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ACCUMULATIONS: UPDATING THE ROLE OF CYPRIOT BICHROME WARE IN EGYPT

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ABSTRACT

Cypriot Bichrome Wheel-made Ware is an important index for the study of interrelations in the Ancient Eastern Mediterranean World. The ware is a chronological marker for the beginning of the Late Cypriot Bronze Age and was the subject of a research project during the last decade within the Cyprus project of SCIEM 2000 (FWF, F1412). The aim of the project was to investigate the appearance of the ware at various sites in the Eastern Mediterranean, and to correlate contexts and finds. This paper presents an overview of the regional distribution of the ware, and a detailed look at its appearance in Egypt. Based on those distributions, we develop ideas about the social role of Bichrome Wheel-made Ware.

INTRODUCTION: THE DISTRIBUTION OF BICHROME WHEEL-MADE WARE IN THE EASTERN MEDITERRANEAN (FIGURE 1)

In the course of gathering material for the Bichrome project a large amount of data were collected at various field projects and at museums in Europe, the Near East, and the US. The total amount of items that entered the database in the project currently includes 2,087 catalogue entries with detailed descriptions of the Bichrome Wheel-made Ware pieces.[1] The distribution of the material in the eastern Mediterranean shows a rather dense network of findspots in Cyprus and the area of modern Israel, whereas the other eastern Mediterranean areas have a looser pattern that may or may not reflect the actual distribution of the ware. For this reason, some rather pragmatic considerations must be taken into account when looking at the accumulations of the ware in various areas.

One major reason for the discrepancy mentioned above is the variable intensity of archaeological exploration of sites in different countries both during the last century and in particular under the present political circumstances.[2] The archaeological exploration of the modern state of Israel is far more intensive and better documented then that of surrounding countries, even those rich in sites. The dense concentration of sites in the Canaanite region can partly be explained by that configuration, and this has to be kept in mind while looking at the interpretation of all tables, distribution maps, and graphs. Another consideration for the interpretation of the data is the recognition of Cypriot ceramics; certainly a number of sherds have remained unrecognized in the shelves of various excavations and museums, and therefore the graphs in this paper have no claim to represent absolute values. More material will surely be detected in future excavations, possibly changing the view presented here. A more detailed discussion of the data will appear in the forthcoming *Manual of Cypriot Bichrome Wheel-made Ware*.[3]

The origin of Bichrome Wheel-made Ware has been discussed in the past, and here we want only briefly to mention some stages of this history.[4] After the initial rich finds of the usually nicely decorated vessels at Tell el-'Ajjul by Petrie in 1932, attempts were made to attribute the ware to a Palestinian origin. In 1939, Heurtley[5] proposed the idea of the "'Ajjul Painter." Likewise, Westholm, working on the finds from Milia, eagerly recognized the 'Ajjul similarities, and considered the examples on Cyprus to be Palestinian imports.[6] A Cypriot origin, on the other hand, was suggested by Stewart in the 1940s, when he noted similarities of certain shapes in Cyprus with Palestinian ones, and also considered the possibility of Palestinian imitations.[7] Claire Epstein clearly claimed a Canaanite origin in her monograph about the "Palestinian Bichrome Ware" as did Amiran in the

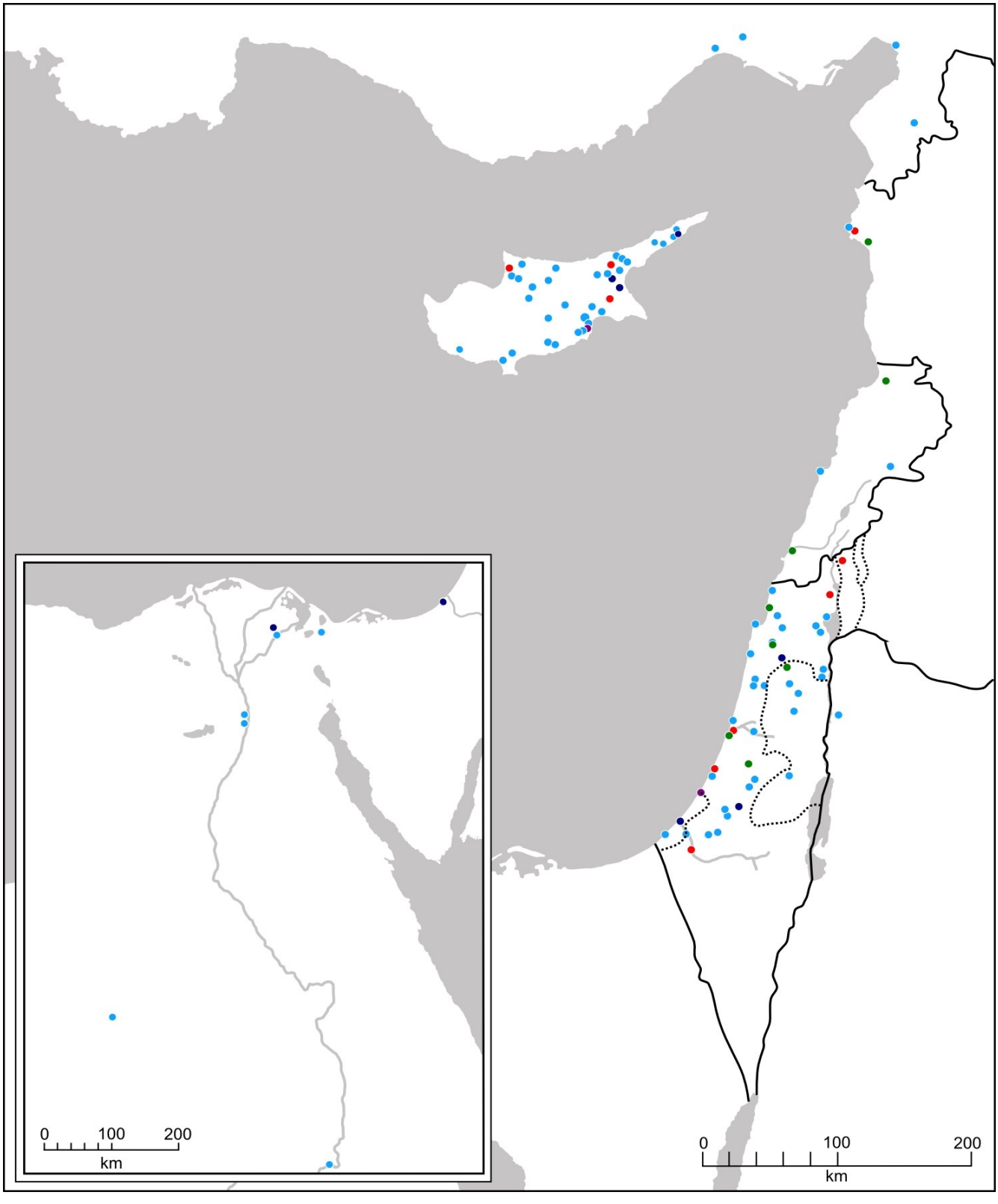

Figure 1: Distribution of Bichrome Wheel-made Ware in the Eastern Mediterranean (Map) The colours indicate the number of items: light blue 1-9; green 10-19; red 20-49: violet 50-99; darkblue < 100.

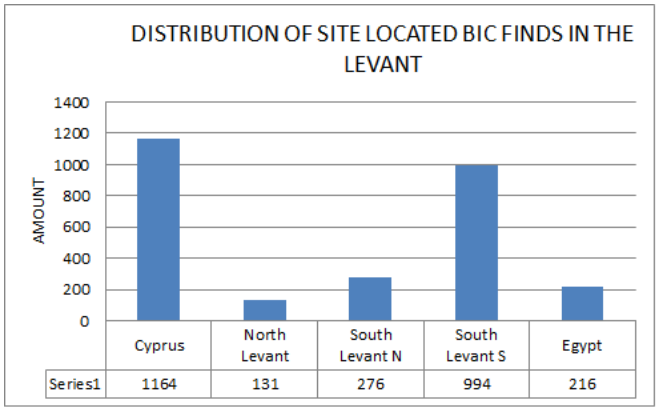

Figure 2: Distribution of Bichrome Wheel-made Ware items in the Levant as registered in the catalogue of the SCIEM 2000 project.

1960s. It was to the credit of M. Artzy and the analysts Perlman and Asaro that the issue of the origin of Bichrome Wheel-made Ware could be settled in the 1970s, via the application of Neutron Activation analysis, a ground breaking application of modern technology for the question of provenience in eastern Mediterranean archaeology. [8] It has become clear from these studies that the ware originated in Cyprus and also that imitations of the ware exist, for example from Megiddo. Following the conference that Paul Åström organized in 2000 in Stockholm[9] about Base Ring and Bichrome Wheel-made Ware, it became evident that more studies on the ware were needed, and a large study emerged in the Cyprus project of SCIEM 2000 (see acknowledgements). The publication of these results is currently under preparation.

In the last decade, new analytical studies of Bichrome Wheel-made Ware were undertaken using petrographic thin sections, XRD, XRF and ICPMS, by Tschegg, Hein and Ntaflos.[10] This study has led to the recognition of an Egyptian group of Bichrome fabrics. The Cypriot origin for the ware is however commonly accepted, and it is remarkable that the ware was imitated rather quickly in the eastern Mediterranean.

The distribution of the Bichrome Wheel-made Ware in the eastern Mediterranean shows a rather dense occupation at Cyprus at 38 sites that is easily explicable by the now widely accepted origin of the ware on the island.[11] Outside of the core land Cyprus the ware can be traced from the Southern coast of Turkey, stretching over the entire Eastern Levantine coast down to Egypt (see Figures 1 and 2). Significantly the distribution of sites outside Cyprus remains more or less near the coastal areas in the Levant, whereas in the Egyptian sphere we find items even in the far south of the country in Nubia. We will come back to this point below.[12]

In the Northern Levant we can identify single finds in southern Turkey, at Mersin (1) and Tarsus (1)[13], and from the palatial site of Alalakh[14] (9). Fresh evidence also comes from the excavations at Kinet Höyük.[15] In Syria we have records for the largest amount of Bichrome Wheel-made Ware from Ras Shamra (49). From Lebanon we have evidence from Tell Arqa (19), Tell el-Ghassil (8), Beirut (3) and to a larger extent from Sidon (18).

In southern Canaan the distribution pattern becomes suddenly more dense. Because of local differences in the pottery tradition, for the purposes of the project, this region was subdivided in two sections: South Canaan north (25 sites) and South Canaan south (20 sites) (see the Appendix).[16] Within the northern part of southern Canaan, we find the largest amount of Bichrome Wheel-made Ware at the inland sites of Megiddo (132), and nearby Tel Tanach (18). A solid number of items are also found at Hazor (30) and Tel Dan (23). On the coast of northern Canaan Tel Akko (16) has to be mentioned; all other sites in the region thus far have quantities in the single digits.

The region of South Canaan South includes 20 sites, but the amount of items dramatically increases. In particular Tell el-'Ajjul (661) is the most prolific site for Bichrome Wheel-made Ware in the entire Levant outside Cyprus. Another relatively high number of items was found at Lachish (135), followed by Ashkelon (51), Tel Mor (46), Tell Farah South (22), Tel Jerisheh (21), Jaffa (16) and Gezer (12). The other sites in the region have counts below 10 items.

For the coastal area we have to mention first of all Tell el-'Ajjul with the incredibly high amount of items, as well as Ashkelon, Tel Mor, Tel Jerisheh and Jaffa. All are sites with immediate access to the Mediterranean. From the inland sites it is mainly Lachish that shows also a high amount of items. The other sites, such as Tell Farah South or Gezer, have at least more than 10 finds recorded, however the amount is much lower than at Tell el-'Ajjul, a palatial site, with multiple settlement layers and cemeteries.

Looking at the distribution map of Egypt, the largest quantity of Cypriot Bichrome Wheel-made Ware was found over the last 20 years in the palatial site of Tell el-Dabᶜa/ᶜEzbet Helmi, whereas only rare single finds are known thus far from 6 other sites in Egypt.[17] The connection of the site of Tell el-Dabᶜa /Ancient Avaris with Cyprus is not a surprise, and we have already good evidence from earlier periods for the rather intensive integration of the site in the Eastern Mediterranean trade networks.

Tell el-Dabᶜa/Avaris as Participant in the Eastern Mediterranean Trade Networks

From the initial stages of settlement occupation in the area of Tell el-Dabᶜa /Avaris, we have almost no evidence for external trade, as Czerny has already pointed out by analyzing the material from the earliest constructed settlement (area F/I, Stratum I).[18] In the subsequent phases of occupation, (Strata H, G and F in Tell el-Dabᶜa, areas A/I, II, IV, V and area F) Syro-Palestinian influence became visible in various house types, funerary customs and pottery imports, as Bietak has repeatedly pointed out.[19] Kopetzky[20] has investigated the settlement pottery from area F/I and recently also Bader[21] has restudied the material of the Str. G where she points to the cultural markers for Asiatic inhabitants from settlement levels in the Nile delta. The cemetery areas with

Asiatic components from area F/I have been analyzed in detail by Schiestl[22] and Kopetzky (forthcoming), those from field area A/II by Bietak[23] and Forstner-Müller[24], or Hein and Jánosi[25] from area A/V; all areas contain relevant strata for the SIP at Tell el-Dabᶜa/Avaris.

The origin of the Hyksos, traditionally attributed to southern Palestine, was recently reconsidered by Bietak[26] who proposes a northern Levantine origin for them. He points to the function of Avaris in the Delta as a harbor town, and emphasizes that Asiatics had gained influence in Egypt via the maritime trade in the MB/SIP period. His arguments are in part based on the appearance of imported material that is more strongly represented at Tell el-Dabᶜa than at other contemporaneous sites in Egypt. For the Cypriot relationship the interpretation as a harbor site is of importance, as is the case for other sites where Bichrome was found in larger quantities.

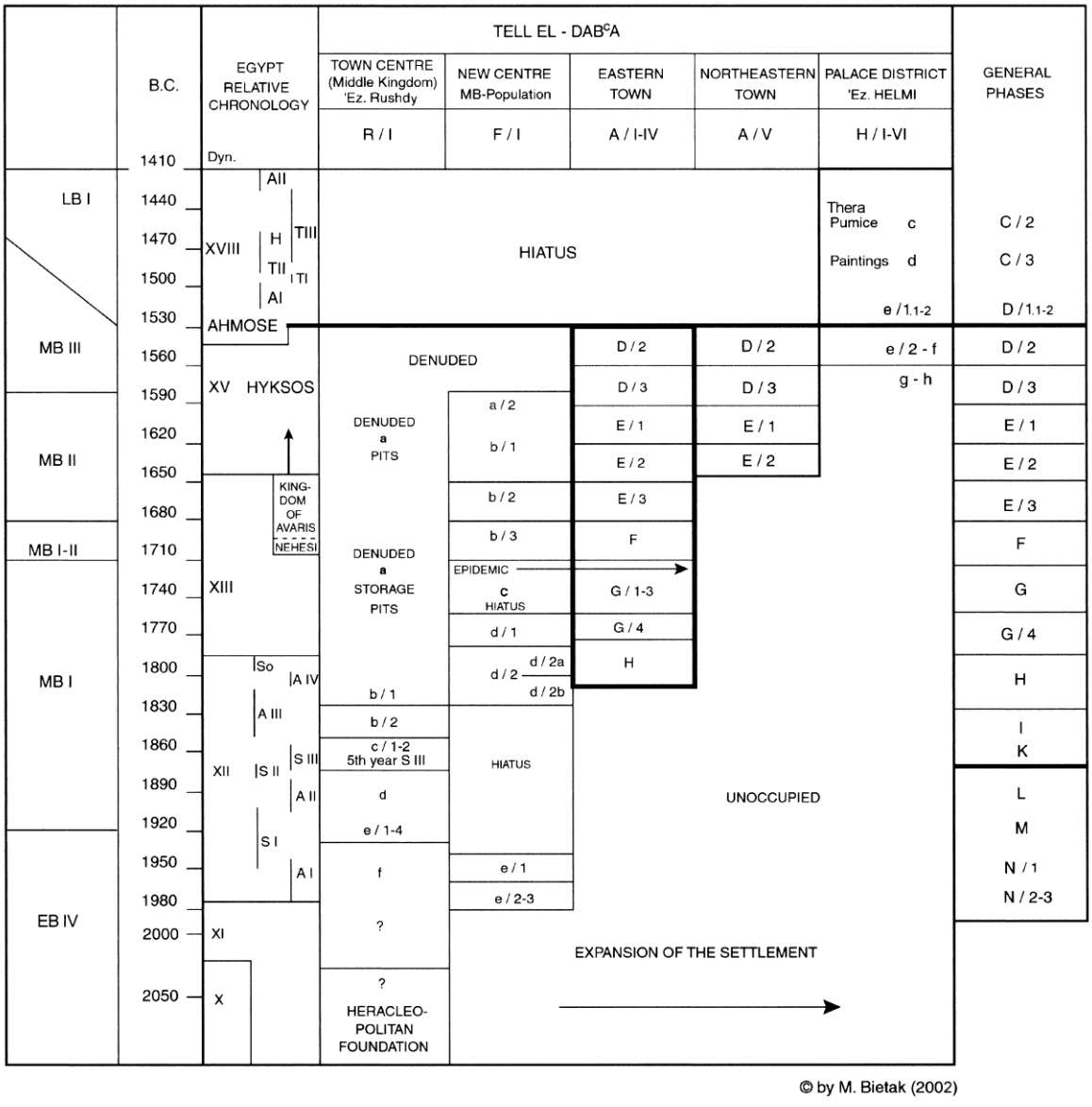

Figure 3: Stratigraphy of Tell el-Dabᶜa (after M. Bietak et alii. 2002).

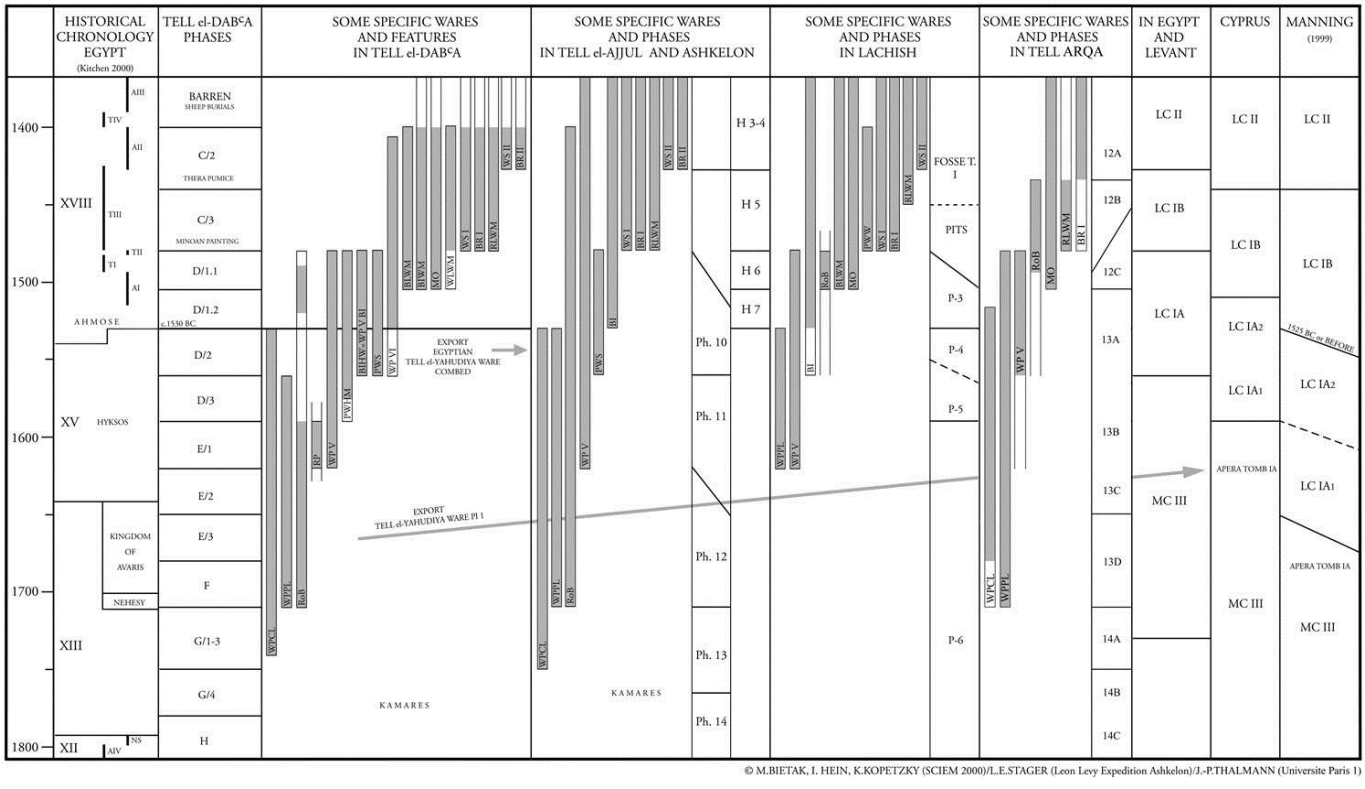

Figure 4: Comparative appearance of pottery wares in the Levant at specific sites (after Bietak, Hein, Kopetzky, Stager, Thalman).

For the Cypriot Middle Bronze Age we have evidence for Egypt's participation in the eastern Mediterranean networks, as the recently published studies by Maguire (2009)[27]and also by Bagh (2013)[28] have shown. These studies include the imported pottery from the MK and SIP strata from Tell el-Dabᶜa, and help contextualize them with the Levant. After Merrillees'[29] 1968 study of Cypriot pottery in Egypt, of major relevance for the Egyptian thread was the recent PhD study of Maguire that updates the appearance of the MC Cypriot pottery in the Levant in general. Special weight is given to the data from Tell el-Dabᶜa,[30] where Maguire has included the finds from the field areas A and F. It has to be noted that the finds from the more recent fieldwork in ᶜEzbet Helmi, (areas H/I-VI)[31] have not been included, as the focus of her account was on the Middle Cypriot period. She points however to the flourishing of small format containers[32] during the Middle Bronze Age and offers a hypothesis for the Late Bronze Age, where she identifies almost a monopoly for Cypriot wares in the exchange of narrow necked containers.[33]

The equivalent period for the Middle Cypriot period in Egypt is the Egyptian Middle Kingdom (XIIth Dynasty) and the Second Intermediate Period (XIIIth-XVth/XVIIth Dynasty), (see Figure 4). The date for the beginning of the Late Cypriot period has been, and is still, the subject of intensive debate in the scientific community.[34] In the present paper we rely on the chronology that has been developed within SCIEM 2000, on the base of the stratigraphic comparison of sites gained from material culture studies in several projects.

In comparison with the MB phase, the trade patterns in the eastern Mediterranean and the exchange with Cyprus became intensified during the phases of the Late Bronze Age.[35] This view is widely accepted, although numerous aspects have been debated during the last decades. A fully detailed discussion is beyond the scope of the present paper, but some details shall be noted. According to the hitherto recorded finds of MC pottery, the trade interest shifts from the northern Levant towards the southern Levant,[36] as indicated by the large variety of Late Cypriot pottery wares at several sites in Southern Canaan.[37]

One major trade partner in the early LC Cypriot connection with the Levantine coast to the southern eastern corner of the Levant is obviously Tell el-'Ajjul, where an overwhelming amount of BIC was detected, but also other Cypriot wares are well represented.[38] This is not new and was already stated by several scholars. The eagerly awaited reinvestigation of the appearance of the late Cypriot White Painted wares was recently prepared by Bergoffen.[39]

In contrast to the MC where mostly Cypriot White Painted Wares are represented, we find in the Late Bronze Age levels a larger variety of Cypriot wares on the Levantine coast. The most frequent wares are White Slip I and II, Base Ring I and II, Black Lustrous and Red Lustrous Wheel-made Ware.[40] The provenience of the Red Lustrous Ware is still a matter of discussion. After Eriksson's (1993) study, in which she concluded a Cypriot provenience of the ware, the distribution in the Near East has changed due to more recent discoveries. In particular, the

numerous finds of the ware at Bogazköy[41] as well as recent analytical studies by Knappett and Kilikoglou, that brought up evidence for a possible Cilician origin[42] contradict Eriksson's theory of a Cypriot provenience of the ware. However, other wares, such as Plain White Ware, White Shaved Ware, and Monochrome Ware, are attested along the Levantine coast at numerous sites, such as Tell Abu Hawam, Tell Nami or Tell Dor. Recent studies by Sauvage[43] and other scholars have focused again on the trade networks, and we acknowledge that the commercial contacts with Cyprus are based on the demand for Cypriot copper and the exchange of goods, that ties into this sphere of metal production and metal trade.[44]

ʿEzbet Helmi, Bichrome and Late Cypriot Pottery in Egypt

In the conference about Egypt and Cyprus from 2003, Hulin, drew some conclusions on the distribution of Cypriot ware types in the eastern Levant.[45] In concordance with earlier studies,[46] she points to the differences in the Late Cypriot vessel repertoire known from Canaan, where "open shapes were as popular as closed," and from Egypt, where "closed forms, mainly Base Ring, predominated." The function of the Base Ring ware juglets as containers of precious liquids such as perfumes or opium was underlined already by Merrillees[47] and interestingly Hulin elaborates their meaning as an affordable "luxury item" in the New Kingdom for an emerging social "middle class," who wants to show a certain kind of wealth, by owning imported goods. Therefore imported vessels take on new values and social functions, and Cypriot wares are limited to so-called "sub-elites".

This functional interpretation of the Base Ring juglets is certainly valid for the New Kingdom, however the statement about the variety of Cypriot imports as "almost exclusively juglets" has to be reconsidered based on the recent ʿEzbet Helmi finds. In the same conference volume from 2003 I have already demonstrated the diversity of Cypriot imports in the ʿEzbet Helmi areas A/V, H/I+IV, H/II, and H/V.[48] The opinion of a reduced repertoire of Late Cypriot wares in New Kingdom Egypt comprising the closed vessel types of Base Ring I and II, Red Lustrous, Black Lustrous and White Lustrous Wares, and the open bowls of White Slip I and II, has to be enlarged to include closed Plain White Wares, open Monochrome Ware, closed Red Slip, closed Red-on-Black and of course for Bichrome Wheel-made Ware for both open and closed vessels.

The finds from ʿEzbet Helmi represent the majority of the Cypriot pottery finds in Egypt, and in particular the Bichrome Wheel-made Ware would seem to contradict the view of "the exclusively closed vessel Cypriot imports" (meaning jugs and juglets) to Egypt, as the diagram of the distribution of Bichrome vessel types in the various regions demonstrates (see Figure 5).

From Figure 5 we recognize also that the Bichrome Wheel-made Ware is represented in a larger variety of shapes than previously assumed. As expected the closed vessel types of jugs (123 items) and juglets (12) are found in the highest numbers. Kraters are found in the repertoire in a rather well represented amount of 39 items, and we have the first finds (2) of Cypriot tankards on Egyptian territory. Bowls are indeed rarely found, however two fragments are recorded, furthermore 3 fragments of amphoriskoi, and one fragment of an askos.

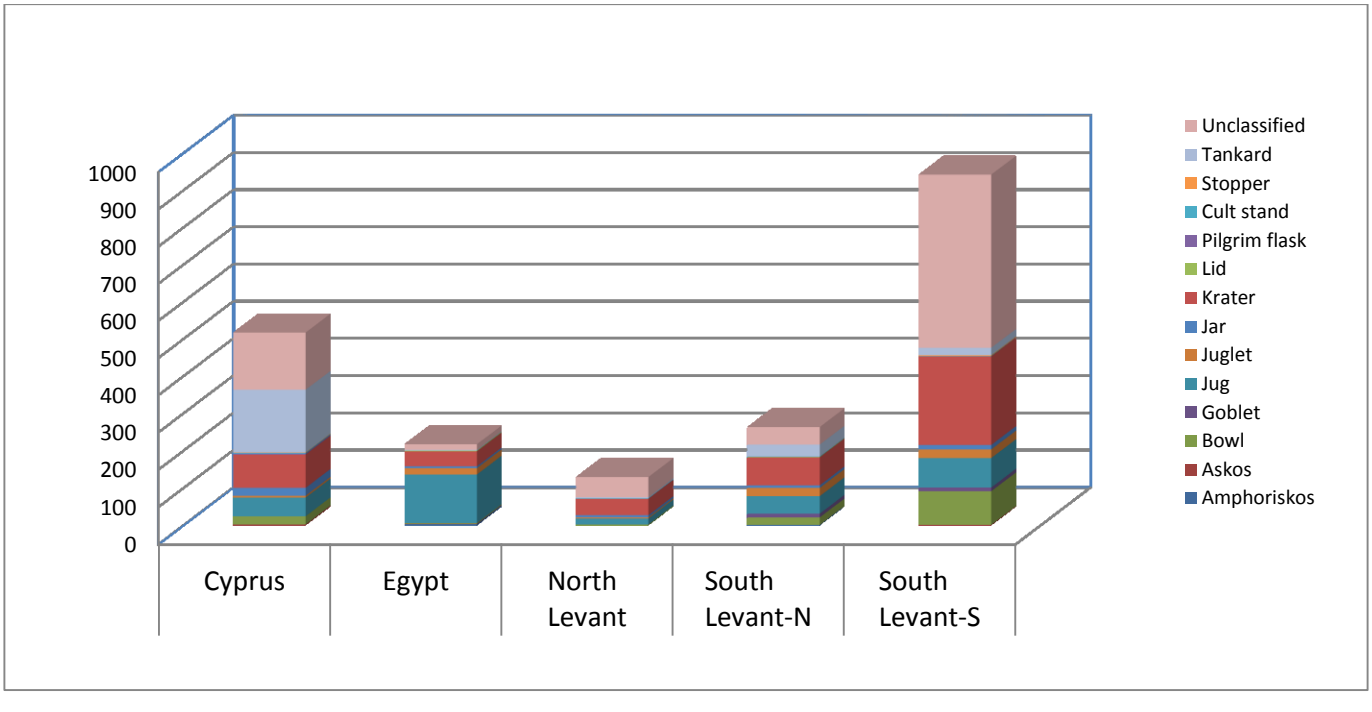

Figure 5: Proportions of BIC Vessels in the Levant by region.

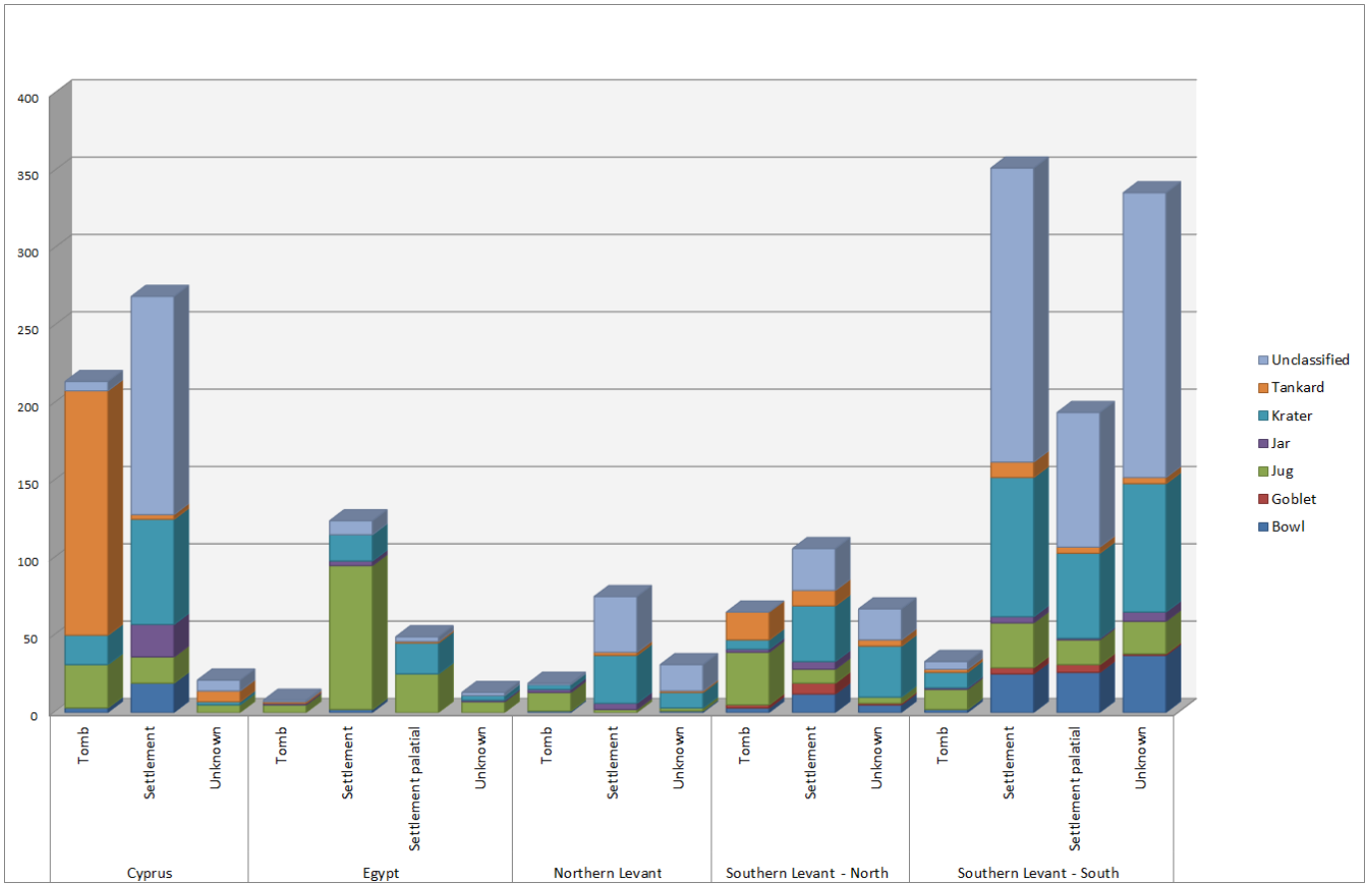

Figure. 6: Regional Variety of Bichrome ware vessel groups by context character in the Levant. The vessel types included are jugs+juglets, tankard, jars, kraters, goblets, and bowls; the other vessel types known from Bichrome are omitted in the chart, as they represent single items.

From the 6 other sites in Egypt we have evidence for two lids as well as for 9 jugs and juglets. Whilst considering the vessel type accumulations, we shall also take into account the character of the contexts. Find context contributes to the understanding of the distribution, for the Levant as well as Egypt. For this reason we have differentiated the characters of the contexts basically in two categories, such as funeral "tomb" (T) or "settlement" (S). As a third category we have introduced "settlement palatial" (SP); this takes into account the finds from ᶜEzbet Helmi and Tell el-ʿAjjul, where we have the archaeological evidence for palatial constructions and where a rather large amount of finds of Bichrome Wheel-made Ware come from in or near such structures.[49] There remain also "unclassified contexts" that include surface levels and uncertain contexts

Some observations clearly come to mind, whilst interpreting the diagrams in Figures 6-9, or the maps from Figure 10.

1- First of all, the accumulation of tankards in Cyprus is numerous in funerary contexts (Figures 6 and 7), and we have to note that the tankards show up in the other regions predominantly in funerary contexts as well, (e.g. in the Southern Levant North, see Figures 6 and 7). An exception can be seen in the Southern Levant South, where the tankards are better represented in settlement layers; here we can readily point to the bulk of material that comes from Tell el-ʿAjjul, and most probably the tankards are precious containers from the palatial sphere. In contrast to this, Cypriot tankards are hardly known from Egypt; as yet only two fragments are known, both from ᶜEzbet Helmi. This is truly remarkable, as the originally imported shape of the tankards was adopted rather fast in the Egyptian repertoire. Within the New Kingdom types it becomes a standard element that follows its own development until much later. Tankards are a specific type of jug, with a rather cylindrical long wide neck, on a mostly squat globular body; usually one handle is set from rim to shoulder or from neck to shoulder. Numerous examples of Egyptian tankards made from Egyptian fabrics often with red and black linear decorations are on display in museum collections (some variations of the type are known, e.g. in Holthoer[50]). Looking at the shape and the decoration the affinities of the vessels between Cyprus and Egypt are obvious.

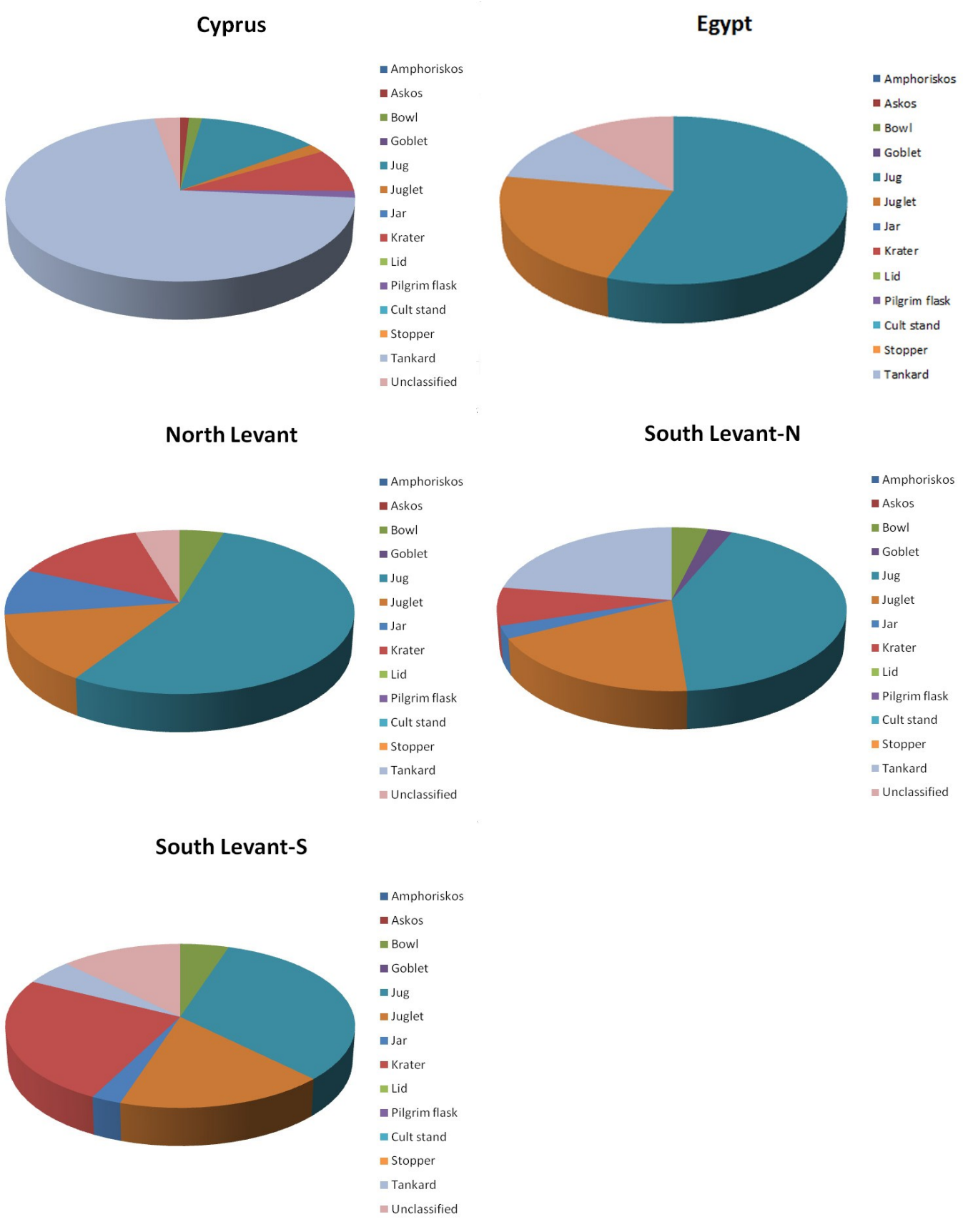

Figure. 7: Bichrome Wheel-made Ware vessel types from tomb contexts by region.

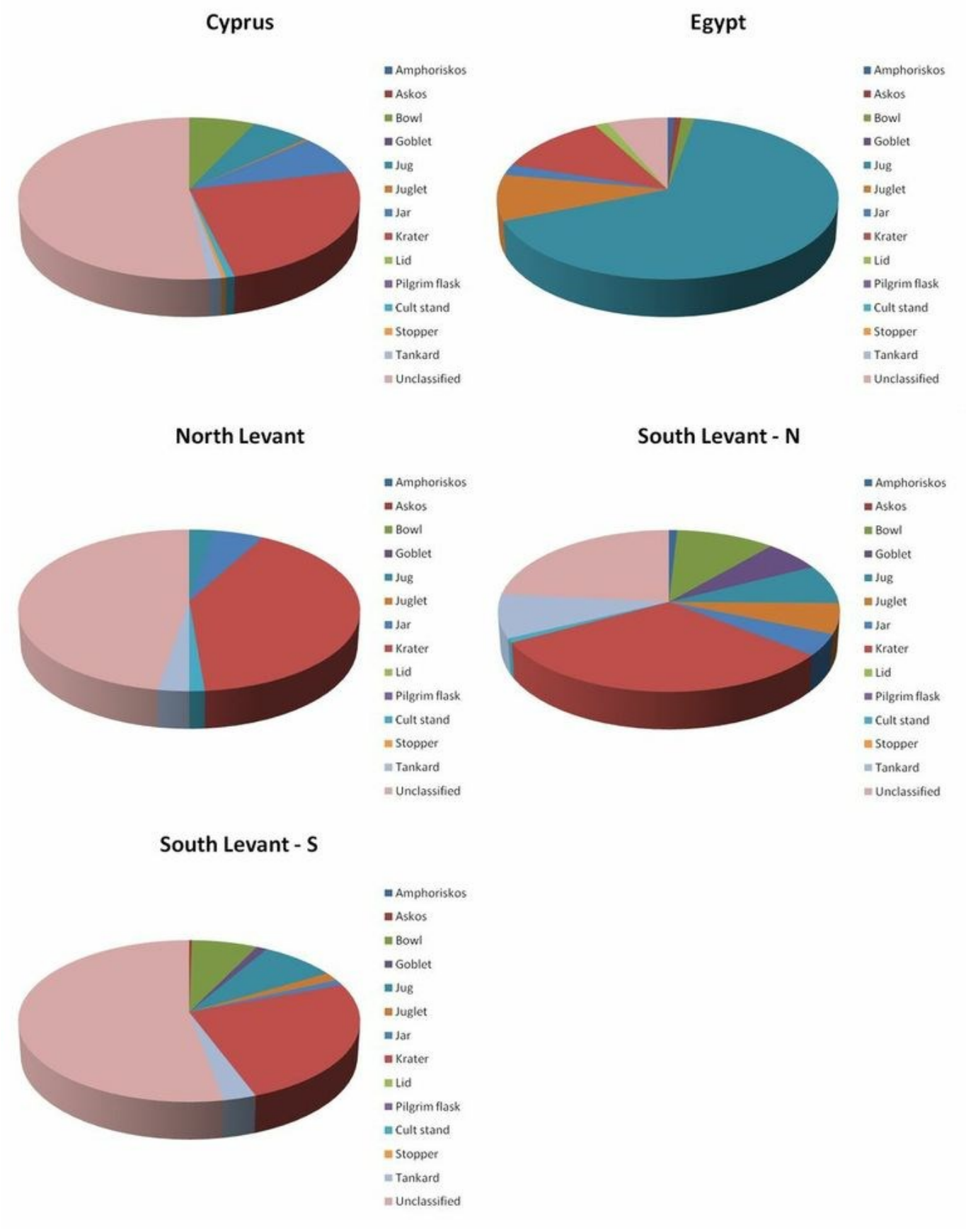

Figure. 8: Bichrome Wheel-made Ware vessel types from settlement contexts by region.

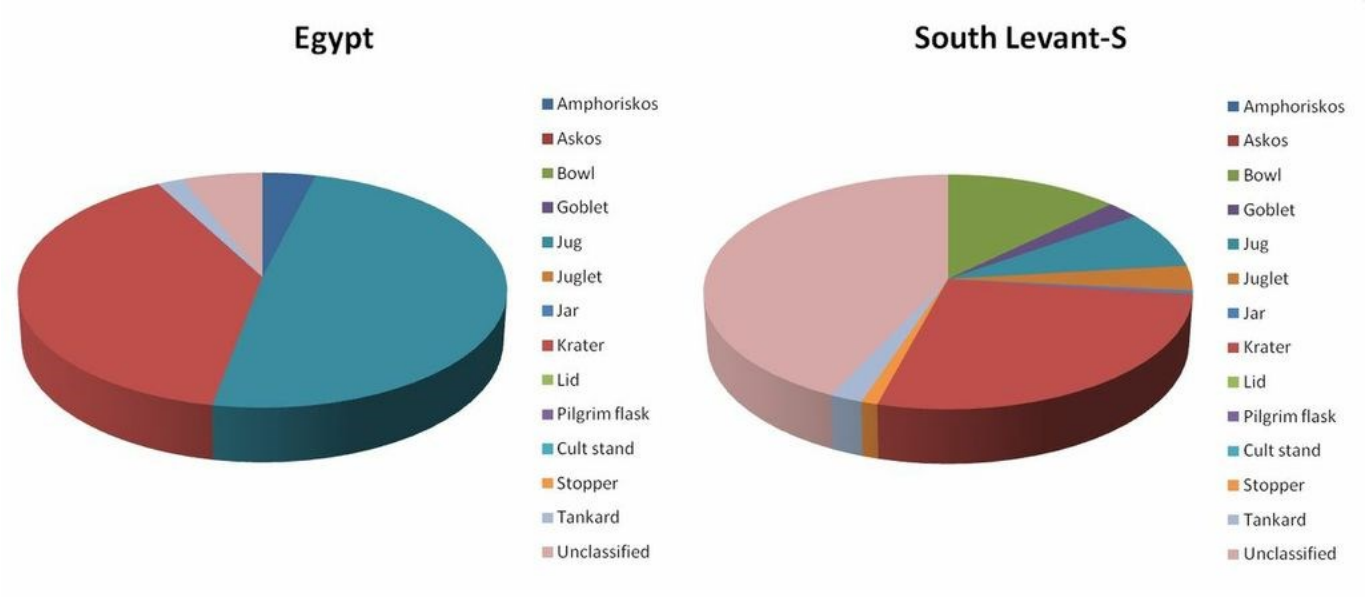

Figure 9: Bichrome Wheel-made Ware vessel types from settlement-palatial contexts by region.

2- Jugs and juglets of Bichrome Wheel-made Ware in Egypt are much better represented from settlement and palatial contexts (see Figure 6). While it has been generally assumed (based on distributions of Base-Ring ware) that closed shaped jugs and juglets were used mostly in funerary contexts, the evidence from ʿEzbet Helmi, a palatial site where 141 Bichrome Ware jugs and juglets have been found to date, suggests otherwise. This contradicts the distribution from other sites in Egypt, where we encounter the almost exclusive evidence of the low amount of 7 Bichrome Ware jugs and juglets from tombs (that are three items from tombs at Aniba[51], one from Deshasheh[52], and three from the tombs at Sedment/Mayana[53]). Two juglets come from other settlement contexts, one item was found in an uncertain context at Kom Hilgan[54] in the Nile Delta, one juglet is reported from the settlement (fortress) of Tell el-Hebua[55]; and therefore we have to look very cautiously at the graph from the tomb contexts from Egypt in Figure 7.

3- Kraters also appear in rather high quantity (40) in settlement context in Egypt (Figure 6), a pattern that corresponds with other Levantine contexts and with Cyprus. Again in Egypt we have to point to the palatial character of the New Kingdom layers at ʿEzbet Helmi/Tell el-Dabʿa, where we can assume, that the adjacent settlement layers were inhabited by individuals with palatial access. That can be also assumed for Tell el-ʿAjjul (44 from settlement and 59 from settlement palatial contexts; see Figures 8 and 9). In Cyprus the highest amount of kraters are recorded for Nitovikla (42) and Enkomi (35). Both places are well known as settlement sites of increasing importance in the Late Cypriot Bronze Age without any palatial character; this suggests that the kraters from Cyprus might possibly be evaluated as a sign of the uprising social hierarchy during the early Late Bronze Age on the island.[56]

4- Jars belong also mostly to the settlement sphere, or they show a palatial connectivity, however the amount of jars is very low in general and the distribution is therefore not significant.

5- Scarce examples of Bichrome Ware bowls are found in Egypt. Most probably there are two in Tell el-Dabʿa. Other Cypriot bowls from wares such as White Slip I or Base Ring I and II are so far rare in Egypt. The open bowls, in this respect, do not represent the most numerous amount of Bichrome ware in general; we have only single appearances for lids (two from Ayn Asil). From Tell el-Dabʿa one askos and 3 fragments of amphoriskoi are known, but these are single items and it would be too far-fetched to attribute them to specific spheres of social life.

The proximity of a palace certainly influenced the lifestyle of the inhabitants in a settlement and the accessibility of luxurious items was appreciated. Certainly the Bichrome Wheel-made Ware vessels as such or in their function as containers were prestigious. Bichrome Wheel-made Ware undoubtedly was a highly desired good in Egypt as can be deduced from the subsequent appearance of an Egyptian version.[57] There existed apparently a demand for such decorated juglets, evident from the arising New Kingdom types of tankards and jugs, and kraters and amphoriskoi with linear bichrome patterns.

Moreover, the Bichrome ware variety found in ʿEzbet Helmi clearly demonstrates that there are more types than "just jugs" existing in Egypt. The so called "Middle class connotation," as Hulin has developed, is probably adaptable for the jugs and juglets, as those types appear at the other sites in Egypt in almost entirely private funerary contexts (3 sites of 5, the exceptions are Tell el Hebua and Kom Hilgan), however the amount is very poor. Maybe the vessels were property of officials or soldiers; but at least we can assume that the owners of such vessels had to have access to the imported materials, whether via the palace or from access to

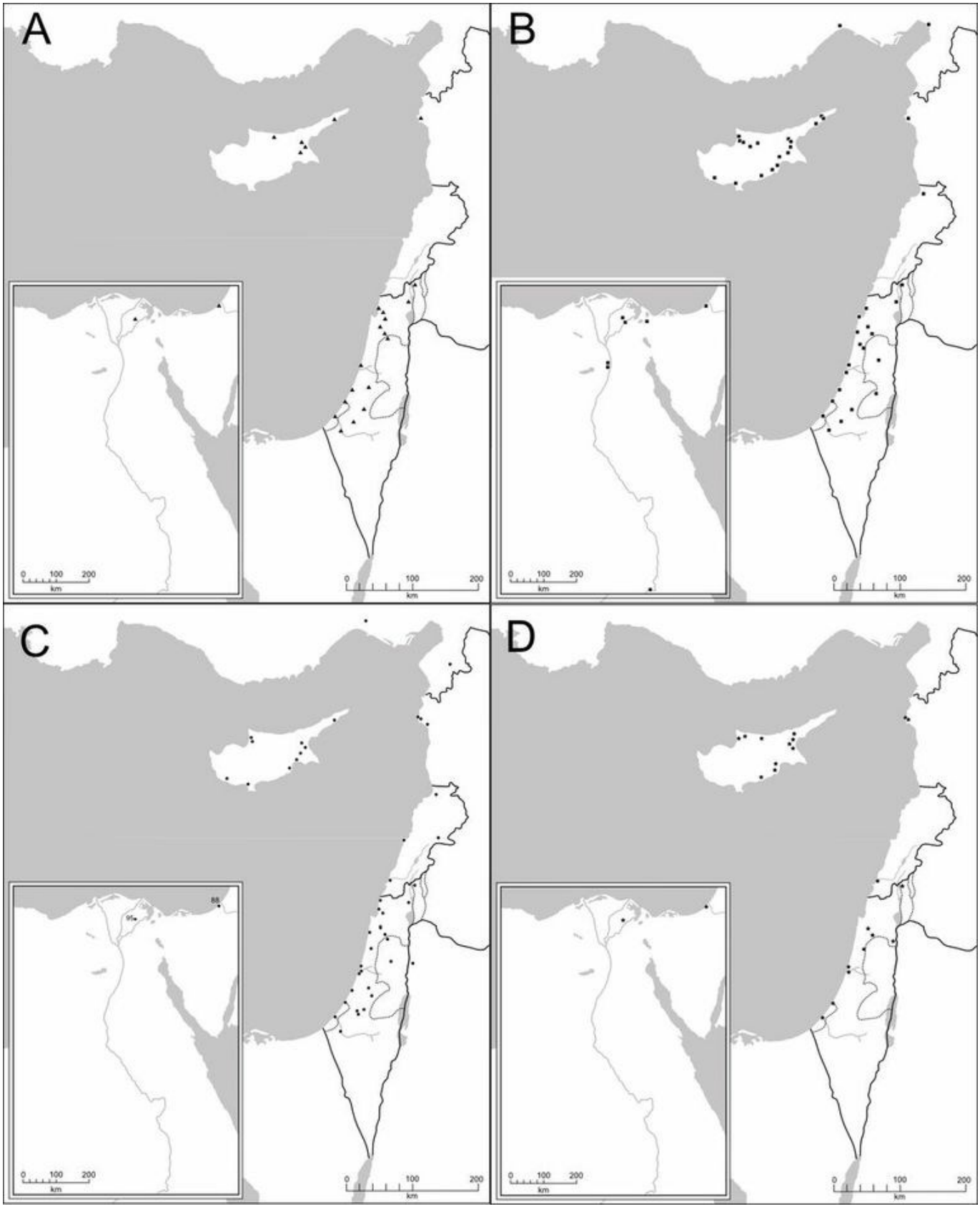

Figure 10: Appearance of specific types of Bichrome Wheel-made Ware vessels in the Eastern Mediterranean: A-Bowls; B-jugs and juglets, C-Kraters, D-Tankards.

the harbor, which was recognized in the Tell el-Dabʿa vicinity.[58] However, the finds from the palace areas in ʿEzbet Helmi force us to recognize the "elite" connotation, and this is apparently the case for many types of Bichrome Wheel-made Ware in Egypt, at least on the basis of the evidence to date. The Bichrome vessels certainly represent luxurious containers that were estimated as a sort of status symbol, probably showing a sort of "palace affinity". We shall however admit, that our knowledge about Cypriot imports (and imports in general) is more or less still based on funerary contexts from other sites in Egypt, and that settlements still need more exploration to fill up the gaps of our knowledge. In this respect we shall adjust our view upon the new evidence from ongoing or future excavations at other settlement and palatial sites in Egypt.

ACKNOWLEDGEMENTS

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The task of the project was to investigate the appearance of the Cypriot Bichrome Wheel-made Ware at various sites in the Eastern Mediterranean, and to correlate the finds. The material was collected in a database that opened opportunities for many more studies. The regional appearance of the ware, a large typology of the ware and investigation of the motifs are part of it. Within the project also the investigation of fabrics was undertaken, in order to pursue the question of the origin of the ware, and as a major result, several places for production could be traced via the application of various analytical methods. Analytical study of the fabrics by application of NAA was undertaken by M. Artzy, in cooperation with Y. Salmon, using analyses made in the 1970s in the Berkeley Laboratory in California. The data were updated by recent analyses by Mommsen from the Helmholtz Strahlen Institut, Bonn. Analyses using petrographic methods, such as thin section analyses, XRF, XRD and ICPMS were made by C. Tschegg at the Dept. of Lithospheric studies (University of Vienna), and have resulted in the recognition of an Egyptian fabric group for the project. The project has largely profited from the scientific discussions within the Special Research program SCIEM 2000, and the conferences organized in this program, under the aegis of the first speaker M. Bietak, based in Vienna at the Austrian Academy of Science. As director of the Cyprus project I want to thank all colleagues, who cannot be listed here in detail as they are too numerous, but whose work is described in the Manual. The University of Uppsala finally has given financial support for the project in the editorial phase.

For this paper the map by R. Stidsing and accounts that were developed within the project from the database were used as starting point for further interpretations and for new graphics, the careful design of which we want to thank Angelika Kern. The text however remains the responsibility of the first author.

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Notes

1 The collection of the material in the museums was an international collaboration, various collections and field projects opened their archives, and many colleagues have to be thanked for the accessibility of the material, see also acknowledgements.

2 In this context the recent political transformation in the Middle East, the "Arab Spring" in adjacent areas including Egypt has to be named.

3 See the forthcoming manual: *Potters Art in Red and Black - The Manual of Cypriot Bichrome Wheel-made Ware*, 3 vols. (in print).Chronology and fabric issues of Bichrome Wheel-made Ware are not discussed in this paper.

4 Cf. Artzy 2001, 157-174.

5 Heurtley 1939.

6 Westholm **1939.**

7 Notes of Stewart from 1948, published in 1974, by H. Kassis (Stewart 1974).

8 Artzy 1973; Artzy et al. 1976; Artzy et al. 1979.

9 Åström 2001.

10 Tschegg et al. 2008, 1134-1147.

11 Cf. Artzy 2001.

12 Bietak 2010.

13 Excavations at Tarsus and Mersin: see: Garstang, 1953, 155,7, or: Epstein 1966, 10, Pl. XIV:3 (type Jugs B.1.a). For the item from Tarsus s. Goldman 1956, 183, 200, Fig. 315:1085; Epstein 1966, 15 (type Kraters A.1.a).

14 Bergoffen 2005, 87f.

15 Kozal 2006, 116.

16 Hazor and Tel Dan participate in a more northern orientated trade network, for a summary cf. Hesse-Josephson 2008.

17 Cf. Hein, 2001; 2009; and forthcoming. Bietak 2001; Bader 2006.

18 See Czerny 2009 and 2010.

19 An updated summary for the issue is given in Bietak 2010, 147- 163. See also Cohen-Weinberger and Goren, 2004.

20 Kopetzky 2010.

21 Bader 2011 and 2012, 41-72.

22 Schiestl 2004 and 2009.

23 Bietak 1975.

24 Forstner-Müller 2008.

25 Hein and Jánosi 2004.

26 Bietak 2010. Hein and Jánosi, 2004.

27 Maguire 2009.

28 Bagh 2013.

29 Merrillees 1968.

30 See Maguire, 2010, 41, Table 3.

31 The 'Ezbet Helmi areas (H/I-VI) with the NK levels are in particular relevant for the Late Bronze Age connectivity.

32 Maguire, 2009, 62: "P*rior to the end of the Hyksos era we are presented with an extensive circulation in multiple kinds of small containers...Each represents a particular place of origin and suggests a particular place of origin in terms of the requirements of a particular area, as well as a closer interaction in some areas, for example, between Syria and Cyprus".*

33 Maguire 2009, figure 22 lists Red Lustrous and Black Lustrous ware as Cypriot, however provenience studies on Red Lustrous and Black Lustrous have shown more differentiated options for the provenience; see Yannai 2007 for the Black Lustrous Ware; Knappet and Kilikoglou 2007 for Red Lustrous Ware.

34 See Manning, 2001. Manning et alii 2002, 97-162. Most recent B.A. Knapp, 2013, 513-517, and following the model with the chronological data, based on the calibrated C14 series from the Oxford laboratory, Knapp favorites the initial date for the LC with 1679±14 BC.

35 Sauvage 2012. Cf. Artzy 1985 and 1997.
36 Maguire 2009, 62-68. Cf. also Knapp 2013, 418-423.
37 Bergoffen, 1989 and 2001. Cf. Eriksson 2001 and 2007; Hein 2009. Cf. also Maguire 2009, 62-68.
38 Bergoffen 2001 and 1989.
39 The study about the Cypriot pottery in Canaan by Bergoffen is in preparation for print. Cf. Bergoffen 1989.
40 Hein 2007.
41 For Bogazköy see Mielke 2007.
42 Knappet 2007; Eriksson 1993.
43 Sauvage 2011, 433 – 443. Cf. Sauvage 2012.
44 For the issue of the demand for Cypriot copper cf. Keswani-Schuster, 2005, 392-395; see most recently Knapp 2013, 417- 419. Bergoffen 1989, 289-291 and Bergoffen forthc. Cf. also Merrillees 1974 and 1968
45 The papers of the conference from 2003 were published in 2009, see: Hulin 2009, 40-47.
46 Merrillees 1968.
47 Merrillees 1962 and 1978, 167-171.
48 Hein 2009, 29-39.
49 We are aware of palatial constructions also at other sites such as Alalakh or Tell Kabri. However due to the low amount of items at those they are not included in the diagram. "Ritual" is not explicitly distinguished here, as there is only little evidence for this category from Egypt, besides the funerary function, that is already specified.
50 Tankards in Egypt can be produced from the two dominant fabric groups, marl clay as well as Nile clay. See: Holthoer 1977, pl. 20, Types IP; or variants A and B, as well as IR, and pl. 21, most of the types JU1 ordinary, types IR, IIR, IIIP and IIIR.
51 Wolf, 1937, 135, Type 39 and pl. 83.
52 Petrie, 1898, 37 and pl. XXXIII.
53 Petrie, 1924,16f. and pl. XLV.
54 Oral reference by S. Marchand.
55 Seiler, 1997, 27.
56 Cf. Crewe 2007, 17-20; see also Knapp, 2013, 432 -434.
57 Tschegg et al. 2008, 1134-1147.
58 Tronchère et al., 2008, 327-339.