that Tel Lachish witnessed heavier occupation during the EB III period, which echoes the remains at Tel Yarmuth.

A major difference in the pottery discovered between the 1930's and the renewed excavations can be attributed to the differing aims of the excavation. The renewed excavations took place on the tel proper and concerned domestic contexts, whereas the earlier excavations took place outside of the tel focused on graves and various funerary contexts. This resulted in differing pottery forms, as domestic contexts produce vessels used in daily life, whereas funerary contexts produce vessels made for cultic purposes.

Periods	City Areas	Cavern/Burial Areas		
	N-W Settlement 1500	4000 6000		
<b>EB IIIC</b>	1513, 1556	6013, 6030, 603		
EB IIIB	1501, 1516, 1519, 1535, 1538, 1556	6013, 6030, 6031		

Table 8. Phases associated with the Early Bronze at Tel Lachish uncovered in the excavations conducted under Tufnell (1930's).

<sup>&</sup>lt;sup>102</sup> Gophna and Blockman, 2004: 873; See also, Ussishkin, 2004: 695-765.

<sup>&</sup>lt;sup>103</sup> See Gophna and Blockman, 2004: 886-889 (EB II), 889-895 (EB III).

<sup>&</sup>lt;sup>104</sup> Ussishkin, 2004: 880.

EB IIIA	1501, 1516, 1519, 1535, 1538, 1556		6013, 6030, 6031
EB II	1501, 1516, 1519, 1535, 1538,	Pit 4022 Layer 3	6005, 6013
EB I	1535		6005, 6013

No EB remains from this period

Table 9. Phases associated with the Early Bronze at Tel Lachish uncovered in the excavations conducted under Ussishkin (1973-1994).

Periods	Area D	Area GW	Area P	Area S	Area R
EB III	7070, 7101	III, IIb	P3-P4	III, IV	6016, 6017, 6007, 6060, 6127, 6137
EB II			Р3		6006, 6007, 6013
EB IB		III-II	VI		6007, 6013
EB IA					

No EB remains from this period

### 3.1.3 TELL ES-SAFI/GATH

Concerning the EB phases at Tell es-Safi/Gath, three are relevant to this discussion: Phases E5 to E7 (Table 10).<sup>105</sup> E5 dates to the latter half of the EB III and is the product of the Area E architectural sequence, not defined by typology. Of this phase, E5b-c is the earliest (EB IIIB) and E5a the latest (EB IIIC). Subsequently, E6 dates to the EB IIIA, and E7 potentially dates as early as the EB II. It should be noted that typologically, there is little difference in pottery between the E5 (and its sub-phases) and E6, the foundations of which are based on architecture.<sup>106</sup>

At Tell es-Safi/Gath a small area of EB III settlement was excavated in Area E during the excavations under the directorship of Maeir in 2004-2006.<sup>107</sup> This area comprises three squares of EB III strata, with Early Bronze Age pottery found within the E5 and E6 stratum.<sup>108</sup> Of particular importance is the Floor 74512 of Building 74512 (later EB III), and Floor 84805 (earlier EB III). Both these contexts belong to Phase E5a at Tell es-Safi, dating to the EB IIIC period.<sup>109</sup> The reliable loci from Tell es-Safi are from domestic contexts only, which subsequently resulted in a variety of pottery similar to the pottery from the Area 1500 (North-West Settlement) at Tel Lachish, and Areas C, G and H at Tel Yarmuth.

In addition to Area E, few sherds were also discovered in Area C, notably in C3, and in the fortifications phase known as Lower F5.<sup>110</sup> A quantitative analysis of pottery discovered at the site was also produced, with 6.0% of the overall pottery of the site dating to the EB period. Of this, 1.2% was from the EB I period, and the remaining 4.8% of the EB II-III period.<sup>111</sup>

<sup>&</sup>lt;sup>105</sup> Eliyahu-Behar, *et al.* 2017: 2.

<sup>&</sup>lt;sup>106</sup> Shai, et al., 2014.

<sup>&</sup>lt;sup>107</sup> Uziel and Maeir, 2012: 235-239.

<sup>&</sup>lt;sup>108</sup> For Stratum E5, see Shai, Uziel, Maeir, 2012: 221-224. Stratum E6 yet to be published.

<sup>&</sup>lt;sup>109</sup> Shai, Uziel, Maeir, 2012: 221, Fig. 10.1.

<sup>&</sup>lt;sup>110</sup> Maeir, 2012: Figure 1.3.

<sup>&</sup>lt;sup>111</sup> Uziel and Maier, 2012: 174–175; Table 8.1.

Periods	City .	Fortification Areas	
I ci ious	С	E	F
EB IIIC	C3 (few sherds)	E5a	Lower F5
EB IIIB		E5b-c	
EB IIIA		E6	
EB II		E7	
EB I			

No EB remains from this period

The pottery of these three sites provides substantial archaeological context of EB pottery to discern that during the EB, pottery was used for both domestic and funerary purposes. Furthermore, this outline highlights the importance of these three sites to this study of EB pottery from Tel Azekah. Not only does the proximity of these sites to Tel Azekah influence their inclusion, but also the quantity of pottery uncovered, and the reliability of the archaeological contexts.

## **3.2 NORTHERN SITES**

Due to the position of Tel Azekah, and its affinity with the sites of the southern material culture in later periods, little attention will be paid to the EB sites of the northern material culture, with a mere outline of their importance to follow. The primary sites exhibiting the northern material culture include Tel Megiddo, Tel Beth Yerah, Tel Beth Shean, Tel Dalit and 'Ai/et-Tell (Figure 7).

Tel Dalit provides an interesting case study for the fluctuation of cultural manufacture and liminal area between the northern and southern material cultures, and its stratigraphy will therefore be expanded upon in this Chapter. Across the EB period, Tel Dalit shows evidence of both the northern and southern material cultures, which is understandable due to its

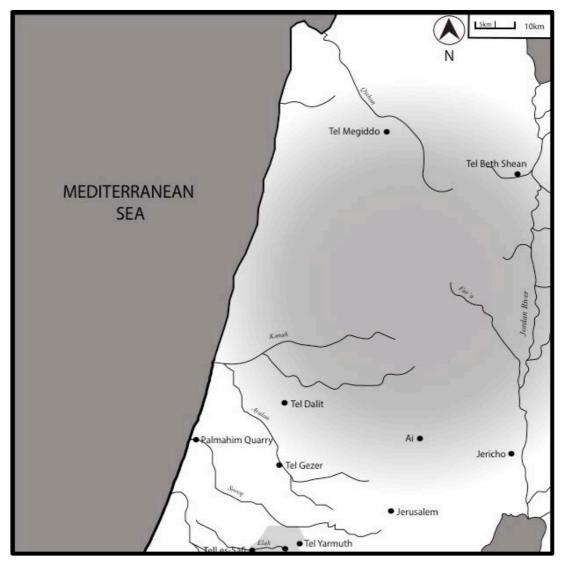


Figure 7. Map of the northern culture of the Southern Levant.

geographical position between the larger sites of the period, in what is defined by the term "central". In the EB I-II, Tel Dalit show evidence of the northern material culture, whilst in the EB III, the southern culture is more predominant, indicating a shift toward the southern material culture during this period.<sup>112</sup> Due to the lack of culturally synonymous pottery found at the remaining sites in the northern material culture (i.e. those listed above), these sites will not be discussed in detail, though their chronological parallels can be found in Table 11.

#### **3.2.1 TEL DALIT**

Excavations at Tel Dalit began in 1978 and only continued for three seasons until 1980 as a part of the Tel Aviv University Institute of Archaeology regional project aimed at investigating the basins of the Ayalon and Yarkon Rivers in the Central Coastal Plain of Israel.<sup>113</sup> It was first identified as a site occupied for a single-period by Gophna in 1967, and further surveyed in 1975, resulting in the discovery of stone fortifications circling the tel, and predominantly Early Bronze Age pottery, with few Persian and Byzantine sherds also scattered across the site.<sup>114</sup>

As the focus of this excavation was aimed toward the Early Bronze Age, the areas excavated were determined by the location of 'tumuli' which were similar to those associated with large buildings at sites such as Ai.<sup>115</sup> Excavations took place in three primary areas, A in the north, B in the south, and C in the east.<sup>116</sup> The results of this excavation were that the site shows evidence from the EB I through the EB III, identified in five strata, numbered I-V (Table 11). It was discovered that the site was fortified in the EB II, with no earlier evidence of EB I pottery in association with architectural features.<sup>117</sup> The earlier periods were attested in all three areas, with EB III pottery discovered in Area B3 only (Stratum 1) Of this, most pottery is from the EB II (Stratum IV-II), however the quantity of pottery dating to the EB I (Stratum V) is also comprehensive. All remains dating to the EB III (Stratum I) came from Area B3,

<sup>&</sup>lt;sup>112</sup> Gophna, 1996: 129.

<sup>&</sup>lt;sup>113</sup> Gophna, 1996: 14.

<sup>&</sup>lt;sup>114</sup> Gophna, 1996: 11.

<sup>&</sup>lt;sup>115</sup> Gophna, 1996: 129.

<sup>&</sup>lt;sup>116</sup> Gophna, 1996: Figure 3.

<sup>&</sup>lt;sup>117</sup> Gophna, 1996: 76-78.

though this included little pottery, which was compared to the remains from Phase VII at Ai.<sup>118</sup>

Culturally, this site shows evidence of both northern and material cultures during the EB I-II.<sup>119</sup> It is concluded by Gophna that this site represented an area where the 'sub-cultures' of the north and south met and were both practiced by people in the area.<sup>120</sup> This is important as it highlights the liminality of this region at this time, with two differing methods of manufacture present, and two different decorative techniques employed. Concerning the EB III, the pottery from this period at Tel Dalit was scarce, providing evidence that the settlement was not extensively occupied during this period.<sup>121</sup> Of the pottery that is identified as belonging to the EB III, many more southern elements are identified, perhaps indicating a shift toward the southern culture during this period.

Periods	А	В	С
EB IIIC		I (B3)	
EB IIIB		I (B3)	
EB IIIA		I (B3)	
	IIa/b	IIa/b	IIa/b
EB II	(Broadroom 115-152)	(Broadroom 115-152)	(Broadroom 115-152)
ED II	III	III	III
	IV	IV	IV
ЕВ І	V	V	V
EB I	Pre-V	Pre-V	Pre-V

Table 11. Stratum associated with the Early Bronze at Tel Dalit.

No EB remains from this period

<sup>&</sup>lt;sup>118</sup> Gophna, 1996: 130.

<sup>&</sup>lt;sup>119</sup> Gophna, 1996: 129.

<sup>&</sup>lt;sup>120</sup> Gophna, 1996: 130.

<sup>&</sup>lt;sup>121</sup> This is similarly seen at nearby Tel Aphek and Tel Gezer. Gophna, 1996: 129-130.

Due to the geographical position of Tel Azekah, between Tel Lachish, Tel Yarmuth and Tell es-Safi/Gath, it is probable that the pottery from the site will belong to the southern material culture of the Southern Levant. As indicated in this Chapter, all sites belonging to the southern material culture exhibit EB contexts from all three EB phases, excepting Tel 'Ira, which only appeared to be settled in the EB III (see Figure 8).<sup>122</sup> As can be clearly indicated here, all sites chosen for use as primary comparisons express a holistic snapshot exhibiting regional variety, with the sites in question coming from different areas of the Southern Levant, not only the sites surrounding Tel Azekah.

For a stratigraphical comparison of all the sites of the northern and southern cultures mentioned here, see Table 12. This Table includes sites in the northern material culture, and also Tel Halif, for wider reference and understanding into the paralleled phasing across these sites. The aim of this Table is to provide a foundation in which to place the relevant EB phases of Tel Azekah by the end of this project.

<sup>&</sup>lt;sup>122</sup> Concerning the northern culture all sites also adhere to this, excepting Tel Megiddo, which only exhibits EB I and III contexts, and further assumes that the site was abandoned during the EB II.

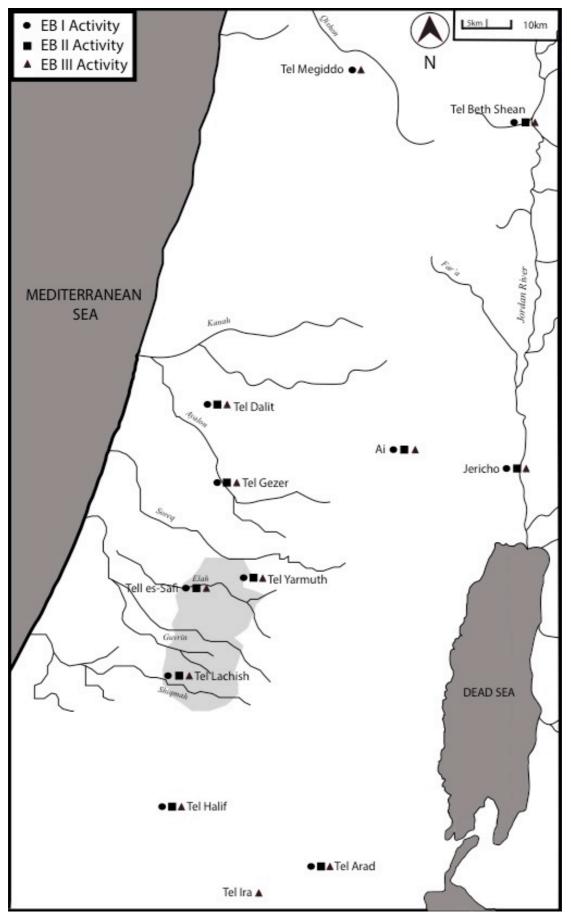


Figure 8. Pottery activity in the Southern Levant across the Early Bronze Age.

 Table 12. Chronological alignment Early Bronze II-III contexts.

	SOUTHERN CULTURE							IERN CULTUR	
	Tel Yarmuth	Tel Lachish	Tell es-Safi	Tel Halif	Tel 'Ira	Tel Dalit	Tel Megiddo	Beth Yerah	Beth Shean
	City Fort.	City Burials	Phase		Phase	Strata	Strata	Strata	Strata Phase
EB IIIC	B-I, C-I G-I/II H-II/III A-7, D-8	1513 1556 6013, 6030 6031 D7070, D7101, GWIII, GW IIB, P3, P4, SIII, SIV	E5a Lower F5 Fortifications Sherds in C3	XII	No evidence indicating solid EB IIIC date	I	XVI J-6	Е	XI R7
EB IIIB	B-II, C-II G-III, H-IV A-6, D-7 E-4	1501, 1516 1519, 1535 1538, 1556 6013, 6030 6031 D7070, D7101, GWIII, GW IIB, P3, P4, SIII, SIV	E5b-c	XIII	IX	I (cont.)	XVII J-5	D	R8 XII R9
EB IIIA	B-III C-III/IV G-IV, H-V A-5, D-6 E-3	1501, 1516 1519, 1535 1538, 1556 6013, 6030 6031 D7070, D7101, GWIII, GW IIB, P3, P4, SIII, SIV	E6	XIV, XV	IX	I (cont.)	XVII J-5	D	R10 M1 R11 XIII
EB II	B-IV CV/VI/ VII/VIII G-V A-4/3/2/1 D-5/4/3/2/1 E-2/1/0	1501, 1516 1519, 1535 1538 6005, 6013 Pit 4022 Layer 3	E7	XV		IIa/b III IV	GAP (possible abandonment)	С	XIII R12 M2

## **CHAPTER 4 TEL AZEKAH ASSEMBLAGE**

This Chapter discusses the EB pottery assemblage discovered at Tel Azekah during the first five seasons of excavations from 2012-2016. It is divided into three primary sections beginning with an outline of the areas of the site that EB pottery has been discovered. This then moves into an outline of the different wares present within the assemblage and the cultural associations to be considered. Then follows a breakdown of the pottery by type, discussing the material culture in parallel with surrounding sites for chronological alignment. This Chapter presents a holistic understanding of the EB pottery, the sites cultural affinity as presented through the pottery, and a comprehensive look at pottery relations during this period. This Chapter will then lead into a discussion of both the cultural and chronological elements present in the assemblage, and the position of Tel Azekah during the EBA.

## **4.1 AREAS OF DISCOVERY**

The Early Bronze Age pottery was found across four excavation areas of the site— S1 (2013), W2 (2014), W3 (2015), and N1 (2016) (Figure 9). To outline the topography of the site, all four areas of discovery are situated on the slopes of the tel, which is understandable due to erosion causing it to require the shortest amount of time and resources to excavate to the EB contexts. Interestingly, the areas of discovery span the entire length of the 4.5ha tel emphasising the wide presence of EB remains at the site. To date, no comprehensive EB remains have been discovered on the eastern plateau or slope of the tel (Area E), nor on the central plateau (Area T). However, the discovery of EB remains on the western slope (Areas W2 and W3) present a formidable argument that EB occupation at Tel Azekah is present, though due to a severe lack of excavated architecture, understanding the extent of this period is limited. The ceramic assemblage presented here represents four archaeological contexts coming from Tel Azekah. For further reference, a list of loci with EB pottery remains is presented in Table 13 to allow for easy reference and understanding of the remains.

#### AREA S1 (Plate I)

The first two contexts are an accumulation on and the dismantling of a floor in Area S1 (Phase S1-12: L271, 287, 300-303, 307-308), and an associated donkey burial (Phase S1-13: L122, 170, 200). This context has been previously dated to the EB based on pottery remains

and its affinity to similar burials discovered at Tell es-Safi.<sup>123</sup> In addition to this, radiocarbon dates are currently underway, and perhaps the outcome of that research will aid in drawing closer parallels between the four sites in question, particularly with the donkey burial at Tell es-Safi. The baskets included for illustration from Area S1 are 10435, 10545, 10852, 10966, 12267, 12329, and 12905.

#### AREA W2 (Plates I-II)

The second archaeological context comes from the dismantling of a wall, and an accumulation in Area W2 (Phase W2-9-10: L248-249, 253, Phase W2-10: L240, 267; Phase W2-11: L 256, 258). The baskets included that provided EB pottery in Area W2 are 60936, 61195, and 61250.

#### AREA W3 (Plate II)

The archaeological context in Area W3 comprises a fill and accumulation and unearthed pottery of a heavily mixed nature (Phase W3-7, L116, 118, 127, 128, 132, 133, 135, 141, 143).<sup>124</sup> The baskets included that provided EB pottery from Area W3 are 90240, 90327, 90329, 90335, 90346, and 90363.

#### AREA N1

In addition to this, EB pottery was also discovered in Area N1 in 2016, discovered in conjunction with MB pottery, located both inside and outside the continuation of the MB fortification wall (Phase N1-10: L336, 338, 341, 372). Inside the fortification wall, this context includes the dismanting of two floors, and the associated material both atop and below it. Pottery from Area N1 has not been drawn or included in the plates in this study due to the high levels of contamination by Middle Bronze Age pottery.

50 sherds chosen for illustration in this thesis, all of which have been amended as plates (Pls I-III). In addition to this, it must be noted that the pottery published here is a sample of the entire assemblage, which has been condensed to show a representation of the typology present at Tel Azekah. Although the potential contribution of this material seems modest, it

<sup>&</sup>lt;sup>123</sup> Greenfield, Shai and Maeir, 2012: 21-52.

<sup>&</sup>lt;sup>124</sup> Mixed primarily with MB and LB pottery.

will enable chronological and cultural insight into the Early Bronze Age at Tel Azekah, as well as the cultural affintiy of the site with its surroundings.

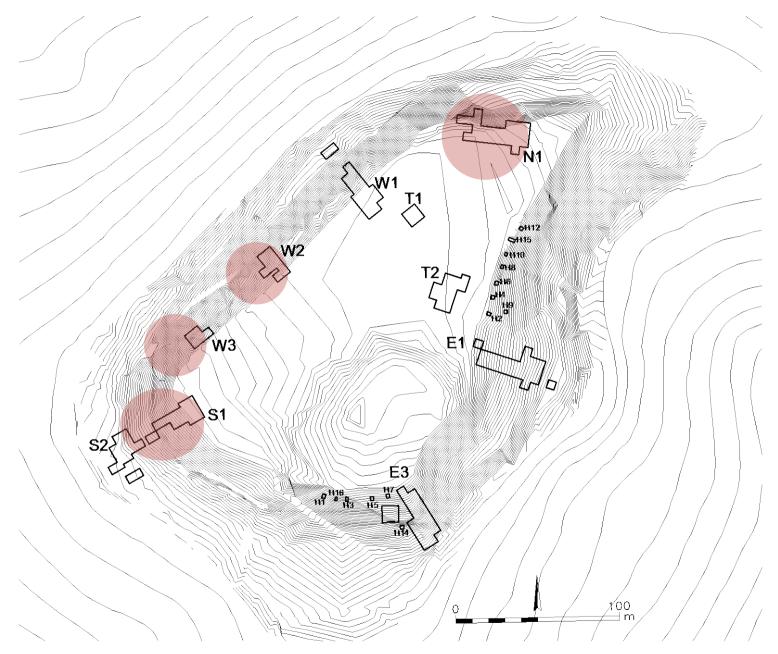


Figure 9. Topographical map of Tel Azekah.

#### Table 13. Loci with EB remains.

AREA	PHASE	LOCUS	SQUARE	BASKETS	DESCRIPTION
	W2-9	L248	P20	60990; 61145	Wall
		L249	P20	61012	Fill
		L253	P20	61026; 61052; 61147	Accumulation
W2	W2-10	L240	O20	60936*; 60946	Rampart
		L267	P20	61137	Wall
	W2-11	L256	P20	61055; 61089; 61160; 61250*	Wall
		L258	P20	61062; 61090; 61128; 61152; 61181; 61195*; 61227; 61258	Accumulation
	W3-7	L116	Q33	90096; 90106; 90245	Fill
		L118	T3	90130; 90135; 90177	Fill
		L127	Q34	90199	Fill
		L128	T3	90200; 90222	Fill
W3		L132	Q34	90240*; 90269; 90291; 90309; 90318; 90335*; 90346*	Accumulation
		L133	Q33	90242; 90271; 90327*	Accumulation
		L135	Q33	90259; 90329*	Accumulation
		L141	Q33	90312	Accumulation
		L143	R32	90362; 90363*	Fill
	S1-12	L271	O7/P7	12105	Accumulation
		L273	O7/P7	12103; 12138; 12139; 12168	Accumulation
		L287	O7/P7	12200	Dismantling floor
		L300	07	12234; 12253; 12267*; 12289	Fill
		L301	07	12255; 12269	Floor make-up
		L302	07	12292; 12910	Accumulation
<b>S</b> 1		L303	07	12294; 12306; 12309*; 12329; 12347; 12534*	Accumulation
		L307	07	12464	Accumulation
		L308	07	12540, 12905*	Collapse
	S1-13	L122	07	10435*	Accumulation
		L170	07	10966*; 10484; 10545*	Accumulation
		L200	07	10815; 10852*; 10941	Burial- Excavating donkey
					skeleton below terrace wall
N1	N1-8	L315	D20	81338	Dismantling of Floor

	L316	C20	81325; 81337; 81379; 81421	Remains on Floor
	L318	D19	81331	Dismantling of Wall
	L330	D20	81458	Fill below Floor
	L353	C20	81540; 81596; 81644; 81723	Fill below Floor
N1-8-9	L320	D19	81332; 81335; 81410	Accumulation
N1-8-10	L303	D19	81251; 81279	Accumulation
	L304	D19	81252; 81269	Accumulation
	L306	B19	81253; 81286	Accumulation
N1-9	L348	D20	81493	Accumulation
	L381	E19	81777	Accumulation
	L392	J20	81870	Dismantling of Wall
	L406	E19	81984	Fill
	L427	E19	82081	Remains on Floor
N1-9-10	L326	D19	81384	Accumulation on Floor
	L428	E19		Dismantling of Wall
N1-10	L336	D19	81408; 81441; 81517; 81543	Dismantling of Floor
	L338	D19	81480; 81505; 81562; 81542	Fill
	L341	D19	81439	Dismantling of Wall
	L372	D19	81693	Collapse
U	L225	F22	80604	Accumulation
	L298	D19	81207	Accumulation
	L299	B-C19	81293	Accumulation
	L337	E19	81922	Accumulation
	L360	E19	81692; 81852	Fill

\* Baskets used for drawing

## 4.2 WARES

Within the Tel Azekah assemblage, few sherds show painted decoration. Of these sherds, a majority are unidentifiable decorations of red-on-light ware perhaps dating to the late EB II or early EB III.<sup>125</sup> This shows synchronisms with the painted/decorated ware discovered at Tel Yarmuth, with no painted sherds dating to the final phase of the EBA.<sup>126</sup>

Few sherds of Abydos Ware are also present in the assemblage, number 15 in total. 14 of these sherds are from the bodies of the vessels and therefore provide little typological information to assist in dating. The remaining sherd is numbered 10545\_1 (Pl. I), and is a jug base providing limited ability to periodise the sherd. The appearance of these 'Abydos Ware' sherds is similarly observed at Tel Yarmuth, Tel Lachish and Tell es-Safi (i.e. in small quantities), indicating some relation or interaction with the people of the northern material culture.

The primary decorative technique observed in the Tel Azekah assemblage is pattern burnishing. This occurs on almost all platters from the Early Bronze Age, and is common across the southern material culture. Pattern burnishing is one of the most indicative typological elements of vessels dating to this period. During the EB I, platters were slipped on the entire interior and exterior of the vessel, whereas by the EB III, only the interior and the exterior rim were slipped and/or pattern-burnished. Of the Tel Azekah assemblage, many examples show the latter of these forms, dating to the EB III period (10435\_1, 10435\_3, 10435\_5, 10966\_1, 10966\_2, 10966\_3, 12267\_1, 12905\_1, 12905\_3, 60936\_2, 60936\_3, 61195\_1, 61195\_2, 61195\_3, 61195\_4, 61195\_6, 61195\_7, 61195\_9, 61250\_1, 90240\_4, 90327\_1, 90335\_2, 90346\_1, 90346\_3, 90363\_2, 90363\_3)

Lime-plaster is another decorative technique found in the pottery record from the Early Bronze Age II-III.<sup>127</sup> Before 2016, little interest had lay into why this change in technology had occurred, or the process of manufacture and application of the white substance. Three primary terms were applied to the discovery of this aesthetic, with variations of 'white slip'

<sup>&</sup>lt;sup>125</sup> Miroschedji, 2000: 325.

<sup>&</sup>lt;sup>126</sup> Belonging to B-I, C-I, G-I, H-II, A-7, D-8. Miroschedji, 1988: 81.

<sup>&</sup>lt;sup>127</sup> Amiran, 1978; Greenberg and Porat, 1996: 6.

and 'lime wash', found throughout scholarship.<sup>128</sup> This technique is often observed on large closed storage vessels including pithoi and more rarely, kraters.<sup>129</sup> The lime-coating was usually thick and applied only to the exterior surface of vessels, with only few exceptions showing its application on the interior.<sup>130</sup>

It needs to also be noted that on few occasions a white slip has served as a base for further painted decorations during the EB II-III, for example on so called 'Erani Ware' or 'Pajama Ware'.<sup>131</sup> In the Tel Azekah assemblage no further decoration can be seen atop the examples of white 'lime-slip' mentioned by Eliyahu-Behar. That being said, few sherds in the Tel Azekah assemblage show evidence of this technique, primarily belonging to storage vessels (10435\_7, 10852\_1, 12329\_1, 12905\_2, 61195\_8, 90327\_3, 90329\_1).

In addition to lime-plastering technique, asphalt coating is also observed n few examples from Tel Azekah dated to the EB through the vessels shape. After the discovery of this technique in many vessels from Tel Dalit, it was concluded that this process dated to the EB I-II period, however recent scholarship point to an EB II-III date. Of the Tel Dalit assemblage, examples of asphalt coating was discovered in Stratum II-V, and at Tel Arad in Stratum IV-I.<sup>132</sup> Of the examples of this form in the Tel Azekah assemblage, all are body sherds and therefore not included in illustration in this paper.

The following section expands upon the types of vessels present in the Tel Azekah assemblage to further correlate the site with its surroundings

<sup>&</sup>lt;sup>128</sup> 'White-slip': Callaway, 1980: 270; Sala, 2010: 280. 'White limey-slip': Amiran, 1978: 48. 'Lime-wash': Stager, 1992: 39; Greenberg and Porat, 1996: 10. 'Lime or white-coated': Greenberg and Porat, 1996: 17; Nigro, *et al.*, 2012.

<sup>&</sup>lt;sup>129</sup> Eliyahu-Behar et al., 2016: 28; Figs. 1-2. For further examples, see Fargo, 1979: 143.

<sup>&</sup>lt;sup>130</sup> One such example from Ai, Callaway, 1980: Fig. 63:2.

<sup>&</sup>lt;sup>131</sup> For 'Erani Ware', see Braun, 2012: 12; for 'Pajama Ware', see Braun, 2012: 15.

<sup>&</sup>lt;sup>132</sup> Tel Dalit: Gophna, 1996: 34. Tel Arad: Amiran, et al., 1978: 58.

## **4.3 TYPES**

### **4.3.1 Bowls**

Two main types of bowls are present in the EB ceramic assemblage at Tel Azekah. The first type is characterised as small, hemispherical bowls with an inward flaring rim (BL1). Unusually, there are no examples discovered with a plain rim, which are common during the EB III, often accompanied by evidence of use as a lamp. Parallels of this type are seen across the southern material culture, however the lack of occurrence at Tel Azekah is not outstanding. Only one example of a bowl with an inward flaring rim was found at Tel Azekah (12267\_1), accompanied by a red-slip. Bowls with inward flaring rims are more common in the E5 and E6 assemblages at Tell es-Safi,<sup>133</sup> and are common in the Early Bronze III period, especially at Tel Yarmuth.<sup>134</sup>

The second type of bowl found at Tel Azekah (BL2) has straighter sides, almost V-shaped, with an inward flaring rim. There are four examples of this type found at Tel Azekah (12905\_2, 12905\_3, 90335\_2, 90346\_3), all with evidence of red slip burnish on the interior, and the exterior of the rim. These characteristics are common during the EB III period, though the sub-phase in which the latter two examples developed is difficult to determine.<sup>135</sup> As inferred by the parallels discovered for sherd 12905\_2 and 12905\_3, these two examples of this type are solely attested during the EB IIIA and not later, though this does not confirm this sub-phase as the only date for this type.

The third type of bowl found at Tel Azekah are deep bowls, either with inward and outward flaring rim (BL3a), with inverted rim (BL3b), with horizontal, flat rim (BL3c), or with vertical rim with folded or thickened lip (BL3d). This shape of bowl is common in the southern material culture, with examples found at Tel Yarmuth, Tel Dalit, and Tell es-Safi (See Table 14).

Of the first subtype, BL3a, a single example is present within the Tel Azekah assemblage showing strong affinity with the EB IIIA and IIIB at Tel Yarmuth and Tell es-Safi (61195\_1). This example exhibits red slip on the interior and exterior of the vessel. Further parallels can

<sup>&</sup>lt;sup>133</sup> Uziel and Maeir 235.

<sup>&</sup>lt;sup>134</sup> Miroschedji, 2000, Pl. 32

<sup>&</sup>lt;sup>135</sup> Miroschedji, 2000: 321.

be seen in Table 14, though the sub-phases associated with these finds are not identified in their associated publications. Of the second subtype, BL3b, three examples are present within the Tel Azekah assemblage (60936\_2, 61195\_3, 61250\_1). All these sherds are red slipped on the interior and exterior to the bottom of the rim. No indicative date is inferred by these vessels at the surrounding sites and therefore provides limited insight into the Tel Azekah assemblage.

Туре	Site	Parallel	EB Phase
BL1	Tel Yarmuth	1988, Pl. 27:1	IIIA
		1988, Pl. 30:3	IIIA
		1988, Pl. 42:4	IIIB
		2000, Fig. 18.3:5	IIIA
	Tell es-Safi	2012, Pl. 11.1:5	IIIC
	Tel Lachish	1958, Pl. 59.148	
BL2	Tel Yarmuth	2000, Pl. 18.3:9	IIIA
	Tel Lachish	2004, Fig. 15.3.7	IIIA
		1958, Pl. 59.153, 154	IIIA
		1958, Pl. 58. 91	IIIA
BL3a	Tel Yarmuth	1988, Pl. 28:5	IIIA
		1988, Pl. 43:8	IIIA
		2000, Fig. 18.3:6	IIIB
	'Ai	1980, Fig. 129:23	
	Tel Lachish	2004, Fig. 15.3:8	
		1958, Pl. 58.90	
	Tel Dalit	1996, Fig. 66.5	
BL3b	Tel Yarmuth	1988, Pl. 32:15-16	IIIA
	Tell es-Safi	2012, Fig. 11.1:5	
	Tel Lachish	1958, Pl. 59.154	
		2004, Fig. 15.3:10	
	Tel Dalit	1996, Fig. 65.2	IIIB
BL3c	Tel Yarmuth	1988, Pl. 42:5	IIIB
	Tel Lachish	2004, Fig. 15.3:9	
		2004, Fig. 15.6:11	
		1958, Pl. 58.142	
BL3d	Tel Yarmuth	1988, Pl. 42:10	IIIB
	Tel Lachish	2004, Fig. 15.3.6	
		1958, Pl. 60.198	IIIB
	'Ai	1949, Pl. LXXII.2023	
BL4	Tel Yarmuth	2000, Fig. 18.5:11	IIIB
	Tell es-Safi	2012, Pl. 11.2.8	IIIB
	Tel Lachish	2004, Fig. 15.3.1	
		2004, Fig. 15.4.3	
		1958, Pl. 60.194,	IIIB-C

#### Table 14. Parallels of EB Bowls from Tel Azekah.

Of the third subtype, BL3c, four examples are present within the Tel Azekah assemblage (10966\_1, 12905\_2, 61195\_9, 90335\_3) Three of these examples (10966\_1, 12905\_2, 61195\_9) exhibit a red slip on the interior and exterior rim, with the fourth example (90335\_3) showing no evidence of surface treatment. The fourth subtype, BL3d, has two examples present within the Tel Azekah assemblage (10852\_1, 90346\_1). These two examples both show evidence of red slip on the interior and exterior of the vessel and is characterised by a thickened, upright rim. This subtype shows parallels with the EB IIIB period, as highlighted by the parallels in Table 14.

The final type of bowl (BL4) discovered at Tel Azekah are large hemispherical bowls with pattern burnishing on the interior. One example comes from the Tel Azekah assemblage (61195\_4), with parallels at Tel Yarmuth from the EB IIIB and IIIC. The placement of this large bowl is difficult due to its thin profile that is synonymous with the small, plain rim, hemispherical bowls used as lamps throughout the EB III period. The example from Tel Azekah is red slipped on the interior and exterior of the rim.

#### 4.3.2 Platters

A large number of EBA platters have been recovered from Tel Azekah, with four main types present (PL1a-1b, 2, 3a-b, 4). The first type consists of platters with horizontal rim, broken down further into those having a concavity below the rim (PL1a) and those with no concavity below the rim (PL1b). Concerning the first subtype, there are two examples in the Tel Azekah assemblage (90240\_4, 90363\_2). This concavity is common during the EB III with numerous parallels from Tel Yarmuth, Tel Lachish and Tell es-Safi from all sub-phases of the EB III. Both sherds exhibit line burnishing and a slipped interior, with the slip continuing to the exterior of the vessel only to the bottom of the rim. There is an issue dating this type to an EB sub-phase due to the differing dates proposed by the parallels identified in Table 15.

The second subtype of platter PL1 (PL1b) is characterised by a horizontal flat rim, often with no concavity below the rim. These five examples from Tel Azekah can be placed in the midlate EB III, often associated with the EB IIIB-C.<sup>136</sup> Of these five examples, all are pattern burnished, four with line burnishing, and one (10435\_3) burnished in a net pattern.

<sup>&</sup>lt;sup>136</sup> Miroschedji, 2000, 330.

Unlike the previous type, the second type present in the Tel Azekah assemblage are chronologically indicative, and referred to by Miroschedji as 'gutter-rim' platters (PL2), characterised by the upward flaring nature of the outer edge of the rim. Two examples of gutter-rim platters were found, one with a red slip and line-burnish on the inside and outside only to the bottom of the rim (61195\_2), and the other with blackened net-burnished interior, and red slip covering the entire vessel (10435\_1). This type sits firmly in the middle EB III (i.e. EB IIIB), based on Miroschedji's typology.<sup>137</sup> These two sherds come from mixed loci, and therefore the confident dating of this sherd provides no further stratigraphical dating.

The third type of platter (PL3) dates late in the EB III, though not in the final stages as seen at Tel Yarmuth (the late EB IIIC). This type is much shallower than earlier examples, with a vertical wall and no-or-little concavity beneath the rim. Three examples of this type were found at Tel Azekah, with red slip and burnish on both the interior and exterior. The first subtype (PL3a) of this form has no concavity beneath the rim (61195\_7, 90363\_3). The first example, 90363\_3, is 32cm in diameter, with a net-burnished design on the interior, and the second example, 61195\_7, has a red slip on the interior and exterior to the bottom of the rim. The second subtype (PL3b) has a concavity beneath the rim, and there is one example (12905\_1). This sherd is red slipped on the interior continuing over the exterior of the rim.

The final type of platter (PL4) only provided two examples within the Tel Azekah assemblage, characterized by an internally and externally flaring rim, with a slightly convex horizon (10966\_3, 60936\_3). Both sherds show evidence of line burnishing on the interior, and a red slip continuing over the rim on the exterior. Sherd 10966\_3 comes from the donkey burial in Area S1 (Phase S1-13), and dates to the mid-late EB III. This draws parallels from Tel Yarmuth, Tell el-Safi and Tel Lachish, though no precise EB III date can be inferred.

In addition to these indicative sherds, many pattern-burnished and slipped body sherds were also found at Tel Azekah. Considering the platter assemblage as a whole, it is important to note the size of the corpus, with more platter sherds than any other type excepting holemouth vessels. A similar ratio of platters to storage jars can be seen in the Tel Yarmuth assemblage, though not at Tell es-Safi or Tel Lachish. The platters vary from diameters of 20cm to 50cm.

<sup>&</sup>lt;sup>137</sup> Miroschedji, 2000: 328-330; 1988: Pl. 43: 10-11.

Туре	Site	Parallel	EB Phase
PL1a	Tel Yarmuth	1988, Pl. 28:7, 9-10	IIIA
		2000, Fig. 18.3:12-13	IIIA
	Tel Lachish	2004, Fig. 15.3:6	
		2004, Fig. 15.4:5	
	Tel 'Ira	1999, Fig. 6.11.1-2	IIIA
PL1b	Tel Yarmuth	1988, Pl. 42:14-16	IIIB
		2000, Pl. 18.8:9-10	IIIC
	Tel Lachish	2004, Fig. 15.3:5	
		2004, Fig. 15.6.7	
PL2	Tel Yarmuth	1988, Pl. 45:7-8	IIIB
	Tel Lachish	1958, Pl. 64.350	IIIB
PL3a	Tel Yarmuth	1988, Pl. 30.13	IIIA
	Tell es-Safi	2012, Pl. 11.2:9	IIIB
	Tel 'Ira	1999, Fig. 6.10.1	
PL3b	Tel Yarmuth	1988, Pl. 27:6	IIIA
		2000, Fig. 18.5:15	IIIB
		2000, Fig. 18.8:11	IIIC
	Tel Lachish	1958, Pl. 63.306	IIIB
PL4	Tel Yarmuth	1988, Pl. 42.12	IIIB
		2000, Fig. 18.8:14	IIIC

#### Table 15. Parallels of EB Platters from Tel Azekah.

### 4.3.3 Jars

#### 4.3.3.1 Storage Jars

Only two types of storage jars with profiled rims have been identified in the Early Bronze assemblage at Tel Azekah. As no restorable storage vessels have been discovered at Azekah, the types discussed here are devised solely from the rim shapes and therefore provide limited understanding of remainder of the vessels shape and size. The first type, SJ1 (10435\_7), has a folded down lip and is lime washed on the interior and exterior, with a diameter of 25cm. Based on the parallels outlined in Table 16, it can be assumed that this subtype is more prominent during the EB IIIB-C, and less during the EB IIIA. The second jar type, SJ2 (12329\_1) has a horizontal folded lip and is also lime washed with a diameter of 18cm. This form is difficult to periodise as this author could find limited parallels.

Туре	Site	Parallel	EB Phase
SJ1	Tel Yarmuth	1988, Pl. 44:8, 11	IIIB
		2000, Fig. 18.6:6	IIIB
		2000, Fig. 18.8:5, 12	IIIC
	Tel Lachish	2004, Fig. 15.5:4	
		2004, Fig. 15.8:2	
		1958, Pl. 58.118	
		1958, Pl. 60.225	IIIC
	Tell es-Safi	2012, Pl. 11.1.11	IIIB
	Tel Dalit	1996, Fig. 65:8	
	'Ai	1980, Fig. 92:29	
SJ2	Tel Lachish	1958, Pl. 58.124	

#### Table 16. Parallels of EB Jars from Tel Azekah.

#### 4.3.3.2 Holemouth Jars

In addition to these two storage jar forms, holemouth jars must also be included in this section. Due to the standardization of the holemouth form and features, its position as a chronological indicator is insufficient. Although the assemblage provides limited chronological evidence, the many differences in shape can be viewed within this assemblage. Of the 64 recovered holemouth sherds, 37 of them have a plain rim and are classified as HM1 (10966\_4, 10966\_10, 61250\_5). This being said, they are not non-existent in the EBIII, with an example coming from a later EBIII context (E5) at Tell es-Safi.

The second type of holemouth jar (HM2) falls under the category of slightly thickened rim sherds (10966\_5, 10966\_7, 10966\_8, 61195\_5, 61250\_2, 90363\_5) and numbered 18 of the total assemblage. These are not thickened to the degree seen in the earlier EBA or late Chalcolithic period, though are noticeably more thickened than the HMI examples.

Nine examples of holemouth jars with squared or angular rims (HM3) are present, with only four included here for illustration (10966\_6, 10966\_9, 10966\_11, 61250\_3). The degree of angularity varies, but most are vertical. Only one example exhibits a potmark (61250\_3), which is characterised by six consecutive lines lying parallel, 1.2cm in length. The strokes lay 0.3cm apart, and in the other they lay 0.5cm apart and dates to the early EB III based on comparison with Tel Yarmuth (Table 17). This date is tentative due to the confusion that surrounds the function of potmarks during the EBA.

In addition to these rim sherds, 20 coarse, flat bases have also been discovered, most likely of holemouth jars or large storage jars. One of these examples (10966\_11) contains a lining of asphalt. This is seen earlier in the EBI-II strata (IV-I) at Tel Arad,<sup>138</sup> and also at Tell Uqair.<sup>139</sup> Furthermore, in the E6 strata from Tell es-Safi, many coarse sherds containing bitumen were also discovered, though the date of such a technique spans across the EBA and beyond.<sup>140</sup>

Туре	Site	Parallel	EB Phase
Incised Decoration	Tel Yarmuth	1988, Pl. 39:11	IIIA
	Tel Lachish	1958, Pl. 62.300, 303	III
		2004, Fig. 15.7.8	

Table 17. Parallels of EB Holemouth Jars from Tel Azekah.

### 4.3.4 Kraters

One type of krater is present within the EB assemblage from Tel Azekah (KR1), with horizontal, internally folded rim (90329\_1). In addition to the sherd 90329\_1, one more broken sherd of the same rim shape was discovered dating to the EB III, with the inclusion of a 4cm diameter circular spout. These two examples are lime-washed on the interior and exterior of the vessel. Based on the parallels of this krater, this type sits firmly in the EB IIIA-B periods (Table 18).

#### Table 18. Parallels of EB Kraters from Tel Azekah.

Туре	Site	Parallel	EB Phase
KR1	Tel Yarmuth	1988, Pl. 29:1	IIIA
		1988, Pl. 35:3, 7	IIIA
		1988, Pl. 44:15-19	IIIB
		2000, Fig. 18.7:3	IIIB
	Tell es-Safi	2012, Fig. 11.1:8	IIIB
	Tel Lachish	1958, Pl. 62.276	

<sup>&</sup>lt;sup>138</sup> Amiran et al. 1978: 58; Nissenbaum, et al., 1984

<sup>&</sup>lt;sup>139</sup> Lloyd and Safar, 1943: 138, 144; Pl. XIII.

<sup>&</sup>lt;sup>140</sup> Kisos (pers. comm.)

### 4.3.5 Pithoi

Only one type of pithos was discovered at Tel Azekah (PT1), with an outward flaring beaded rim, with a narrow neck. Two examples were discovered, both with lime wash on the interior and exterior. The first example (61195\_8) has 25cm wide opening, and the second example (90327\_3) has a small 11cm wide opening, with both showing parallels with the EB IIIA-B at Tel Yarmuth, Tel Dalit and Tell es-Safi (Table 19).

Туре	Site	Parallel	EB Phase
PT1 Tel Yarmuth		1988, Pl. 29:5	IIIA
		1988, Pl. 44.5	IIIB
		2000, Fig. 18.4:4, 10	IIIA
		2000, Fig. 18.6:9	IIIB
	Tel Dalit	1996, Fig. 65:5	
	'Ai	1980, Fig. 111:28	
	Tel Lachish	1958, Pl. 62.298	
		2004, Fig. 15.8.2	
	Tell es-Safi	2012, Pl. 11.1.9	IIIB

#### 4.3.5 Jugs/Juglets

One jug base was found at Tel Azekah, along with two rim sherds. JG1 is characterised by an inward flaring rim, with an opening 5cm in diameter (61250\_4). This example shows no evidence of surface treatment and is paralleled by examples within EB IIIA-B strata. JG2 has an outward flaring triangular rim, and an opening 4cm in diameter (12267\_2). The neck of this vessel is 3.5cm in diameter, making the upper part of the vessel relatively rectangular in shape. This example also shows no evidence of surface treatment.

The base sherd is short and stout, with red slip and high levels of burnishing on the interior and exterior (10545\_1). This sherd belongs to the 'Abydos Ware' of the northern material culture, though there appearance in the southern material culture is not unheard of. Similar slipped bases are seen during the EBII at Tell es-Safi; however, they are not unheard of in the early EB IIIA period, numbering relatively few compared to their later EB III evolution.<sup>141</sup> Taller bases are common later in the EBIII period, indicating that this example should be considered, along with the rest of the assemblage, to be of the early EB III (Table 20).

<sup>&</sup>lt;sup>141</sup> Miroschedji, 2000: 330

Туре	Site	Parallel	EB Phase
JG1	Tel Yarmuth	1988, Pl. 38:14	IIIA
	Tell es-Safi	2012, Pl. 11.2:4	IIIB
JG2	Tel Lachish	1958, Pl. 58.120	
JG BASE	Tell es-Safi	2012, Pl. 11.2:5	IIIB
	Tel Yarmuth	1988, Pl. 38:13	IIIA
		1988, Pl. 44:3	IIIB
		2000, Fig. 18.4:7	IIIA
	Tel Lachish	2004, Fig. 15.8:15	

Table 20. Parallels of EB Jugs/Juglets from Tel Azekah.

### 4.3.6 Handles

Of the handles found at Tel Azekah, all are of the wavy ledge-handle type. Of the 13 wavy handle sherds, one is red slipped and of the 'Abydos Ware' type, and one is lime-washed. Red-slipped wavy-handles are uncommon in the Southern Levant; however, there is an example of a red slipped storage jar from the E6 stratum at Tell es-Safi, which concludes that this is not a rarity. The white-slipped example is attested at many sites, including one at Tell es-Safi published in 2012.<sup>142</sup>

<sup>&</sup>lt;sup>142</sup> Maeir, 2012: Pl. 11.1.10.

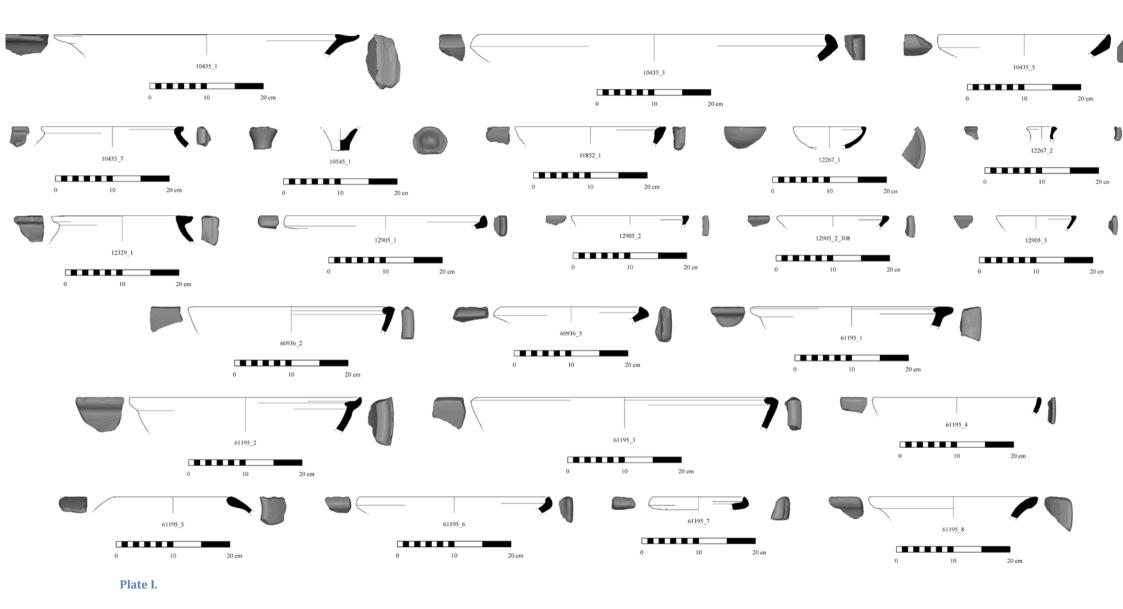
## **4.4 PLATES**

Plate I:	Area S1: 10435_1, 10435_3, 10435_5, 10435_7, 10545_1, 10852_1, 12267_1, 12267_2,
	12329_1, 12905_1, 12905_2, 12905_3
	Area W2: 60936_2, 60936_3, 61195_1, 61195_2, 61195_3, 61195_4, 61195_5, 61195_6,
	61195_7, 61195_8
Plate II:	Area W2: 61195_9, 61250_1, 61250_2, 61250_3, 61250_4, 61250_5
	Area W3: 90240_4, 90327_1, 90327_3, 90329_1, 90335_2, 90335_3, 90346_1, 90346_3,
	90363_2, 90363_3, 90363_5
Plate III:	Area S1: 10966_1, 10966_2, 10966_3, 10966_4, 10966_5, 10966_7, 10966_8, 10966_9,
	10966_10, 10966_11

### 4.4.1 Plate I Notes

Inv. No.	Туре	Notes	Date
10435_1	PL2	Black net-burnished interior with red slip continuing over the exterior of the rim <sup>143</sup>	IIIB
10435_3	PL1b	Black net-burnished interior with red slip continuing over the exterior of the rim	IIIB-C
10435_5	PL1b	Black line-burnished interior with red slip continuing over the exterior of the rim	IIIB-C
10435_7	SJ1	Lime washed interior and exterior, grey-brown clay	IIIA-B
10545_1	JG Base	'Abydos Ware', red slipped and highly burnished	IIIA
10852_1	BL3d	Lime washed interior and exterior, grey-brown clay	N/A
12267_1	BL1	Red slipped interior continuing over the exterior rim	N/A
12267_2	JG2	No surface treatment, grey-brown clay	IIIA
12329_1	SJ1	Lime washed interior and exterior, grey-brown clay	IIIB-C
12905_1	PL3b	Red slipped interior continuing over the exterior rim	N/A
12905_2	BL3c	Lime washed interior and exterior, grey-brown clay	IIIA
12905_3	BL2	Red slipped interior continuing over the exterior rim	IIIA
60936_2	BL3b	Red slipped interior continuing over the exterior rim	N/A
60936_3	PL4	Black line-burnished interior with red slip continuing over the exterior of the rim	N/A
61195_1	BL3a	Red slip on interior and exterior, grey-brown clay	IIIA-B
61195_2	PL2	Black line-burnished interior with red slip continuing over the exterior of the rim	IIIB
61195_3	BL3b	Red slipped interior continuing over the exterior rim	N/A
61195_4	BL4	Black line-burnished interior with red slip continuing over the exterior of the rim	IIIB-C
61195_5	HM2	No surface treatment, grey-brown clay	N/A
61195_6	PL1b	Black net-burnished interior with red slip continuing over the exterior of the rim	IIIB-C
61195_7	PL3a	Red slipped interior continuing over the exterior rim	N/A
61195_8	PT1	Lime washed interior and exterior, grey-brown clay	IIIA-B

<sup>&</sup>lt;sup>143</sup> Burnished designs not included in Plate drawings



## 4.4.2 Plate II Notes

Inv. No.	Туре	Notes	Date
61195_9	BL3c	Red slipped interior and exterior, grey-brown clay	N/A
61250_1	BL3b	Red slipped interior continuing over the exterior rim	N/A
61250_2	JG1	No surface treatment, grey-brown clay	IIIA-B
61250_3	HM3	Potmark present, six consecutive lines lying parallel,	IIIA
		1.2cm in length; grey-brown clay	
61250_4	HM1	No surface treatment, grey-brown clay	N/A
61250_5	HM2	No surface treatment, grey-brown clay	N/A
90240_4	PL1a	Black line-burnished interior with red slip continuing	IIIA-C
		over the exterior of the rim	
90327_1	PL1b	Black line-burnished interior with red slip continuing	IIIB-C
		over the exterior of the rim	
90327_3	PT1	Lime washed interior and exterior, grey-brown clay	IIIA-B
90329_1	KR1	Lime washed interior and exterior, grey-brown clay	IIIA-B
90335_2	BL2	Red slipped interior continuing over the exterior rim	IIIA
90335_3	BL3c	No surface treatment, grey-brown clay	N/A
90346_1	BL3d	Red slipped interior and exterior, grey-brown clay	IIIB
90346_3	BL2	Red slipped interior continuing over the exterior rim	N/A
90363_2	PL1a	Black line-burnished interior with red slip continuing	IIIA-C
_		over the exterior of the rim	
90363_3	PL3a	Net-burnished design on the interior	N/A
90363 5	HM2	No surface treatment, grey-brown clay	N/A

# PLATE II

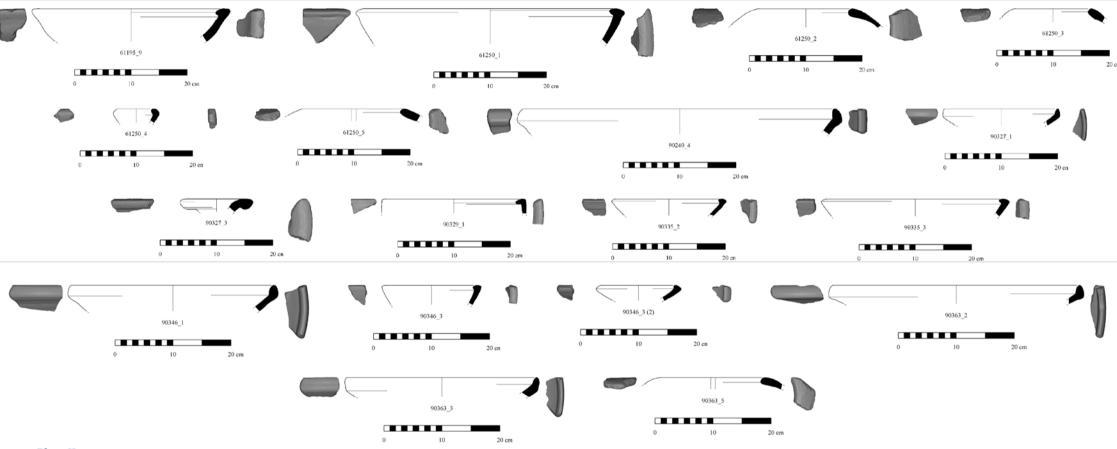
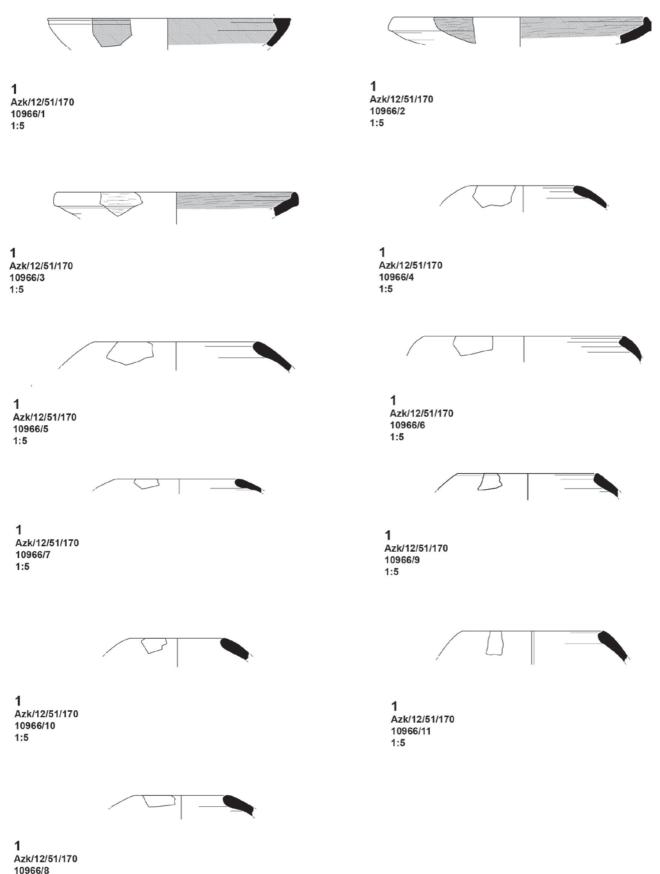


Plate II.

## 4.4.3 Plate III Notes

Inv. No.	Туре	Notes	Date
10966_1	BL3c	Red slipped interior and exterior, grey-brown clay	N/A
10966_2	PL1b	Black line-burnished interior with red slip continuing over the exterior of the rim	IIIB-C
10966_3	PL4	Black line-burnished interior with red slip continuing over the exterior of the rim	N/A
10966_4	HM1	No surface treatment, grey-brown clay	N/A
10966_5	HM2	No surface treatment, grey-brown clay	N/A
10966_6	HM3	No surface treatment, grey-brown clay	B/A
10966_7	HM2	No surface treatment, grey-brown clay	N/A
10096_8	HM2	No surface treatment, grey-brown clay	N/A
10966_9	HM3	No surface treatment, grey-brown clay	N/A
10966_10	HM1	No surface treatment, grey-brown clay	N/A
10966_11	HM3	No surface treatment, grey-brown clay	N/A



10966/8 1:5

Plate III.

## **CHAPTER 5 DISCUSSION**

The focus of this project now turns to the cultural and chronological position of the Tel Azekah assemblage in relation to the surrounding sites. It is obvious that Tel Azekah exhibits EB pottery synonymous with the traditions of the southern material culture as outlined in Chapter 2.1. Considering the assemblage as a whole, it is evident that the pottery is more indicative of the earlier EB III, missing almost entirely the indicative sherds developed late in the third phase at Tel Yarmuth (the late EB IIIC).

Due to the mixed nature of the phases from all four areas in which EB remains have been discovered at Tel Azekah, it is impossible to determine the specific correlation of EB phases from Tel Azekah with those of surrounding sites. What can be determined is that all the EB pottery discussed here dates primarily to the EB IIIA-B with few sherds also dating to the early EB IIIC period (See Table 21). Pottery of this time frame is attested in phases W2-9-10, W2-10, W2-11, W3-7, S1-12, S1-13, and N1-10, though often mixed with Middle Bronze Age remains.<sup>144</sup> Concerning the donkey burial in Area S1 (Basket 10966), this pottery is tentatively dated to the EB IIIA due to sherd 10966\_2. Again, this assemblage cannot be dated with certainty due to the heavy volume of holemouth vessels, providing limited pottery-based chronological conclusions.

This assemblage corresponds most closely with Phase E6 and the late Phase E5 at Tell es-Safi, however due to limited publications present surrounding the E6 phase, this is only a tentative comparison based on observation of the Tell es-Safi assemblage. One difference between Phase E5-6 at Tell es-Safi and the pottery of Tel Azekah is that the assemblage discussed here contains a far higher prevalence of platters compared to storage jars. Storage jars are the most common types of pottery discovered in EB III contexts, whereas this assemblage contains high numbers of open vessels, i.e. platters and bowls. Although many parallels can be drawn between

<sup>&</sup>lt;sup>144</sup> See Chapter 4.1.

Tell es-Safi and the Tel Azekah assemblage, the assemblage discussed in this paper is far more synonymous with the Tel Yarmuth assemblage than that of Tell es-Safi.

A notable occurrence in the EB ceramic assemblage at Tel Azekah is the occurrence of a single sherd recovered containing a potmark. Potmarks of the time are discovered al surrounding sites and are debated to indicate local identification, though their wider use during the EBA is widely debated. As potmarks are common on both holemouth jars and pithoi at surrounding sites it could be inferred that the lack of potmarks was an intentional omission or the product of chance discovery. One such example is at Tell es-Safi, with a vast number of potmarks discovered on vessels dating to the EB III period.<sup>145</sup> This provides an interesting parallel, which is unexplainable considering the short distance between the two sites. Due to the convoluted understanding of potmarks from the EBA, making any conclusion on the matter both bold and unsupported from this study. Perhaps further excavation will unearth potmarks from the EBA, however at this moment the reason behind its absence is unknown.

No evidence of settlement has been detected through excavation or survey at Tel Azekah from the Early Bronze I-II period.<sup>146</sup> This is mimicked in the pottery remains from the site, with no indicative sherds belonging to the EB I-II. Due to the small number of sites dating to the EB I as concluded upon by Levy-Reifer to number only 44 during the EB I, the lack of architecture from the EB I is understandable as the settlements increase monumentally during the EB II and III.<sup>147</sup> Of the pottery from Tel Azekah, only one sherd is hesitantly indicative of the EB II phase, that belonging to a holemouth jar with coarse inclusions gaining it a tentative earlier date. The lack of EB II pottery could perhaps be understood through other means considering Levy-Reifer concluded that 88 communities were present during the EB II, which is a high number considering Tel Azekah shows no evidence of occupation during this period.<sup>148</sup> Without proper architectural remains from the EB II it is unknown whether the site was occupied during this time, and the pottery leads one to believe it had little human activity during the EB II. The lack of EB II remains is aided by the confusion

<sup>&</sup>lt;sup>145</sup> Kisos, 2014.

<sup>&</sup>lt;sup>146</sup> Lipschitz, et al. 2012: 199-200, 204-205.

<sup>&</sup>lt;sup>147</sup> Levy-Reifer, 2012: 560.

<sup>&</sup>lt;sup>148</sup> Levy-Reifer, 2012: 560.

surrounding the identification of pottery forms dating to the EB II, as a straightforward typology does not exist, which perhaps contributes to the lack of discernible pottery within the Tel Azekah assemblage. As Joffe states, the EB II is primarily indicated by the surrounding EB I and EB III strata, *not* by the pottery forms and styles associated with the period.<sup>149</sup> These few reasons justify the lack of EB II pottery within the Tel Azekah assemblage.

It can be confidently concluded that Tel Azekah was a site with increased activity during the EB III. Although limited urban insight can be inferred due to a lack of architectural remains, it is certain that Tel Azekah observed heightened human activity during the late EB period, mainly around the EB IIIA-B periods. Following Levy-Reifer's analysis of Early Bronze Age settlements, it was concluded that 5 governing centres, two cities and 10 towns, along with 10 villages and 25 hamlets, belonged to the EB III period.<sup>150</sup> To situate Tel Azekah within this framework is both bold, and littered with issues. Without substantial EB architectural remains, it is impossible to infer the extent of the site in comparison to the surrounding sites. Further excavation could provide pottery to predate the EB III, or even postdate the early EB IIIC examples, though this requires further material that is unattainable at the present time.

The close synchronism between the pottery forms found at Tel Azekah and those found at Tel Yarmuth is another avenue that requires discussion. Many sites surrounding Tel Yarmuth exhibit similar though differing assemblages, often culminating in a smaller quantity of platters as Tel Yarmuth, which undoubtedly has the largest number of platters of any site in the southern material culture from the EB III. Interestingly, Tel Azekah has increased numbers of platters in comparison to the entire assemblage, with few storage jars and pithoi sherds present. This has led to the conclusion that Tel Azekah shows closest affinity with Tel Yarmuth in the southern material culture, with few imports from the northern material culture unlike the quantities seen at Tel Lachish or Tell es-Safi. Although this is not a quantitative study, it is important to consider this assemblage as more synonymous with Tel Yarmuth than Tell es-Safi or Tel Lachish.

<sup>&</sup>lt;sup>149</sup> Joffe, 1993: 66.

<sup>&</sup>lt;sup>150</sup> Levy-Reifer, 2012: 560.

Considering the parallels of Tel Lachish, Tel Azekah shows strongest affinity with Phases D7070, D7101, GWIII, GW IIB, P3, P4, SIII, SIV of the renewed excavations, and burials 6013, 6030, 6031 along with city areas of Area 1500 as outlined in Table 21. Of the Tel Yarmuth assemblage, the Tel Azekah material shows parallels most strongly associated with Phases B-II/III, C-II/III/IV, G-III/IV, and H-/IV/V of the EB IIIA-B period (See Table 21). During this time at Tel Yarmuth, the site was undergoing a period of expansion and fortification, reaching its maximum size in the EB IIIC. It is understandable that EB IIIA-B pottery was discovered at Tel Azekah not only due to the proximity of the site to Tel Yarmuth, but the wider urban landscape of the period. As outlined previously, during the EB III many sites were being either abandoned, or expanded, which would create fewer large communities, as well as fewer small communities of considerable distance to the so called 'governing centers' or 'large cities'. If Tel Yarmuth was in fact, a considerable 'governing center' during the EB III, then this would promote small communities in the vicinity of Tel Yarmuth, perhaps protected to a degree by the economy of the 'governing centre'. This in turn, would explain the increased human activity at Tel Azekah as highlighted by the pottery assemblage during the EB III.

Due to the sudden decline in pottery dating to the EB IIIC period, it is probable that the site observed limited settlement during this period in comparison to the earlier EB III. Such decline in settlements of the southern material culture during the EB IIIC is common, due to the expansion of fewer sites and the abandonment of a large number of smaller sites, as discussed in Chapter 1.2.3. Although this discussion is concise, the few important things to take away from this study are the periodization of the Tel Azekah assemblage, primarily dating to the EB IIIA-B, and the close affinity the pottery remains have with the assemblage from the EB IIIA-C at Tel Yarmuth. 
 Table 21. Chronological alignment of Tel Azekah with existing Early Bronze II-III contexts in the Southern Levant.

	Tel Azekah	Tel Yarmuth		Tel Lachish		Tell es-Safi	Tel Dalit
	Phase	City	Fortification	City	Burials	Phase	Stratum
EB IIIC		B-I, C-I G-I/II H-II/III	A-7, D-8	GW IIB, F	6013, 6030 6031 101, GWIII, 23, P4, SIII, IV	E5a Lower F5 Fortifications Sherds in Area C6	Ι
EB IIIB		B-II, C-II G-III, H-IV	7 A-6, D-7 E-4	GW IIB, F	6013, 6030 6031 101, GWIII, 23, P4, SIII, IV	E5b-c	Ι
EB IIIA		B-III C-III/IV G-IV, H-V E-3	A-5, D-6	GW IIB, F	6013, 6030 6031 101, GWIII, 23, P4, SIII, IV	E6	Ι
EBII		B-IV CV/VI/ VII/VIII G-V	A-4/3/2/1 D-5/4/3/2/1	1501, 1516 1519, 1535 1538	6005, 6013 Pit 4022 Layer 3	E7	IIa/b III
			E-2/1/0		,0.2		IV

# **CHAPTER 6 FINAL THOUGHTS**

The pottery discussed in this study provides a preliminary snapshot of the EB pottery remains of Tel Azekah, which can be expanded upon in the excavations to come. The first five seasons of excavations has provided limited, though useful remains to confidently situate Tel Azekah within the chronology and typology of the surrounding sites exhibiting the southern material culture. The extent of the pottery, in conjunction with the surrounding urban landscape provide evidence that Tel Azekah will one day exhibit architecture that can be dated to the EB III period, though the extent of the settlement is currently uncertain. It can also be concluded that the pottery discovered at Tel Azekah shows strong affinity with major sites in the region, primarily Tel Yarmuth, Tell es-Safi and Tel Lachish, though the synchronisms are not limited to these three sites.

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