Distinguishing grave and non-grave pottery assemblages in LBA Central Syria and the Levant

STEFANIE DÖPPER

La differenziazione tra ceramica funeraria e non funeraria in un dato periodo e in una specifica regione influisce sulla cronologia che gli archeologi stabiliscono proprio sulla base delle ceramiche. La comprensione di queste differenze permette di meglio conoscere le società che hanno prodotto e usato quelle ceramiche. Nella Tarda Età del Bronzo della Siria centrale è emersa una chiara distinzione tra ceramica funeraria e non funeraria. Essa si basa sulle proporzioni delle forme dei vasi, sui tipi di ceramiche e sulle merci importate. Questa distinzione può essere illustrata grazie all’analisi delle corrispondenze tipologiche e ai confronti statistici. I risultati mostrano che gli ambiti dei vivi e dei morti, nella Tarda Età del Bronzo, si sovrappongono come per esempio nella fornitura di cibo, mentre in altri, come nel caso dei rituali, essi sono ben distinti.

Differentiation between grave and non-grave pottery in a given time and region has consequences for archaeologists arguing on the basis of pottery chronologies. Understanding these differences also allows insights into the society in which the pottery was made and used. In the LBA in Central Syria and the Levant, there is, besides a general overlap in the pottery, a clear distinction between grave and non-grave pottery based on the proportions of vessel shapes, pottery types and imported wares. This distinction can be made visible by correspondence analyses and other statistical analyses. The results show that the domains of the living and the dead in the LBA were in some parts, such as the provision of food, overlapping while in others, such as ritual acts, quite distinct.

Parole chiave / Keywords

Siria centrale, Levante, Tarda Età del Bronzo, ceramica funeraria, ceramica non funeraria, analisi delle corrispondenze

Central Syria, Levant, Late Bronze Age, grave pottery, non-grave pottery, correspondence analysis
1. Introduction

Whether grave (also called tomb or mortuary) and non-grave (also called settlement or non-mortuary) pottery represent different categories depends on the region and time period you are looking at. In some periods and places, there is no difference between them at all, while in others, differences are clearly visible. In such cases, tomb pottery can comprise only a section of the generally much broader range of pottery that is found in the settlements. Alternatively, the grave pottery may have no or only very few overlaps with non-grave pottery as they are exclusively produced for its use in the funerary context. Indicators for the latter might be a decoration that is too delicate or impermanent for continuous use or an inferior production of the vessels as they are placed in the graves only as substitutes for the real ones. When a difference between grave and non-grave pottery exists, this has, on the one hand, significant effects on the possibilities for the archaeologist to draw conclusions based on the similarities of pottery assemblages, as is done by all pottery based chronologies. On the other hand, it allows insight into the society where the pottery comes from as pottery is always a representation of the culture of their makers and users. Within this paper, I will demonstrate that there are significant differences between grave and non-grave pottery in LBA Central Syria and the Levant based on the comparison of pottery shapes and types, as well as imported wares, and discuss possible reasons behind this phenomenon.

2. Correspondence analysis of pottery types

In order to address these questions, pottery from 58 different sites in Central Syria and the Levant was examined. The objects that were studied include 21,976 sherds and ceramic vessels from 440 different contexts. 198 of the contexts were classified by their excavators as graves, while 242 fall under the category of non-grave contexts. Such contexts can only be rather broadly described with the term settlement as they include profane and ritual buildings as well as humble and monumental ones. Equally, no difference was made in the category of grave contexts between rich and poor or single and multiple burials. The comparison of the pottery from these categories focuses both on the vessel shapes and pottery types, as well as on imported ware, as these categories are best available in publications.

With the purpose of identifying whether there is a recognizable difference between grave and non-grave assemblages among the pottery of LBA Central Syria and the Levant, correspondence analysis was carried out. The principles of correspondence analyses go back to Hirschfeld’s work in 1935, while the actual method was developed in the 1960s by the linguist Benzécri. It was first applied to archaeological data in 1980 by Djindjian. Correspondence analysis is multivariate statistic technique to visually arrange objects according to their characteristics from tablets in a two dimensional graph. For this paper, objects are pottery assemblages and characteristics are the pottery shapes present in the assemblages. In the graph produced by this means (fig. 1), assemblages that are more alike to each other with regard to the presence and absence of pottery shapes are found closer to each other than assemblages that are more different from each other. In contrast to conventional seriation as invented by Petrie, correspondence analyses cannot only visualize linear solutions but more complex graphical patterns. Thus, it is closer to a more complex reality than seriation. On the right side of the graph (fig. 1) are the di-

---

3. Weinberg 1965, p. 188.

---

12. Due to the very high amount of variables included in the analyses, i.e. the different shapes occurring at the sites, the percentage of the inertia in the correspondence analyses are generally low, resulting in a low representation and thus
amond shapes representing the grave assemblages and on the left side the triangle representing the settlement assemblages. Clear clustering from the assemblages according to their different contexts is visible. Thus, there is an evident distinction between the pottery shapes present in grave and non-grave pottery in the period and region studied. This results are indistinguishable applicable for Central Syria and the Levant and also no further distinction can be made between southern and northern Levant. However, some outliers are to be seen as well. Some assemblages that are classified by their excavators as grave assemblages find themselves among the settlement assemblages. These are the pottery assemblages from Tombeau II in Qatna, the pottery assemblage from the so-called Schatzhaus in Kamid el-Loz and the Lower Tomb and Upper Tomb Phase assemblages from Gezer. This might be explained in the case of Tombeau II in Qatna as the pottery found within this tomb does probably not belong to the original inventory of the tomb itself but was placed there after the use of the structure as a tomb.13 The Lower and Upper Tomb phases in Gezer represent intermediate phases between the actual burials14 and, therefore, the pottery found within these phases is strictly speaking not grave pottery. Why the assemblage from the Schatzhaus in Kamid el-Loz finds itself among the non-grave assemblages can however not be fully explained. The Schatzhaus evidently represents a tomb. Three burials have been found within it.15 The only reason for the position of the Schatzhaus assemblage between the

---

13 Döpper 2014.
S. Döpper

Distinguishing grave and non-grave pottery assemblages in LBA Central Syria and the Levant

The clear distinction between grave and non-grave assemblages visible in the correspondence analysis, leads to the question in which way the assemblages differ from each other. Do the grave assemblages only represent a part of larger and more diverse non-grave assemblages or do they stand alone and show little to no overlap with the non-grave assemblages? The latter would indicate that the pottery was exclusively produced for the graves.

A widespread opinion is that grave and non-grave assemblages differ because non-grave assemblages tend to be more fragmented. This would mean that the assemblages were the same or very similar during their original use and only different storage conditions and taphonomic processes made them vary over the time. For this reason, a second correspondence analysis was carried out on the same material, but by defining pottery shapes only by the lip and upper vessel shape. Lower vessel shape and bases, which

non-grave assemblages might be that the inventory of the Schatzhaus was not complete when it was found, which influenced the presence and absence of pottery shapes. Likewise there are also assemblages that were classified as non-grave assemblages, which are to be found among the grave assemblages in the graph. These are the pottery assemblages from: Temple 6 in Tell Kazel, the Fosse Temple I in Lachish, Area F level 1B in Hazor, levels VIIB and VIII in Megiddo, level V in Tell Abu Hawam, and from cave A2 und B3 in the Baq'ah Valley. The assemblages from Hazor and Megiddo subsume, according to their excavators, pottery from non-grave contexts as well as from grave contexts. Following the correspondence analysis, the latter is dominant. The excavation reports of all the other contexts give no hints to tombs.

17 Badre, Gubel 1999-2000, pp. 143-5; Tufnell, Inge, Harding 1940, pp. 36-7; Hamilton 1935, pp. 11-3;

Figure 2
Correspondence analysis of LBA pottery assemblages from Central Syria and the Levant distinguishing between grave and non-grave assemblages without accounting for lower vessel shape and base
3. Presence of vessel shapes and pottery types

As the completeness of the vessels does not account for the differences between grave and non-grave pottery, other explanations have to be sought. A comparison of the percentages of the different vessel shapes of grave and non-grave assemblages (fig. 3 and Tab. 1) demonstrates that shallow bowls are the most prominent shape in both contexts, accounting for nearly 50 percent each. Small jars amount to 32 percent in grave contexts and only to 21 percent in non-grave contexts, while large jars are much more common in non-grave contexts than in grave contexts. In the latter, they account for only 6 percent while they make up to 20 percent in non-grave contexts. Oil lamps are also slightly more frequent in graves than in non-grave contexts. Other vessel shapes like deep bowls, beakers, cups, storage jars, miniature vessels, lids, stands and sieves are generally quite rare in LBA pottery from Central Syria and the Levant and thus differences in their presence are small.

The comparably high number of shallow bowls in the assemblages from both contexts indicates that they were important in both spheres. As they are most likely to be connected with serving food and eating, these activities should thus be present in both grave and non-grave contexts. The different percentages of small and large vessels on the other hand, hint to differences in the use of pottery in grave and non-grave contexts in LBA Central Syria and the Levant and thus differences in their presence are small.

---

See footnote 12.

---

S. Döpper  
**Distinguishing grave and non-grave pottery assemblages in LBA Central Syria and the Levant**

...commonly but appear exclusively or nearly exclusively in one of these contexts. The most frequent pottery types in non-grave assemblages are shallow bowls with internally slightly thickened rims (fig. 4.1).

<table>
<thead>
<tr>
<th>Vessel shape</th>
<th>Non-graves</th>
<th></th>
<th></th>
<th>Gravest</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Percentage</td>
<td>Total</td>
<td>Percentage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shallow bowls</td>
<td>7658</td>
<td>44,7</td>
<td>2257</td>
<td>49,4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deep bowls</td>
<td>1236</td>
<td>7,2</td>
<td>269</td>
<td>5,9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beaker</td>
<td>293</td>
<td>1,7</td>
<td>26</td>
<td>0,6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cups</td>
<td>86</td>
<td>0,5</td>
<td>19</td>
<td>0,4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small jars</td>
<td>3599</td>
<td>21,0</td>
<td>1465</td>
<td>32,0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large jars</td>
<td>3429</td>
<td>20,0</td>
<td>273</td>
<td>6,0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Storage vessels</td>
<td>207</td>
<td>1,2</td>
<td>3</td>
<td>0,1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miniature vessels</td>
<td>124</td>
<td>0,7</td>
<td>33</td>
<td>0,7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oil lamps</td>
<td>143</td>
<td>0,8</td>
<td>220</td>
<td>4,8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lids</td>
<td>232</td>
<td>1,4</td>
<td>3</td>
<td>0,1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stands</td>
<td>94</td>
<td>0,5</td>
<td>5</td>
<td>0,1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sieves</td>
<td>47</td>
<td>0,3</td>
<td>0</td>
<td>0,0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>17148</td>
<td>100</td>
<td>4573</td>
<td>100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1  
Total counts and percentage of different vessel shapes in grave and non-grave assemblages


22 Parallels can be found e.g. in Kamid el-Loz (Adler, Penner 2001, Taf. 19.6, Taf. 20.3, Taf. 21.6, Taf. 27.9, Taf. 33.6, Taf. 89.2, 11, Taf. 91.9, Taf. 92.10; Metzger, Barthel 1993, Taf. 93.1-3, Taf. 95.1, Taf. 150.2; Penner 2006, Abb. 7.10, Abb. 56.9, Taf. 2.9, 15), in Sarepta (Anderson 1988, pl. 21.10, pl. 23.7-8, 15, pl. 25.14), in Tall Nebi Mend (Bourke 1991, pl. 28.3, pl. 30.1), in Lachish (Clamer 2004a, fig. 20.3.3, fig. 20.4.14, fig. 20.5.9, fig. 20.11.14, 18, fig. 20.13.3, fig. 20.17.13, fig. 20.19.4, fig. 20.21.9, fig. 20.23.10, fig. 20.28.10, fig. 21.2.12, fig. 21.11.5; Tufnell 1940, pl. XLVIB.205), in Ebla (Colantoni 2010, fig. 5, 3), in Gezer (Dever 1974, pl. 25.16-17, pl. 10.3, 13, pl. 14, 5), in Tell Hadidi (Dornemann 1979, fig. 20.16-18; Dornemann 1981, fig. 13.30, 32), in Ashdod (Dothan, Porath 1993, fig. 4.3, fig. 8.6), in Tell el-Ghassil (Doumet-Serhal 1996, pl. 44.5), in Sidon (Doumet-Serhal 2004, pl. 4.26, 28, 36-37), in Emar (Finkbeiner 2001, Abb. 9g), in Tell Deir Alla (Franken 1992, fig. 7-4.3, fig. 7-7.7, fig. 7-17.96), in Qatna (Iamoni 2012, pl. 2.4, pl. 14.8-9, pl. 35.7-13, 15-16, pl. 67.10, pl. 68.6), in Rifa‘at (Matthers 1981, fig. 223.6, fig. 225.6), in Tell Beth-Shean (Mazar, Mullins 2007, pl. 67.3, pl. 68.1), in Tell el-Qitar (McClellan 1984-1985, fig. 5.1-5, 7-8), in...
fig. 4.320) or simple rounded rims (fig. 4.2, 24)

Ugarit (Monchambert 2004, fig. 10.119, 122, fig. 11.148, fig. 30.593, fig. 31.601, fig. 32.606, fig. 120.1639), in Tel Batash (Panitz-Cohen, Mazor 2006, pl. 9, pl. 20.5-7), in Tell Arqa (Thalmann 2008, pl. 117.8), in Munbaqa (Werner 2008, Taf. 89.6485, Taf. 90.6489, Taf. 100.6648, Taf. 104.6742, 6752, 6756-6759, 6762, 6764, 6766, Taf. 106.6809, Taf. 109.6856), and in Hazor (Yadin et al. 1958, pl. LXXXV, Yadin et al. 1961, pl. CLVIII15-16).

21 Parallels can be found e.g. in Kamid el-Loz (Adler, Penner 2001, Taf. 17.8, 12, Taf. 27.8; Metzger, Barthel 1994, Taf. 94.14, Taf. 95.5, Taf. 159.4; Penner 2006, Taf. 1.6), in Tell Ashtara (Assar 1968, Taf. 6.8), in Tyros (Bikai 1978, pl. XLII), in Tell Nebi Mend (Bourke 1991, pl. 28.8, 29.5-6, 11, pl. 30.2), in Lachish (Clamer 2004, fig. 20.7,2, fig. 20.16.5; Yannai 2004, fig. 19.15.10, fig. 19.15.12, fig. 19.17.10, fig. 19.19.6), in Ebla (Colantoni 2010, fig. 5.1-2, in Tell Hadid (Dornemann 1979, fig. 19.13, fig. 20.21-22; Dornemann 1981, fig. 13.23, 31), in Tell el-Ghassil (Doumet-Serhal 1996, pl. 52.4), in Sidon (Doumet-Serhal 2004, pl. 4.40, fig. 8.15), in Shiyukh Tahalste (Falson 1998, 9.8.13, in Emar (Finkelbeiner 2001, Abb. 11b), in Tell Deir Alla (Franken 1992, fig. 7-8.11), in Qatna (Iamoni 2012, pl. 2.2, fig. 8.5-6, 14.14, pl. 15.3-5, pl. 35.1.4, 9-10.2, pl. 37.8, fig. 68.12), in Rifa'a (Matthews 1981, fig. 223.1), in Tel Beth-Sehan (Mazar-Mullins 2007, pl. 49.4, pl. 62.12), in Tell el-Qitar (McClellan 1984-1985, fig. 5.6), in Ugarit (Monchambert 2004, fig. 11.161, fig. 32.608, fig. 38.659, fig. 127.1693), Tel Batash (Panitz-Cohen, Mazor 2006, pl. 16.13.16), in Busra (Seeden 1986, fig. 19.194-197, 223-224, fig. 24.337), and in Munbaqa (Werner 2008, Taf. 83.6344, 89.6484, Taf. 91.6508, 6516, Taf. 92.6517, 6524, Taf. 100.6664, Taf. 101.6676-6680, Taf. 102.6703, 6706-6707, 6709, 6712, 6716, Taf. 104.6770-6771, Taf. 105.6774, 6791, Taf. 106.6796, 6797, 6798).

22 Parallels can be found e.g. in Kamid el-Loz (Adler, Penner 2001, Taf. 17.14, Taf. 18.9-10, 13-14, Taf. 19.2, 4, 7, 13, Taf. 20.9, 11-12, Taf. 21.2, 7, 9, Taf. 22.5, Taf. 24.8, Taf. 70.3, Taf. 71.1-2, 4-6, 8-9, 11, Taf. 72.5, Taf. 85.6, Taf. 86.2-3.5, Taf. 87.4, Taf. 91.2; Metzger, Barthel 1993, Taf. 90.6-7, Taf. 91.16, Taf. 93.5-7, 8-11, Taf. 94.6, 13; Penner 2006, Taf. 1.1-3.4, Taf. 2.1, 5, 10, 13), in Sarepta (Anderson 1988, pl. 23.9, pl. 26.12), in Tel Dan (Ben-Dov 2002, fig. 2.29.1, 3, fig. 2.31.3), in Tell Nebi Mend (Bourke 1993, fig. 19.14), Tell Afis (Ccncchini, Iamoni 1998, fig. 5.4), in Lachish (Clamer 2004a, fig. 20.1-1, 6-8, 10, fig. 20.3, 7.11, fig. 20.4, 10, fig. 20.5, 6, fig. 20.6.4, 7-8, 10, fig. 20.7.10, 12, fig. 20.11.10, 15, 17, 19, fig. 20.15.12, fig. 20.16.2, fig. 20.18-5, 6, fig. 20.20.3, 11, fig. 20.21.17, fig. 20.22.1, 4, fig. 20.23.14-16, fig. 20.24.4, fig. 20.26-3.4, 6, fig. 20.27.3, 11, fig. 20.28.3-6, 4, 9, fig. 20.29.10-11; Clamer 2004b, fig. 21.12-24-26, fig. 21.23.2-4, 6, 9, 11, fig. 21.5-21-26, 29, fig. 21.8.3, 5, 12-15, 18, fig. 21.11.1, 4, 6; Yannai 2004, fig. 19.3.1, fig. 19.5.3, fig. 19.6.7, fig. 19.9.2, 4, fig. 19.10.9, fig. 19.13.1, fig. 19.14.6, fig. 19.17.8, fig. 19.18.2, fig. 19.19.3, fig. 19.20.1-2, fig. 19.21.4, fig. 19.22.2, fig. 19.27.6, fig. 19.36.1, fig. 19.38.4, fig. 19.40.6, fig. 19.41.11, 13, 15), in Gezer (Dever 1986, pl. 13.3, pl. 16.9, pl. 9.19), in Tell Hadid (Dornemann 1981, fig. 13.21), in Ashdod (Dothan, Porath 1993, fig. 4.8, fig. 8.1, fig. 9.1), in Tell el-Ghassil (Doumet-Serhal 1996, pl. 44.1, pl. 52.1, 7), in Sidon (Doumet-Serhal 2004, pl. 4.2, 10, 14, 16-17, 4.235), carinated bowls with high, vertical upper walls (fig. 4.5-6),26 small jars with an external...
ly thickened rim (fig. 4.7).\(^{27}\) shaved jugs with simple rims (fig. 4.8),\(^{28}\) cooking pots with diverse exter-

\(^{27}\) Parallels can be found e.g. in Kamid el-Loz (Adler, Penner 2001, Taf. 15.3, 4, 6, Taf. 43.1, Taf. 52.3-4, Taf. 55.7, 19, Taf. 56.4-6, 10, 13, Taf. 73.7, Taf. 74.1, 4, Taf. 97.1, 3-6, 8, 12, 14; Metzger, Barthel 1993, Taf. 114.2, 7, Taf. 115.4, 14, Taf. 116.2, 4, Taf. 119.20; Penner 2006, Abb. 25.2-4), in Sarepta (Anderson 2003, pl. 21.13-14, 23.1, 3, pl. 25.1-3, 4, pl. 26.2-3), in Tyros (Bikai 1988, pl. VLIXI.6-8, pl. XXVI.10-12, pl. XXVII.4-5, pl. XXVIII.23-24, 29-30).

\(^{28}\) Parallels can be found e.g. in Kamid el-Loz (Adler, Penner 2001, Taf. 15.4, 6, Taf. 43.1, Taf. 52.3-4, Taf. 55.7, 19, Taf. 56.4-6, 10, 13, Taf. 73.7, Taf. 74.1, 4, Taf. 97.1, 3-6, 8, 12, 14; Metzger, Barthel 1993, Taf. 114.2, 7, Taf. 115.4, 14, Taf. 116.2, 4, Taf. 119.20; Penner 2006, Abb. 25.2-4), in Sarepta (Anderson 2003, pl. 21.13-14, 23.1, 3, pl. 25.1-3, 4, pl. 26.2-3), in Tyros (Bikai 1988, pl. VLIXI.6-8, pl. XXVI.10-12, pl. XXVII.4-5, pl. XXVIII.23-24, 29-30).
Figure 4
Typical pottery shapes from LBA non-grave contexts
(nr. 3 after Finkbeiner 2001, Abb. 11b, nr. 5 after Metzger, Barthel 1993, Taf. 157.15, nr. 6 after Badre, Gubel 1999-2000, 162 fig. 22r, nr. 8 after Badre, Gubel 1999-2000, 164 fig. 24c, nr. 10 after Yadin et al. 1958, pl. LXXX-VIII.1, nr. 11 after Finkbeiner 2002, Abb. 7c, nr. 12 after Thalmann, Charaf-Mullins (edd.) 2006, pl. 112.9, nr. 13 after Hamilton 1935, 36 fig. 227, nr. 14 after Werner 2008, Taf. 260.836)
simple rims (fig. 4.13)\textsuperscript{30} as well as lids with knobs (fig. 4.14).

The most frequent pottery types in grave assemblages include: shallow bowls with simple rounded rims (fig. 5.1),\textsuperscript{31} carinated bowls with high, vertical upper walls (fig. 5.2-3),\textsuperscript{32} shaved jars with simple rims (fig. 5.6)\textsuperscript{33} and oil lamps with simple rims (fig. 5.10),\textsuperscript{34} which are all also among the most frequent pottery types in non-grave assemblages. Shallow bowls with curved walls (fig. 5.4),\textsuperscript{35} deep conical bowls of Base Ring Ware (fig. 5.5),\textsuperscript{36} different jugs with simple rims and ring bases (fig. 5.7-9),\textsuperscript{37} among them the so-

\textsuperscript{30} Parallels can be found e.g. in Kamid el-Loz (ADLER, PENNER 2001, fig. 64.1-2, fig. 101.7), in Saqqara (ANDERSON 1988, pl. 22.7, METZGER, BARTHREL 1993, fig. 133.1, fig. 14-3, fig. 156.5; PENNER 2006, Abb. 37.1), in Tell Aschtarha (ASSAF 1968, fig. 4.1, fig. 6.2-3, 6), in Tell Kazel (BADER, GUBEL 1999-2000, fig. 23f), in Lachish (CLAMER 2004, fig. 20.23.1.3, 3; TUFNELL 1940, pl. XLVII.192; TUFNELL 1958, pl. 73.654, 659; VANNAI 2004, fig. 19.21.7, fig. 19.29.5, fig. 19.34.11, fig. 19.51.4), in Gezer (DEVER 1986, pl. 10.9, 17-19), in Tell Deir Alla (FRANKEN 1992, fig. 7-12, fig. 4-14.8), in Megiddo (LOUD 1948, pl. 62.1-3, 5 pl. 66.9, 11-12, pl. 70.7), in Tel Beth-Shean (MAZAR, MULLINS 2007, pl. 47.10-11, pl. 61.1-5, 69.9), in Tell Arqa (THALMANN 2006, pl. 111.3, 9-10), in Tell Afs (VENTURI 2007, fig. 4.5.8), and in Hazor (YADIN ET AL. 1958, pl. CX.1, pl. CXLII.1-2, 4-5, pl. CXXV.24, 26, pl. CXII.13-14; YADIN ET AL. 1960, pl. CXVI.29, CXVIII.3, pl. CXVII.3-6, 9-20; YADIN ET AL. 1961, pl. CXXIII.13).

\textsuperscript{31} Parallels can be found e.g. in Emar (PINKBEINER 2002, Abb. 6), and in Munbaqa (WERNER 2008, Taf. 259.8334-8343, Taf. 260.8334-8357, 837.9-8390, 8392, Taf. 263.8427-8430, 8434-8446, 8449-8452, 8456, Taf. 264.8461-8474, 9477-8482, Taf. 265.8484-8504, 8508, Taf. 266.8510, 8527-8531, 8533-8539, Taf. 267.8540-8552).

\textsuperscript{32} Parallels can be found e.g. in Qebehbe (YADIN ET AL. 1961, pl. CXXIII.13), in Tell Beit Mirsim (YADIN ET AL. 1964, fig. 2.28.10, 13-14, fig. 2.30.27, 32, fig. 26.7.1, fig. 2.85.9-10), in Tyros (BIKAI 1978, pl. LI.7, pl. LI.14-15), in Megiddo (YADIN 1938, pl. 40.10, pl. 42.9-10, pl. 42.18, pl. 45.5, pl. 49.1, pl. 52.4, pl. 54.6, pl. 54.8, pl. 65.7), in Tel Beth-Shean (YADIN 1937, fig. 25.2, fig. 27.4-6, 10-11, fig. 35.1, 5, 7, 13), in Sidon (SAIDAH 2004, fig. 32.72, fig. 34.77-78, fig. 38.91), in Byblos (SAIDAH 1990, pl. 19.6, 8, 12-13) and in Ugarit (SCHAFFER 1938, fig. 21O.1; SCHAFFER 1949, fig. 73.14).

\textsuperscript{33} Parallels can be found e.g. in Tel Beit Mirsim (YADIN ET AL. 2004, fig. 2.31.41, 43, 52-53, fig. 2.68.26-27, 29, 31, fig. 2.85.12-14), in Ugarit (COURTOIS 1969, fig. 5A-B; SCHAFFER 1938, fig. 11G, fig. 13R), in Megiddo (YADIN 1938, pl. 11.1, pl. 19.1, pl. 37.11, pl. 41.18, 20, pl. 42.11, 43.2, 20-21, 45.12, (fig. 5.6)\textsuperscript{34} and oil lamps with simple rims (fig. 5.10),\textsuperscript{35} which are all also among the most frequent pottery types in non-grave assemblages. Shallow bowls with curved walls (fig. 5.4),\textsuperscript{36} deep conical bowls of Base Ring Ware (fig. 5.5),\textsuperscript{37} different jugs with simple rims and ring bases (fig. 5.7-9),\textsuperscript{37} among them the so-
called dipper juglets, and oil lamps with an internally thickened rim (fig. 5.11) are further among the most frequent types, but either do not occur or are found only rarely in non-grave assemblages.

24.54, fig. 37.84-85, fig. 39.103, and in Byblos (Salles 1980, pl. 10.4-7, pl. 22.11).

Parallels can be found e.g. in Megiddo (Guy 1938, pl. 19.5, pl. 47.1, pl. 49.9, pl. 52.5-6), in Tel Beth-Shean (Oren 1973, fig. 38.1), and in Gibeon (Pritchard 1963, fig. 7.12).

4. Wares

In the whole of LBA pottery from Central Syria and the Levant, mineral tempered wares dominate by far. Thus, they are not useful to distinguish between grave and non-grave contexts. An exception are imported wares, namely in Base Ring Ware. It comprises more than five percent of the total wares in grave assemblages, which is far more common than in non-grave assemblages, although it constitutes only a tiny proportion of the general wares.

**Figure 5**

Typical pottery shapes from LBA grave contexts
(nr. 1 after Guy 1938, pl. 45.5, nr. 2 after Pritchard 1963, 85 fig. 8.30, nr. 3 after Grant 1929, 147 351, nr. 4 after Ilan, Hallote, Cline 2000, 206 fig. 9.8.7, nr. 5 after Schaeffer 1949, 145 fig. 54.2, nr. 6 after Saidah 2004, 56 fig. 30.70, nr. 7 after Guy 1938, pl. 42.6, nr. 8 after Ben-Arie, Ben-Tor, Godovitz 1993, pl. 10.2, nr. 9 after Guy 1938, pl. 55.2, nr. 10 after Seger, Lance 1988, 199 pl. 14.6, nr. 11 after MacGovern, Brown 1986, 141 fig. 44.2)
from both contexts (fig. 6 and Tab. 2). This distinction was already discovered by Berry Gittlen.\textsuperscript{41} He concludes that as bowls generally dominate grave as well as non-grave contexts, it is surprising that this is not reflected in the Cypriote imports. Aaron Greener\textsuperscript{42} came to a similar distribution in his study of imported pottery in the Southern Levant. He found out that among the imports and thus in contrast to the local and regional pottery, closed shapes dominate in grave contexts, while open shapes dominate in non-grave contexts. As Base Ring Ware primarily occurs in closed shapes and White Slip Ware in open shapes, Greener describes the same difference that is observed here. Other imported wares, such as White Slip Ware or Mycenaean pottery, are present in both contexts in similar proportions.

\begin{table}[h]
\centering
\begin{tabular}{|l|c|c|c|c|}
\hline
\textbf{Ware} & \textbf{NON-GRAVES} & & \textbf{GRAVES} & \\
 & \textbf{TOTAL} & \% OF ALL WARES & \textbf{TOTAL} & \% OF ALL WARES \\
\hline
Base Ring & 142 & 0,8 & 238 & 5,2 \\
White Slip & 230 & 1,3 & 41 & 0,9 \\
Mycenaean & 109 & 0,6 & 58 & 1,3 \\
\hline
\end{tabular}
\caption{Total counts and percentage of Base Ring Ware, White Slip Ware and Mycenaean pottery in grave and non-grave assemblages}
\end{table}

\textsuperscript{42} Greener 2014.
5. Conclusions

The comparison of grave and non-grave assemblages from LBA Central Syria and the Levant demonstrates a difference between the pottery from the two contexts. However, the pottery is not completely diverse but differs mainly in the proportions in which vessel types, pottery shapes and wares occur. There is a significant overlap in shapes, types and wares, and only some pottery shapes are exclusively found in one kind of context. Accordingly, the pottery is certainly not produced exclusively for one context. The significant difference between grave and non-grave contexts lies foremost in the composition of the assemblages. These results, on the one hand, limit the comparability between pottery from these two contexts, implying severe consequences for chronologies based on pottery. It shows that, contrary to the common belief and also contrary to traditional practice, contemporaneous pottery assemblages are not necessarily alike to each other, as their functional context has a stronger influence on their composition than their chronological setting – at least in LBA Central Syria and the Levant. On the other hand, this difference offers the chance of insights into the function of the ceramics in their specific cultural setting. For one, it shows that the realms of life and death were in some parts related while in others distinct. The related part can be seen in the overlap between grave and non-grave pottery. Some of the vessels might have an everyday function and the same use in graves as in non-grave contexts. Such vessels can for instance provide the dead with their provisions in the next world, like storing and serving vessels for food and drink. This means that the dead and the living had to some degree the same basic needs.

Other vessels might have a solely ceremonial function in the funerary rites. Those are thus normally not present in non-grave contexts as it is the case in LBA Central Syria and the Levant for Base Ring Ware deep bowls and certain jugs. However, their proportion in this study is quite small. In conclusion, differences between grave and non-grave pottery must not be directly evident but can lie in more subtle differences like proportions. Nevertheless, as it gives important insights in the different treatments of the living and the dead, it is well worth studying as it is unfortunately not systematically done in Near Eastern Archaeology and can mislead when ignored.

Acknowledgements

This article was written when the author was a Feodor Lynen Research Fellow at Leiden University. The material is based upon her PhD thesis supported by Studienstiftung des deutschen Volkes. Correspondence analyses were carried out with the computer programme PAST (Hammer, Harper, Ryan 2001). The author would like to thank the two anonymous reviewers and Marco Iamoni for their helpful comments on an earlier draft of this paper. Unfortunately, the reviewers’ suggestion to show the assemblages and ceramic types in a single graph and to publish all data for the correspondence analysis could not be realized due to space limitations and comprehensiveness of the graphs.


43 Smith 2011, p. 306.
44 Epstein 2001, p. 81.
45 Epstein 2001, p. 92.
46 Epstein 2001, p. 81.
47 Epstein 2001, p. 81.
Bibliography

ADLER W., HANSEN D.P. 1994, Das Schatzhaus im Palastbereich: die Beifunde des Königgrabes, Bonn
BIKAI P.M. 1978, *The pottery of Tyre*, Warminster
BOURKE S.J. 1993, *The Transition from the Middle to the Late Bronze Age in Syria. The Evidence from Tell Nebi Mend*, «Levant» 25/1, pp. 155-95
Dornemann R.H. 1979, Tell Hadidi: A Millennium of Bronze Age City Occupation, «AASOR» 44, pp. 113-51
Dornemann, R.H. 1981, The Late Bronze Age Pottery Tradition at Tell Hadidi, Syria, «BASOR» 241, pp. 29-47
Duistermaat K. 2008, The pots and potters of Assyria. Technology and Organisation of Production, Ceramic Sequence and Vessel Function at Late Bronze Age Tell Sabi Abyad, Syria, Turnhout
Fischer P.M. 2006, Tell Abu al-Kharaz in the Jordan Valley, II. The Middle and Late Bronze Ages, Wien («ÖA W» 39)
Franken H.J. 1992, Excavations at Tell Deir ‘Alla: the Late Bronze Age sanctuary, Louvain
Gittlen Barry M. 1977, Studies in the Late Cypriote Pottery found in Palestine, PhD thesis, University of Pennsylvania
Gittlen Barry M. 1981, The Cultural and Chronological Implications of the Cypro-Palestinian Trade during the Late Bronze Age, «BASOR» 241, pp. 49-59
Grant E. 1929, Beth Shemesh (Palestine). Progres of the Haverford archaeological expedition, Haverford
Greenacre M.L. 1984, Theory and applications of correspondence analysis, London
Guy P.L.O. 1938, Megiddo Tombs, Chicago («OIP» 33)
Hirschfeld H.O. 1935, A connection between correlation and contingency, «Mathematical Proceedings of the Cambridge Philosophical Society» 31/4, pp. 520-4
Iamonì M. 2012, The late MBA and LBA pottery horizon at Qatna. Innovation and conservation in the ceramic tradition of a regional capital and the implications for 2nd millennium Syrian chronology, Udine («SAQ» 2)
Loud G. 1948, Megiddo II: Seasons of 1935-39, Chicago
Mazar A., Mullins R.A. 2007, Excavations at Tel Beth-Shean 1989-1996, II. The Middle and Late Bronze Age strata in Area R, Jerusalem


