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## **The Early Bronze Age (EB I) Ceramic Assemblage from Murayghāt in the Mādabā Region: Preliminary Results of the Ritual Landscape of Murayghāt Project 2014–2018**

The site of Murayghāt in the Mādabā region was noted by early travellers in Jordan (1817–1818), due to the presence of a substantial number of dolmens located on the hills surrounding a central mound, where remains of semi-circular and rectangular stone structures could also be observed (Irby and Mangles 1985: 465–6; FIG. 1). In 1881, as many as 150 dolmens were noted at Murayghāt and some were further described by illustration (Conder 1889: 184). Today, the dolmens and stone structures can still be observed, although damage to the site has been inflicted by three nearby quarries. At present, 122 dolmen structures have been recorded at the site (Kerner 2018: 263, 2019: 181; FIGS. 2–3). Even though the dolmen fields west of the central knoll have been purchased by the Department of Antiquities and the Jordan Government, agricultural and industrial development of the area still threatens the landscape and the archaeological remains. Combined, this not only means that the ancient structures

on the site are endangered, but also that the landscape, and whatever likeness it has with the ancient landscape, is being rapidly and significantly altered.

The Ritual Landscape of Murayghāt Project studies the relationship between dolmen structures, cultic structures, and the landscape between the 4<sup>th</sup> to the 2<sup>nd</sup> millennium BC (Kerner 2019). This paper will present the preliminary results of the study of the Early Bronze Age (EBA) ceramics during the 2014–2018 seasons. A more extensive publication of the material will be forthcoming (Kerner and Andersson forthcoming). So far, the EBA ceramics excavated at Murayghāt have been dated to the earliest part of the EBA, *i.e.*, EB IA (*ca.* 3700–3400/3300 BC).<sup>1</sup>

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<sup>1</sup> The EB I (3700–3000 BC) is divided into two phases: the EB IA and EB IB, which may also be designated Early and Late EB I. The transition between the subphases of the EB I is dated around 3400/3300 BC (Philip 2008: 167; Fraser 2018: 6).



1. View of the central knoll at Murayghât. Several stone structures are visible on the surface of the small tall.



2. View of an individual dolmen structure.



3. Two dolmen structures on the hills surrounding Murayghāt. Note also the two additional dolmens in the background.

### Ritual Landscape of Murayghāt Project 2014–2018

The Ritual Landscape of Murayghāt Project began in 2014 and has been running for six seasons (with its latest season in 2019) and is directed by Dr. Susanne Kerner.<sup>2</sup> The project is also a field school for students of Near Eastern Archaeology at the University of Copenhagen.

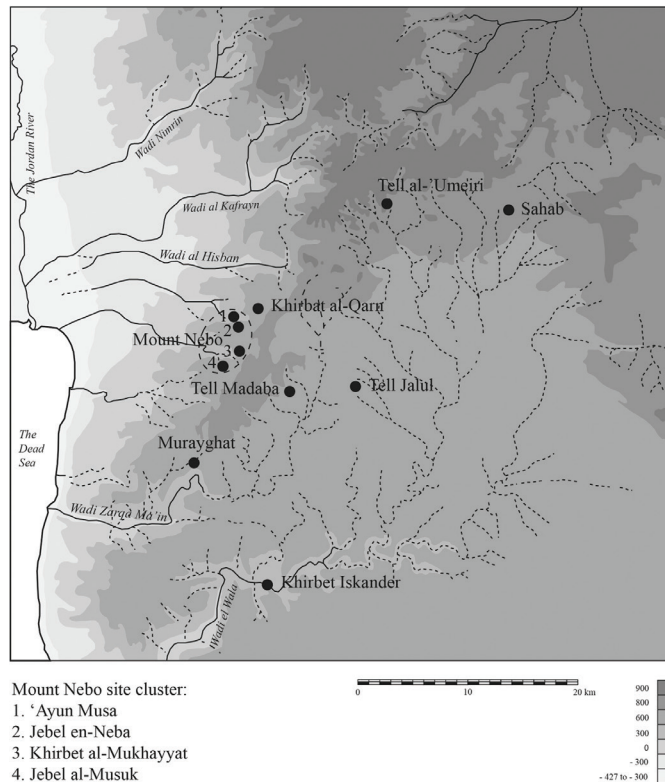
The excavations at Murayghāt have concentrated on an area slightly northwest of the central mound (trenches 3, 4, and 5), which has been excavated over several years (2014–2019) revealing a sequence of Middle Bronze Age (MBA) and EBA architecture. In addition, a small excavation area (trench 6) concentrated on a dolmen at the site (2015). Besides these excavations, an extensive survey has been undertaken since 2014, which documents the landscape and the many structures encountered on and around the central mound of Murayghāt (Kerner 2018).

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### Murayghāt and the Madaba Region in the Early Bronze Age

Considering the settlement patterns in the Madaba region, it is difficult to distinguished Late Chalcolithic (LC) sites from EB I sites (FIG. 4). The transition between the periods is at present poorly understood and sites of the two periods have often been grouped together in surveys (Harrison 1997: 11). Still, the region exhibits a low number of sites and ‘. . . settlement during the Late Chalcolithic/EB I was sparse, consisting primarily of isolated clusters of communities engaged in basic subsistence pursuits’ (Harrison 1997: 13).<sup>3</sup> Settlement in the region peaked in the EB II/III period with sites increasing in both size and numbers. EB II–III sites often resettled earlier LC/EB I locations (Harrison 1997: 13). During the EB IV/MB I period sites decreased in number and size, which appear to reflect a partial return to nomadic subsistence

<sup>3</sup> The division between EB IA and EB IB is similarly difficult, as the period has not been adequately investigated.



4. The Mādabā Plain with selected EB I sites mentioned in the text.

practices, while some larger rural villages remained. EB II–III sites were rarely settled again in the EB IV/MB I (Harrison 1997: 17–9).

While a good number of surveys on the Mādabā Plain<sup>4</sup> have discovered sites of the EB I, excavations have rarely exposed large expanses of the period, as the remains lie below substantial deposits of later phases of occupation. This also means that the EB I ceramic tradition from the Mādabā region is at present poorly understood. Tall Mādabā and Tall Jalūl are two of the dominant settlement sites on the Mādabā

Plain, where EB I layers may be present, but not exposed (Harrison 1997: 2). Limited excavations at Tall Mādabā indicate that the tall was settled in the Late EB I/Early EB II (Harrison *et al.* 2000: 222). However, with the extensive modern occupation of the tall, any settlement and archaeological remains of the EBA period are very difficult to study. At Tall Jalūl, only sherd scatters of the EBA period are reported, while no architectural remains have been excavated (Yunker 2007). Other prominent archaeological sites with EBA material include Khirbat Iskandar, Tall al-'Umayrī, Khirbat al-Qarn, and the Mount Nebo site cluster.<sup>5</sup> At

Khirbat Iskandar, excavations in Area B reached layers (stratum III, phase D) that may be of EB I date. Furthermore, a cist tomb excavated in area J dated to the EB I indicates that Khirbat Iskandar may have been occupied in EB I (Richard 1990: 35, 2010: 14). At Tall al-'Umayrī the excavation of a dolmen revealed pottery and secondary burials (stratum 21) dating to the EB IB and it is possible that the site was inhabited during this period (Dabrowski *et al.* 1994: 241–2, 1996: 86–90; Dubis and Dabrowski 2002: 171–7; Herr and Clark 2007: 121).<sup>6</sup> Khirbat al-Qarn only seems to have had a smaller EB I settlement component, perhaps occupying caves at the site. However, any remains at the tall itself are hidden under EB III layers (Savage and Rollefson 2001: 223). At Mount

<sup>4</sup> Such as the early surveys by Glueck, the Hishbān survey, the Jalūl survey, the Tall al-'Umayrī survey and the Sahab survey (Harrison 1997), along with the MOAB Archaeological Resource Survey (Savage and Rollefson 2001).

<sup>5</sup> Sahab is often mentioned as a large EB site (*e.g.*, Harrison 1997), but subsequent excavation uncovered only Chalcolithic remains (Ibrahim 2006).

<sup>6</sup> While this is the only dolmen found at Tall al-'Umayrī, two more dolmens were noted in the vicinity of the site (Dabrowski *et al.* 1996: 89).

Nebo, a number of locations with EBA material was surveyed between 1992–1995, 1997–1998, and in 2008 (Mortensen *et al.* 2019: 8).<sup>7</sup> Here a large number of dolmens (189), stone lines (35), and standing stones (32) were recorded and excavations were carried out at a large EBA monument called “Conder’s Circle” (2000–2001 and 2003–2005). All of these features are dated to the EB I(A), perhaps with very LC components (Thuesen 2009: 606; Mortensen *et al.* 2019: 11). A number of smaller sites at the Mādabā Plain may likewise have been occupied in the EB I, but have not been investigated beyond surveys.

Murayghāt was visited by Mortensen and Thuesen in the 1990s, who noted similarities with the Mount Nebo dolmen field (Thuesen 2004). In 1999–2000, Stephen H. Savage surveyed Murayghāt and determined that the majority of the archaeological material found here dated to the EB I (Dubis and Savage 2001: 96; Savage and Rollefson 2001: 225; Savage 2010: 33). The results of the survey conducted by Savage have been verified by the pottery assemblage excavated and collected since 2014 by the Ritual Landscape of Murayghāt Project (Kerner 2018: 265). Therefore, the excavations at Murayghāt present a unique opportunity to study the EB I, which is not readily available at other sites in the region and will help clarify the EB I ceramic tradition of the Mādabā Plain.

### The Early Bronze Age Ceramics

The ceramic material is characterised by a high degree of fragmentation, both in survey material and in the excavated material (FIG. 5). Partially complete vessels are rarely preserved, and it is also relatively unusual to find joining sherds. Therefore, it is difficult to assess how the vessels might have looked when complete, and additionally difficult to find suitable parallels (TABLES 1–3). The following will present some form types and decoration types, which are relevant to the dating of the ceramic material. Furthermore, a vessel form, where parallels have so far not been found and appear particular to the Murayghāt assemblage, is also presented.



<sup>7</sup> The Mount Nebo site cluster investigated by Peder Mortensen, Ingolf Thuesen, and Inge Demant Mortensen includes the EBA sites recorded as ‘Ayūn Mūsā, Jabal an-Neba, Khirbat al-Mukhayyat, and Jabal al-Musuk (Harrison 1997).

5. Map of the southern Levant with EBA sites mentioned in text and schematic distribution of decoration styles.

*Holemouth Jars*

## Plain Holemouth Jars

At Murayghāt, plain holemouth jars represent the greater part of the holemouth jar assemblage, and the diversity of plain holemouth jars may point towards different uses. The plain holemouth versions vary in form, with rims that are both simple, thinned, and bulbous (FIG. 6a–c), and these rims offer no chronological indications. Other variants of the plain holemouth jars have upturned straight thinned rims or inwards sloping walls and a slightly everted rim, which makes them appear bag shaped (FIG. 6d–e). While the two latter forms are less common than the typical holemouth jars, parallels may be found at many EB I sites.

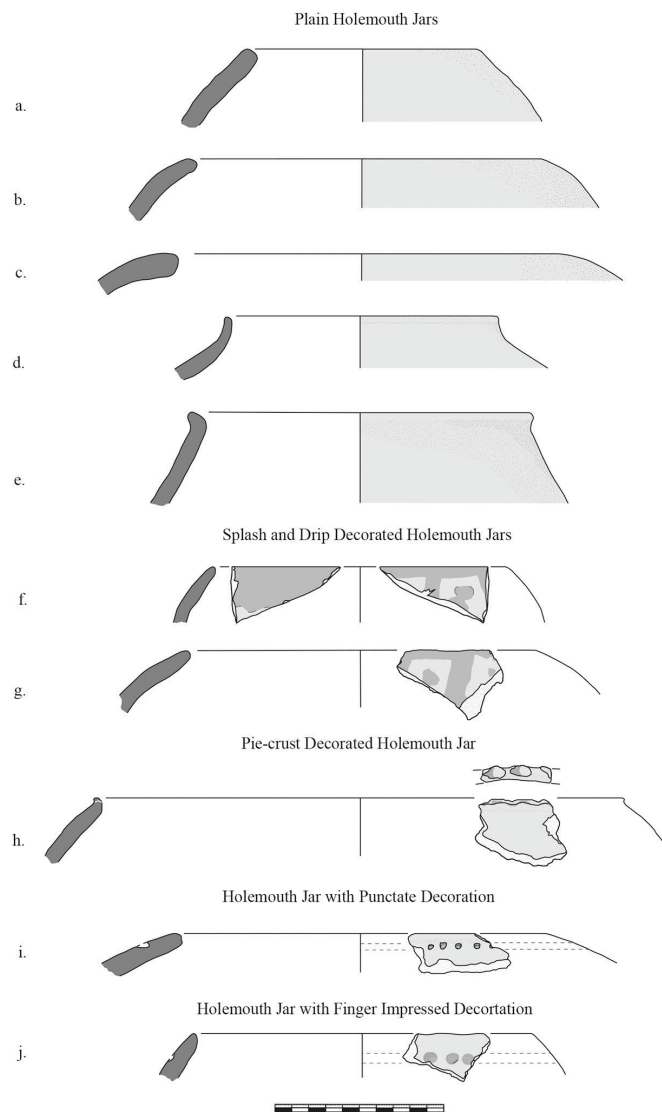
Holemouth Jars with  
Splash and Drip Paint  
Decoration

Splash and drip paint decoration is distributed at sites along the central and southern Jordan Valley and is described as a purely local style (FIG. 6f–g). This decoration type is known from the LC through the EB IA, and as the name suggests, the decoration consists of splashing and dripping of red paint on holemouth vessels or jars. The decoration type can be found at sites such as Tall ash-Shūna, Tall as-Sa‘īdiyy, Tall Abū-al-Kharaz, Tall Umm Ḥammād, and at Jericho (Milevski 2011: 76). This type of decoration is not well represented in the Murayghāt assemblage and

only a few examples have been recognized, but their presence does suggest a dating to the very late LC or the EB IA.

## Pie-Crust Decorated Holemouth Jars

Another kind of decoration present in the Murayghāt assemblage has been described in several different ways but is usually called either scalloped, thumb-indented, or pie-crust decoration (FIG. 6h; Golani 2008: 27). Here, the term “pie crust” has been adopted due to its descriptive



6. EB I holemouth jars from Murayghāt.

Table 1. EB I holemouth jar parallels.

Fig. 6	Description	Parallels
a.	Plain Holemouth Jar	Tall Umm Ḥammād (Helms 1992: 45–7 fig. 141.5, G1) EB IB.
b.	Plain Holemouth Jar	Jawa (Helms 1991: 74–5 fig. 118.107, GA) EB IA; Tall Umm Ḥammād (Helms 1992: 55–6 fig. 172.6, G15) EB IB.
c.	Plain Holemouth Jar	Jawa (Helms 1991: 74–5 fig. 116.80, GA) EB IA; Tall Umm Ḥammād (Helms 1992: 55–6 fig. 168.7, G15) EB IB.
d.	Holemouth Jar with Vertical Raised Rim	Tall Umm Ḥammād (Helms 1992: 66 fig. 204.10, G29).
e.	Holemouth Jar with Everted Rim (Bag-shaped?)	Tall Umm Ḥammād (Helms 1992: 49 fig. 152.3, G6) EB IA.
f.	Holemouth Jars with Splash and Drip Decoration	Splash and Drip Decoration: Jericho, Tell Abu-Kharaz, Tell esh-Shuneh, Tell es-Saidiyeh, Tall Umm Ḥammād (Milevski 2011: 76) LC/EB IA.
g.	Holemouth Jar with Splash and Drip Decoration	Splash and Drip Decoration: Jericho, Tell Abu-Kharaz, Tell esh-Shuneh, Tell es-Saidiyeh, Tall Umm Ḥammād (Milevski 2011: 76) LC/EB IA.
h.	Holemouth Jar with Pie-crust Decoration on Rim	Pie-crust Decoration: Ashqelon Afridar, Besor Site H, Tell Halif Terrace and (Golani 2008) Chalc./EB I.
i.	Holemouth Jar with Punctate Decoration below Rim	Punctate Decoration: Kataret es-Samra, Jawa, Jebel Mutawwaq, Tell esh-Shuneh, Tell Handaqq (N.), Tall Umm Ḥammād (Helms 1991: 58 fig.112–5, 1992: 47–8 fig. 143.8, fig. 145.2, fig. 145.5, G2; Philip 2008: 199, 201) EB IA.
j.	Holemouth Jar with Finger Impressed Decoration below Rim	Finger Impressed Decoration: Tall Umm Ḥammād (Helms 1992: 47–8 fig. 143.10, fig. 145.3, fig. 145.10, fig. 146.5, G2) EB IA/EB IB.

nature. The decoration type is known from the Chalcolithic and the Early EB I (Golani 2008: 32). Pie-crust decorated rims on holemouths, which are relatively frequent in the Murayghāt assemblage, are usually found at sites west of Murayghāt, *i.e.*, in the southern Shephelah and the coastal region. Although less common at LC sites, such pie-crust decorated holemouth jars are known from Shiqmim BP II, Abu Matar, and Besor Site A. Pie-crust decorated holemouth jars became more common during the EB I and occur at sites such as Besor Site H, Tall Halif Terrace, and Ashqelon Afridar (Golani 2008: 32). Pie-crust decoration occurs at many EB I sites outside the main distribution area of pie-crust rim decoration, but generally represent minor parts of the ceramic assemblages.

#### Holemouth Jars with Punctate Decoration

Punctate decoration along the rims of holemouths are known from the stage 2 assemblage at Tall Umm Ḥammād, which is dated to the Early EB I (EB IA; FIG. 6i). At Tall Umm Ḥammād, the decoration is usually connected with rounded or slightly pointed, pushed up lug handles at or near the rim (Helms 1992: 47–8 figs. 143–6). No vessels with a combination of these features have been found at Murayghāt, which may be due to the fragmented state of the pottery. Alternatively, the vessel may not have had any handles. Besides being present at Tall Umm Ḥammād, this vessel type is reported from EB IA sites in the Wādī az-Zarqā (Kataret as-Samra and Jabal Muṭawwaq) and at Jāwā towards the northeast in the black desert, but also towards the north at

EB IA Tall Ḥandaqūq (N.) and Tall ash-Shūna (Helms 1992: 47–8; Philip 2008: 199, 201). Examples with punctate decoration, but probably without handles, can be found at Jāwā (Helms 1991: 58 figs.112–5). There are not many examples represented in the Murayghāt assemblage, but the presence of this decoration on holemouth jars supports an EB IA date.<sup>8</sup>

#### Holemouth Jars with Finger-Impressed Decoration

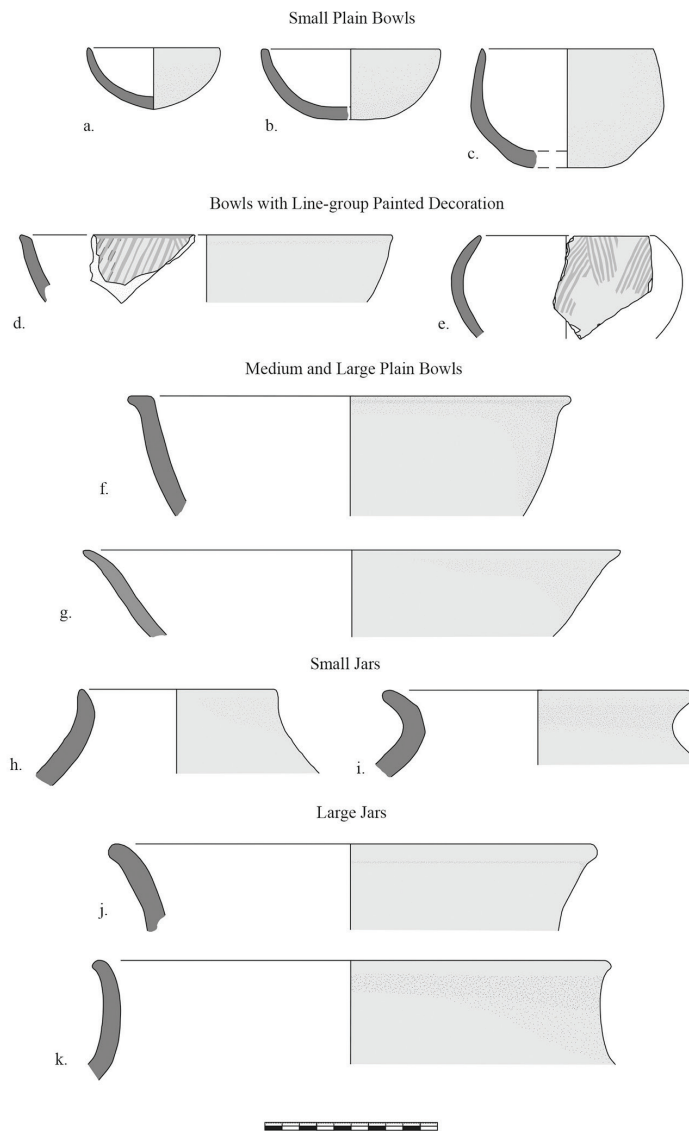
Some holemouth jars are decorated with slight finger-impressed decoration below the rim, forming slight round depressions (FIG. 6j). In some cases, fingernail imprints can be seen in these impressions. While this kind of decoration is not frequent at Murayghāt, possible parallels may be found in EB IA and EB IB contexts at Tall Umm Ḥammād (Helms 1992: 47–8 figs. 143.10, 145.3, 145.10, 146.5).

#### Bowls

##### Small Plain Bowls

Many small bowls (or cups) are present in the assemblage. The majority of small bowls are plain and occur in different forms, such as open and shallow bowls with rounded or

thinned rims (FIG. 7 a–b) and closed and deep bowls with thinned rims (FIG. 7c). The diameters of these small bowls are generally around 10 cm. Such small bowls may have been connected with burial practices, since they are found in large numbers in burial contexts and generally only make up a small percentage of settlement assemblages. They might have been used as drinking vessels or as small lamps (Kaptijn 2009: 102). The parallels from Mount Nebo (“Conders Circle”, MN1), Tall al-‘Umayrī, Tall Umm



7. EB I bowls and jars in different sizes from Murayghāt.

<sup>8</sup> The presence of Tall Umm Ḥammād, stage 2 (EB IA) decorative features in the assemblage is significant, as the stage 3 assemblage (EB IB) decoration style changes significantly (see for instance Helms 1992 and Bar 2010) and this decoration style has not been identified at Murayghāt. This could indicate that Murayghāt was only settled during the EB IA.



Table 2. EB I bowls and jar parallels.

Fig. 7	Description	Parallels
a.	Small Open Plain Bowl	Mount Nebo, “Conders Circle”, MN1 (Thuesen 2009: 607 fig. 5.1; Mortensen et al. 2019: 99 fig. 85.1) EB I; Tell al-‘Umeiri, Field K, dolmen (Dubis and Dabrowski 2002: 171–3 fig. 8.3.4.) EB IB; Tall Umm Ḥammād (Helms 1992: 74 fig. 214.4, G39) EB IB; Zerqa Triangle, Field 81 (Kaptijn 2009: 121–3 fig. 4.46.10, no. s81.5.xp15) EB IA.
b.	Small Open Plain Bowl	Asqelon Afridar – Area G (Braun 2000: 122 fig. 7.3.1) EB I; Tell al-‘Umeiri, Field K, dolmen (Dubis and Dabrowski 2002: 171–3 fig. 8.3.5) EB IB.
c.	Small Closed Plain Bowl	Zerqa Triangle, Katār Dāmiyah (Kaptijn 2009: 101–4 fig. 4.31.13, no. 500.x.7p15) LC/EB I.
d.	Open Bowl with Line-group Painted Decoration	Line-group Painted Decoration: Jericho (Nigro 2008: 653; Milevski 2011: 83) LC/EB IA/EB IB.
e.	Closed Bowl with Line-group Painted Decoration	Jericho, Tomb 13 (Kenyon 1960: 51 fig. 22.2) EB I. Line-group Painted Decoration: Jericho (Nigro 2008: 653; Milevski 2011: 83) LC/EB IA/EB IB.
f.	Deep Open Bowl with Everted Flattened Rim	Zerqa Triangle, Field 27 (Kaptijn 2009: 85 fig. 4.13.5, no. 2710.5p1) LC.
g.	Wide Shallow Open Bowl	Mount Nebo, Tell al-Jadidah North, MN354 (Mortensen et al. 2019: 90 fig. 95.j), EB I; Zerqa Triangle, Katār Dāmiyah (Kaptijn 2009: 100 fig. 4.29, no. 500.x.5p6) LC/EB I.
h.	Circular Necked Small Jar	Zerqa Triangle, Katār Dāmiyah (Kaptijn 2009: 104–5 fig. 4.32.7, no. 500.x.3p1 and fig. 4.32.11., no. 500.x.1p1) LC/EB I.
i.	High Necked Medium Jar	Jawa (Helms 1991: 88–91 fig. 139.378–381, GE) EB IA; Tall Umm Ḥammād (Helms 1992: 67–8 fig. 206.4, G31) EB IB.
j.	Large Jar with Everted Flared Rim	Jawa (Helms 1991: 78–80 fig. 127.207, GB) EB IA; Tall Umm Ḥammād (Helms 1992: 55–7 fig. 184.7–12 and fig. 185.1–4, G16) EB IA/EB IB.
k.	Large Jar with Slightly Everted Rim	Jawa (Helms 1991: 78–80 fig. 126.193, fig. 127.205, and fig. 127.208, GB) EB IA; Tall Umm Ḥammād (Helms 1992: 55–7 fig. 184.7–12 and fig. 185.1–4, G16) EB IA/EB IB.

Ḥammād, and at Katār Dāmiyah and Field 81 in the Zerqa Triangle date between the LC and EB IB.

#### Small and Medium Bowls with Line-Group Painted Decoration

A small number of bowls are decorated with paint, which has been identified as line-group painted decoration (FIG. 7d–e). This decoration consists of thin red lines, applied either to the exterior/interior or both. The two examples presented here are the rim of an open bowl with remains of line-group pattern decoration on the interior and a rim of a closed bowl form with much of the body of the vessel preserved with remains of line-group pattern decoration on the exterior. The decoration consists of thin lines arranged in sections of right-slanting

and left-slanting lines arranged around the rim and upper part of the bowl. Line-group painted decoration has been found at various sites over a wide area including ‘. . . the central coastal plain, the central hill country, southern Shephelah, the Northern Negev and the Dead Sea plain’ as early as the LC (Milevski 2011: 83). At Jericho, this type of decoration first appears in stratum IIIa1 (EB IA), which however, becomes a diagnostic element of the material culture in stratum IIIa2 (EB IB) and in funerary assemblages of the same period (Nigro 2008: 653).

#### Medium and Large Plain Bowls

At Murayghāt, medium and large bowls are generally plain and occur in a variety of forms. Here only a few examples are shown.

One is an open deep bowl with an everted flattened and thinned rim (FIG. 7f), while the other is a shallow open bowl with a thinned rim (FIG. 7g). Both probably had flat bases. While no precise parallels have yet been found for the deep open bowl with the everted flattened rim, a roughly similar large bowl has been found at the Zerqa Triangle, field 27 (Kaptijn 2009: 85 fig. 4.13.5, no. 27.10.5p1). This example is dated to the LC. The wide shallow open bowl also has a parallel at the Zerqa Triangle, *i.e.*, Katār Dāmiyah, which is dated between the LC and the EB I (Kaptijn 2009: 100 fig. 4.29, no. 500.x.5p6). A possible EB I parallel is found at Mount Nebo (Tall al-Jadidah North; Mortensen *et al.* 2019: 90 fig. 95.j).

#### *Necked Jars*

##### Small to Medium Plain Jars

The repertoire of small jars is quite diverse and only a few examples will be shown here (FIG. 7h–i). One is a small simple rounded or circular necked jar. Such jars are known to occur in both LC and EB I periods (Kaptijn 2009: 104–5). The other jar is a high-necked medium-sized jar, which probably had a globular body. The parallels from Tall Umm Ḥammād and Jāwā are dated to the EB IA/EB IB (Helms 1991: 88–91 fig. 139.378–381, 1992: 67–8 fig. 206.4).

##### Large Plain Jars

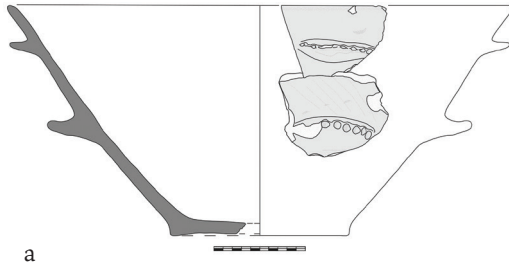
Only a few rims, which can be identified as large jars, have been recovered (FIG. 7j–k). These are vessels with a plain rounded rim and a large rim diameter. The rims are everted and may be either flared or sit on rather vertical necks. Even though nothing can be said for certain about the form of the body of the vessel, the rims likely belong to large globular storage vessels. While none of the parallels from Tall Umm Ḥammād are precise parallels, as many of these vessels have painted decoration, similar jars (Genre B) from Jāwā do not exhibit the same

painted decoration. The two sites provide form parallels dated between the EB IA/EB IB. However, the general form of these vessels is simple and according to Helms, these may also find form parallels in the Chalcolithic or even earlier (Helms 1991: 78–80 figs. 126.193, 127.205, 127.208; 1992: 55–7 figs. 184.7–12, 185.1–4).

#### *V-Shaped Murayghāt Bowls*

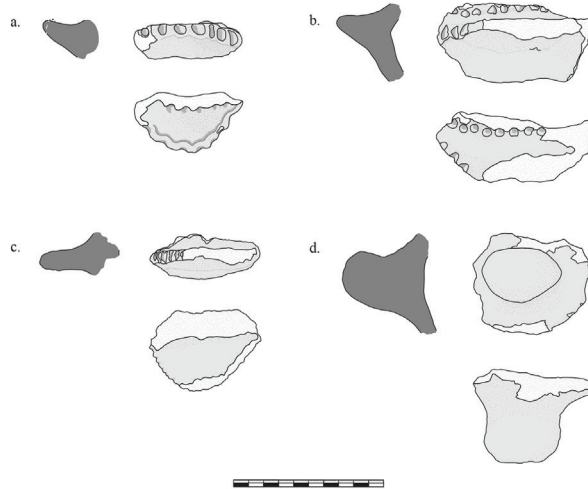
Even though the majority of the ceramic assemblage from Murayghāt is very fragmented, it has been possible to reconstruct profiles of some vessels. In one case, a full profile of a large V-shaped bowl was reconstructed. The vessel is handmade and has a very large diameter around 50 cm. It is a large deep V-shaped form with straight-sided walls, a straight rounded rim and double ledge handles (*i.e.*, a smaller ledge handle placed above a larger one) with a flat base. The edges of the ledge handles are decorated by scalloped decoration (FIGS. 8a and 8b). The multiple ledge handles may represent a local feature, as parallels have so far not been found in other EBA ceramic assemblages. The form of this vessel is similar to smaller bowl forms, *i.e.*, V-shaped bowls, which may also be described as flat-based bowls with flaring or straight-sided walls. At Ashqelon Afridar, small V-shaped bowls are a vessel type, which appears in the Chalcolithic and continues to be used in the EB I (Golani 2008: 27–8). An occurrence of larger versions of the earlier LC V-shaped bowls is described by Yekuteili in relation to EB Ia1 ceramics (here designated as kraters) from the southern Canaan (Yekuteili 2000: 132). The very large V-shaped bowls are not frequent at Murayghāt, but represent a minor and distinctive part of the ceramic assemblage and the few large and fairly elaborate vessels of the V-shaped bowl type may have had a special function at the site.

Joffe suggests that the ‘continuity’ between the Chalcolithic and EB I in terms of V-shaped vessels, may not only



- 8a. Illustration of the complete profile of the V-shaped vat with double ledge handles.
- 8b. Photograph of the complete profile of the V-shaped vat with double ledge handles.

Ledge and Lump Handles



- 9. EB I ledge handles from Murayghāt.

point to a high degree of continuity in craft production, but ‘. . . may also include ritual and behavioral aspects connected with food and commensality’ (Joffe 2018: 43). In the LC, V-shaped bowls are suggested as a primary vessel type for food consumption, which may also have been used in ritual contexts to present quantities of food, such as stews, soups, and porridges (Joffe 2018: 42). It is tempting to propose the EB I

V-shaped bowls from Murayghāt were used in the context of burial rituals and associated food consumption.

*Ledge and Lump Handles*

Ledge handles are usually considered good chronological indicators, which can be dated due to form and decoration, but only a small selection of the ledge handles found at Murayghāt are shown here (FIG. 9). The

ledge handles found at Murayghāt exhibit a range of different styles of decoration. While incised ledge handles and scalloped ledge handles are well represented (FIGS. 8a and 9a–c), there are also plain ledge handles present in the assemblage. To this should be added a few lump handles (FIG. 9d). Among other sites, the incised and scalloped ledge handles find parallels at Mount Nebo, where similar ledge handles have been found, either at ‘Conder’s Circle’ (large circular structure) or at Tall al-Jadidah North (settlement site) dated to the EB I<sup>9</sup> (see FIG. 9a–c; Mortensen *et al.* 2019: 89–90). The close proximity between the Mount Nebo site cluster and Murayghāt, along with comparable ledge handles, point towards some shared traditions of the EB I ceramic tradition on the Mādabā Plain. The feature of puncture decoration on top of the ledge handle (near the join between the handle and the vessel body) may be reminiscent of decoration on ledge handles from Tall Umm Ḥammād (e.g., Helms 1992: G66 fig. 237.6, G68 fig. 238.5–6, G69 fig. 238.9, all dated to the EB IA), but no exact parallels have

yet been found. Lump handles are not well represented at Murayghāt with only a few occurrences, but parallels are present at Tall Umm Ḥammād, Jāwā, and the Jerash region (Helms 1991: 80–1 fig. 128.213, 1992: 90 fig. 239.10).

### Early Bronze Age I Fabrics from Murayghāt

During the study of the EB I ceramics, seven different fabric types were established by macroscopic examination. In the majority of the fabrics, chert is the dominant inclusion type (fabrics I–IV).<sup>10</sup> Other fabric types also contain chert, but these are dominated by other inclusions such as chalk (fabric V), limestone (fabric VI), and grog (fabric VII). The ceramics are handmade and usually nicely smoothed on the exterior. Part of the material is slipped in slips closely matching the colour of the fabric (TABLE 4).

#### Fabric I

Fabric I is a heavily chert-tempered ware. The chert inclusions are very frequent and range from medium to large in size. Other inclusion types (such as basalt, chalk,

<sup>9</sup> With some possibility of the construction of ‘Conder’s Circle’ and the founding of the Tall al-Jadidah North settlement site going back to the very LC (Mortensen *et al.* 2019: 89–90).

<sup>10</sup> Chert-tempered fabrics are also noted as typical of the EB I ceramics excavated at ‘Conder’s Circle’ at Mount Nebo (Thuesen 2009: 607).

**Table 3.** EB I ledge and lump handle parallels.

Fig. 9	Description	Parallels
a.	Ledge Handle with Scalloped Decoration	Asqelon Afridar – Area M (Golani 2008: 34 fig. 9.15 and fig. 10.10) EB IA; Mount Nebo, ‘Conders Circle’, MN1 (Thuesen 2009: 609 fig. 8.6; Mortensen <i>et al.</i> 2019: 101 fig. 87.6) EB I.
b.	Ledge Handle with Incised Decoration and Punctate Decoration on Top of Handle	Zerqa Triangle, field 81 (Kaptijn 2009: 131–2 fig. 4.57.12, no. 81.9.1p19–2) EB IA. Punctate Decoration on Top of Handle: Tall Umm Ḥammād (Helms 1992: G66 fig. 237.6 and G68, fig. 238.5–6 and G69, fig. 238.9) EB IA.
c.	Ledge handle with Incised Decoration	Mount Nebo, Tell al-Jadidah North, MN354 (Mortensen <i>et al.</i> 2019: 109 fig. 96a/b), EB I; Mount Nebo, Tell al-Jadidah South, MN 401 (Mortensen <i>et al.</i> 2019: 112 fig. 99.d) EB I; Tall Umm Ḥammād (Helms 1992: 88 fig. 236.6–9, G64) EB IA/EB IB; Zerqa Triangle, Al-Rweihah (Kaptijn 2009: 150–1 fig. 4.77.1, no. s232.x.xp7) EB IA/EB IB.
d.	Lump Handle	Jawa (Helms 1991: 59–60 fig. 128.213, GB) EB IA; Tall Umm Ḥammād (Helms 1992: 90 fig. 239.10, G71).

**Table 4.** EB I fabrics from Murayghāt: inclusions and surface treatments. Features which occur occasionally: (+), (slip), (paint). Surface treatments: Sm.: Smoothing of the surface.

Fabric Type \ Inclusion	Fabric I	Fabric II	Fabric III	Fabric IV	Fabric V	Fabric VI	Fabric VII
Inclusion							
Basalt	(+)				(+)		
Chaff		(+)	(+)				
Chalk	+	+	+			(+)	+
Chert	+	+	+	+	+	+	
Grog	+	+	+	+	+	(+)	+
Hematite					(+)		
Limestone	+	+	+	+	+	+	
Surface treatments	Sm.	Sm.	Sm.	Sm.	Sm.	Sm.	?
	-	(slip)	(paint)	-	(slip)	-	slip

grog, and limestone) are far less numerous and smaller in size. The clay of the fabric varies from orange to pink in colour. The vessels made in this fabric are handmade, generally well fired, and surfaces appear smoothed.

*Fabric II*

Fabric II is a moderately chert-tempered fabric, with frequent occurrences of chalk and sporadic occurrences of grog. The clay of the fabric ranges in colour between pale pink and a reddish yellow. The appearance of the fabric and the nature of inclusions range from fine to coarse. Vessels made of this fabric are hard, handmade, and well fired. The exterior surfaces are smoothed. A small number of the sherds have a light slip on the exterior surface in the colour range of very pale brown to pale yellow.

*Fabric III*

Fabric III is a moderately chert-tempered fabric. Other kinds of inclusions either occur rarely (chalk and limestone) or sporadically (grog). Chaff is rare and only present in a small part of the sherds.

The fabric has a bright orange colour on the exterior surfaces. The interior colour varies from a light red to a pale yellowish pink. The fabric is well fired, very dense and hard. The exterior of the fabric is well smoothed. A small portion of the sherds have red paint on the exterior surface. Fabric II and III are closely related and are distinguished by the hardness and composition of the fabrics.

*Fabric IV*

The dominant inclusion in fabric IV consists of flakes of ground chert, while grog and limestone either occur regularly or frequently in sizes ranging from small to very large. Fabric IV is a coarse fabric with a light core colour and all sherds appear to have been slipped in a light slip on the exterior surface. The surfaces of the sherds range in colour from pink to very pale brown. The interior surfaces are either somewhat uneven or nicely smoothed. The composition of the fabric ranges from medium hardness and somewhat crumbly to dense and hard.

*Fabric V*

The visually dominant feature in the

fabric is white chalk inclusions, which stand out against the red colour of the clay matrix. However, the fabric also contains grog, limestone, and dark reddish brown to black mineral components, identified as small basalt or hematite grits. Fabric V is characterized by a bright light red to reddish yellow colour. The fabric is hard and dense in composition. Both the exterior and interior surfaces are well smoothed. A small portion of sherds have exterior surfaces with evidence of a lighter yellow colour, which is likely the remains of a slip.

#### *Fabric VI*

Fabric IV is characterised by limestone grits that are visually dominant in the fabric IV clay matrix, but the fabric also contains few inclusions of grog, chalk, and some ground chert. The fabric is generally hard and dense. Many of the sherds have fully reduced cores, but may also be reddish orange. The exterior sherd colour ranges from a reddish orange nuance to a very characteristic high red colour, and the exterior surfaces may also take on a completely greyish black to purple hue.

#### *Fabric VII*

Fabric VII is a light whitish to yellowish coloured fabric with some reddish beige to dull red rounded (grog) inclusions. Small white inclusions (chalk) are seen in a few places. The composition of clay is quite hard and dense, but has large pores and cracks on the interior surface. The exterior surface is heavily slipped in whitish shifting to a slight orange hue.

### **Conclusion**

Murayghāt is at present considered to be a ceremonial site used during burials, but possibly also used for large ritual gatherings, on account of the dolmens, the standing stones, and the structures present on the central knoll of the site. Additional excavation and survey may further uncover

the significance of the site in the EBA Mādabā Plain settlement landscape. The relatively simple vessel forms of the Murayghāt assemblage can be found in both Chalcolithic and EB I contexts, which complicates a precise dating of the ceramic assemblage. Some decoration techniques and styles present in the assemblage (*i.e.*, splash and drip decoration, pie-crust decoration, and punctate decoration) dates from the LC to the EB IA, while others (*i.e.*, finger impressed decoration) dates from the LC to the EB IB. Additionally, line-group painted decoration dates from the LC to the EB IB. Combined, the presence of the different decoration types reviewed above are interpreted as indicating a predominantly EB IA assemblage. Another strong indication of the dating of the Murayghāt assemblage to the EB IA is the absence of any of the characteristic Tall Umm Ḥammād stage 3 (EB IB) ware. The ceramics have to be analysed further to more accurately determine the dating of the assemblage, but as of now, the ceramic assemblage points to the site of Murayghāt being used, possibly to some extent in the LC, but more extensively in the EB IA.<sup>11</sup> The reason for the presence of the different types of decorations in the assemblage, especially related to holemouth jars, has not yet been determined. The vessels could be imported, showing ties towards the west and north (*e.g.*, pie crust and splash and drip decoration). Alternatively, the vessels may also have been produced locally either at or in the vicinity of Murayghāt. But since the general EB I assemblage at the Mādabā Plain is not well known, it is at present difficult to answer such questions. Hopefully, further analysis of the Murayghāt assemblage will answer questions about the EB I ceramic tradition at the Mādabā Plain.

<sup>11</sup> The excavations have also uncovered a MB IIA settlement component, which will be published elsewhere.

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### Bibliography

- Bar, S. 2010. "Early Bronze Age I 'Um Hammad Ware': A Study in Regionalism." *PEQ* 142:82–94
- Braun, E. 2000. "Area G at Afridar, Palhamim Quarry 3 and the Earliest Pottery of Early Bronze Age I: Part of the 'Missing Link.'" In *Ceramics and Change in the Early Bronze Age of the Southern Levant*, edited G. Philip and D. Baird, 113–28. Sheffield: Sheffield Academic Press.
- Conder, C.R. 1889. *The Survey of Eastern Palestine: Memoirs of the Topography, Orography, Hydrography, Archaeology, etc.* Vol. 1, *The Adwān Country*. London: Committee of the Palestine Exploration Fund.
- Dabrowski, B., Ø. LaBianca, and E. Dubis. 1994. "Megalithic Tomb at Tell el-Umeiri, Jordan." *The Biblical Archaeologist* 57:241–2.
- Dabrowski, B., E. Dubis, K. Maryla, H.P. Krug, and Ø.S. LaBianca. 1996. "Funerary Sites in the Vicinity of Tell el-Umeiri (Season 1994 of the Madaba Plains Project)." In *Studies in Ancient Art and Civilizations*. Vol. 7, edited by J. Sliwa, 85–95. Warszawa: Państw. Wydaw. Naukowe.
- Dubis, E., and B. Dabrowski. 2002. "Field K: The Dolmen and Other Features on the South Slopes of Tall al-'Umayri." In *Madaba Plains Project 5: The 1994 Season at Tall al-'Umayri and Subsequent Studies*, edited by L.G. Herr, D.R. Clark, L.T. Geraty, R.W. Younker, and Ø.S. LaBianca, 171–7. Berrien Springs, MI: Andrews University.
- Dubis, E., and S.H. Savage. 2001. "Moab Archaeological Resource Survey: The Dolmen Field at al-Murayghāt." *Archaeologia* 52:91–6.
- Fraser, J.A. 2018. *Dolmens of the Levant*. London: Routledge.
- Golani, A. 2008. "The Early Bronze Age Site of Ashqelon, Afridar – Area M." *'Atiqot* 60:19–51.
- Harrison, T.P. 1997. "Shifting Patterns of Settlement in the Highlands of Central Jordan during the Early Bronze Age." *BASOR* 306:1–38.
- Harrison, T.P., B. Hesse, S.H. Savage, and D.W. Schnurrenberger. 2000. "Urban Life in the Highlands of Central Jordan: A Preliminary Report of the 1996 Tall Madaba Excavations." *ADAJ* 44:211–29.
- Helms, S. 1991. "The Pottery." In *Excavations at Jawa 1972–1986. Excavations and Explorations of the Hashemite Kingdom of Jordan*, edited by A.V.G. Betts, 55–109. Edinburgh: Edinburgh University Press.
- . 1992. "The Pottery Typology." In *Excavations at Tell um Hammad, 1982–1984 (EB I–II: Excavations and Explorations in the Hashemite Kingdom of Jordan)*, edited by A.V.G. Betts, 39–121. Edinburgh: Edinburgh University Press.
- Herr, L.G., and D.R. Clark. 2007. "Tall al-'Umeyri through the Ages." In *Crossing Jordan: North American Contributions to the Archaeology of Jordan*, edited by T.E. Levy, 121–8. London: Equinox.
- Ibrahim, M. 2006. *Sahab: Chalcolithic Village Farming Community at Sahab*. Vol. 1. Amman: Department of Antiquities of Jordan Publications Series.
- Irby, C.L., and J. Mangles. 1985. *Travels in Egypt and Nubia, Syria and Asia Minor during the Years 1817 and 1818*. Cambridge: Cambridge University Press.
- Joffe, A. 2018. "Notes on Early Bronze Age Commensality." In *Tell it in Gath: Studies in the History and Archaeology of Israel*.

- Essays in Honor of A.M. Maeir on the Occasion of his Sixtieth Birthday*, edited by I. Shai, J.R. Chadwick, L. Hitchcock, A. Dagan, C. McKinny, and J. Uziel, 41–70. Münster: Zaphon.
- Kaptijn, E. 2009. *Life on the Watershed. Reconstructing Subsistence in a Steppe Region using Archaeological Survey: A Diachronic Perspective on Habitation in the Jordan Valley*. Leiden: Sidestone Press.
- Kenyon, K.M. 1960. *Excavations at Jericho*. Vol. 1, *The Tombs Excavated in 1952–1954*. British: School of Archaeology in Jerusalem.
- Kerner, S. 2018. “Dolmens in the Ritual Landscape of Murayghat.” In *Proceedings of the 10<sup>th</sup> International Congress on the Archaeology of the Ancient Near East, 25–29 April 2016*. Vol. 1, edited by B. Horejs, C. Schwall, V. Müller, M. Luciani, M. Ritter, M. Giudetti, R.B. Salisbury, F. Höflmayer, and T. Bürge, 259–72. Wiesbaden: Harrassowitz.
- . 2019. “New Research into the Early and Middle Bronze Age in Central Jordan: Murayghat.” *Journal of Eastern Mediterranean Archaeology and Heritage Studies* 7:165–86.
- Kerner, S., R.H. Barnes, M. Flender, I. Ruben, and A. Andersson. 2017. “The 2014 Season in the ‘Ritual Landscape of Murayghat’ Project.” *ADAJ* 58:359–74.
- Kerner, S., and A. Andersson. Forthcoming. *The Early Bronze Age and Middle Bronze Age Pottery of Murayghat*.
- Mortensen, P., I. Thuesen, and I.D. Mortensen. 2019. *Mount Nebo. An Archaeological Survey of the Region*. Vol. 2, *The Early Bronze Age*. Copenhagen: Forlaget Orbis.
- Milevski, I. 2011. *Early Bronze Age Goods Exchange in the Southern Levant - A Marxist Perspective. Approaches to Anthropological Archaeology*. London: Routledge.
- Nigro, L. 2008. “Telles-Sultan/Jericho from Village to Town: A Reassessment of the Early Bronze Age I Settlement and Necropolis.” In *Proceedings of the 5<sup>th</sup> International Congress on the Archaeology of the Ancient Near East*. Vol. 2, edited by J.M<sup>a</sup> Córdoba, M. Molist, C. Pérez, I. Rubio, and S. Martínez, 645–62. Madrid: Ediciones Universidad Autónoma de Madrid.
- Philip, G. 2008. “The Early Bronze Age I–III.” In *Jordan. An Archaeological Reader*, edited by R.B. Adams, 161–226. London: Equinox.
- Richard, S. 1990. “Khirbet Iskander and the Early Bronze IV: Fourth Preliminary Report, 1987 Season.” *BASOR Supplement* 26:33–58.
- . 2010. “Introduction.” In *Khirbat Iskandar: Final Report on the Early Bronze IV Area C Gateway and Cemeteries*. Vol. 1, edited by S. Richard, J.C. Long Jr, P.S. Holdorf, and G. Peterman, 1–19. Boston: American Schools of Oriental Research.
- Savage, S.H. 2010. “The Endangered Chalcolithic/Early Bronze Age Site at al-Murayghât-Hajr al-Mansûb.” *NEA* 73:32–46.
- Savage, S.H., and G.O. Rollefson. 2001. “The Moab Archaeological Resource Survey: Some Results from the 2000 Field Season.” *ADAJ* 45:217–36.
- Thuesen, I. 2004. “Messages in Stone: The Megaliths of the Nebo Region in Jordan.” In *From Handaxe to Khan. Essays Presented to Peder Mortensen on the Occasion of his 70<sup>th</sup> Birthday*, edited by K. von Folsach, H. Thrane, and I. Thuesen, 105–17. Aarhus: Aarhus University Press.
- . 2009. “From Jericho to Mount Nebo: Results of Recent Excavations of Conder’s Circle.” *SHAJ* 10:603–9.
- Yekuteili, Y. 2000. “Early Bronze Age I Pottery in Southwestern Canaan.” In *Ceramics and Change in the Early Bronze Age of the Southern Levant*, edited by G.



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- Philip and D. Baird, 129–52. Sheffield: Sheffield Academic Press.
- Yunker, R.W. 2007. “Highlights from the Heights of Jalul.” In *Crossing Jordan: North American Contributions to the Archaeology of Jordan*, edited by T.E. Levy, P.M. Daviau, R.W. Yunker, and M. Shaer, 129–36. London: Equinox.