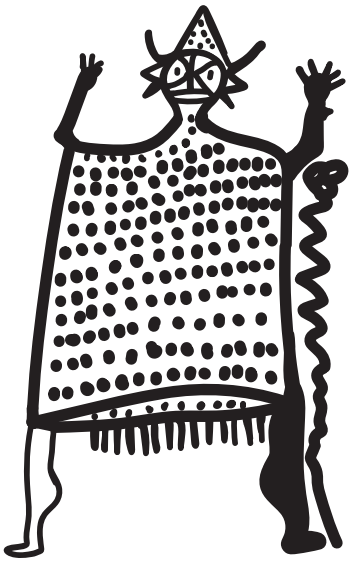
STUDIES IN MEDITERRANEAN ARCHAEOLOGY
VOL. CLIV

THE DECLINE OF BRONZE AGE CIVILISATIONS IN THE MEDITERRANEAN: CYPRUS AND BEYOND

edited by

Teresa Bürge and Peter M. Fischer



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STUDIES IN MEDITERRANEAN ARCHAEOLOGY
Volume CLIV

Founded by Paul Åström

Cover image: 'Horned God' on krater N121 from Hala Sultan Tekke, CQ2, Stratum 2 (LC IIIA early; ca 1200 BC) (drawing by T. Bürge)

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Preface and acknowledgements

The papers presented in this volume are the results of the conference *The Decline of Bronze Age Civilisations in the Mediterranean: Cyprus and Beyond* organised by the editors of the volume and held on January 17 and 18, 2020 at the Department of Historical Studies, University of Gothenburg. It was supported by much appreciated funds from the Swedish Research Council (Vetenskapsrådet, registration number 2019-00327) and the Riksbank's Anniverary Fund (Riksbankens Jubileumsfond, registration number F19-1036:1). In addition, it was the final conference of the project *The Collapse of Bronze Age Societies in the Eastern Mediterranean* (Vetenskapsrådet, registration number 2015-01192; project director Peter M. Fischer) that investigated the causes of disruption in international trade and the 'collapse' of Bronze Age civilisations in the Eastern Mediterranean in the second half of the 13th and the 12th centuries BC, focusing on the island of Cyprus which was the centre of interregional trade in this region. The project was closely connected with our ongoing excavations at the Late Bronze Age harbour city of Hala Sultan Tekke on the island's southern coast.

The newly restored and enlarged building of the Faculty of Humanities, where the conference was hosted, thanks to the support of Henrik Jansson, the Head of the Department, provided an excellent environment for the conference. The conference dinner in the refined Jugendstil milieu of 'Ågrenska Villan', built in 1916 in the centre of Gothenburg as a private residence and since 1981 owned by the University of Gothenburg, was much appreciated by the participants. To the best of our knowledge, this conference was the last at the university of Gothenburg before the serious outbreak of COVID-19 ended physical meetings for almost two years. In retrospect, we are even more grateful that we could enjoy these very intense and stimulating two days to the full, untroubled by thoughts about physical distancing, the potential spread of infection and other issues that would start to affect our everyday life only a few weeks later.

For some of us the pandemic was a very quiet and perhaps more productive period than usual, while others had to deal with parental challenges while schools and preschools were closed. In spite of these and the many other difficulties, issues and changes that we all had to face during the last more than two and a half years, we are particularly glad that all participants were able to submit a contribution to the present volume. In addition, we have included three more chapters to round off the topic.

Besides the funding bodies mentioned above, we would like to thank Jennifer Webb and David Frankel and Lennart Åström, the editors-in-chief and manager of SIMA, for including the volume in this series. Each single contribution was carefully peer-reviewed and we are grateful to all reviewers for accepting this task. Jennifer Webb has given us incredible support by finalising the layout and correcting and improving the language. We are very much obliged for all her accurate work! We also want to thank Elena Peri, who has assisted with copy editing, and Jennie Fälth of the administration of our department for practical help.

Gothenburg and Bern, June 2023
Teresa Bürge and Peter M. Fischer

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The external contacts of Cyprus in the Late Bronze Age on the basis of the ceramic evidence

Reinhard Jung, Hans Mommsen and Tatiana Pedrazzi

Abstract

Ongoing research is producing an increasingly detailed picture of the external relationships of the Eastern Mediterranean island of Cyprus. For any approach to achieve a regionally and chronologically differentiated picture, it is essential to combine a fine-grained typological analysis, a strict stratigraphic contextualisation (both at a site level and through inter-regional comparisons) and precise provenance analyses based on archaeometric methods. Only in this way, may one hope to disentangle imports from specific regions and selective stylistic adaptations and to use these data in a holistic historical reconstruction.

This contribution provides new evidence from three Late Cypriot settlements, Maa *Palaeokastro*, Pyla *Kokkinokremos* and Enkomi. It contains NAA results obtained on different pottery classes dated from LC IIC through LC IIIB with a special focus on Aegean-type and Aegeanising pottery as well as on Syro-Palestinian amphorae (Canaanite jars), while also including a representative array of undecorated Cypriot fine wares and kitchen wares. All analysed vessels and vessel fragments are published with their stratigraphic data, a macroscopic fabric assignation, a drawing and in selected cases a colour photo as well. In addition, we illustrate further Canaanite jars, which we did not analyse, but which give a more complete picture of that class in LBA Cyprus, including many fragments found at Enkomi that are published here for the first time.

Introduction

The society of the kingdom of Alašiya, the island of Cyprus according to the majority opinion of scholars (Knapp 2011), was one of the most widely and intensely connected ones in the Mediterranean during the later 2nd millennium BCE. In our chapter, we will try to follow the threads of those connections by means of chemical and typological pottery analyses conducted on the ceramics from three coastal settlements. We focus on Enkomi in the east, Pyla *Kokkinokremos* in the southeast and Maa *Palaeokastro* in the southwest of the island. The material we analysed covers a time span from LC IIC (Enkomi, Level IIB; Pyla; perhaps Maa, Floor II), through LC IIIA (Enkomi, Levels IIIA and early IIIB; Maa, Floors II and I) until LC IIIB (Enkomi, later Level IIIB and Level IIIC). For the chemical analysis, we applied NAA (neutron activation analysis). Fortunately, a large quantity of comparative data produced by the Bonn laboratory for many sites all around Cyprus is already published (Mountjoy & Mommsen 2015, 2019). While these comparative data mainly refer to Mycenaean imports and to local Mycenaean as well as Mycenaeanising pots (the latter combining Aegean elements with local ones, for a definition of local Mycenaean *versus* Mycenaeanising/Aegeanising see Jung 2010: 152–154), the data we discuss in this chapter come from a broader spectrum of Late Bronze Age ceramics, both of local and non-Cypriot origin. The pottery classes we took into consideration are broadly representative of the many different categories the Cypriot population was producing, importing and using throughout these two or two and a half centuries (cf. *excursus*).

Methodology

We will proceed by typological and fabric categories which represent (a) broader production regions and (b) use categories. In each of these categories we will then evaluate the analytical results and ask what they tell us about the procurement of (a) the pots themselves and (b) eventual products packaged in those pots as well as about the economic and political relations the settlements entertained, in which those ceramics have been found.

Neutron activation analysis (NAA)

NAA is an old, well accepted and stable method to determine the production workshops of archaeological pottery (Perlman & Asaro 1969; Mommsen *et al*. 1991; Mommsen 2007). Since NAA measures up to about 30 elements, the number of

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parameters of such a concentration pattern is large enough to have a high probability to be unique and to be able to differentiate between different clay pastes. Today we know that three facts are most important. Considering the elements measurable at Bonn, the composition of pottery does not vary to a large degree, i.e. in the percent region for Ca, Na, K, Fe and Ti, and in limited trace element concentration regions for the remaining elements. The first important task is to see to it that the highest possible measurement precision for the different elements is reached. This is important to distinguish different clay pastes used in different production workshops or even to sort out different production series at the same workshop(s). The second fact concerns the statistical data evaluation. It should include the consideration of experimental uncertainties or, if average concentration patterns are compared, the root mean square deviations (standard deviations) of the average values. This has the advantage that pattern similarity measures can be calculated that directly give the probability of group membership for a single sample or of the similarity of two already existing groups (Beier & Mommsen 1994a, 1994b). This solves the known problem of Cluster Analyses resulting in dendrograms without a hint how many different groups are represented (without including a set of repeated measurements of some homogeneous material like a pottery standard, Mommsen *et al*. 1988; Mommsen & Japp 2014). The third fact is the correction of recipe variations of the potters preparing the clay paste. Common are dilutions of the raw clay with chalk or sand or elutriation of unwanted parts of the raw clay. This can be corrected by a best relative fit of each individual sample with respect to the average grouping values (Mommsen & Sjöberg 2007). A division of all values by the concentration of a single, well measurable element can be done alternatively. The effect and the increase in group separability of this correction are shown in **Figures 1a** and **1b**. The three Cypriot groups CypI (Enkomi), CypJ (Kition/Hala Sultan Tekke) and CypH (Sinda) are depicted.

Another most important fact for provenancing is the availability of good reference material like, for example, kiln wasters. A concentration pattern of a group of samples that does not include some reference material of already known provenance as members cannot be assigned to any site with certainty, but distribution arguments can help to increase the probability of a production site as their origin. If a single sample is a chemical singleton, then nothing can be learned from the analysis.

Altogether 97 samples from the Late Cypriot settlements Enkomi (49, **Table 1**), Pyla *Kokkinokremos* (13, **Table 2**) and Maa *Palaeokastro* (35, **Table 3**) have been analysed here. In terms of ceramic categories, these include five Mycenaean and five Minoan imports, 14 local Mycenaean and two Mycenaeanising products, 19 Canaanite jars, 28 cooking pots (of which

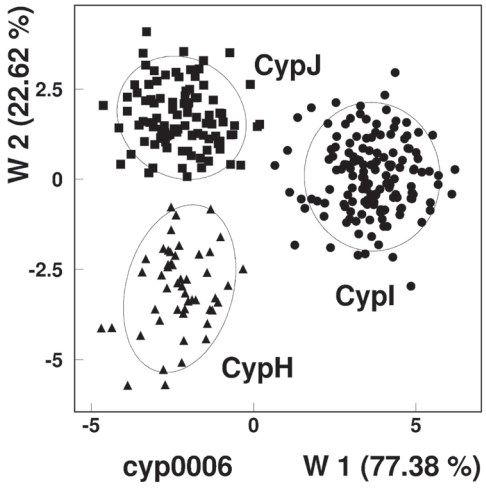


Figure 1a. Result of a discriminant analysis assuming the three clusters CypI (Enkomi), CypJ (Kition/Hala Sultan Tekke) and CypH (Sinda) using all elements except As, Ba and Na. Plotted are the discriminant functions W1 and W2, which cover 77.4% and 22.6% of the between-group variance. The ellipses drawn are the 2σ boundaries of the groups

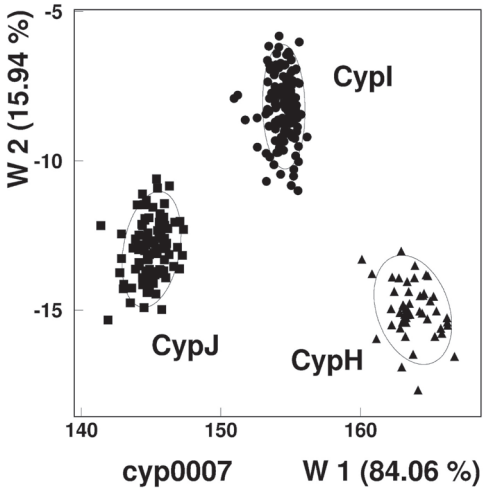


Figure 1b. As Figure 1a, but now after correction of the individual samples with their best relative fit factor with respect to their grouping values, increasing the separability of the groups

seven are of handmade Cypriot type, 18 of wheelmade Mycenaean type and three of Levantine type), ten handmade Cypriot-type vessels (mostly unpainted), 13 wheelmade unpainted vessels of Cypriot type and one vessel of Grey Ware from Asia Minor.

The raw data are given in **Table 4** and/or on the web: mommsen.hiskp.uni-bonn.de. The statistical grouping with the filter procedure shows the presence of many different elemental patterns, some of them from already known workshops, but most of them not yet clearly located. About a third of the samples turned out to be chemical loners (singletons). The elemental patterns of five groups discussed below are shown in **Table 5**. Four of these patterns can be assigned with high probability to Cypriot production sites and one

Sample no. Enkomi (Enkj)	Sherd number or context (tray) no.	Stratigraphical context	Vessel type	Fabric	NAA group	Publication
1	4540/1+4545/..	well (according to the label 'Engomi 1958. Area I. Well 32. 1650–1700'), located in Area I (= Quarter 4W), probably Room 39A, Level IIIA (cf. Dikaios 1969/71: 187: 'Inv. 4540')	Mycenaean krater FT 281/282, Protome Painter A work, with bovines	M 8	MYBE/ DelA	Dikaios 1969/71: 329, pl. 109.1; Slenczka 1974: 91 no. 7, 139, no. 8, pl. 47.4; Vermeule & Karageorghis 1982: 205, cat. no. V.86; Jung 2018a: 283–284, fig. 19.5:3
2	1848/2.12	Area III (= Quarter 1W), first half of Level IIB, Casemate 64, layer (-14.80 to -15.00m) cut by the foundation trench of the fortification	Minoan coarse ware stirrup jar FT 164	M 33?	singleton (X039 -)	Dikaios 1969/71: 312, pl. 92.25
3	1328/1, 1329/3	Quarter 1W, inner side of fortification; 1328: Level IIB–IIIA, above the Level IIB floor (-14.40 to -14.50m); 1329: in Level IIB floor (-15.00 to -15.10m)	Mycenaean krater FT 281/282, Pastoral Style	M 40	CypI U+	Jung 2011a: 174, 190, fig. 1.3
4	1848/4.6, 1848/10	Quarter 1W, first half of Level IIB, Casemate 64, western part, layer (-14.80 to -15.00m) cut by the foundation trench of the fortification	Mycenaean juglet of southeast Aegean style with horizontal wavy line	M 41	MilD	unpublished
5	1955/1	Quarter 4W, Level IIB, R. 104, western part, between Floors III and IV (-12.50 to -12.55m)	Mycenaean amphoroid krater of southeast Aegean style with horizontal wavy lines	M 36	RHc2	Jung 2009: 79, 84, 90, fig. 3.3
6	2715/7.10+2707/7	Quarter 1W, Level IIB, R. 1, western part, between Floors II and IV (-14.35 to -14.70m and -14.25 to -14.65m)	Mycenaean shallow strap-handled bowl FT 295/296 with hybrid flower among other motifs	M 30	MYBE	Dikaios 1969/71: 566, pl. 67.21; Jung 2011a: 179, 194, fig. 5.2; Jung 2012: 105–106, fig. 10.1:1; Mountjoy 2018: 315–316, fig. 164:836
7	1836/5.6+1846/10	Quarter 1W, first half of Level IIB, Casemate 65, western part, layer (-14.50 to -14.80m) cut by the foundation trench of the fortification	Cypriot bowl type 12 (FT 247), rim variety a, linear decoration	M 4	CypI	Dikaios 1969/71: 75, 313, pl. 93.10
8	3391/..	Quarter 1W, Level IIB, below Floor III in R. 72B of Level IIIA (below -14.95m)	Minoan deep bowl with flower	M 38	singleton	Dikaios 1969/71: 568, pl. 66.44
9	3683/6+3689/.., 3689/2	Quarter 1W, Level IIB, R. 28, between Floors III and IV (-14.20 to -14.50m and -14.10 to -14.34m)	Cypriot bowl type 12 (FT 247), rim variety a, linear decoration	M 29	CypI	Jung 2011a: 180, 194, fig. 5.3; Jung 2012: 105–106, fig. 10.1:3; Mountjoy 2018: 375–376, fig. 195.1167
10	1328/2, 1329/1.2	Quarter 1W, inner side of fortification; 1328: Level IIB–IIIA, above the Level IIB floor (-14.40 to -14.50m); 1329: in Level IIB floor (-15.00 to -15.10m)	Mycenaean conical rhyton FT 199 with hybrid flower and vertical whorl-shells	M 13	MYBE/ DelA	Dikaios 1969/71: 313, pl. 93.21–22
11	2715/..	Quarter 1W, Level IIB, R. 1, western part, between Floors II and IV (-14.35 to -14.70m)	handmade cooking pot with vertical handle	Ha 2	singleton	Jung 2011b: 58, 73, 79, fig. 1.1

Table 1. NAA samples from Enkomi

Sample no. Enkomi (Enkj)	Sherd number or context (tray) no.	Stratigraphical context	Vessel type	Fabric	NAA group	Publication
12	2715/23	Quarter 1W, Level IIB, R. 1, western part, between Floors II and IV (-14.35 to -14.70m)	handmade cooking pot with horizontal handle	Ha 1	X083	Jung 2011b: 58, 73, 79, fig. 1.3
13	5898/..	Quarter 4W, end of Level IIB, R. 142, between Floors VI (Lev. IIIA) and VII (2nd floor of Lev. IIB)	handmade bowl	Ha 1	X083 associated	unpublished
14	2650/10	Quarter 1W, Level IIB, R. 3A, eastern part, below Floor III of R. 3 (Lev. IIIA) (-14.30 to -14.54m)	handmade cooking pot with vertical handle	Ha 1	X083	Jung 2011b: 58, 73, 79, fig. 1.4
15	2540/..	Quarter 1W, Level IIIA, R. 2, above Floor III (-13.83 to -14.13m)	Mycenaean cooking jug/ amphora FT 65/66	U 10	singleton	Jung 2009: 80, 84, 90, fig. 3.8
16	2684/18	Quarter 1W, Level IIIA, R. 77 or 8, below Floor II (Lev. IIIB) until Floor VI (earliest floor of Lev. IIIA) (-13.54 to -13.82m)	Mycenaean cooking pot, base fragment	U 9	X076	unpublished
17	3768/28	Quarter 1W, Level IIIA, R. 32, destruction debris on Floor III (-13.50 to -13.80m)	Mycenaean cooking jug/ amphora FT 65/66	U 15	singleton	unpublished
18	3768/..	Quarter 1W, Level IIIA, R. 32, destruction debris on Floor III (-13.50 to -13.80m)	Mycenaean cooking pot, base fragment	U 16	X076	unpublished
19	3768/..	Quarter 1W, Level IIIA, R. 32, destruction debris on Floor III (-13.50 to -13.80m)	Mycenaean cooking pot, rim fragment	U 14	X076	unpublished
20	*sample not taken*					
21	5974/..	Quarter 4W, early Level IIIA, R. 45, southern part, sherds from material of Floor IV (-12.90 to -12.95m)	Mycenaean cooking jug/ amphora FT 65/66	U 18	X076	unpublished
22	5333/..	Quarter 4W, R. 13, Level IIIB (-12.29 to -12.59m), probably between Floors IV and II	Mycenaean cooking pot, rim fragment	U 18	X076	unpublished
23	3747/..	Quarter 1W, Level IIIA, R. 32, northern part, destruction debris between Floors II (Lev. IIIB) and III (Lev. IIIA) (-13.40 to -14.00m)	Mycenaean cooking pot, rim and base fragments	U 10	X076	unpublished
24	3747/..	Quarter 1W, Level IIIA, R. 32, northern part, destruction debris between Floors II (Lev. IIIB) and III (Lev. IIIA) (-13.40 to -14.00m)	Mycenaean cooking jug/ amphora FT 65/66	U 15	X076	Jung 2011b: 60, 73, 81, fig. 4.6
25	1343/6.7	Quarter 1W, Level IIIA, courtyard 87, northwestern part, pit in Floor III (-14.25m)	Mycenaean cooking amphora FT 66	U 14	X076	Jung 2009: 80, 84, 90, fig. 3.7; Jung 2011a: 182, 196, fig. 8.3; Jung 2012: 113–114, fig. 10.5:4; Jung 2017: 132–133, fig. 11.6
26	1343/4	Quarter 1W, Level IIIA, courtyard 87, northwestern part, pit in Floor III (-14.25m)	Mycenaean cooking jug/ amphora FT 65/66	U 10	X076	unpublished

Table 1 (continued). NAA samples from Enkomi

Sample no. Enkomi (Enkj)	Sherd number or context (tray) no.	Stratigraphical context	Vessel type	Fabric	NAA group	Publication
27	5546/2	Quarter 4W, end of Level IIIB, R. 26, between Floors II and I (-11.83 to -12.36m)	unpainted wheelmade bowl of Base Ring shape, Plain White Wheelmade	U 5	singleton	Dikaios 1969/71: 613, pl. 77.14
28	2579/3	Quarter 1W, Level IIIA, R. 8, between Floors IV and III (-13.70 to -13.80m)	unpainted deep hemispherical bowl, rim variety dVar, one handle attachment, Plain White Wheelmade	U 13	CypI U+	Dikaios 1969/71: pl. 117.2
29	2715/29	Quarter 1W, Level IIB, R. 1, western part, between Floors II and IV (-14.35 to -14.70m)	unpainted amphoroid krater, Plain White Wheelmade	U 1	CypI	unpublished
30	3745/..	Quarter 1W, Level IIIA, R. 32, debris on Floor III (-13.80 to -14.10m)	unpainted Mycenaean carinated strap-handled bowl FT 295, Plain White Wheelmade	U 17	CypI Zn+	Jung 2009: 81, 84, 90, fig. 3.9
31	5546	Quarter 4W, end of Level IIIB, R. 26, between Floors II and I (-11.83 to -12.36m)	unpainted deep hemispherical bowl, Plain White Wheelmade	U 22	singleton	unpublished
32	5563/..	Quarter 4W, Level IIB(-IIIA), R.136, above Floor IV	unpainted wheelmade bowl of Base Ring shape, Plain White Wheelmade	U 5	X076	unpublished
33	5333/..	Quarter 4W, Level IIIB, R. 13 (-12.29 to -12.59m), probably between Floors IV and II	unpainted wheelmade bowl of Base Ring shape, Plain White Wheelmade	U 1	X076	unpublished
34	732/12	Quarter 4W, middle Level IIIB, R. 6, between Floors III and II (-12.60 to -12.46m)	unpainted amphoroid krater, Plain White Wheelmade	U 1	singleton	unpublished
35	718/7	Quarter 4W, middle Level IIIB, R. 3, on Floor III (-12.60m)	Canaanite jar with cross on shoulder	U 39	singleton	Dikaios 1969/71: 193, 596, pl. 77.23
36	3747/31	Quarter 1W, Level IIIA, R. 32, northern part, destruction debris between Floors II (Lev. IIIB) and III (Lev. IIIA) (-13.40 to -14.00m)	unpainted Mycenaean-type vat FT 4, Plain White Wheelmade	U 1	CypI	unpublished
37	3767/15	Quarter 1W, Level IIIA, R. 32, destruction debris on Floor III (-13.80 to -13.90m)	unpainted Cypriot vat with vertical handle, Plain White Handmade	U 1, but handmade	CypI	unpublished
38	758/..	Quarter 4W, early Level IIIA, R. 14, on Floor V, sherd layer below hearth (-12.71m)	unpainted Mycenaean-type vat FT 4, Plain White Wheelmade	U 5	CypI	Jung 2009: 80, 84, 90, fig. 3.6

Table 1 (continued). NAA samples from Enkomi

Sample no. Enkomi (Enkj)	Sherd number or context (tray) no.	Stratigraphical context	Vessel type	Fabric	NAA group	Publication
39	2715/27	Quarter 1W, Level IIB, R. 1, western part, between Floors II and IV (-14.35 to -14.70m)	unpainted large jug, Plain White Wheelmade	U 1	CypI	Jung 2011a: 178, 190, fig. 1.3; Jung 2011b: 65, 73, 81, fig. 4.2
40	2520/3	Quarter 1W, Level IIIA, Hall 3, bench along the western wall, on Floor III (-14.32 to -14.40m)	unpainted misfired base, Plain White Wheelmade	U 1	CypI	Dikaios 1969/71: pl. 117.44
41	2715/..	Quarter 1W, Level IIB, R. 1, western part, between Floors II and IV (-14.35 to -14.70m)	Canaanite jar, shoulder and base	U 7	singleton	unpublished
42	2715/28	Quarter 1W, Level IIB, R. 1, western part, between Floors II and IV (-14.35 to -14.70m)	Canaanite jar, rim fragment	U 4	singleton	unpublished
43	2715/..	Quarter 1W, Level IIB, R. 1, western part, between Floors II and IV (-14.35 to -14.70m)	Canaanite jar, base fragment	U 8	singleton	unpublished
44	5667/..	Quarter 4W, Level IIIA, R. 35, destruction layer between Floor VI (Lev. IIIA) and V (Lev. IIIB) (-12.97 to -13.16m)	Canaanite jar, base fragment	U 1	singleton	unpublished
45	3762/..	Quarter 1W, Level IIIA, R. 32, southern part, destruction debris on Floor III (-13.80 to -14.15m)	Canaanite jar, rim fragment	U 27	singleton	unpublished
46	5898/..	Quarter 4W, end of Level IIB, R. 142, between Floors VI (Lev. IIIA) and VII (2nd floor of Lev. IIB)	Canaanite jar, rim fragment	U 31	Ul97	unpublished
47	732 R	Quarter 4W, middle Level IIIB, R. 6, between Floors III and II (-12.60 to -12.46m)	Canaanite jar, rim fragment	U 8	singleton	unpublished
48	3316/..	Quarter 1W, Level IIIC, Corridor 91, on Floor II (-13.90 to -13.50m) (assignation based on Dikaios 1969/71: 151, pl. 257, thus correcting ascription to Level IIIB [Dikaios 1969/71: 603]).	Canaanite jar, rim fragment	U 30	singleton	unpublished
49	2540/3	Quarter 1W, Level IIIA, R. 2, above Floor III (-13.83 to -14.13m)	Canaanite jar, base fragment	U 38	singleton	unpublished
50	2474/..	Quarter 1W, Level IIIA, R. 45, between Floors II and III (-13.16 to -13.30m)	Levantine cooking pot	U 19	singleton	Jung 2009: 80, 84, 92, fig. 6.3

Table 1 (continued). NAA samples from Enkomi

Sample no. Pyla (Pylj)	Inventory number or context and tray no.	Stratigraphical context	Vessel type	Fabric	NAA group	Publication
1	*sample not taken*					
2	*sample not taken*					
3	*sample not taken*					
4	133	Sector 2, Squares L–M 8–9	large stirrup jar, Grey Ware		singleton	Karageorghis & Demas 1984: 43, 50, pl. 19.133; Mommsen & Pavúk 2007: 26, 32, table 1: sample GPK 44
5	Sq. O 5-6		handmade bowl (rim sherd)	Ha 2	X083	–
6	Sq. O 5-6		handmade bowl (rim sherd)	Ha 3	singleton	–
7	Sq. O 5-6		handmade cooking pot (rim sherd)	Ha 4	X083	unpublished
8	Pyla 1952, Trial A	Trial A	Canaanite jar (rim sherd)	Du 5	singleton	–
9	45	Sector 2, Complex D, Room 24	large handmade jug	Ha 1	singleton	Karageorghis & Demas 1984: 16, 36, pls 20.45, 37.45
10	103	Sector 2, Complex C, Room 12	handmade vat	Ha 1	singleton	Karageorghis & Demas 1984: 14, 41, pls 21.103, 36.103
11	109	Sector 2, Complex E, Room 30	Canaanite jar	Du 4	singleton	Karageorghis & Demas 1984: 19, 41, pls 23.109, 38.109
12	102	Sector 2, Complex D, Room 25	handmade cooking pot	Ha 3	X171	Karageorghis & Demas 1984: 17, 41, pl. 20.102; Jung 2017: 139, fig. 11.20
13	1953/V-21/25 + 18.05.00403-C	Surface find 1953 and Sector 5, Room 5.30	amphoroid krater, Pastoral Style		CypJ	Karageorghis & Demas 1984: 48, pl. 19.1953/V-21/25; Karageorghis 2008: 174–175, pl. 2; Mountjoy 2018: 546, fig. 277.6
14	Pyla 1959, IV-30/1	Surface find	amphoroid krater, Minoan		singleton	Dikaios 1969/71: 906, pl. 237.4A; Karageorghis & Georgiou 2012: 304, cat. no. 5 (inv. no. incorrect), 318, fig. 5
14a	Pyla 1953/III-9/1, 1959/ IV-30/1	Surface find	amphoroid krater, Minoan		singleton (AkaR/ ACb5)	Karageorghis & Georgiou 2012: 304, cat. no. 6, 319, fig. 6
15	Pyla 1952, surface	Surface find	amphoroid krater, Minoan		KnoL-	–

Table 2. NAA samples from Pyla Kokkinokremos

Sample no. Maa (Maaj)	Inventory number or context and tray no.	Stratigraphical context	Vessel type	Fabric	NAA group	Publication
1	250	Floor I, Area 95	Mycenaean deep bowl FT 284/285 with bird		singleton (CypS -)	Karageorghis & Demas 1988: 202–203, pls 151.250, 243.250; Mountjoy 2018: 878–879, fig. 438.131
2	574	Floor I, R. 79C	Mycenaean conical bowl FT 242, linear decoration		singleton	Karageorghis & Demas 1988: 188, pls 143.574, 235.574; Mountjoy 2018: 881–882, fig. 440.151
3	Pit L/1	Floors I–II, Pit L	Mycenaean deep bowl FT 284/285 with triangular patch		CypS	Karageorghis & Demas 1988: 143, pls 101, Pit L/1, 210, Pit L/1; Mountjoy 2018: 875–876, fig. 436.117
4	Pit L/24	Floors I–II, Pit L	Mycenaean deep bowl FT 284/285 with stemmed spiral		X140	Karageorghis & Demas 1988: 145, pl. 103, Pit L/24; Mountjoy 2018: 876, fig. 436.121
5	545	Floor II, N. of Area 99, Bothros 1	Canaanite jar with 4 handles, Type 6-2	U 14	singleton	Karageorghis & Demas 1988: 124, pls 81.545, 194,545
6	Pit L/24	Floors I–II, Pit L	Mycenaean deep bowl FT 284/285 with triglyph and bird		CypS	Karageorghis & Demas 1988: 145, pl. 103, Pit L/24; Mountjoy 2018: 875–876, fig. 436.115
7	Room 20/1	Floor II, R. 20	small wheelmade pithos of Cypriot type	U 2	singleton	Karageorghis & Demas 1988: 102
8	Bothros 1/11	Floor II, N. of Area 99, Bothros 1	Mycenaean deep bowl FT 284/285 with chevrons and trefoil rockwork		X140	Karageorghis & Demas 1988: 125, pls 74, Bothros 1/11, 192, Bothros 1/11; Mountjoy 2018: 868–869, fig. 432.80
9	656	Floor II, R. 55	Canaanite jar, Type 4-2	U 17	singleton	Karageorghis & Demas 1988: 111, pls 51.656, 176.656
10	Pit L/23	Floors I–II, Pit L	Mycenaean deep bowl FT 284/285 with herringbone tree		= 37	Karageorghis & Demas 1988: 145, pl. 103, Pit L/23; Mountjoy 2018: 875–876, fig. 436.116
11	Pit L/1	Floors I–II, Pit L	Mycenaean deep bowl FT 284/285 with quirk		CypT, Cs low	Karageorghis & Demas 1988: 143, pls 101, Pit L/1, 210, Pit L/1; Mountjoy 2018: 875–876, fig. 436.118
12	Room 7/1	Floor I, R. 7	Canaanite jar	U 2	Ul97	Karageorghis & Demas 1988: 156
13	550	Floor II, Area 98	handmade large unpainted jug	HG 5	CypM, Cr high	Karageorghis & Demas 1988: 119–120, pls 60.550, 191.550
14	615	Floor II, Area 96	handmade large unpainted jug	HG 5	singleton	Karageorghis & Demas 1988: 130, pls 81.615, 195.615
15	Room 73/1	Floor II, R. 73	handmade cooking pot	HG 11	singleton	Karageorghis & Demas 1988: 126
16	Bothros 1/1	Floor II, N. of Area 99, Bothros 1	handmade cooking pot	HG 16	singleton	Karageorghis & Demas 1988: 124
17	603	Floor I, R. 85A and east	handmade jug, unpainted	HG 10	singleton	Karageorghis & Demas 1988: 190, pls 145.603, 235.603

Table 3. NAA samples from Maa Palaeokastro

Sample no. Maa (Maaj)	Inventory number or context and tray no.	Stratigraphical context	Vessel type	Fabric	NAA group	Publication
18	599	Floor II, Area 96	handmade vat with vertical handles	HG 9	CypM	Karageorghis & Demas 1988: 129, pls 80.599, 195.599
19	269	Floor I, R. 79A, Pit 1	Base Ring II bowl	HG 14	CypM	Karageorghis & Demas 1988: 187, pls 142.269, 235.269
20	Room 61/12	Floor II, R. 61	Mycenaean cooking jug/ amphora FT 65/66	U 5	singleton	Karageorghis & Demas 1988: 107 pl. 51.Room 61/12
21	692	Floor II, R. 79D	Mycenaean cooking amphora FT 66	U 5	singleton	Karageorghis & Demas 1988: 115, pls 60.692, 183.
22	425	Floor II, R. 75, Pit a	Mycenaean cooking jug/ amphora FT 65/66	U 9	singleton	Karageorghis & Demas 1988: 122, pls 80.425, 193.425
23	Room 81A/3	Floor I, R. 81A	Mycenaean cooking jug/ amphora FT 65/66	U 7	singleton	Karageorghis & Demas 1988: 197, pls 148, Room 81A/3, 245, Room 81A/3
24	677A	Floor I–II, Pit L	Mycenaean cooking jug/ amphora FT 65/66	U 9	singleton	Karageorghis & Demas 1988: 145, pls 104.677A, 211.677A
25	Room 96/3	Floor II, Area 96	Mycenaean cooking jug/ amphora FT 65/66	U 3	X082	Karageorghis & Demas 1988: 129
26	578	Floor II, R. 79D	Mycenaean cooking jug/ amphora FT 65/66	U 3	Ul63	Karageorghis & Demas 1988: 115, pls 60.578, 183.578
27	358	Floor I, Area 101A	round-bottomed cooking pot, wheelmade	U 5	X082	Karageorghis & Demas 1988: 199, pls 153.358, 245.358
28	11	Floor I, West of R. 9	wheelmade cooking pot	U 5	singleton	Karageorghis & Demas 1988: 157, pls 118.11, 219.11
29	703	Unstratified, south of Building III, Unit 6	Mycenaean unpainted carinated bowl FT 295	U 1	CypS	Karageorghis & Demas 1988: 205, pls 155.703, 247.703
30	240	Floor II, R. 61, pit a	unpainted wheelmade jug with conical neck	U 5	X082	Karageorghis & Demas 1988: 108, pl. 176.240
31	12	Floor I, West of R. 9	unpainted wheelmade jug with conical neck	U 7	X082	Karageorghis & Demas 1988: 157, pls 118.12, 219.12
32	265+500	Floor I, R. 74	Canaanite jar, Type 2-1, Subtype 2-1-2	U 16	=250	Karageorghis & Demas 1988: 201, pls 152.265+500, 244.265+500
33	267	Floor I, R. 74	Canaanite jar, Type 2-1, Subtype 2-1-1		singleton	Karageorghis & Demas 1988: 201, pls 152.267, 244.267
34	585	Floor IA, Area 86A	Canaanite jar, fragmentary	U 15	Marl	Karageorghis & Demas 1988: 197, pls 152.585, 244.585
35	339	Floor I, R. 89	Canaanite jar, Type 2-1, Subtype 2-1-2		=250	Karageorghis & Demas 1988: 202, pls 152.339, 244.339

Table 3 (continued). NAA samples from Maa Palaeokastro

Sample	As	Ba	Ca%	Ce	Co	Cr	Cs	Eu	Fe%	Ga	Hf	K %	La	Lu	Na%	Nd	Ni	Rb	Sb	Sc	Sm	Ta	Tb	Th	U	W	Yb	Zn	Zr
Enkj 1	45.6	308.	5.12	58.3	26.0	257.	7.23	1.04	5.04	18.7	4.14	2.50	28.0	0.41	0.96	24.6	141.	134.	0.67	19.5	4.48	0.84	0.67	10.8	3.32	1.94	2.45	85.8	189.
Enkj 2	5.01	365.	6.72	51.9	31.5	382.	10.0	0.95	5.37	19.9	2.92	2.61	25.0	0.41	0.42	21.6	318.	136.	0.43	22.5	4.05	0.69	0.56	9.12	1.90	2.08	2.37	96.6	91.6
Enkj 3	13.5	372.	5.59	40.5	32.8	382.	4.55	0.93	5.88	14.6	3.40	2.24	18.4	0.38	1.10	14.1	317.	85.7	1.12	23.2	3.46	0.74	0.54	6.70	3.44	1.61	2.01	97.7	140.
Enkj 4	12.9	559.	6.45	103.	25.0	238.	12.1	1.53	5.11	32.6	4.51	3.08	48.7	0.56	0.86	41.8	265.	204.	1.72	16.8	8.20	1.39	1.19	24.5	4.97	3.07	4.01	83.9	194.
Enkj 5	23.0	468.	6.80	89.7	26.1	304.	10.7	1.34	5.02	25.1	3.86	2.92	41.9	0.51	0.98	33.2	336.	190.	2.75	16.8	6.91	1.27	1.08	20.6	3.66	3.68	3.41	83.5	178.
Enkj 6	6.41	334.	10.1	57.4	29.0	243.	9.48	1.06	4.62	16.7	3.58	2.53	28.3	0.42	0.53	25.5	218.	134.	0.59	19.5	4.48	0.67	0.59	10.3	1.92	2.27	2.45	111.	180.
Enkj 7	11.7	236.	8.29	41.2	29.2	418.	4.50	1.02	5.52	11.7	3.14	2.08	20.1	0.39	1.18	17.7	258.	70.9	1.19	21.5	3.77	0.56	0.62	6.49	1.79	1.82	2.21	101.	128.
Enkj 8	3.91	228.	14.5	47.3	27.1	358.	4.43	0.92	4.25	13.0	3.15	0.90	23.4	0.35	1.12	18.6	366.	47.3	0.34	16.2	3.83	0.63	0.67	7.62	2.30	1.78	2.12	73.0	137.
Enkj 9	21.4	489.	8.52	40.7	33.9	632.	4.20	1.02	5.70	20.8	3.13	1.89	19.2	0.39	1.13	17.2	385.	73.2	1.17	22.0	3.62	0.69	0.53	6.49	1.72	1.36	2.16	84.9	160.
Enkj 10	4.38	396.	7.93	60.1	27.0	243.	8.16	1.07	5.07	21.4	4.40	2.45	28.2	0.42	0.73	24.4	252.	135.	0.40	18.9	4.58	0.88	0.59	10.7	2.29	2.36	2.39	102.	181.
Enkj 11	3.28	96.1	1.19	12.6	33.1	48.2	0.45	0.75	10.0	26.1	2.26	0.80	4.57	0.56	1.28	10.4	--	23.1	0.29	36.8	2.24	0.11	0.56	1.27	0.60	2.24	2.68	90.2	88.7
Enkj 12	1.77	133.	3.26	7.68	36.2	58.7	0.34	0.53	6.92	15.2	1.52	1.02	2.99	0.47	2.82	4.81	43.9	13.2	0.12	39.9	1.39	0.16	0.39	0.87	--	3.35	1.82	112.	46.2
Enkj 13	10.9	80.3	2.54	20.2	43.2	193.	0.70	0.79	8.02	16.8	2.47	0.89	9.09	0.49	1.40	12.5	123.	21.3	0.32	38.1	2.50	0.36	0.43	2.51	0.49	2.49	2.24	144.	128.
Enkj 14	2.06	131.	4.46	11.5	32.1	103.	0.46	0.58	6.23	15.5	1.36	1.00	4.98	0.42	2.46	3.92	66.7	14.8	0.19	34.5	1.49	0.11	0.36	1.14	--	1.79	1.84	63.2	66.9
Enkj 15	16.6	338.	4.74	38.0	26.5	1130.	2.29	1.12	5.59	17.0	3.06	1.70	18.9	0.44	1.16	15.4	103.	45.3	0.53	35.1	3.40	0.52	0.60	5.30	1.20	2.09	2.43	150.	145.
Enkj 16	21.7	301.	5.02	57.2	22.2	921.	4.21	1.29	5.25	18.6	4.59	2.27	28.4	0.46	1.01	19.0	160.	88.3	1.02	21.5	4.14	0.77	0.71	8.32	1.99	2.07	2.59	91.2	165.
Enkj 17	28.1	437.	3.78	25.0	25.5	1712.	0.82	0.84	5.25	13.6	1.81	1.11	10.6	0.41	1.35	12.7	143.	23.3	0.55	40.1	2.24	0.24	0.40	3.15	0.58	2.29	1.96	92.0	56.8
Enkj 18	20.9	375.	6.22	54.2	26.2	749.	4.54	1.22	5.63	20.1	4.10	2.16	26.8	0.43	0.95	19.5	167.	85.3	0.89	22.6	4.23	0.71	0.60	7.98	1.76	2.23	2.47	86.4	201.
Enkj 19	27.1	768.	3.72	47.3	20.0	691.	2.97	0.99	4.52	15.5	3.58	2.18	20.6	0.33	1.04	18.4	95.3	66.9	0.75	19.1	3.10	0.66	0.48	6.91	1.63	2.25	1.93	123.	128.
Enkj 21	20.1	288.	4.82	55.3	25.7	836.	4.36	1.26	5.47	16.0	4.24	2.19	27.4	0.44	0.98	18.8	125.	83.8	0.81	21.8	4.05	0.71	0.72	8.47	1.72	2.27	2.55	96.0	171.
Enkj 22	9.14	355.	6.03	54.4	24.5	700.	4.33	1.25	5.58	24.6	3.93	2.05	27.5	0.43	0.85	21.1	215.	83.0	0.66	21.9	4.16	0.82	0.76	8.18	1.60	1.92	2.52	105.	129.
Enkj 23	36.4	424.	7.64	57.2	24.6	906.	4.29	1.30	5.52	16.1	3.97	2.03	28.3	0.42	0.89	21.6	187.	83.3	0.85	22.2	4.22	0.76	0.75	8.27	1.65	2.02	2.61	89.5	176.
Enkj 24	3.57	372.	3.68	45.4	19.6	890.	3.03	1.08	4.01	16.7	3.37	2.02	20.7	0.36	1.40	16.3	91.7	70.2	0.55	19.2	3.28	0.57	0.60	6.35	1.73	2.37	2.20	69.3	150.
Enkj 25	26.9	371.	4.56	53.2	24.3	801.	2.89	1.15	5.43	18.6	3.88	2.32	24.4	0.42	0.93	22.6	205.	70.4	0.88	20.7	3.64	0.76	0.67	8.19	1.54	1.98	2.30	93.3	203.
Enkj 26	16.3	354.	4.62	60.3	25.1	843.	4.72	1.40	5.84	11.5	4.23	2.42	30.7	0.47	0.81	24.3	159.	95.9	0.79	22.5	4.41	0.80	0.84	8.89	1.49	3.09	2.73	93.3	217.
Enkj 27	20.7	381.	6.78	48.7	27.7	835.	2.36	1.17	6.28	15.6	4.48	1.91	24.3	0.50	1.19	18.8	241.	56.9	0.81	24.6	3.86	0.87	0.62	8.15	1.53	2.59	2.63	259.	182.
Enkj 28	9.51	387.	12.5	38.8	29.6	268.	3.77	0.99	5.97	27.7	2.89	1.92	18.9	0.45	1.10	13.5	267.	62.0	0.83	26.2	3.13	0.57	0.57	6.19	3.73	2.79	2.30	92.4	123.
Enkj 29	6.69	329.	9.83	36.8	30.6	291.	4.59	0.99	5.82	17.5	2.83	2.16	17.4	0.42	1.16	13.7	232.	74.2	0.65	25.5	2.88	0.57	0.61	5.88	1.99	2.82	2.22	115.	153.
Enkj 30	13.9	542.	9.27	32.2	25.8	207.	3.96	0.79	5.22	13.5	2.41	1.96	15.6	0.32	0.83	17.1	229.	57.5	0.72	22.3	3.01	0.48	0.48	5.57	1.68	1.23	1.74	178.	75.2
Enkj 31	10.5	249.	9.87	44.8	29.6	776.	3.56	1.10	5.85	16.1	3.92	0.93	21.5	0.39	1.30	21.4	234.	32.8	0.56	24.3	4.34	0.80	0.64	7.17	1.07	0.79	2.33	186.	154.
Enkj 32	7.81	335.	5.62	52.5	26.7	711.	3.90	1.23	5.97	16.1	4.04	2.16	24.7	0.42	1.60	25.8	195.	79.7	0.78	23.4	4.91	0.76	0.69	7.92	1.09	1.41	2.53	90.6	134.
Enkj 33	17.2	369.	4.75	54.0	27.9	701.	4.10	1.23	5.84	17.7	4.30	2.31	24.8	0.41	1.23	23.8	220.	77.8	0.75	23.2	4.78	0.72	0.74	8.05	1.39	1.62	2.46	126.	172.
Enkj 34	9.80	286.	9.36	49.7	28.9	658.	4.65	1.16	5.61	17.2	3.73	1.39	23.4	0.40	1.41	27.1	278.	53.5	0.73	23.0	4.48	0.66	0.77	7.54	1.65	1.01	2.35	97.1	151.
ave. error	0.13	34.	0.20	0.37	0.12	1.5	0.099	0.021	0.015	2.6	0.056	0.031	0.079	0.012	0.006	2.5	29.	2.2	0.028	0.022	0.037	0.043	0.056	0.062	0.19	0.19	0.050	2.1	22.
in %	1.1	7.1	2.8	0.7	0.5	0.4	2.7	1.9	0.3	15.	1.3	1.9	0.3	2.9	0.7	12.	16.	3.3	4.0	0.1	0.9	5.2	8.2	0.8	9.5	9.5	2.0	2.1	13.

Table 4. Raw elemental concentration data from Enkomi (Enkj), Pyla Kokkinokremos (Pylj) and Maa Palaeokastro (Maaj) measured by NAA, University Bonn, in µg/g (ppm), if not indicated otherwise, and below average experimental uncertainties (errors), also in percent, for the whole dataset given in this table

Sample	As	Ba	Ca%	Ce	Co	Cr	Cs	Eu	Fe%	Ga	Hf	K %	La	Lu	Na%	Nd	Ni	Rb	Sb	Sc	Sm	Ta	Tb	Th	U	W	Yb	Zn	Zr
Enkj 35	16.3	843.	6.90	57.9	22.3	299.	3.05	1.29	5.44	15.0	6.30	1.60	32.5	0.47	0.097	22.7	159.	62.1	0.68	18.0	4.88	1.13	0.81	7.55	4.75	1.44	3.07	131.	255.
Enkj 36	38.5	349.	11.7	31.6	26.3	330.	3.03	0.87	5.14	13.1	2.40	1.48	15.1	0.33	1.31	13.3	179.	50.1	0.91	22.1	3.02	0.41	0.39	4.82	1.50	0.94	1.84	117.	117.
Enkj 37	8.13	324.	11.4	33.5	27.7	239.	3.28	0.91	5.40	14.2	2.54	1.97	16.8	0.36	1.18	17.1	219.	64.6	0.64	24.0	3.19	0.41	0.55	5.29	1.46	1.46	1.99	100.	109.
Enkj 38	12.6	197.	10.1	35.9	26.6	572.	3.36	1.03	5.67	17.1	3.47	1.82	19.1	0.38	1.33	17.8	172.	55.8	0.71	23.8	3.63	0.55	0.56	5.60	1.35	1.23	2.19	91.0	118.
Enkj 39	11.5	209.	10.4	34.7	29.0	395.	3.74	0.94	5.57	12.2	2.91	1.89	17.2	0.36	1.16	17.0	217.	64.3	0.69	24.1	3.25	0.53	0.46	5.60	1.90	1.36	2.11	109.	145.
Enkj 40	12.1	344.	12.3	34.7	28.7	391.	3.41	0.96	5.46	9.40	2.86	1.80	17.1	0.39	1.21	10.6	218.	63.1	0.66	24.1	3.20	0.49	0.69	5.47	1.69	1.47	2.16	90.6	138.
Enkj 41	16.8	519.	15.2	58.9	19.0	152.	1.29	1.39	4.47	8.34	4.05	1.31	26.7	0.35	0.37	20.9	138.	31.9	0.76	13.6	4.67	1.03	0.69	5.50	4.03	0.95	2.28	78.5	187.
Enkj 42	30.6	525.	7.75	49.0	44.5	1262.	2.49	0.97	5.36	15.1	2.56	1.17	22.9	0.34	0.42	21.3	601.	47.3	0.49	23.1	3.66	0.71	0.60	6.14	1.73	1.16	1.92	88.5	110.
Enkj 43	12.2	471.	8.45	70.1	19.7	207.	2.67	1.79	4.64	14.3	6.89	1.12	41.4	0.60	0.66	35.7	138.	50.8	0.63	16.1	6.79	1.22	1.07	9.17	2.23	1.73	3.81	134.	271.
Enkj 44	78.9	557.	7.91	70.3	9.64	155.	3.07	1.24	3.24	20.7	6.97	1.93	33.8	0.39	0.79	26.2	91.4	61.1	1.40	12.0	4.93	1.00	0.68	10.1	4.22	1.07	2.60	126.	304.
Enkj 45	27.3	861.	9.18	71.9	27.8	261.	3.04	1.48	6.52	23.4	6.11	1.68	31.8	0.43	0.71	26.5	153.	52.6	0.97	19.5	5.58	1.76	0.84	9.49	2.25	1.61	2.68	108.	254.
Enkj 46	10.6	254.	13.4	68.2	9.15	127.	4.15	1.33	3.03	18.2	4.40	1.81	34.8	0.37	1.04	24.3	98.4	72.1	1.17	11.5	5.11	0.87	0.74	9.25	3.91	1.22	2.49	109.	205.
Enkj 47	12.5	594.	11.4	98.7	27.5	208.	3.47	2.10	5.32	20.9	6.95	1.80	47.6	0.66	0.22	43.0	195.	70.2	1.03	18.4	8.01	1.38	1.17	10.4	3.75	1.83	4.37	132.	266.
Enkj 48	14.1	424.	22.4	51.9	14.6	111.	1.15	1.23	3.21	10.6	3.19	0.74	26.5	0.33	0.12	22.9	96.1	28.0	0.49	10.7	4.18	0.81	0.79	5.36	2.46	1.13	2.25	63.0	138.
Enkj 49	39.5	286.	16.2	54.9	25.3	157.	1.44	1.42	5.23	8.91	4.02	1.41	26.1	0.34	0.50	22.3	125.	30.2	1.21	14.3	4.65	1.04	0.68	5.03	1.92	1.17	2.11	225.	156.
Enkj 50	35.7	968.	3.39	132.	36.0	304.	2.76	2.67	7.34	21.2	8.58	0.98	54.5	0.82	0.25	51.0	185.	49.7	1.23	20.7	9.84	1.77	1.49	13.1	2.46	2.40	5.28	99.8	356.
Maaj 1	4.33	1507.	10.5	52.4	30.4	144.	2.72	1.21	4.45	14.6	3.20	1.17	26.4	0.39	0.47	18.7	258.	54.4	0.56	17.0	4.43	0.96	0.80	6.42	1.34	1.45	2.36	84.4	141.
Maaj 2	6.13	548.	4.67	61.7	23.7	76.0	2.53	0.94	3.93	21.3	3.40	1.52	20.7	0.32	0.50	18.1	63.3	54.5	0.58	13.1	3.43	1.05	0.53	7.76	1.07	1.99	1.95	89.2	136.
Maaj 3	4.22	597.	6.85	56.7	22.9	106.	3.29	1.02	4.55	18.0	3.79	1.26	26.0	0.35	0.40	20.3	113.	57.7	0.40	15.9	3.57	1.13	0.62	7.70	1.43	1.86	2.02	88.1	171.
Maaj 4	8.98	502.	8.34	61.4	23.4	139.	5.61	1.12	4.98	18.1	3.79	2.15	27.7	0.42	1.11	19.1	182.	94.0	0.54	20.3	4.25	0.96	0.69	9.20	2.10	2.28	2.39	103.	182.
Maaj 5	3.47	613.	4.83	43.4	15.6	131.	1.55	0.75	3.96	18.7	13.1	1.09	17.6	0.38	0.73	14.8	66.6	33.3	0.37	12.0	3.04	1.36	0.63	7.69	1.97	1.61	2.32	83.3	435.
Maaj 6	5.72	527.	8.05	49.9	21.4	128.	3.34	0.93	4.50	18.5	3.12	1.36	23.1	0.34	0.64	20.2	133.	63.5	0.41	16.8	3.32	0.94	0.49	6.34	1.06	1.66	1.97	83.3	95.7
Maaj 7	4.67	328.	8.53	27.4	43.0	2305.	1.33	0.87	8.16	18.5	2.37	0.98	11.2	0.45	1.52	12.5	189.	26.7	0.39	40.9	2.67	0.19	0.70	3.34	1.08	2.52	2.14	94.8	158.
Maaj 8	5.44	281.	8.14	70.0	24.6	128.	6.06	1.13	4.66	20.6	4.15	2.11	33.5	0.39	0.93	27.4	112.	114.	0.53	18.2	4.52	1.04	0.66	10.8	2.18	2.05	2.53	85.7	118.
Maaj 9	5.16	688.	7.98	55.7	7.42	125.	3.32	1.12	3.04	15.0	5.48	1.48	27.2	0.37	0.49	20.3	150.	57.9	0.93	11.4	4.04	0.85	0.65	9.07	2.63	1.03	2.34	98.9	259.
Maaj 10	2.84	431.	7.61	56.7	24.9	272.	3.50	1.00	4.54	17.3	3.44	1.29	25.2	0.35	0.53	18.6	100.	59.1	0.39	16.7	3.23	0.98	0.47	6.62	1.17	5.69	2.02	79.6	116.
Maaj 11	10.0	398.	9.48	31.0	26.7	265.	1.31	0.91	5.59	10.1	2.71	1.19	14.9	0.37	1.39	17.1	158.	38.8	0.50	23.4	2.92	0.46	0.52	4.68	1.21	2.32	2.00	85.8	125.
Maaj 12	7.80	537.	7.09	81.1	8.50	148.	4.24	1.55	3.72	21.2	5.14	1.91	40.6	0.46	0.86	32.8	85.1	75.1	1.55	14.1	6.03	1.11	0.93	12.2	3.41	1.50	3.02	110.	235.
Maaj 13	3.04	302.	2.92	59.7	17.2	272.	5.06	0.96	3.65	19.3	4.39	1.89	28.4	0.35	0.80	23.4	101.	93.8	0.54	13.8	3.78	1.03	0.56	9.41	1.97	2.40	2.22	60.4	202.
Maaj 14	6.42	314.	5.88	65.7	19.2	108.	4.84	1.16	3.74	17.7	4.14	1.79	30.7	0.38	0.67	17.6	101.	89.2	0.45	13.2	4.39	1.12	0.69	9.41	2.12	10.8	2.26	75.5	129.
Maaj 15	5.94	956.	5.51	29.2	27.7	567.	1.19	0.85	5.62	10.0	2.52	1.69	13.9	0.40	0.99	12.2	137.	33.0	0.46	31.8	2.72	0.43	0.41	3.85	0.53	2.45	1.87	92.6	60.2
Maaj 16	8.27	657.	2.08	35.4	24.3	1395.	1.20	0.96	5.57	10.8	2.45	0.97	15.7	0.44	1.30	16.3	138.	26.5	0.32	38.7	3.03	0.48	0.44	4.87	0.66	3.62	2.08	84.5	66.6
Maaj 17	5.50	354.	7.09	44.7	27.8	432.	6.58	1.01	5.57	26.7	3.39	1.89	21.7	0.39	1.32	21.4	310.	69.5	0.98	23.3	3.30	0.60	0.58	8.90	1.61	2.21	2.09	73.9	150.
ave. error	0.13	34.	0.20	0.37	0.12	1.5	0.099	0.021	0.015	2.6	0.056	0.031	0.079	0.012	0.006	2.5	29.	2.2	0.028	0.022	0.037	0.043	0.056	0.062	0.19	0.19	0.050	2.1	22.
in %	1.1	7.1	2.8	0.7	0.5	0.4	2.7	1.9	0.3	15.	1.3	1.9	0.3	2.9	0.7	12.	16.	3.3	4.0	0.1	0.9	5.2	8.2	0.8	9.5	9.5	2.0	2.1	13.

Table 4 (continued). Raw elemental concentration data from Enkomi (Enkj), Pyla Kokkinokremos (Pylj) and Maa Palaeokastro (Maaj) measured by NAA, University Bonn, in µg/g (ppm), if not indicated otherwise, and below average experimental uncertainties (errors), also in percent, for the whole dataset given in this table

Sample	As	Ba	Ca%	Ce	Co	Cr	Cs	Eu	Fe%	Ga	Hf	K %	La	Lu	Na%	Nd	Ni	Rb	Sb	Sc	Sm	Ta	Tb	Th	U	W	Yb	Zn	Zr
Maaj 18	6.45	252.	3.79	69.2	18.7	165.	5.39	1.12	4.27	22.6	4.34	1.91	33.1	0.38	0.62	24.7	123.	101.	0.46	14.3	4.25	1.10	0.65	10.1	1.99	2.43	2.38	89.8	177.
Maaj 19	5.80	456.	2.50	85.3	19.1	131.	7.45	1.28	4.67	24.8	5.80	2.68	41.1	0.51	0.66	27.0	154.	138.	0.50	17.6	4.99	1.51	0.70	14.0	2.41	3.10	2.91	104.	187.
Maaj 20	6.99	833.	2.14	86.8	23.0	372.	4.01	1.46	5.27	16.1	6.54	1.95	35.4	0.53	0.51	30.4	128.	89.2	0.57	17.8	5.75	1.35	0.92	13.1	1.61	3.00	3.17	92.4	252.
Maaj 21	5.73	263.	4.18	35.3	30.6	449.	1.36	0.97	6.43	13.6	3.49	1.11	14.0	0.46	1.34	13.6	76.0	35.1	0.42	25.2	2.78	0.47	0.58	4.36	0.74	2.51	2.21	73.8	144.
Maaj 22	11.0	329.	2.71	110.	28.3	224.	4.70	1.44	5.56	24.4	7.98	2.34	35.8	0.53	0.73	33.2	113.	86.5	0.84	18.7	6.27	1.53	0.99	13.7	2.11	1.80	3.46	110.	309.
Maaj 23	4.69	378.	7.05	77.0	22.0	150.	6.16	1.31	4.75	18.7	5.04	2.22	36.2	0.39	0.84	30.6	164.	113.	0.44	17.1	5.73	1.23	0.84	11.8	2.28	1.75	2.59	86.7	207.
Maaj 24	16.2	657.	2.13	92.8	37.7	455.	5.48	1.68	5.69	23.1	7.44	2.40	42.0	0.53	0.83	35.6	176.	121.	0.95	20.3	7.22	1.17	1.01	13.0	1.96	2.36	3.64	104.	285.
Maaj 25	8.26	806.	2.63	50.8	22.3	572.	2.10	1.24	6.88	18.4	4.76	1.52	21.3	0.47	0.92	22.3	90.6	45.5	0.65	26.5	4.48	0.90	0.66	7.92	1.07	1.47	2.73	75.8	162.
Maaj 26	8.23	320.	3.37	100.	27.6	233.	6.61	1.91	6.05	25.0	7.14	2.28	49.8	0.59	0.53	43.1	178.	126.	0.77	20.4	7.95	1.50	1.12	14.5	2.35	2.37	4.02	118.	278.
Maaj 27	8.85	300.	4.46	64.9	30.3	408.	3.39	1.47	8.00	27.4	6.01	1.65	30.3	0.54	0.70	29.4	209.	70.4	0.83	31.4	5.78	1.16	0.89	9.73	1.44	1.60	3.30	108.	255.
Maaj 28	8.74	604.	5.58	39.1	59.0	494.	1.68	1.04	6.17	16.0	4.26	1.44	17.4	0.43	0.87	16.4	377.	40.0	0.65	25.3	3.48	0.72	0.72	6.65	1.21	1.52	2.48	104.	148.
Maaj 29	7.20	649.	10.4	53.7	22.9	131.	4.05	1.09	4.61	16.7	3.43	1.92	26.0	0.37	0.94	20.5	119.	79.0	0.49	19.2	4.13	0.71	0.61	7.85	1.70	1.59	2.37	105.	159.
Maaj 30	6.74	694.	3.53	47.8	25.8	547.	2.17	1.04	6.49	19.9	4.72	1.93	18.6	0.41	1.16	13.8	98.5	51.0	0.56	24.3	3.64	0.89	0.61	7.02	1.11	1.18	2.42	85.7	203.
Maaj 31	7.79	425.	5.03	68.1	30.7	808.	2.71	1.42	7.78	20.2	7.23	1.45	27.5	0.54	0.77	22.6	196.	59.6	0.77	29.9	4.90	1.05	0.79	9.39	1.50	1.69	3.18	112.	214.
Maaj 32	3.54	1739.	5.84	67.6	17.9	138.	1.41	1.49	3.44	14.4	10.3	0.99	33.4	0.53	0.35	22.9	127.	39.3	0.36	13.0	5.06	1.14	0.90	7.55	1.99	1.51	3.51	67.2	355.
Maaj 33	8.56	827.	4.04	73.4	9.63	176.	4.99	1.30	3.59	20.7	7.02	1.80	36.5	0.41	0.77	21.9	110.	81.0	1.70	13.6	5.07	1.30	0.79	11.6	3.71	1.32	2.78	110.	268.
Maaj 34	7.78	577.	11.7	83.8	22.8	135.	1.96	1.66	6.46	19.8	7.64	1.12	36.0	0.47	0.58	30.0	113.	46.8	0.44	20.1	6.17	1.79	0.91	9.49	2.46	1.54	2.95	105.	301.
Maaj 35	3.96	1967.	5.13	81.8	23.3	157.	1.83	1.75	3.88	13.8	12.7	1.11	40.0	0.60	0.41	32.4	161.	51.4	0.49	14.6	6.17	1.38	1.08	8.94	2.08	1.31	3.95	74.0	484.
Pylj 4	17.1	765.	1.61	57.1	12.8	157.	5.30	0.92	3.63	11.3	5.55	2.25	23.9	0.33	0.82	17.8	125.	88.7	0.97	14.6	3.25	0.84	0.52	13.4	2.38	2.09	2.07	63.9	209.
Pylj 5	1.49	108.	3.49	13.4	33.5	208.	0.63	0.62	6.70	17.9	1.64	0.35	5.82	0.41	1.12	10.5	69.3	11.7	0.11	38.2	1.67	0.22	0.51	1.80	0.49	0.93	1.87	46.5	79.6
Pylj 6	4.29	568.	2.76	27.2	27.8	171.	0.78	0.76	5.98	13.2	3.02	0.51	10.4	0.41	1.21	13.2	89.7	16.1	0.22	33.1	2.36	0.39	0.53	3.48	0.76	1.85	2.04	43.1	93.7
Pylj 7	1.30	308.	3.22	8.15	30.0	140.	0.42	0.45	5.98	11.8	1.37	0.54	3.43	0.36	2.55	3.12	51.0	8.33	0.062	34.1	1.19	0.13	0.33	1.03	--	1.52	1.61	64.5	--
Pylj 8	6.74	320.	13.8	34.2	21.3	384.	2.55	0.86	4.49	13.1	2.36	0.68	16.7	0.33	1.44	16.2	241.	19.6	0.37	17.9	2.80	0.40	0.44	5.00	2.06	1.63	1.81	66.7	129.
Pylj 9	4.78	377.	7.54	61.8	6.70	122.	4.29	1.16	2.84	15.0	4.54	1.48	30.7	0.32	0.69	19.7	74.4	74.7	1.17	10.9	4.04	0.87	0.67	8.92	2.89	0.94	2.23	92.7	179.
Pylj 10	7.12	577.	17.2	34.9	20.0	274.	2.18	0.89	3.74	10.9	2.26	0.51	17.4	0.35	1.29	13.1	159.	17.4	0.91	16.6	2.82	0.46	0.58	4.74	5.79	1.12	2.05	84.6	142.
Pylj 11	5.17	547.	5.06	85.8	23.7	119.	1.60	1.49	4.22	10.6	7.37	0.34	31.0	0.44	0.24	23.8	104.	19.0	0.39	13.7	5.15	1.26	0.92	8.54	1.83	1.64	3.05	47.5	255.
Pylj 12	1.21	102.	6.53	5.81	39.7	444.	0.23	0.34	5.45	8.93	0.75	0.26	2.47	0.31	1.08	5.02	238.	10.4	0.12	41.2	0.79	0.069	0.31	0.82	0.51	1.67	1.14	49.6	29.5
Pylj 13	8.56	379.	11.1	43.8	23.2	355.	3.37	1.09	4.87	10.6	3.22	1.59	21.7	0.38	0.95	23.8	165.	63.8	0.60	21.4	--	0.66	0.77	6.49	1.83	1.54	2.23	126.	129.
Pylj 14	4.66	264.	5.36	57.0	34.0	493.	5.22	1.04	4.99	15.4	3.38	1.77	25.8	0.43	0.90	25.6	450.	88.2	0.54	19.0	--	0.85	0.70	8.55	1.69	1.81	2.34	85.5	174.
Pylj 14a	17.0	325.	7.63	61.3	28.0	310.	5.49	1.12	5.21	21.8	3.87	1.92	30.0	0.43	0.58	31.5	317.	101.	0.70	18.1	--	0.91	0.68	9.92	2.13	2.10	2.51	110.	143.
Pylj 15	3.98	605.	5.85	55.4	34.6	386.	6.89	1.05	5.60	15.2	3.75	1.96	25.9	0.39	0.68	25.2	413.	108.	0.72	21.4	--	0.79	0.64	9.37	2.63	2.02	2.32	104.	218.
ave. error	0.13	34.	0.20	0.37	0.12	1.5	0.099	0.021	0.015	2.6	0.056	0.031	0.079	0.012	0.006	2.5	29.	2.2	0.028	0.022	0.037	0.043	0.056	0.062	0.19	0.19	0.050	2.1	22.
in %	1.1	7.1	2.8	0.7	0.5	0.4	2.7	1.9	0.3	15.	1.3	1.9	0.3	2.9	0.7	12.	16.	3.3	4.0	0.1	0.9	5.2	8.2	0.8	9.5	9.5	2.0	2.1	13.

Table 4 (continued). Raw elemental concentration data from Enkomi (Enkj), Pyla Kokkinokremos (Pylj) and Maa Palaeokastro (Maaj) measured by NAA, University Bonn, in µg/g (ppm), if not indicated otherwise, and below average experimental uncertainties (errors), also in percent, for the whole dataset given in this table

	gen. Cyprus		Enkomi?		gen. Cyprus		Troodos?		Central Levant?	
	CypM 6 samples		X076 17 samples		X082 4 samples		X083 8 samples		Ul97 11 samples	
	M	σ(%)	M	σ (%)	M	σ (%)	M	σ (%)	M	σ (%)
As	--		16.6	(55.)	7.96	(9.9)	4.64	(84.)	11.7	(33.)
Ba	400.	(19.)	358.	(15.)	585.	(52.)	172.	(54.)	956.	(51.)
Ca\%	3.28	(41.)	5.93	(29.)	3.90	(19.)	3.78	(27.)	9.62	(48.)
Ce	75.3	(3.6)	51.8	(4.6)	57.7	(5.6)	11.5	(23.)	64.4	(2.3)
Co	19.9	(7.2)	25.1	(9.1)	27.3	(8.8)	33.4	(7.8)	7.54	(8.2)
Cr	186.	(41.)	678.	(13.)	524.	(28.)	116.	(43.)	107.	(4.1)
Cs	6.57	(8.9)	3.96	(12.)	2.58	(11.)	0.56	(29.)	3.44	(11.)
Eu	1.12	(7.4)	1.20	(3.4)	1.29	(4.4)	0.56	(11.)	1.25	(2.0)
Fe\%	4.58	(5.7)	5.41	(6.2)	7.32	(3.7)	6.37	(6.8)	2.87	(3.5)
Ga	23.4	(8.4)	17.8	(15.)	21.5	(12.)	15.3	(18.)	16.1	(13.)
Hf	5.14	(4.1)	4.02	(5.8)	5.66	(12.)	1.57	(14.)	4.32	(22.)
K\%	2.31	(5.1)	2.14	(7.8)	1.68	(24.)	0.80	(34.)	1.81	(12.)
La	35.7	(4.9)	25.2	(5.8)	24.2	(9.0)	5.12	(26.)	33.0	(1.6)
Lu	0.41	(4.3)	0.42	(4.3)	0.49	(3.4)	0.42	(8.8)	0.36	(3.9)
Na\%	0.72	(20.)	1.13	(25.)	0.92	(36.)	2.08	(36.)	0.66	(26.)
Nd	27.8	(7.7)	21.5	(9.1)	21.8	(20.)	6.28	(41.)	26.7	(4.8)
Ni	162.	(34.)	181.	(27.)	146.	(30.)	68.5	(53.)	90.0	(49.)
Rb	120.	(9.4)	75.3	(13.)	56.5	(9.6)	16.0	(34.)	68.9	(5.6)
Sb	0.60	(20.)	0.81	(13.)	0.71	(4.2)	0.16	(43.)	1.29	(22.)
Sc	16.2	(2.7)	22.1	(5.2)	28.1	(2.4)	38.0	(4.4)	11.1	(2.3)
Sm	4.71	(3.8)	4.12	(8.2)	4.68	(8.1)	1.61	(16.)	5.26	(4.9)
Ta	1.23	(4.1)	0.72	(6.0)	1.00	(4.6)	0.19	(30.)	0.83	(4.7)
Tb	0.67	(7.1)	0.67	(8.8)	0.74	(8.2)	0.41	(18.)	0.73	(6.0)
Th	11.8	(5.3)	7.83	(3.0)	8.51	(2.5)	1.35	(26.)	8.98	(4.8)
U	3.13	(54.)	1.77	(26.)	1.29	(15.)	0.31	(39.)	3.27	(7.9)
W	2.25	(25.)	2.01	(20.)	1.49	(9.3)	1.86	(35.)	1.15	(15.)
Yb	2.74	(2.4)	2.58	(3.7)	3.08	(2.0)	1.89	(8.8)	2.57	(2.7)
Zn	91.7	(11.)	95.5	(15.)	95.1	(9.1)	83.9	(28.)	108.	(8.1)
Zr	215.	(14.)	158.	(17.)	208.	(12.)	74.4	(36.)	193.	(20.)

Table 5. Given are average concentration values M in µg/g (ppm), if not indicated otherwise, of groups of samples from the Cypriot sites Enkomi, Maa Palaeokastro, and Pyla Kokkinokremos. σ is the standard deviation (root mean square deviation) in %. All members of the groups in the databank are included. The individual samples have been corrected with a best relative factor with respect to the grouping values (given below).

Best relative fit factors of the individual samples with respect to their grouping values (w after the sample No. indicates repetition measurement. Group members of samples not part of this project have not been published except for the samples from Sidon: Ul97):
CypM: Tiry 181(0.99), Ialy 141n(0.92)base ring, Maaj 13(1.20)(Cr high), 18(1.10), 19(0.91), Qant 29(0.92)
X076: Enkj 16(0.95), 18(0.98), 19(1.14), 21(0.97), 22(0.97), 23(0.96), 24(1.15), 25(1.01), 26(0.90), 32(0.98), 33(0.96), Enkp 1(1.03), 5(0.95), 8(0.99), 27(1.01), 30(0.92), HSTp 24(1.10)
X082: Maaj 25(1.09), 27(0.88), 30(1.17), 31(0.92)
X083: Enkj 12(0.96), 13(0.77), 14(1.07), Pylj 5(0.97), 7(1.16), Tahn 4(0.95), 17(0.99), 27(1.02)
Ul97: Enkj 46(0.96), Maaj 12(0.84), Sidon 22(1.13), 23(1.09), 24(1.02), 24w(1.03), 51(0.99), 52(1.00), 68(1.01), 70(1.04), 71(0.98)

points to the Levant, probably the region of Sidon (cf. Zuckerman *et al*. 2020: 576).

The group X083 and also the quite similar group X171 (here only sample **Pylj 12**) has a peculiar composition that has been observed before in White Slip vessels from Cyprus. It has high Sc values >35ppm and also very low Cs values, ca (1 or <1) ppm. It has been suggested that the high Sc is 'apparently basaltic, since the distinctive composition pattern resembles that of some basaltic common rocks' (Artzy *et al.* 1981: 44). Michal Artzy assumes the workshops producing these wares were in the vicinity of the Troodos Mountains. This composition is also found in Cypriot White Slip Ware measured at Berkeley (Mommsen *et al.* 2002: 672, 632 [group HM1P]). The Manchester NAA Laboratory assigns these groups with high Sc in Cypriot White Slip Ware to the southern Cypriot regions of Larnaca and Limassol (Bryan *et al.* 1997: 38, 60 [groups 8–12]). Our group X083 has very large spreads for elements measured with high precision (see **Table 5**, e. g. Ce, Cr, Cs, La, Th) and is a tentatively formed sum-group of the pastes of several workshops all having the peculiar high Sc concentrations.

Aegean imports

As we had found a satisfying consistency between macroscopic fabric categories and NAA groups of Argive provenance (mainly regarding the MYBE group) in previous projects (see especially Badre *et al.* 2005: 25–26, table 3), we chose to sample only a few vessels of fabrics that should correspond to fabrics verified as Argive by NAA at other sites (**Fig. 2**). We selected three potentially Argive imports from among the ceramics of Enkomi IIB, a krater FT 281/282 painted by the potter or in the workshop referred to as 'Protome Painter A' and dated to LH IIIB Middle or the transition to LH IIIB Developed (**Enkj 1**, see Güntner 2000: 227, no. 116, 351–352, 368, map 3—with further bibliography), a shallow strap-handled bowl FT 295/296 (**Enkj 6**, **Fig. 33**) and a conical rhyton FT 199 (**Enkj 10**, **Fig. 33**).

Enkj 1 is made in Enkomi fabric M 8 corresponding to Tell Kazel fabric M 8 (cf. Jung 2008: 212). The stratigraphic ascription of that krater (4540/1+4545/..) to Enkomi IIIA is not certain. It rests on the mention of inv. no. 4540 for a bronze artefact from a well inside Room 39A of Level IIIA in City Quarter 4 West (Dikaios 1969/71: 187). However, seen against the stratigraphic contexts of other LH IIIB imports, this krater should have been imported during the settlement period of Level IIB, which would make its find context in a Level IIIA well a secondary one.

The NAA confirmed the manufacture of **Enkj 1**, **Enkj 6** and **Enkj 10** in the workshops of the Mycenae/Berbati group likely located in the northern Argolid. At the same time this chemical verification of the provenance ascription based on the macroscopic fabric group means that we can identify the largest portion of the Aegean pottery imports from Enkomi Level IIB as Argive products from the wider region of Mycenae, thus expanding Åkerström's export-oriented production from amphoroid kraters FT 54/55 (Åkerström 1987; Jung 2015: 248–249, fig. 5, 274) to many other shapes. This result lines up with those of many other projects investigating LH IIIA2–IIIB Mycenaean pottery imports found in Egypt, Palestine, Syria and Cyprus (Jung 2015 [with previous bibliography]; Mountjoy 2015; Mountjoy & Mommsen 2015; Zuckerman *et al*. 2020; Jung & Mommsen 2022).

A much smaller part consists of products from other regions bordering the Aegean Sea. Ceramics from Late Minoan Crete are quite well represented in certain LC IIC contexts such as Kition Chamber Tomb 9, lower burial stratum containing LM IIIB piriform jars, small stirrup jars, kylikes and probably one amphoroid krater as well (Karageorghis 1974: 57, 59–60, pls 138.38, 86; 139.44, 74, 83, 93; 141.35, 62; 142.60; 145.140; Mountjoy 2018: 596–597, fig. 296.234–235). The Minoan pottery from Enkomi Level IIB includes fine ware open and closed shapes as well as large coarse ware stirrup jars (Dikaios 1969/71: 312–313, pls 66.23, 28, 29; 67.1, 3, 28, 29; 92.25, 93.14; Jung 2009: 79, 90, fig. 3.2). We have analysed two Late Minoan vessels (**Fig. 3**), a large LM IIIB deep bowl (**Enkj 8**) and a coarse ware stirrup jar FT 164 with an incised sign on the one preserved handle (**Enkj 2**). Both are chemical singletons. A large deep bowl from the LM IIIB Early 'Makritikhos Kitchen Group' in Knossos gives us an almost exact parallel for the combination of shape and exterior linear decoration seen in **Enkj 8** (Hatzaki 2007: 237, fig. 6.27:2; 239). A deep bowl from a LM IIIA2–IIIB context at Kommos shows a combination of shape and similar flower motif (Watrous 1992: 69, fig. 44.1155).

The settlement of Pyla *Kokkinokremos* is known for its rather atypical selection of Minoan imports which, apart from the usual painted fine wares (e.g. Caloi 2015: 32–33, fig. 26) and the large coarse ware stirrup jars (Dikaios 1969/71: 906, pl. 238.1; Karageorghis & Georgiou 2012: 305–306; Bretschneider *et al*. 2017: 79), include a series of coarse ware amphoroid kraters, some of which reach pithos size (Dikaios 1969/71: 906, pls 237.1, 4; 297.1–4; Karageorghis & Demas 1984: 34, pls 18.20; 34; Karageorghis & Georgiou 2012: 302–305; Karageorghis 2014a: 165–167, colour pls 2–3.75; Karageorghis & Georgiou 2014: 124, 126–128, colour pl. 5, pl. 6.52; Caloi 2015: 31, 33, fig. 25). We have analysed three fragments belonging to such large-sized amphoroid kraters. One decorated with a wavy line on the neck and loops and concentric semicircles on the shoulder and belly cannot be assigned with certainty to any group in the Bonn database and remains a singleton for the time being (**Pylj 14**, **Fig. 10**). The chemical characteristics of a second one allow an ascription to either group AkaR or group ACb5 of the Greek mainland (**Pylj 14a**, **Fig. 9**). This would be surprising, as its complex curvilinear motifs, one of

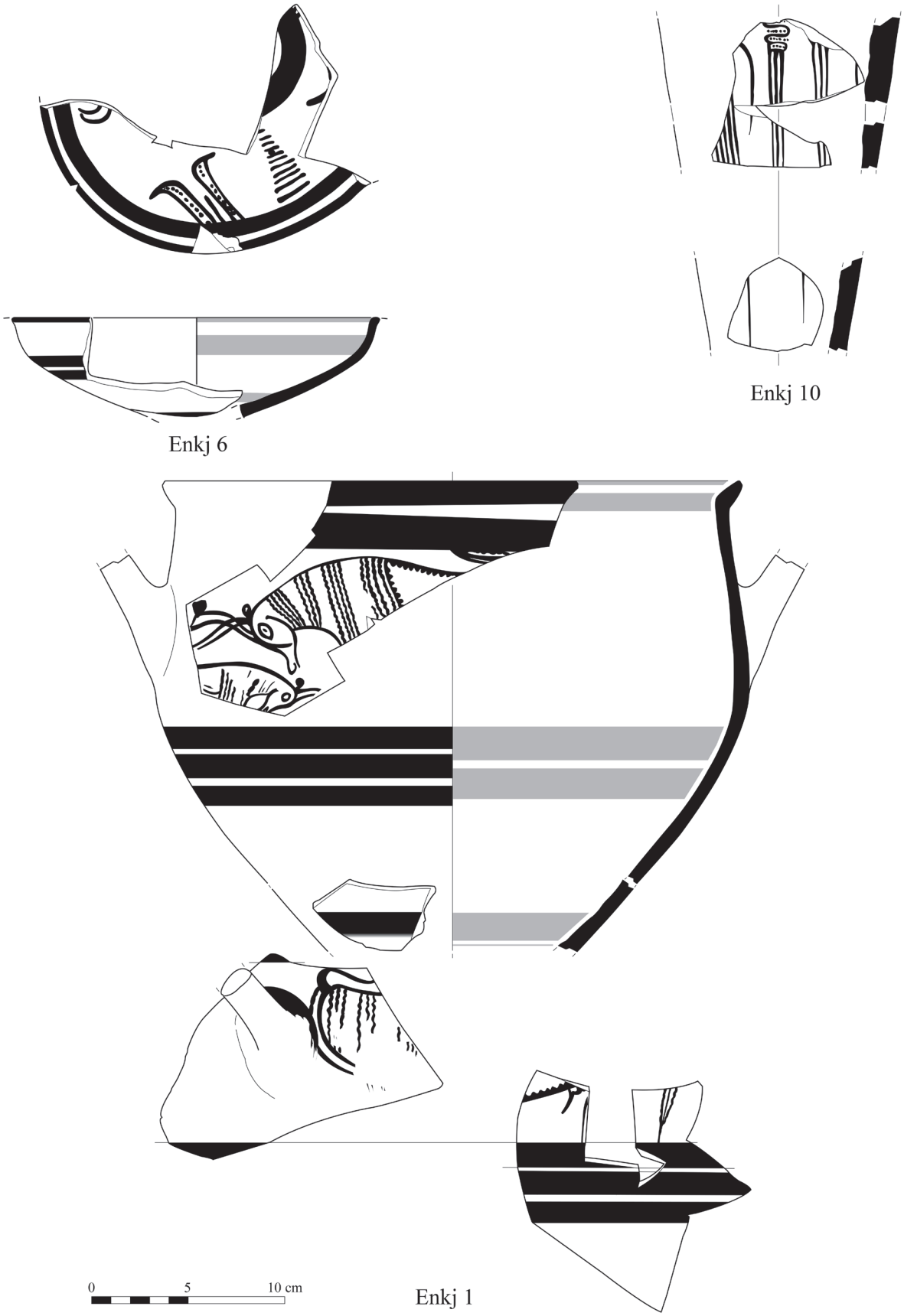


Figure 2. Enkomi IIB (Enkj 6, Enkj 10), Enkomi IIIA (Enkj 1): Mycenaean imports of the MYBE group. Scale 1:3 (drawings R. Jung, digitisation M. Frauenglas, R. Yassine)

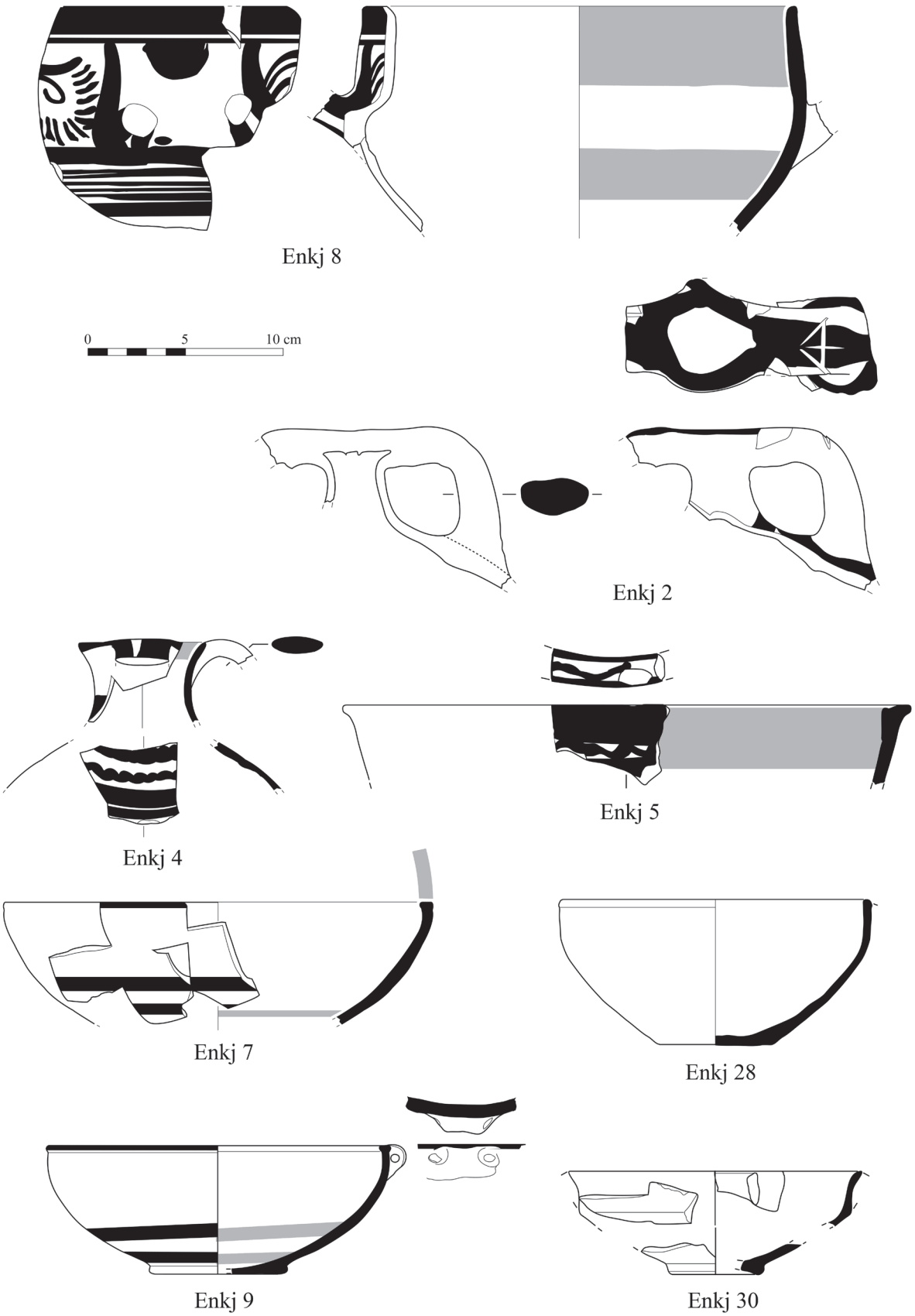


Figure 3. Enkomi IIB (Enkj 2, Enkj 4, Enkj 5, Enkj 7, Enkj 8, Enkj 9), Enkomi IIIA (Enkj 28, Enkj 30): Minoan imports (Enkj 2, Enkj 8), southeast Aegean imports (Enkj 4, Enkj 5) and local products of the CypI group (Enkj 7, Enkj 9, Enkj 28, Enkj 30). Scale 1:3 (drawings R. Jung, digitisation M. Frauenglas, R. Yassine)

which most probably belongs to a bird, seem Minoan rather than Mycenaean in character, as does its coarse fabric. The amphoroid krater with sample **Pylj 14a** has typological parallels at Phaestos, in the LM IIIC Early phase Ib of Khamalevri and at LM IIIC Late Karphi among others (see Borgna 2003: 137, cat. no. 7, 265, pls 29.7 [dated to LM IIIC Early], 70.6, 78.1; Andreadaki-Vlazaki & Papadopoulou 2007: 34, 48, fig. 5.1; Preston Day 2011: 206–207, fig. 6.19:K115.7). The third Minoan amphoroid krater is a member of the chemical group KnoL (**Pylj 15**, **Fig. 9**). Unfortunately, the preserved neck fragment does not provide any typological or stylistic traits useful for further discussion, but we can at least state that central Crete, most probably Knossos itself, was one of the regions that provided the inhabitants of Pyla with Minoan painted pottery. In order to narrow down the Cretan production regions of the various Minoan coarse ware imports at Pyla, we have now started a petrography program in cooperation with Pamela Fragnoli and the team of the new Pyla excavations.

One more Aegean production region is represented among the LC IIC imports examined in our analytical project. Fragments of two sampled pots have typological characteristics pointing to the southeastern Aegean, i.e. the Dodecanese and the opposing coasts of Asia Minor (**Fig. 3**). The first one is a juglet identified as an import from Miletus (**Enkj 4**, **Fig. 33**, group MilD, see Mommsen *et al.* 2002), while the second is an amphoroid krater, which belongs to a chemical group with members at Ialysos on Rhodes and Miletus (**Enkj 5**, group RHc2, see Marketou *et al.* 2006: 5, 18–20, nos 190, 204–206, 211, 227 and 229). The juglet finds quite a good parallel in a LH IIIC context at Miletus (Schiering 1960: 5, 23, 30, pl. 14.3 [right]), i.e. Miletus Phase VI (Niemeier 2007: 16). These results add to the picture that the southeastern Aegean regions exported painted fine wares to the Levant and Cyprus in the decades around 1200 BCE (for the duration of Enkomi IIB see *excursus*). Those fine wares mainly consisted of open shapes—first and foremost amphoroid kraters, but also smaller consumption vessels (Jung 2009: 79, 91, fig. 4; Mountjoy 2009: 59, 67, fig. 3; Mountjoy & Mommsen 2015: 457, 459–460, fig. 24.S7, S35; Zuckerman *et al.* 2020: 614–615, fig. 15.29). However, this pottery export was by no means quantitatively equal to the preceding Argive export and therefore could not have been a substitute for it. It may be that these pottery vessels are only a small archaeologically visible part of some other exchange of products between the southeastern Aegean and the Eastern Mediterranean coastal regions.

Grey Ware vessels of Trojan type appear at many Levantine and Cypriot sites of LBA IIB and LC IIC date respectively, and mostly their composition matches that of products from the Troad (Mommsen & Pavúk 2007; for a distribution map of Grey Ware ceramics of Trojan type in the Eastern Mediterranean see Kozal in the present volume). Usually, they are present only in small quantities at each site, exceptions with slightly higher quantities being Sidon (Jung 2018b; Mommsen 2018a) and Ugarit (Courtois & Courtois 1978: 364–365, fig. 59; Monchambert 2004: 309–310). Regarding Ugarit, one has to note that we have NAA data of only two vessels at our disposal, and these do not match a Trojan group (Mommsen & Pavúk 2007: 27, 32–33, table 1). In our program, we only analysed one Grey Ware stirrup jar found at Pyla *Kokkinokremos* (**Pylj 4**, **Fig. 9**), which turned out to be a singleton. It seems that Susan Heuck Allen had sampled the same vessel (Allen 1990: 156, 416, fig. 57.2). The analysis of the Manchester data at Bonn resulted in an ascription to group GW-A, which in turn fits with Bonn group B-TROY and gives the vessel a Trojan provenance (Mommsen & Pavúk 2007: 26, 32, table 1: sample GPK 44). The group of 101 samples formed at that time with the Manchester data has large spreads (Cs 16%, Hf 16%, K 17%, Th 11%), which we had to accept from our estimation of the non-reported experimental uncertainties (Mommsen & Pavúk 2007: 27). The average pattern GW-A thus agreed and still agrees statistically with our pattern B-Troy. But adding the single dataset of sample GPK 44 as a member in our data bank and comparing its concentrations with the concentration patterns of all our groups, it turns out to be a singleton, too, when we apply our strict group membership rules. This shows, how important it is to publish spreads (root mean square deviations) of average patterns and that large spreads may result in wrong group assignments.

The local Mycenaean and Aegeanising pottery of Cyprus and wheelmade plain wares

By LC IIC, pottery workshops in many regions on Cyprus produced Mycenaean-type pottery locally. A hallmark of those local workshops that had adopted Mycenaean technology and created their own specific styles was the so-called Pastoral Style—formerly also called Rude Style (Furumark 1941: 465–470; Vermeule & Karageorghis 1982: 59–68, 207–208; Mountjoy 2018: 71–82). Previous NAA analyses established that potters in different regions of the island painted kraters of FT 281/282 in this style. Three Pastoral Style kraters with bull motifs from Kalavasos *Ayios Dhimitrios* belong to the CypJ group linked to Kition and Hala Sultan Tekke. Two Pastoral Style kraters from Kition are members of the same group. Another krater found at Kalavasos *Ayios Dhimitrios* is decorated with running spirals and belongs to group CypS. It therefore was an import from the Palaepaphos region. One Pastoral Style krater found at Palaepaphos belongs to the same group CypS, while four more Palaepaphos finds are members of group CypG, also regarded as representing a Palaepaphos workshop. A krater decorated with running spirals and found at Idalion

Kafkallia can be assigned to the Enkomi region, for it is a member of group CypI (Mountjoy & Mommsen 2015: 474–475; Mountjoy 2018: 82).

In our program we analysed an amphoroid krater of FT 54/55 from Pyla, a shape rarely used by the painters of the Pastoral Style, who preferred the bell-shaped krater FT 281/282. This vessel (**Pylj 13**, **Fig. 11**) is a member of group CypJ, which comprises mainly finds from Kition and Hala Sultan Tekke (Mountjoy & Mommsen 2015: 425, 428, table 1, 443–448) and should therefore represent the production of one or many workshops in the Larnaca Bay area. Most of its sherds are surface finds made in 1953, but one joining neck sherd is a recent find from Room 5.30 in settlement Sector 5, to the inventory of which we may now tentatively ascribe the whole vessel. Apart from the usual bull motif, this Pastoral Style vessel shows a row of s-shaped hooks or spirals as a neck pattern, for which there is only one parallel on Cyprus, at Kazaphani in the central north (Karageorghis 2008: 174–175, fig. 4 and pl. 2), and one outside Cyprus. The latter is a find from the House of Urtēnu at Ugarit (Yon *et al.* 1990: 20, 22, fig. 16; Lombard 1995: 230, 234, fig. 4.RS 88.2222). Given the rarity of the amphoroid krater shape in the Pastoral Style and the chemical assignation of the Pyla vessel to the Larnaca Bay area, the Ugaritan artefact may have been an export from the same region.

We also analysed a Pastoral Style krater from Enkomi. It is a FT 281/282 with spiraliform motifs (**Enkj 3**, U+, **Figs 4**, **33**) and belongs to group CypI (apart from Uranium, the concentration of which is somewhat high), which stands for the local production of Enkomi (Mountjoy & Mommsen 2015: 425, 428, table 1). This krater is thus the second Pastoral Style vessel of group CypI. So far, the geographical assignation of CypI was based on painted fine wares of Mycenaean type from Enkomi Levels IIIA through late Level IIIB, importantly supported by an Enkomi clay sample measured at Berkeley (Mountjoy & Mommsen 2015: 435–437). We can now expand this argument by including further Enkomi finds belonging to a number of different pottery classes. These are painted Mycenaeanising vessels from Level IIB (**Enkj 7** and **9**, **Figs 3**, **33**), unpainted Mycenaean-type vessels from Level IIIA (**Enkj 30** [CypI, Zn+], **36** and **38**, **Figs 3–5**), unpainted wheelmade vessels of local type, so-called Plain White Wheelmade pots, found in Levels IIB (**Enkj 29** and **Enkj 39**, **Figs 4–5**) and IIIA (**Enkj 28**, CypI, U+, **Fig. 3**), and finally an unpainted handmade pot of local type, a so-called Plain White Handmade vessel, from Level IIIA (**Enkj 37**, **Fig. 4**). Two further analysed Plain Wheelmade vessels of local types are chemical singletons, i.e. a hemispherical bowl (**Enkj 31**) and an amphoroid krater (**Enkj 34**), both from the end of the habitation period of Level IIIB (**Fig. 5**).

Most of the unpainted vessels that are members of the local group CypI (5 out of 8) belong to the same macroscopic fabric U1 (**Enkj 29**, **Enkj 36**, **Enkj 37** [handmade], **Enkj 39**, **Enkj 40**, **Figs 4–5**), which is a very hard to clinky hard fabric with a thick whitish slip (colours 10YR 8/2, 7.5YR 7/3; surface of slip showing small bubbles) and a differently coloured break (colours 5YR 5/6, 6/6, between 7.5YR 6/4 and 6/6; 10YR 6/4; between 10YR 7/2 and 6/2) containing a large amount of fine to medium (and some coarse) dark grey, white and orange inclusions as well as gold mica (**Fig. 34**). These characteristics formed the model for the definition of the Plain White category by the members of the Swedish Cyprus Expedition (Sjöqvist 1940: 55; cf. Åström 1972: 232). One of the CypI group members is a production waster, a deformed but not overfired base fragment of a Plain White Wheelmade vessel made in fabric U1 (**Enkj 40**, **Figs 5**, **34**), which further confirms the local production of both the chemical group and the macroscopic fabric at Enkomi itself.

This fits very well with the observation that the Berkeley group Enk α fits with CypI (best relative fit factor 1.02, see Mountjoy & Mommsen 2015: 425) and like CypI also comprises vessels of the Plain White classes as well as local Mycenaean pots including those decorated in the Pastoral Style (Artzy *et al.* 1976: 173, table 1).

The painted Mycenaean-type pottery used at LC IIIA Maa *Palaeokastro* was part of our project, but also the subject of another analytical program (Mountjoy & Mommsen 2019). Leaving aside the few Mycenaean imports dating to the palace period that are present at the site as well (Jung 2011b: 66; Mountjoy 2018: 864–865, fig. 430:66, 72; 867), Maa *Palaeokastro* yielded members of several chemical groups linked to different production regions on the island (Mountjoy & Mommsen 2019). The group containing the largest number of samples from Maa is X140. All of its seven members at Maa—five analysed in the above-mentioned project (Mountjoy & Mommsen 2019: 276, 279, 285–287, fig. 6) and two analysed in the one reported here (**Maaj 4** and **Maaj 8**, **Fig. 12**)—are painted Mycenaean vessels. So is an eighth sample found at Kalavasos; only the final ninth sample comes from an Iron Age Black-on-Red vessel found at Megiddo in Palestine (Kleiman *et al.* 2019: 539–541, fig. 4, cat. no. 55 and tables 4–5). This evidence taken together with other samples from the Berkeley data base confirms the island of Cyprus as the area of production of the X140 pots (Mountjoy & Mommsen 2019: 279), while a stylistic element of one of its members points more specifically to western Cyprus (Mountjoy & Mommsen 2019: 287). Yet, at the moment one cannot prove that this group represents a local production of workshops in the surroundings of Maa *Palaeokastro* itself. Our project adds another three Mycenaean-type vessels that are members of the CypS group to the Maa data set. Two are deep bowls FT 284/285 (**Maaj 3** and **Maaj 6**, **Fig. 12**), and the third is an unpainted carinated strap-handled bowl (**Maaj 29**, **Fig. 12**). Another deep bowl, with a rare pictorial

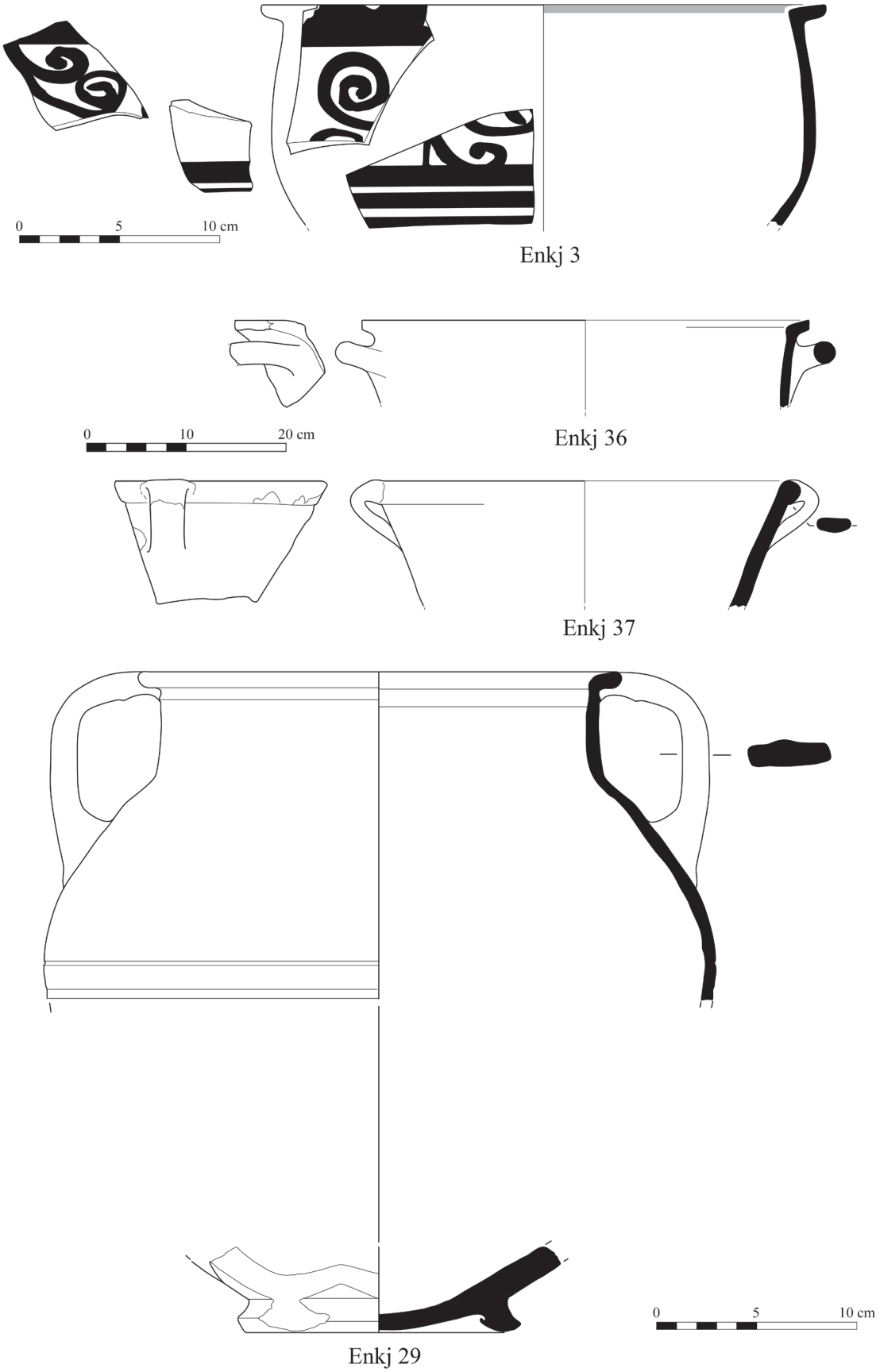


Figure 4. Enkomi IIB (Enkj 29), Enkomi IIB–IIIA (Enkj 3) and Enkomi IIIA (Enkj 36, Enkj 37): local products of the CypI group. Scale 1:3 (Enkj 3, Enkj 29), scale 1:6 (Enkj 36, Enkj 37) (drawings R. Jung, digitisation M. Frauenglas, R. Yassine)

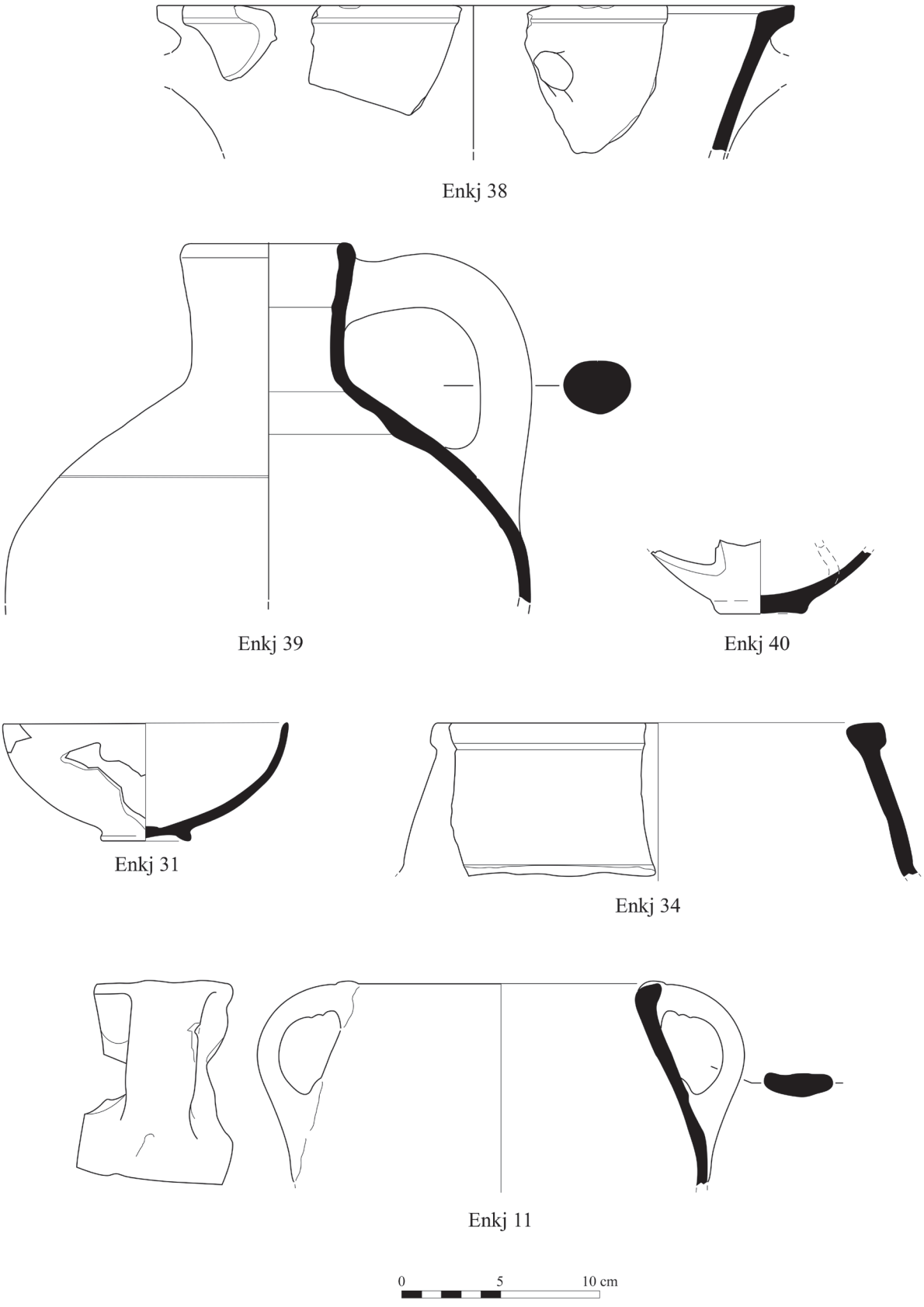


Figure 5. Enkomi IIB (Enkj 39), Enkomi IIIA (Enkj 38), Enkomi IIIB (Enkj 31, Enkj 34): local wheelmade unpainted fine ware pots of the CypI group (Enkj 31, Enkj 34, Enkj 38, Enkj 39) and handmade Cypriot cooking pot (Enkj 11, singleton). Scale 1:3 (drawings R. Jung, digitisation M. Frauenglas, R. Yassine)

motif (a bird), is chemically close to group CypS, but should better be classified as a singleton (**Maaj 1**, **Fig. 12**). Group CypS is related to Kouklia/Palaepaphos (Mountjoy & Mommsen 2015: 426–427; 2019: 279, 283–284). Two more Mycenaean-type vessels among our Maa samples can be assigned to known chemical patterns. A deep bowl with quirk (**Maaj 11**, Cs low, **Fig. 12**) is a member of CypT representing the region of Hala Sultan Tekke, and it is the third CypT vessel found at Maa (cf. Mountjoy & Mommsen 2019: 282–284, figs 4–5). Another deep bowl, decorated with a herringbone tree (**Maaj 10**, **Fig. 12**), forms a pair with a deep bowl also found at Maa (Mountjoy & Mommsen 2019: 284–285, fig. 6.S12, Jung S10). Finally, a linear one-handled conical bowl FT 242 made of a high quality fabric is a chemical singleton (**Maaj 2**, **Fig. 12**). Its fabric is characterised by red paint with solid cover to slightly diluted (showing brush marks), slightly lustrous to lustrous and few medium-sized to coarse white inclusions. The surface very well smoothed but seemingly not slipped.

Contrary to what we found at Enkomi, none of the chemical groups represented among the painted and plain Mycenaean vessels of Maa reappears among the wheelmade and handmade classes of Cypriot tradition from this settlement. This may be interpreted in two ways. Either the inhabitants of Maa did not practice any local Mycenaean pottery production and were getting their Mycenaean ceramics from other (western Cypriot?) regions (Mountjoy & Mommsen 2019: 289), or the workshops in the region of Maa used different clay pastes for Mycenaean-type and for Cypriot-type vessels. Such a practice would not be without comparison in the Eastern Mediterranean of the time (cf. our findings at Tell Kazel, see Badre *et al.* 2005; Boileau *et al.* 2010). The presence of a Black-on-Red vessel in group X140 would not contradict this interpretation, as Black-on-Red is a much later Iron Age pottery category (Kleiman *et al.* 2019).

Cooking pots of Cypriot and Mycenaean tradition and handmade plain wares

While the clay paste of the unpainted and painted fine wares of Enkomi shows a clear continuity from LC IIC to IIIA and beyond, the opposite is true for the cooking pot fabrics. Here discontinuity on basically all levels is notable. By Enkomi Level IIIA (LC IIIA) wheelmade cooking jugs FT 65 and cooking amphorae FT 66 with raised concave or flat bases replaced the handmade round-bottomed cooking pots of earlier Cypriot tradition completely. This typological change, which is clearly connected to a fundamental functional change with the introduction of hearth platforms in Enkomi IIIA (Jung 2011a, 2011b), goes hand in hand with a change of clay pastes. We have noted this change before, but the small amount of NAA data for the handmade cooking pots of Enkomi Level IIB led to a different interpretation of the LC IIC evidence than the one we are proposing now (Mommsen & Jung 2017).

In the meantime, the Bonn database has been enriched, which allowed a new statistical grouping of the LC IIC cooking pots forming a regional sum-group of the samples that had been chemical singletons so far. It has large spreads for many elements, which suggests the existence of several subgroups. However, this sum-group is well separated in concentration space from all the other samples in our data bank. At present two handmade cooking pots of different types from Enkomi Level IIB are members of group X083 (**Enkj 12** and **14**, **Fig. 6**), while a shallow handmade bowl made in the same macroscopic fabric (Ha 1) as those cooking pots is related to that same chemical group (**Enkj 13**, **Fig. 6**). A third Level IIB handmade cooking pot, which belongs to another macroscopic fabric (Ha 2, for descriptions of the Enkomi fabrics Ha 1 and Ha 2 see Jung 2017: 143), is a chemical singleton (**Enkj 11**, **Fig. 5**), but close to group X083. It is very important to note that the new statistical grouping suggests the addition also of cooking pots from another site to the same group X083, to which the three Enkomi vessels belong. One small handmade cooking pot and a deep handmade bowl found at Pyla *Kokkinokremos* are now members of this group (**Pylj 5** and **7**, **Fig. 9**), while a second handmade bowl ascribed to the same fabric as the first remained a chemical singleton (**Pylj 6**, **Fig. 9**). The second handmade cooking pot that we have analysed from the Pyla finds (**Pylj 12**, **Fig. 9**) is a member of another, still unpublished group X171 that is chemically close to X083. These most interesting results suggest that at least the two settlements of Enkomi (Level IIB) and Pyla *Kokkinokremos* received cooking wares and other vessels in cooking pot fabrics from the same workshop region, the clay pastes of which stand out by their high Sc values.

A baking tray from an early Level IIIA context at Enkomi gives us an indication where to search for that region (Jung 2017: 131–132, fig. 11.5), because it belongs to the same fabric Ha 1 as the handmade cooking pots of group X083 and because it represents a traditional Cypriot kitchen vessel type. We have no NAA result for this baking tray, but according to Marie-Claude Boileau's petrographic study it belongs to a group attested at Enkomi IIIA and IIIB as well as at Kition, Floors IIIA–IV and II. She points out that this petrographic group cannot derive from the sedimentary river and coastal plains. Instead, she assigns it to an interior region, located closer to the Troodos Mountains (Pilides & Boileau 2011: 117, 124, fig. 1; 126, figs 4–4a). One of the samples of that petrographic group had previously been analysed with NAA by Vin Robinson (Robinson 1994: 117, 120 [sample CENK19]). It belongs to his chemical group 3C and is a handmade jug from Enkomi early Level IIIB (Pilides 1994: 96, cat. no. 87, fig. 51.2, pl. 17.2; Pilides & Boileau 2011: 117). Robinson's group 3C as well as the other groups 3A and 3B all have the

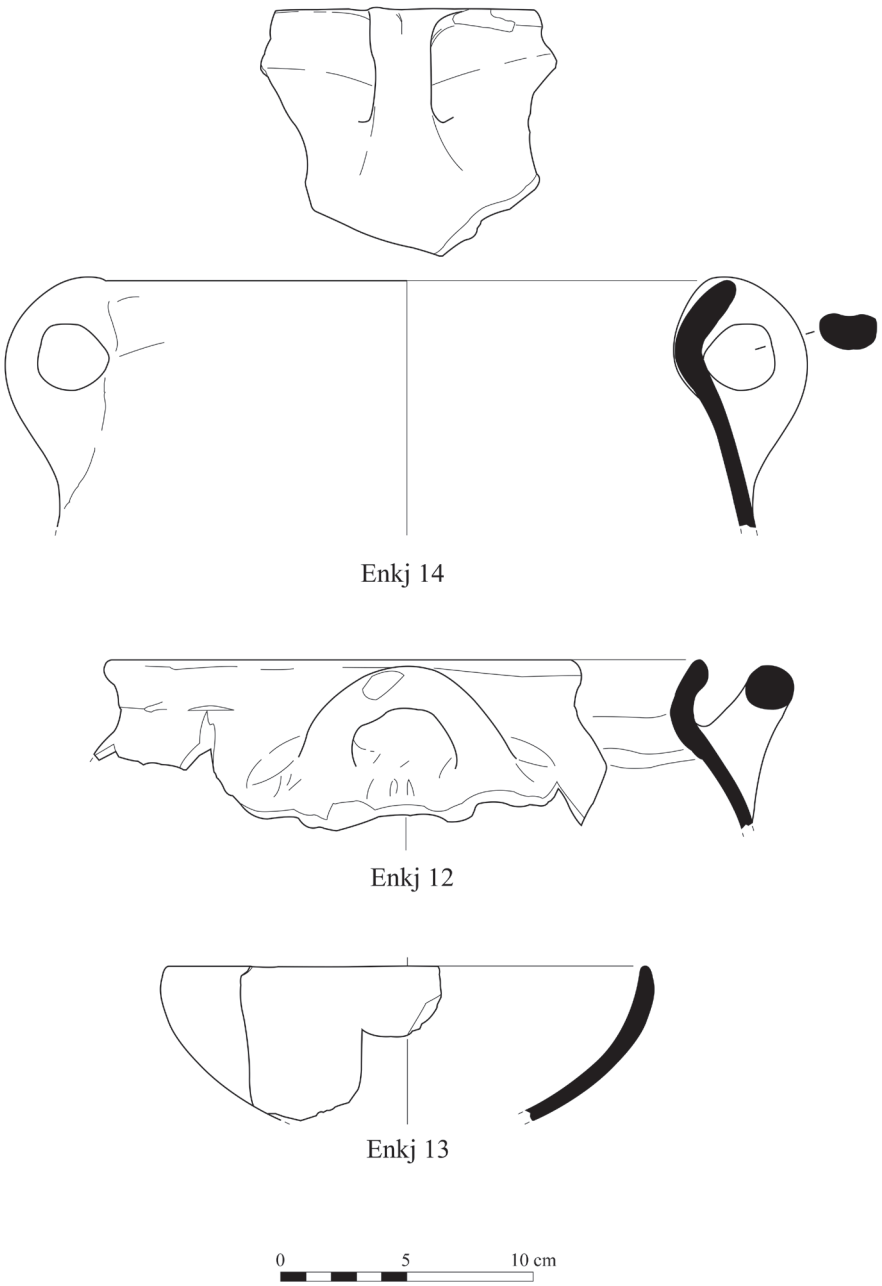


Figure 6. Enkomi IIB: handmade Cypriot cooking pots of the X083 group (Enkj 12, Enkj 14) and coarse ware bowl close to group X083 (Enkj 13). Scale 1:3 (drawings R. Jung, D. Knauseder, digitisation R. Yassine)

unusually high Sc values and can be assumed to come from the Troodos area as mentioned above. Finally, the fact that four out of eight samples of Robinson's group 3C are coarse handmade vessels found at the settlement of Apliki (Robinson 1994: 120 [CAPK15–CAPK18]; Pilides 1994: 95–96, cat. nos 78, 83, 87, 88), i. e. at the northern fringes of the Troodos Mountains, strengthens the possibility that the manufacturing region of that whole group lay in the Troodos area. Moreover, coarse handmade pottery is one of the most common ceramic classes at Apliki, which is why the excavators there called it 'Apliki Ware', which is sometimes subsumed under the SCE term 'Coarse Monochrome Ware' (Pilides 1994: 82–84; Kling 2007: 111–112, 191–198, pls 26–33). All 'Apliki Ware' samples taken at Apliki for NAA fall into Robinson's group 3C (Kling 2007: 115). Robinson's group 3A includes a jug fragment found at Enkomi and classified as Apliki Ware by Pilides (Pilides 1994: 94, cat. no. 73; Robinson 1994: 119 [CENK21]).

Our chemical evidence now also adds to certain petrographic results published for Pyla *Kokkinokremos* in 2014. Based on a selection of ten samples from (non-illustrated) handmade cooking pots of different sizes and types found at the site, a group of researchers suggested a provenance for the dominant cooking

pot petro-fabric in the southern foothill zone of the Troodos mountains (Karageorghis & Georgiou 2014: 139, cat. nos 240–249; Dikomitou-Eliadou *et al.* 2014: 189–193). Furthermore, Vassos Karageorghis (2014b) quoted an unpublished petrography report by Sara Levi on two baking trays from Pyla *Kokkinokremos*, in which she assigned these two vessels also to the Troodos area. These petrographic ascriptions to the Troodos region based on the presence of ultrabasic and basic rocks as well as basalts fit well with the earlier suggestion by Artzy *et al.* (1981: 44), who explained the chemical composition of White Slip vessels also by basaltic inclusions and related them to the Troodos Mountains.

The LC IIIA wheelmade Mycenaean-type cooking pots from Enkomi Level IIIA and from Maa *Palaeokastro* Floors II and I show a completely different picture of chemical composition and thus clay pastes. None of them belongs to groups X083 and X171 or groups with similar composition that are characteristic of the handmade coarse wares of LC IIC. We analysed 11 cooking jugs/amphorae FT 65/66 from Enkomi, ten of which come from Level IIIA and one from Level IIIB. 82% of these 11 Mycenaean-type cooking pots belong to group X076 (**Enkj 16**, **18**, **19**, **21–26**, **Figs 7–8**, **35**), while the rest are singletons (**Enkj 15** and **17**, **Fig. 8**). The vessel with sample **Enkj 18** belongs to fabric U16, which because of its slip is possibly not a cooking pot fabric. By contrast, U18 (with samples **Enkj 21** and **22**) only seems to have a self slip. Typologically speaking, all three fit well with the morphological variability of FT 65 and 66 at Enkomi and beyond.

Group X076 also includes two unpainted wheelmade bowls from Level IIB(–IIIA) and Level IIIB respectively (**Enkj 32** and **33**, **Fig. 8**). Their shapes reproduce the LC II Base Ring bowls. The so-called 'wheelmade Base Ring' pottery first appeared at the end of Enkomi Level IIB, but became common only in the following settlement phases (Dikaios 1969/71: 451, 458, 464, 470–471, 572, pl. 65.9). Thus, the potters using the new clay recipe of group X076 were on the one hand introducing a new kitchen shape connected with a new way of cooking, while on the other hand they were adapting an earlier tradition of a table ware shape to their new wheel-forming technology. A third analysed unpainted wheelmade Base Ring bowl from the end of the Level IIIB habitation period is a chemical singleton (**Enkj 27**, **Fig. 8**).

At Maa *Palaeokastro* the variation of clay pastes used in Mycenaean cooking pot production was more variable, which might point to the involvement of more workshops. A petrographic study had also detected a large fabric variability among the cooking pots at Maa *Palaeokastro*, but the fabrics were all ascribed to the wider region of western Cyprus (Dikomitou-Eliadou *et al.* 2016a: 455). However, that publication has the serious shortcoming that its authors did not provide the inventory numbers or any other stratigraphic data for the sherds or vessels they examined (Dikomitou-Eliadou *et al.* 2016a). Therefore, we cannot relate their petrographic results to our chemical data.

Despite their fabric variability, the typological characteristics of the Mycenaean cooking pots used at Maa do not diverge in any way from the morphological spectrum of FT 65 and 66. Among the seven analysed vessels there are single members of two groups, X082 (**Maaj 25**, **Fig. 14**) and Ul63 (**Maaj 26**, **Fig. 13**), while the remaining five are chemical singletons (**Maaj 20–24**, **Figs 13** and **16**). Apart from the Mycenaean-type cooking pot, group X082 also includes a wheelmade round-bottomed cooking pot (**Maaj 27**, **Fig. 14**) and two specimens of a Cypriot jug type (with a conical neck) of unpainted wheelmade pottery, i.e. Plain White Wheelmade (**Maaj 30** and **31**, **Fig. 14**). The presence of the wheelmade round-bottomed cooking pot (**Maaj 27**) in one chemical group together with these Cypriot jugs now suggests very clearly that the former vessel is a Cypriot product. The wheelmade round-bottomed cooking pots with hollowed rims from the second settlement phase at Maa (Floor I) seem to be typologically related to contemporary, i.e. Early Iron Age I Levantine cooking pots, but were indeed manufactured on the island as a result of Mediterranean connections with the Levantine coasts (see the discussion in Jung 2011b: 67–68, 84–85, figs 8.1–2 and 9.6). It is possible that more than one workshop was producing these cooking pots of Levantine derivation, for the second specimen of the type that we analysed is a chemical singleton (**Maaj 28**, **Fig. 17**). However, at Maa they represent a minor group of kitchen vessels. Roughly coeval typological parallels found on Cyprus itself can be identified at Palaepaphos (Wells III and VIII in the *Evreti* area), if one judges by three rim and shoulder fragments with the hollowed lip and/or interior thickening characteristic for this typological group (Dikomitou-Eliadou *et al.* 2016b: 237, figs 3, 6; 239, fig. 16; 253–254, cat. nos 4, 8 and 19). By contrast, the cooking pots of Levantine tradition at LC IIIA Hala Sultan Tekke belong to a different shape (cf. Bürge & Fischer 2018: 227, fig. 3.17a; 229). A third type of Levantine cooking pot—rarely equipped with handles—was present at Enkomi IIIA (**Enkj 50**, a chemical singleton), but also at Hala Sultan Tekke (Åström 1998: 111–112, figs 246–247; for typological parallels see LBA II Ugarit [Monchambert 2004: 199, 212, fig. 90.1249, 1250] and LBA II to Iron Age I Tell Kazel [Badre & Capet 2018: 41, 130–131, pl. 36.411–412, 414–416]).

Notably, one of the Mycenaean-type cooking pots from Maa is an import. The vessel from a Floor II context (**Maaj 26**, **Figs 13**, **35**) belongs to the still small chemical group Ul63, which apart from this Mycenaean vessel comprises four Early Helladic vessels from Asea in Arcadia and some more vessels from other sites in Arcadia (Forsén *et al.* 2017: 94–95, fig. 1; 102–103, fig. 6) as well as one vessel from the Argolid and one from Triphylia. This clearly suggests that the cooking pot found at Maa reached the

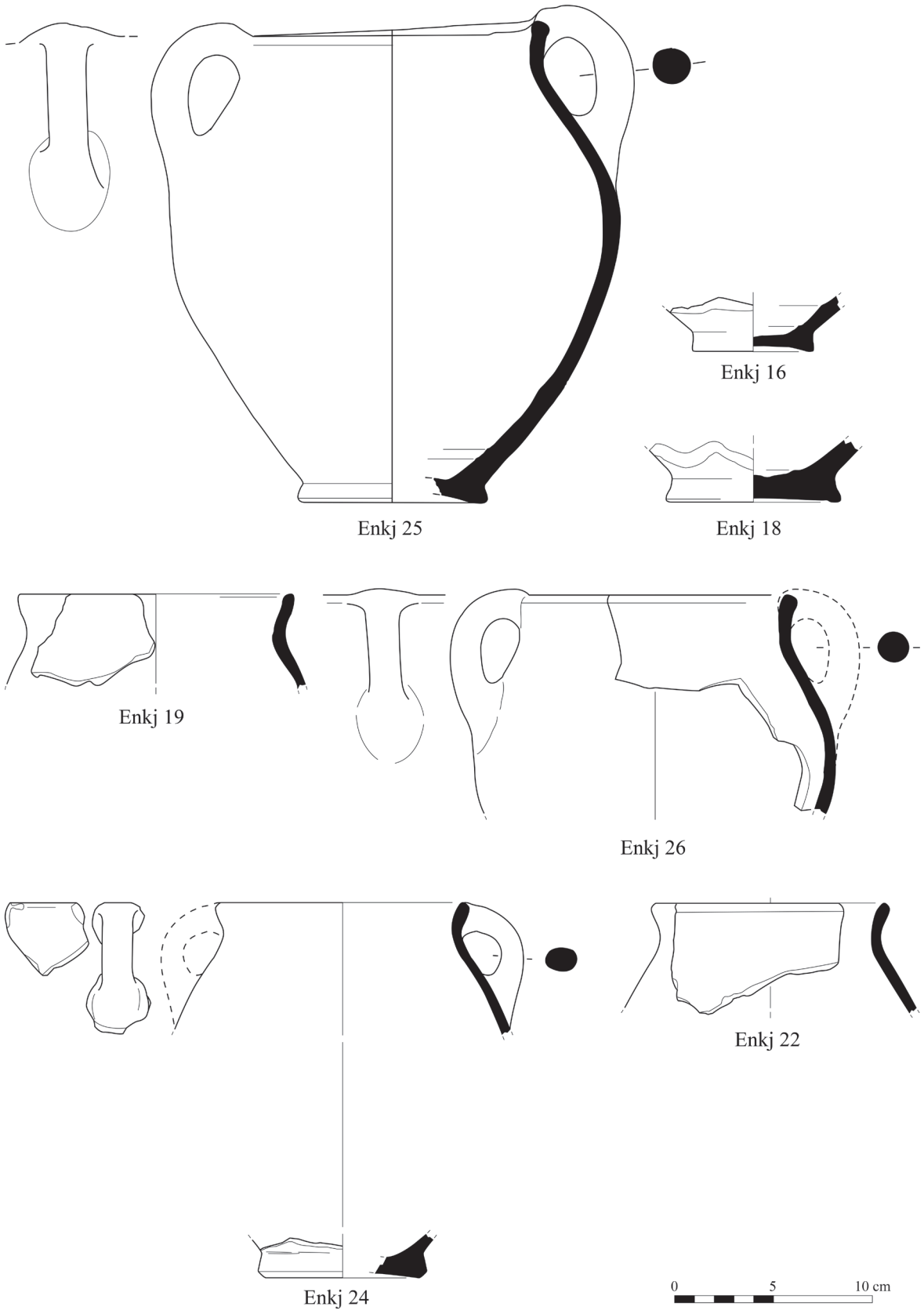


Figure 7. Enkomi IIIA (Enkj 16, Enkj 18, Enkj 19, Enkj 24–26), Enkomi IIIB (Enkj 22): local wheelmade Mycenaean cooking pots of group X076. Scale 1:3 (drawings R. Jung, digitisation M. Frauenglas, R. Yassine)

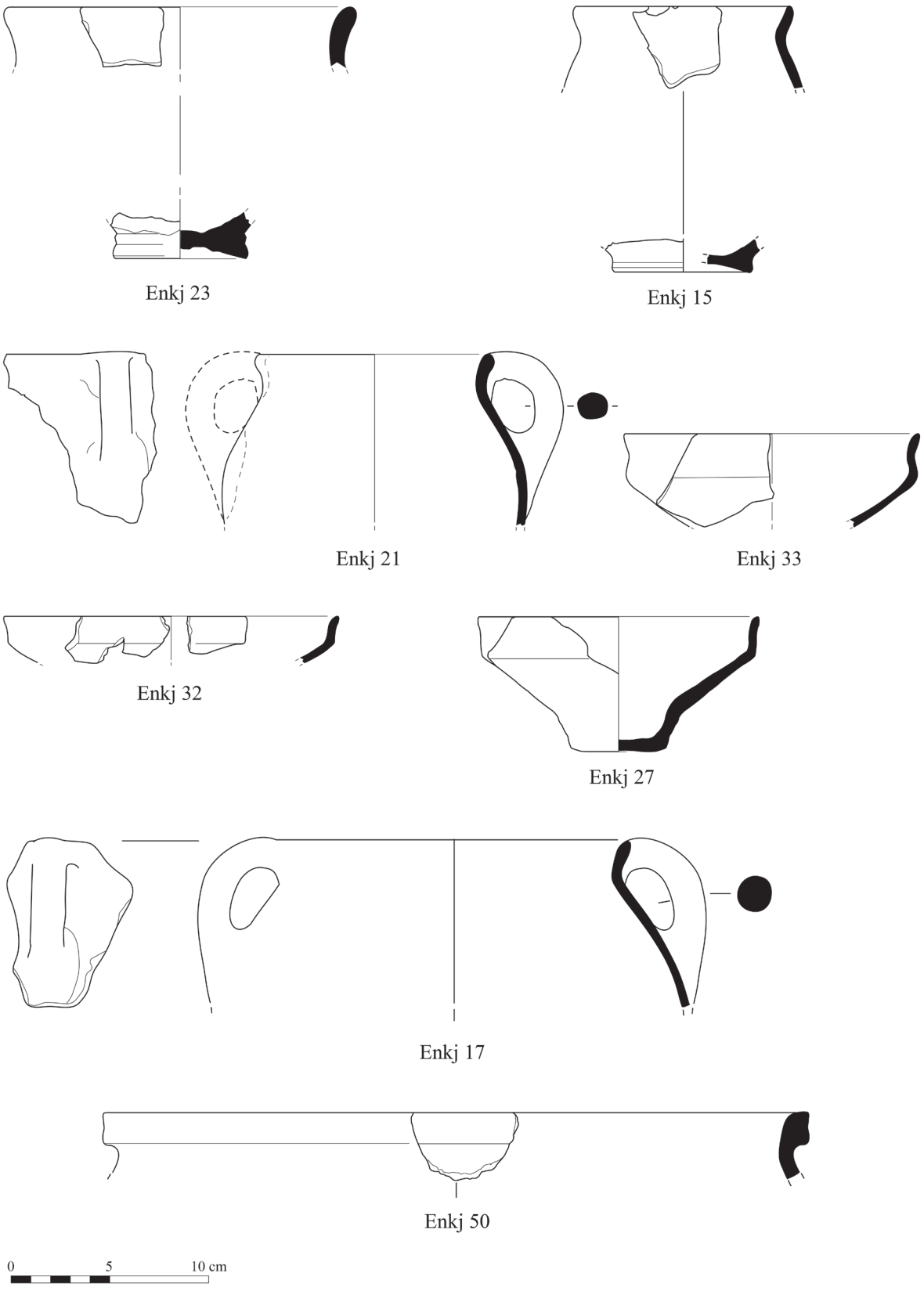


Figure 8. Enkomi IIB(–IIIA) (Enkj 32), Enkomi IIIA (Enkj 15, Enkj 17, Enkj 21, Enkj 23, Enkj 50), Enkomi IIIB (Enkj 27, Enkj 33): local wheelmade Mycenaean cooking pots and unpainted fine ware pots, members of group X076 (Enkj 21, Enkj 23, Enkj 32, Enkj 33) and singletons (Enkj 15, Enkj 17, Enkj 27); one Levantine cooking pot (Enkj 50). Scale 1:3 (drawings R. Jung, digitisation M. Frauenglas, R. Yassine)

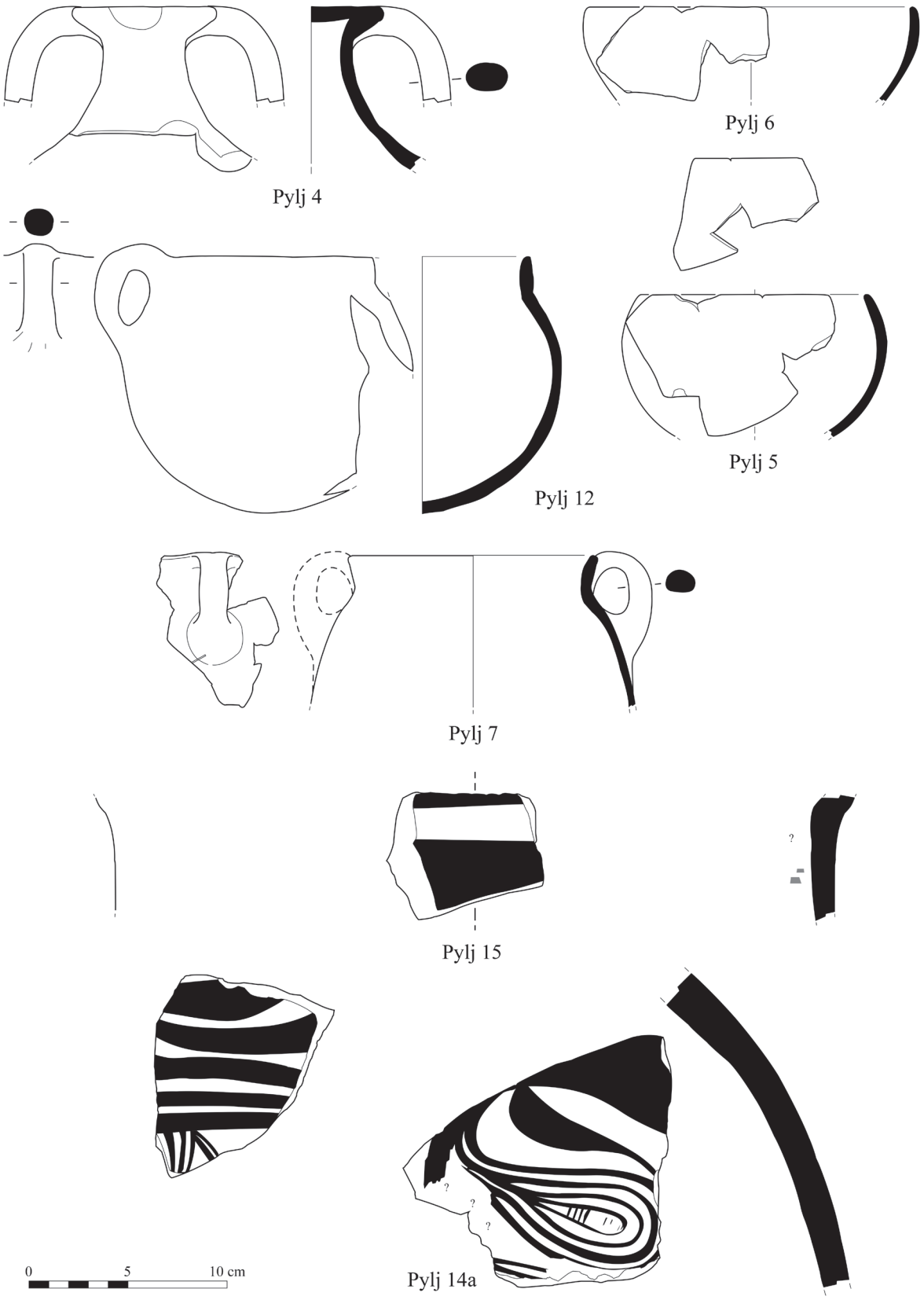


Figure 9. Pyla Kokkinokremos: Grey Ware stirrup jar (Pylj 4); handmade cooking pots (Pylj 7, Pylj 12) and handmade coarse bowls (Pylj 5, Pylj 6) from the Troodos region (Pylj 5 and Pylj 7, group X083; Pylj 12, group X171) and singletons (Pylj 6); Minoan amphoroid kraters (Pylj 14a, Pylj 15). Scale 1:3 (drawings R. Jung, D. Knauseder, digitisation R. Yassine)

southern Cypriot harbour site from the Peloponnese. It is the first imported cooking pot of Mycenaean type identified on Cyprus and underlines again the connection of LC IIIA cooking pot production with mainland Greece—albeit in an indirect way.

The two analysed handmade cooking pots, which connect the earlier settlement phase of Maa Floor II to LC IIC settlements like Pyla *Kokkinokremos*, Enkomi IIB and Kalavasos *Ayios Dhimitrios* (Jung 2011b: 66, 83, fig. 7.1–3; 85, fig. 9.3), are chemical singletons (**Maaj 15** and **16**, **Fig. 13**), but show the high Sc values typical for workshops in the Troodos region. This is expected given the wide distribution across Cyprus of cooking pots produced in the Troodos area during LC IIC (see above).

During LC IIC, the Cypriot unpainted table wares of some settlements such as Enkomi IIB already included a good portion of wheelmade vessels (Plain White Wheelmade), while the inhabitants of other settlements such as Pyla *Kokkinokremos* only rarely used these innovative pots and stuck to the traditional handmade table wares (Plain White Handmade) (Jung 2011b: 65). We have analysed two such Plain White Handmade vessels from Pyla, a jug and a vat with two vertical handles. Both turned out to be singletons (**Pylj 9**, **Pylj 10**, **Fig. 10**).

The Cypriot handmade pottery classes that were still in use during the final settlement phase of Maa (Floor I, the second LC IIIA phase at Maa) belong to chemical groups in which wheelmade members are extremely rare. Group CypM (**Fig. 15**) includes an unpainted handmade jug from Floor II (**Maaj 13**, Cr high), an unpainted handmade vat from Floor II (**Maaj 18**) and a solidly painted Base Ring II bowl from Floor I (**Maaj 19**). Other members of this group come from Tiryns (sample 181, Cr high, unpublished) and Ialysos (sample Ialy 141n, a Base Ring I vessel, Marketou *et al.* 2006: 5, 16, 25 [there still classified as a singleton]) in the Aegean as well as from Qantir in Egypt. At the latter site the relevant piece is a fragment of a Mycenaean-type stirrup jar (sample Qant 29, Mountjoy & Mommsen 2001: 140–141, fig. 1.10 [there published as a singleton, but it is a good member of CypM now]), which is astonishing given the fact that no Mycenaean-type vessel found on Cyprus is a member of CypM so far.

The final Cypriot handmade vessels that we analysed, an unpainted jug from Floor II (**Maaj 14**, **Fig. 16**) and another from a Floor I context (**Maaj 17**, **Fig. 17**), are chemical singletons. The only analysed (apparently wheelmade) pithos of Cypriot type from Maa turned out to be a chemical singleton (**Maaj 7**, **Fig. 17**).

Canaanite jars

The Levantine storage and transport amphorae, conventionally referred to as Canaanite jars (Pedrazzi 2007, 2016), constitute the last pottery category we have examined.

Levantine amphorae (or Canaanite jars) from Maa (Hadjicosti 1988) are represented by ten restored vessels and by a total of 5022 sherds that very probably correspond to around 84 vessels. Maria Hadjicosti identified a few types in the repertoire of Maa: her type 1, described as a jar with a slightly carinated shoulder and button-toe base (no. 319); her type 2, an ovoid vessel with a rounded base (no. 265+500, **Fig. 19**, **Maaj 32**); her type 3, a four-handled jar with button-toe base (no. 545, **Fig. 20**); and a further type, considered the Egyptian variant of the 'Canaanite jar' (no. 585, **Fig. 22.10**). The assemblage also included painted fragments, perforated bases and at least one fragment of a sharply angular shoulder, which in Hadjicosti's opinion could belong to the angular-shouldered jar well known in LBA II as a transport container in the maritime trade (Type 5-4, Pedrazzi 2007: 75–77; **Fig. 36**). This is the typical LBA II commercial amphora, produced in different regions of the coastal Levant; this container was used in maritime trade and reached Mycenaean cities and Egypt (e.g. in the fortress-town of Zawiyet Umm el-Rakham: Snape & Wilson 2007, 60, 64–65, fig. 3.21:C3.1, C3.2, C3.3 and fig. 3.22:C3.4; Deir el-Medineh: Bavay 2015: 129–130, fig. 1a–b; Saqqara [several tombs]: Aston 1997: 93, pl. 122.171–174; Aston 2003: 150, fig. 7d; Memphis: Bourriau 2010; Amarna: Peet & Woolley 1923: pl. LI.XLIII/67), as far as Nubia (Hillat el-Arab: Vincentelli 1996: fig. 3c), but on Cyprus it has been found in limited quantities. To the same type we can also ascribe the narrow stump or pivot base that comes from a Floor I context and that Richard Jones and Sarah Vaughan considered as imported (Hadjicosti 1988: 347, cat. no. 73; 366 no. 24, pl. C.19; Jones & Vaughan 1988: 387, 393). The commercial jar *par excellence* (Type 5-4), thus, was not so common at Maa, even if a few examples can be identified.

On the other hand, the amphora with a slight carination on the shoulder and a 'bellied' profile (Type 4-2, Pedrazzi 2007: 66–69), which spread in the Northern Levant in the final stages of LBA II and during the Late Bronze/Iron Age transition, is well known at Maa, as the complete jars nos 251, 319 and 656 show well (no. 656, **Maaj 9**, **Fig. 18**). Tell Kazel, in coastal Syria, provides good parallels for this storage jar type (Badre & Capet 2018: pl. XXVII.288, 290, 292, 293, 295 [all Type 4-2; for Type 4-1 see Badre & Capet 2018: pl. XXVII.291, 294]). In the Cape Gelidonya wreck we can recognise a similar type (Bass 1967: fig. 132.2), which however has a less distinct shoulder and a more rounded profile (Type 8-1, Pedrazzi 2007: 97–99). In the central-southern Levant, instead, this type is far less common (**Fig. 37**). It is noteworthy that the shape of necks and rims is quite similar to that of necks/rims of the conical Type 5-4, which explains why these two different types can eventually be confused in the local typologies mostly

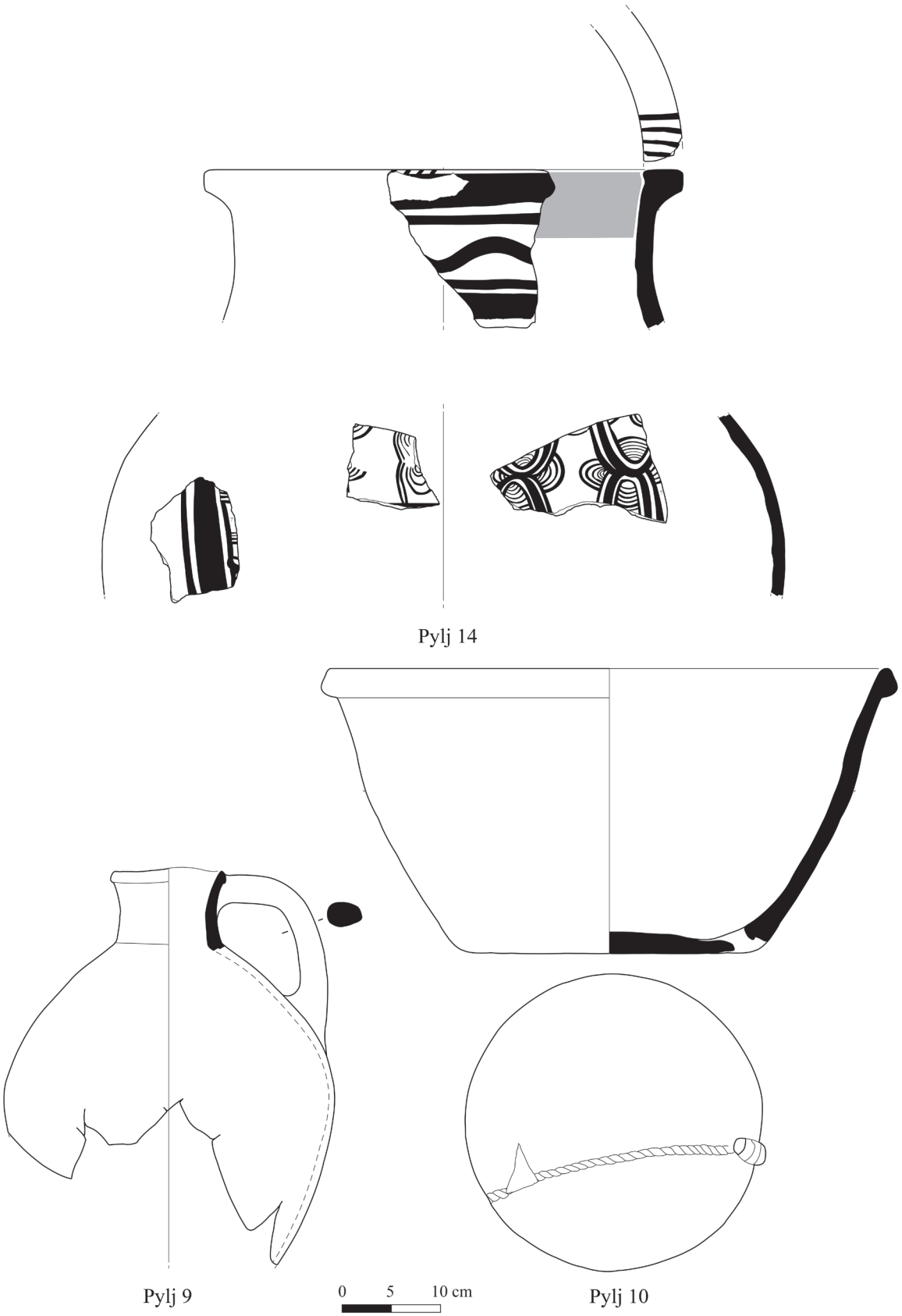
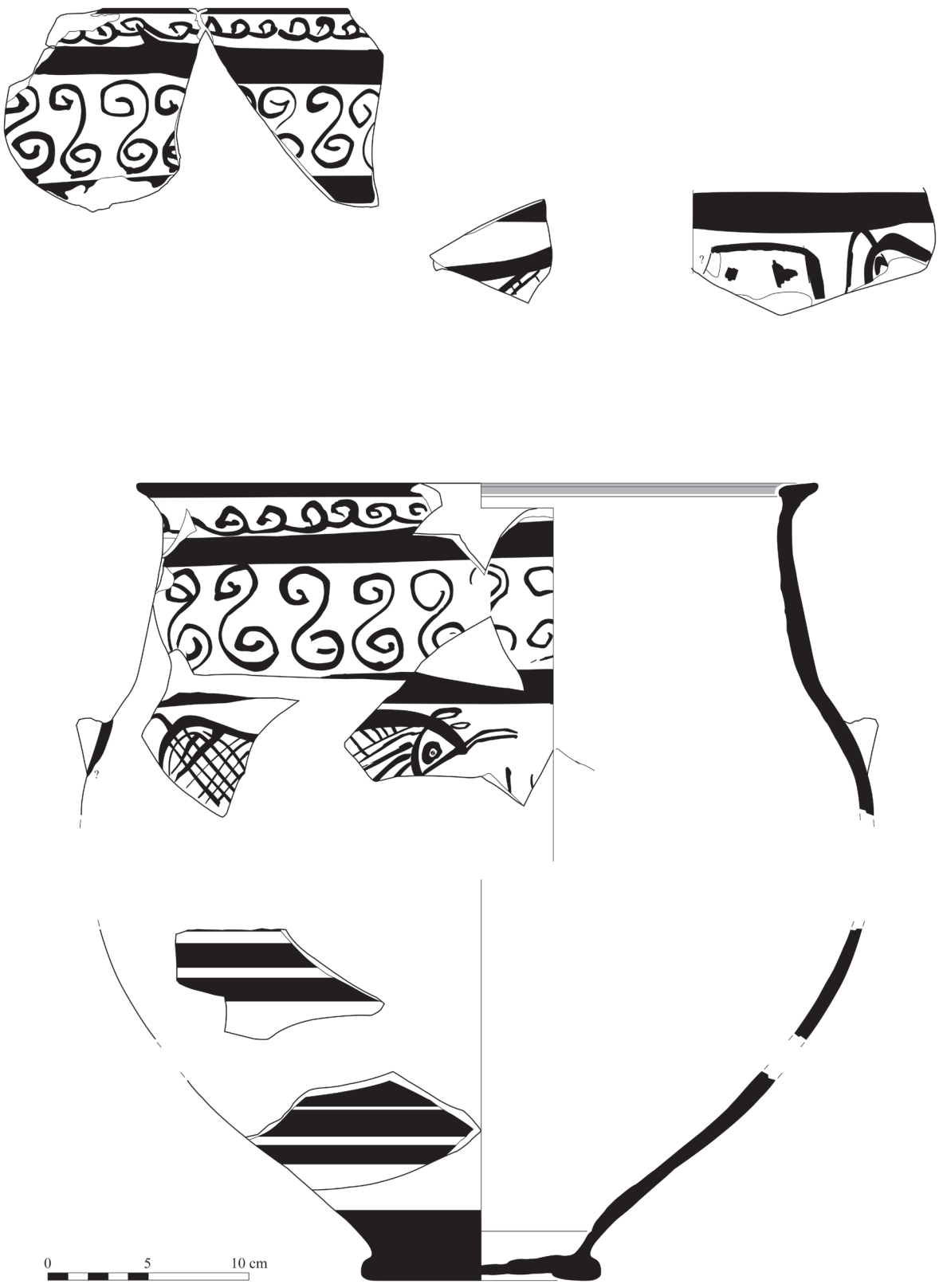


Figure 10. Pyla Kokkinokremos: Minoan amphoroid krater (Pylj 14) and unpainted handmade vessels (Pylj 9, Pylj 10), all singletons. Scale 1:6 (drawings R. Jung, D. Knauseder, digitisation R. Yassine)



Pylj 13

Figure 11. Pyla Kokkinokremos: amphoroid krater of the Pastoral Style (Pylj 13, group CypJ). Scale 1:3 (drawing R. Jung, digitisation R. Yassine)

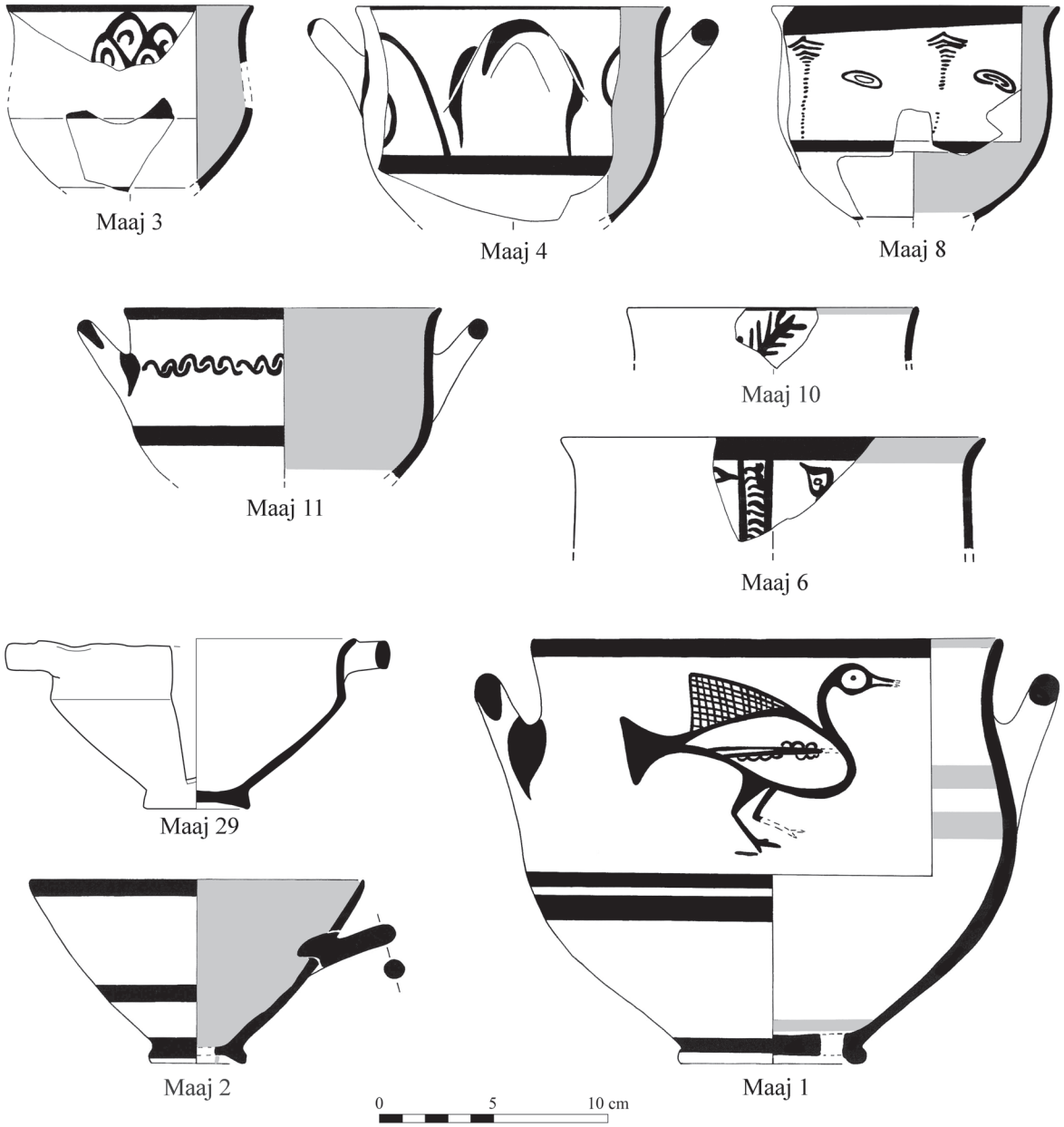


Figure 12. Maa Palaeokastro, Floor II (Maaj 1–2, Maaj 8), Floors I–II (Maaj 3–4, Maaj 6, Maaj 10–11), unstratified (Maaj 29): Mycenaean painted vessels (Maaj 1–4, Maaj 6, Maaj 8, Maaj 10, Maaj 11) and unpainted (Maaj 29) vessels, different groups, pairs and singletons. Scale 1:3 (all drawings after Mountjoy 2018 except for Maaj 29 [drawing R. Jung, digitisation R. Yassine])

based on rim fragments. This bellied form (both Types 4-1, with a more rounded shoulder, and 4-2, with a sloping shoulder) is widespread in LBA II and Early Iron Age Levantine contexts, thus indicating a certain continuity between the two phases. A complete vessel, pertaining to Type 4-2, comes from Zawiyet Umm el-Rakham in Egypt (Snape & Wilson 2007: 58, 64, fig. 3.21:C2.7); this example clearly shows a circulation of this jar, which morphologically seems to have originated in the Northern Levant. Some specimens may even have reached the Aegean, e.g. one at Tiryns, Lower Citadel (LH IIIB Final) (Maran 2008: 56, fig. 35). However, based on the published photo, we cannot exclude that the latter belonged to a jar of Type 3-2 (the LBA II wide biconical type: Pedrazzi 2007: 62). Only a drawing could clarify this issue.

From our recent re-examination of the Maa jars (contrary to what was previously stated in Pedrazzi 2007), we conclude that none of these complete examples apparently belongs to Type 4-1 (with a more rounded shoulder). Many rim fragments and bulbous bases found at Maa belong to Type 4-2, too: slightly everted and slightly thickened rims are attested (see **Fig. 21.1**, **5**, **11**), showing a similar clay (mostly our fabrics U17 and U18); the bulbous base from Floor I, characteristic of Type 4-2 (**Fig. 21.8**), is perforated, as

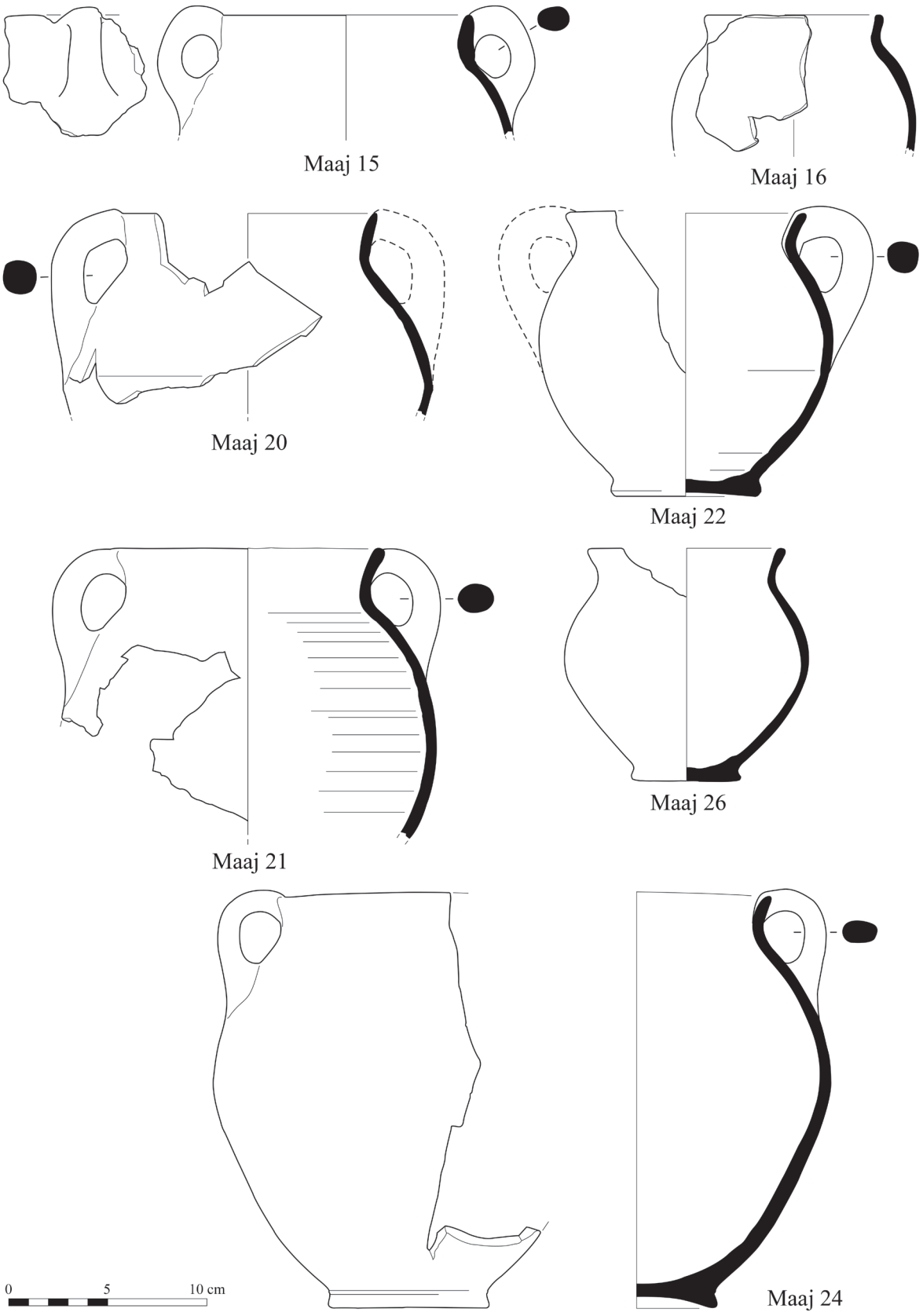


Figure 13. Maa Palaeokastro, Floor II (Maaj 15–16, Maaj 20–22, Maaj 26), Floors I–II (Maaj 24): handmade Cypriot cooking pots (Maaj 15–16) and wheelmade Mycenaean cooking pots (Maaj 20–22, Maaj 24, Maaj 26), group UI63 (Maaj 26) and singletons. Scale 1:3 (drawings R. Jung, D. Knauseder, digitisation R. Yassine)

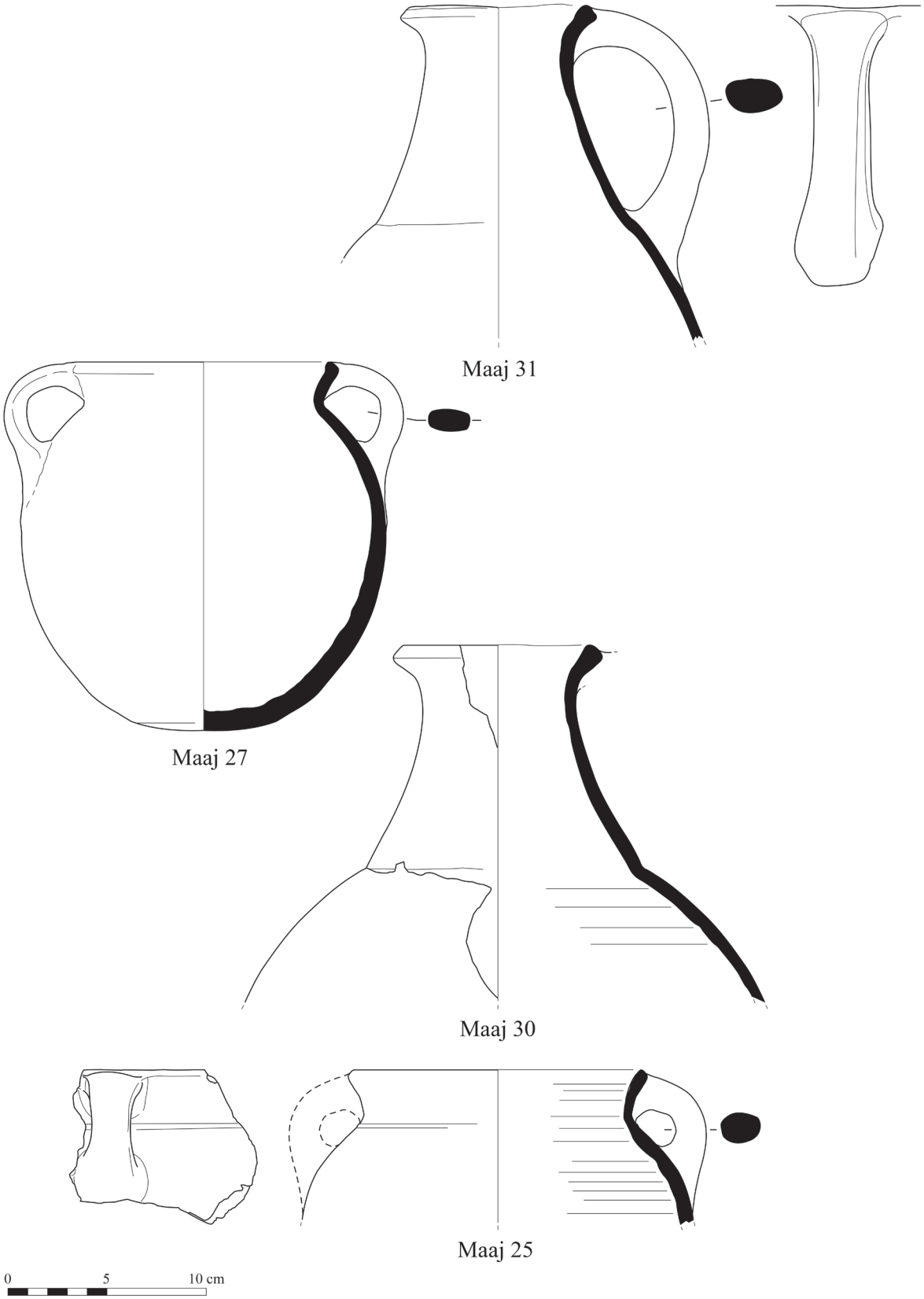


Figure 14. Maa Palaeokastro, Floor II (Maaj 25, Maaj 30), Floor I (Maaj 27, Maaj 31), members of group X082: wheelmade cooking pot of Levantine derivation (Maaj 27), wheelmade Mycenaean cooking pot (Maaj 25) and unpainted Cypriot wheelmade jugs (Maaj 30–31). Scale 1:3 (drawings R. Jung, D. Knauseder, digitisation R. Yassine)

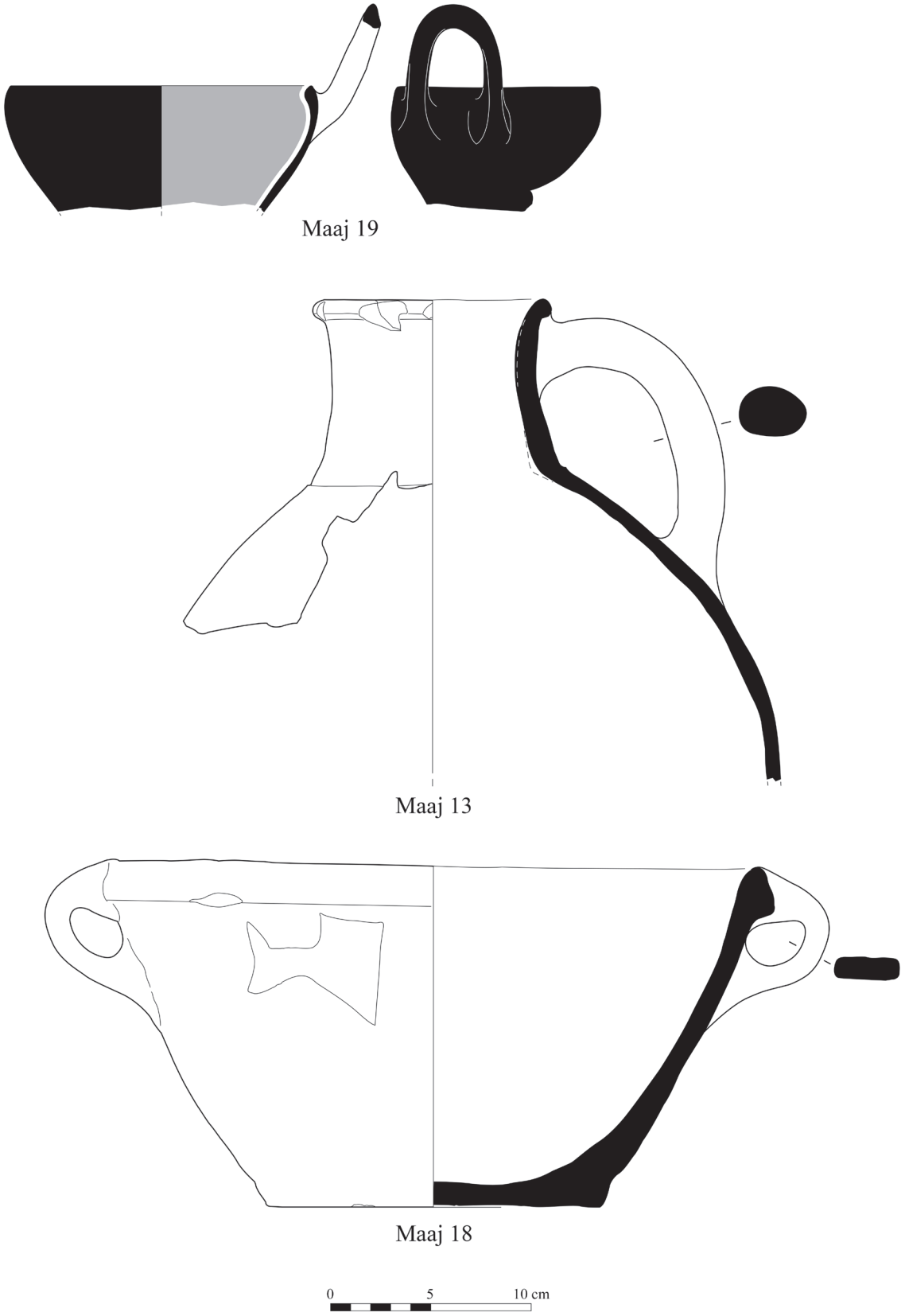


Figure 15. Maa Palaeokastro, Floor II (Maaj 13, Maaj 18), Floor I (Maaj 19), members of group CypM: Base Ring II bowl (Maaj 19) and unpainted Cypriot handmade vessels (Maaj 13, Maaj 18). Scale 1:3 (drawings R. Jung, D. Knauseder, digitisation R. Yassine)

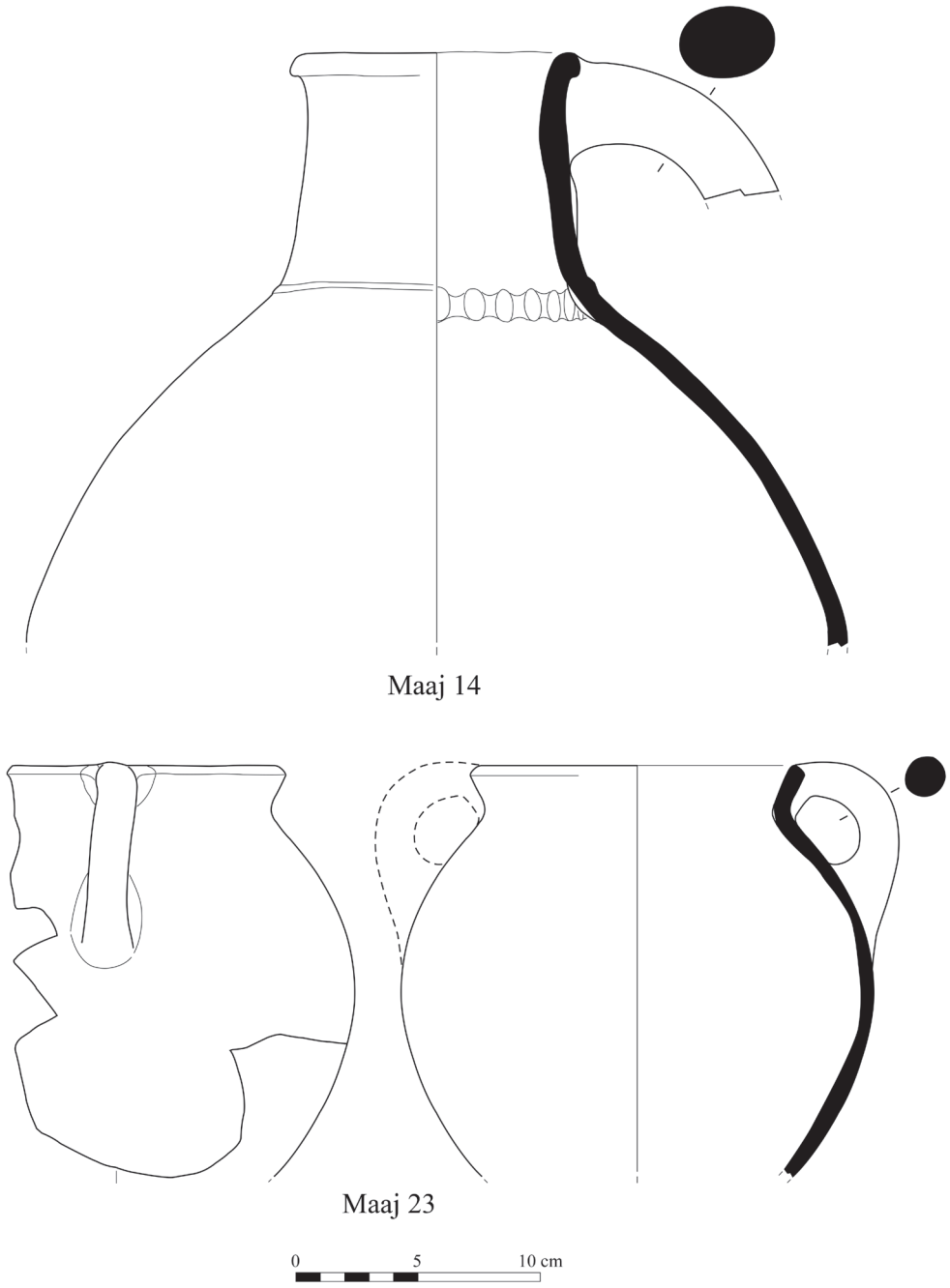


Figure 16. Maa Palaeokastro, Floor II (Maaj 14), Floor I (Maaj 23): unpainted Cypriot handmade jug (Maaj 14) and wheelmade Mycenaean cooking pot (Maaj 23), both singletons. Scale 1:3 (drawings D. Knauseder, digitisation R. Yassine)

happens in many cases for similar storage jars at Tell Kazel. Ultimately, at Maa, the 'bellied' Canaanite jars, in both phases (Floors II and I), are represented by the earlier shape (Type 4-2), of LBA II, with sloping shoulder, rather than by the more rounded-shouldered shape, that spread mainly between the 12th and 11th centuries. In fact, it seems possible to recognise a certain chronological differentiation between the two forms (even though they are morphologically very close), since Type 4-1 tends to be more frequently attested in transitional or Early Iron Age contexts. The bulbous base is also found in some examples from LC IIIA Hala Sultan Tekke; however, in our opinion, those vessels correspond more closely to Type 9-1 (with parallels at Tell Keisan and Hazor, in Galilee: Pedrazzi 2007: 100, fig. 3.48) because of the ovoid shape of the fully preserved jar from City Quarter 1, Stratum 1 (Bürge & Fischer 2018: 322, 324, fig. 3.69:1).

At Maa, three complete jars without carination on the shoulder, with a globular-ovoid shape, belonging to Type 2-1 (Pedrazzi 2007: 57–59) have been included in our analysis (nos 265+500, 267, 339, i.e. samples **Maaj 32**, **33** and **35**, **Figs 18–19**). This morphological type is known at the beginning of the Early Iron Age

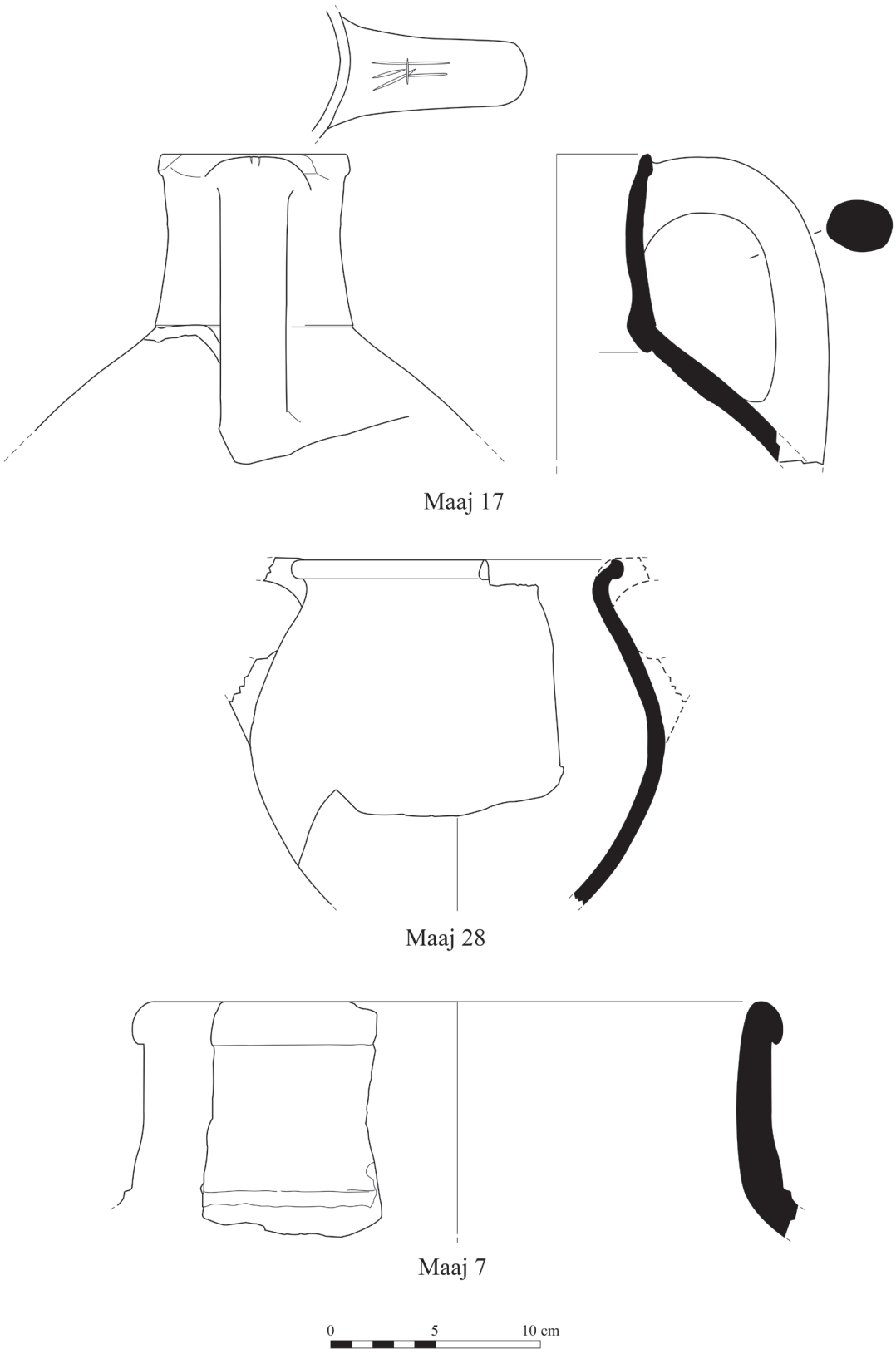
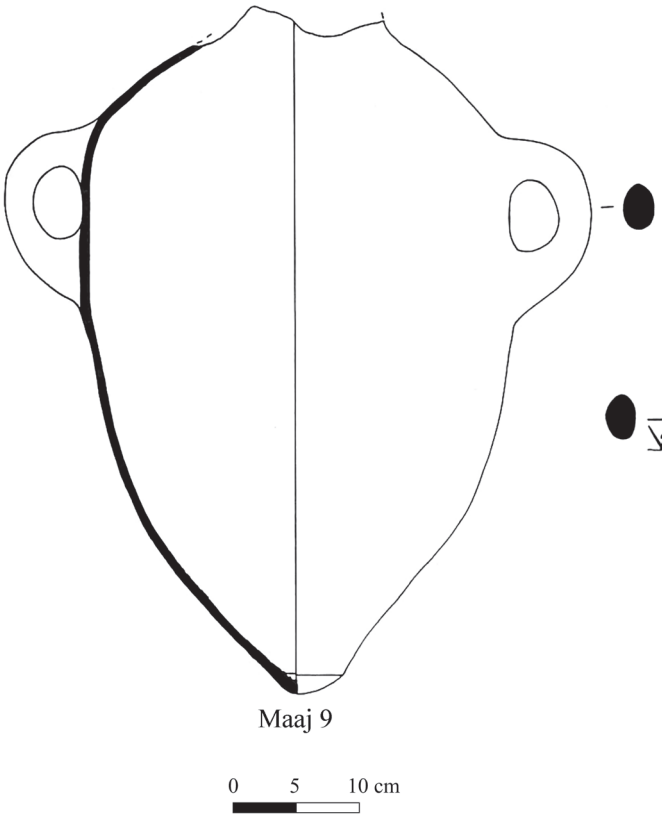


Figure 17. Maa Palaeokastro, Floor II (Maaj 7), Floor I (Maaj 17, Maaj 28): unpainted Cypriot handmade jug (Maaj 17), wheelmade cooking pot of Levantine derivation (Maaj 28) and wheelmade Cypriot pithos (Maaj 7), all singletons. Scale 1:3 (drawings R. Jung, digitisation R. Yassine)



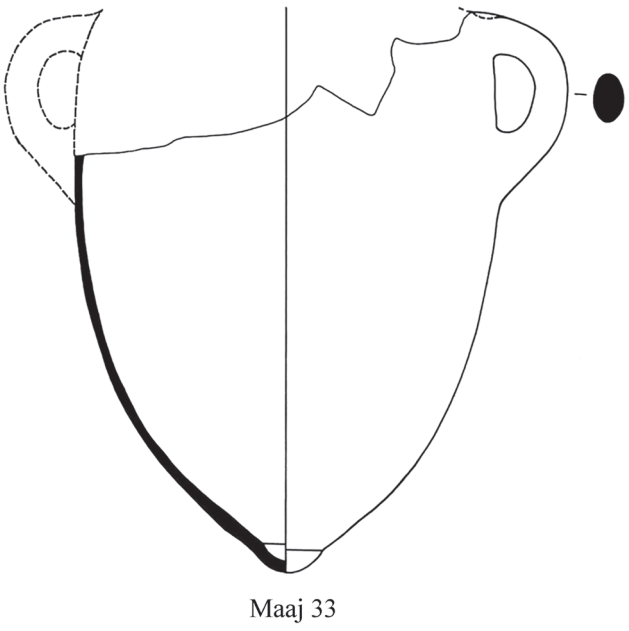
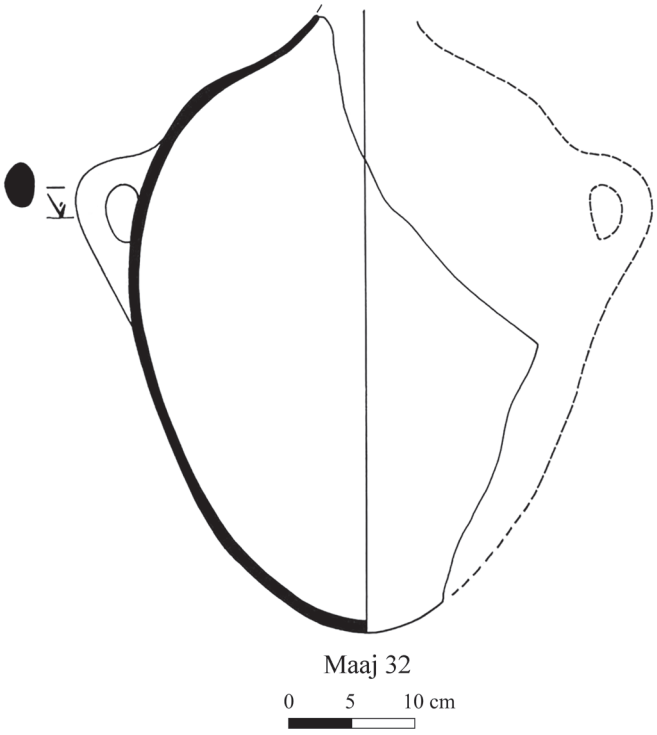


Figure 18. Maa Palaeokastro, Floor II (Maaj 9), Floor I (Maaj 33): Canaanite jars, singletons. Scale 1:6 (after Karageorghis & Demas 1988)



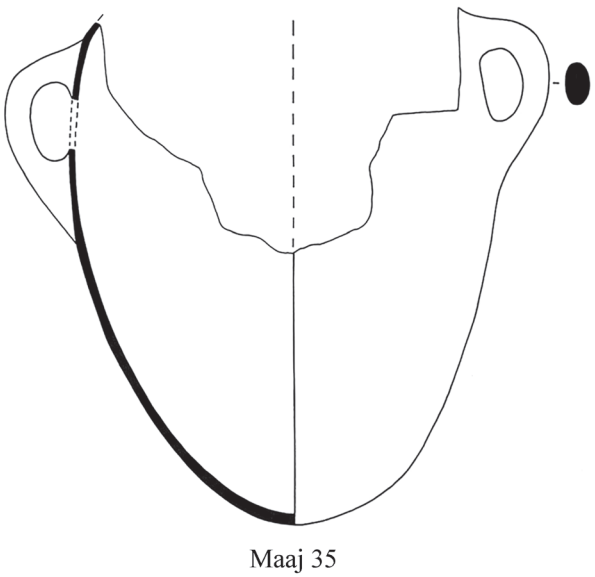


Figure 19. Maa Palaeokastro, Floor I: Canaanite jars, pair 250. Scale 1:6 (after Karageorghis & Demas 1988)

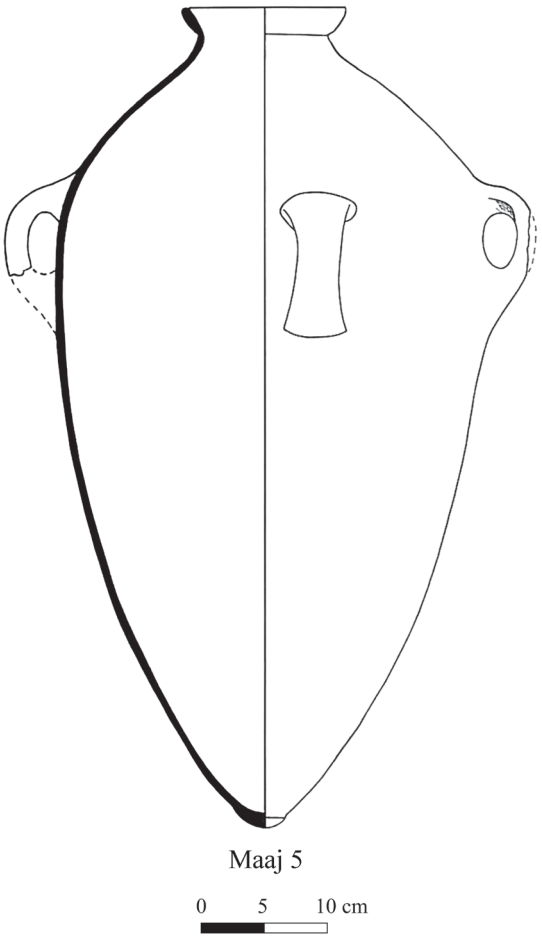


Figure 20. Maa Palaeokastro, Floor II: Canaanite jar, singleton. Scale 1:6 (after Karageorghis & Demas 1988)

in the Levant, in two variants, with a button-like base (Subtype 2-1-1: **Maaj 33**, **Fig. 18**) and with a rounded bottom (Subtype 2-1-2: **Maaj 32** and **35**, **Fig. 19**). Kathryn O. Eriksson (1995) suggested that these jars from Maa (belonging to Hadjicosti's type 2b) could be of Egyptian provenance, since Eriksson's fabric 8 seemed to refer to Egypt because of its petrographic characteristics. In fact, Eriksson assumed that the (missing) neck could be high, wide and cylindrical; from a morphological point of view, it is impossible to agree with this statement. Type 2-1 is rather typical of the Northern Levant, with parallels from Tell Kazel and Tell Sukas in Syria dated to the transitional phase LBA II–Iron Age I.

Hadjicosti recognised the four-handled jar as her 'type 3', linking it to a Levantine tradition dating back to the MBA. The presence of four handles, however, should not be considered as a sufficient feature to define a unique morphological type, as a four-handled version exists for different Levantine morphological types. In this case, at Maa, we can clearly recognise a specific typological class, Type 6-2 (Pedrazzi 2007: 89–91), a four-handled slender jar, of considerable size (usually, no less than 60cm high), with a rounded shoulder and a narrow tapering base. The complete specimen from Maa, Floor II, has been included in our analysis program (**Maaj 5**, **Fig. 20**). We also can ascribe to Type 6-2 a few folded everted rims (**Figs 21.6**, **10** and **22.6** and possibly **Fig. 22.2**), mostly from Floor II, in one case from a pit in Floor I. Many parallels come from Byblos (Salles 1980: 95, pl. 27.9), Ashdod (Dothan 1971: fig. 83.1–2), Lachish (Tufnell 1958: pl. 87.1020), the cemetery of Deir el-Balaḥ (Dothan 1979: 16–17, figs 22 and 28; 38–39, figs 81 and 89; 55–56, figs 124 and 130). It seems to be a Southern Levantine jar, and the slender morphology could be interpreted as being influenced by some sort of Egyptian fashion.

A jar belonging to Type 7-1 (Pedrazzi 2007: 91–94) from Maa has also been included in our program (**Maaj 34**, **Fig. 22.10**). Morphologically, this is a sort of 'hybrid' type, as it represents a true Egyptian evolution of the original model of the Canaanite jar. Indeed, the NAA has shown that this vessel from the latest habitation phase at Maa (Floor IA) was made of Egyptian marl clay. Many examples of this Egyptian amphora, stemming from the Canaanite jar, have been found on coastal sites in the Levant, mostly in funerary contexts. It is an interesting 'return phenomenon', i.e. a Canaanite model, reworked and transformed in Egypt, comes back to the Levantine coast.

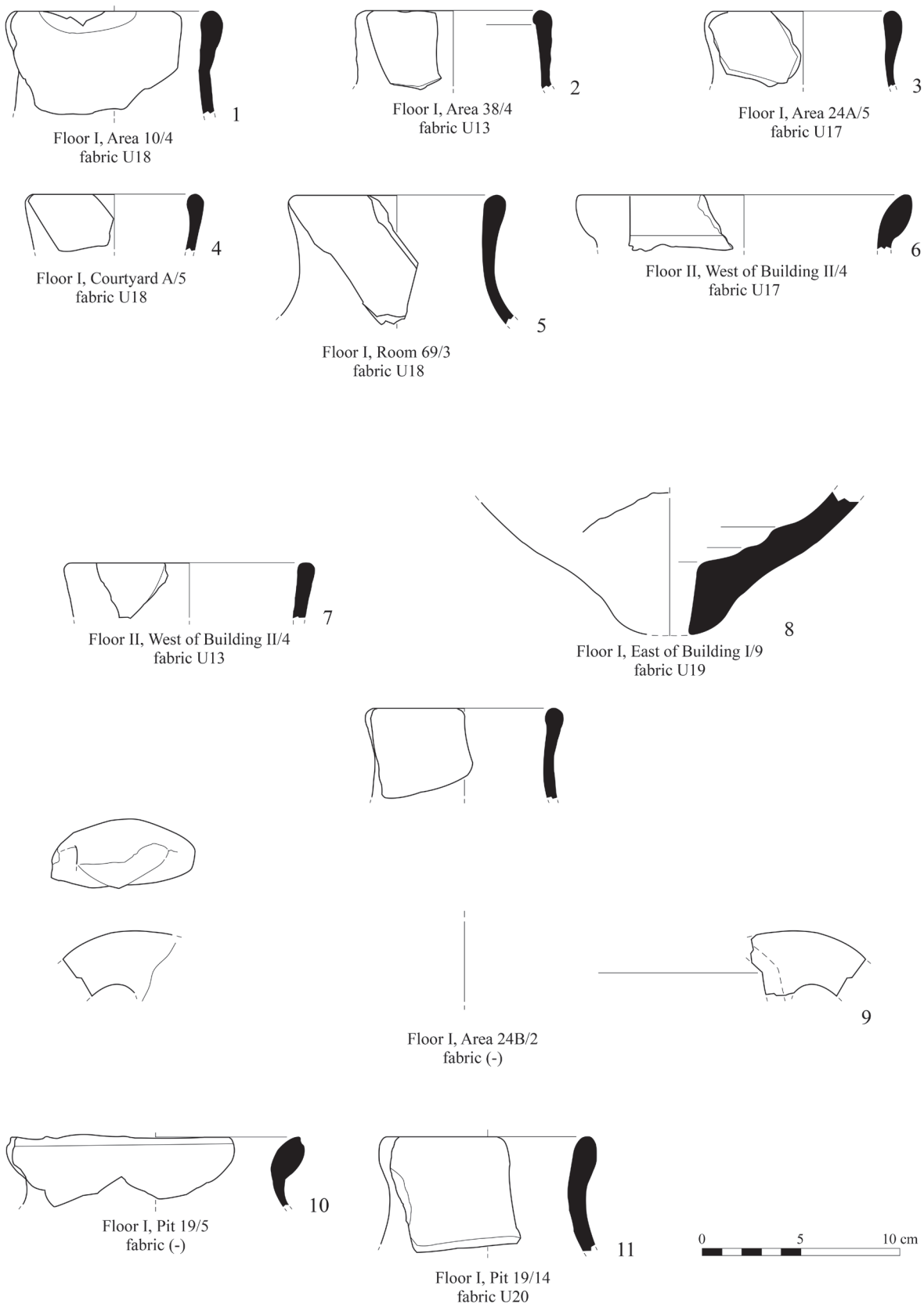


Figure 21. Maa Palaeokastro, Floor II (6, 7), Floor I (1–5, 8–11): Canaanite jars. Scale 1:3 (drawings R. Jung, T. Pedrazzi, digitisation R. Yassine)

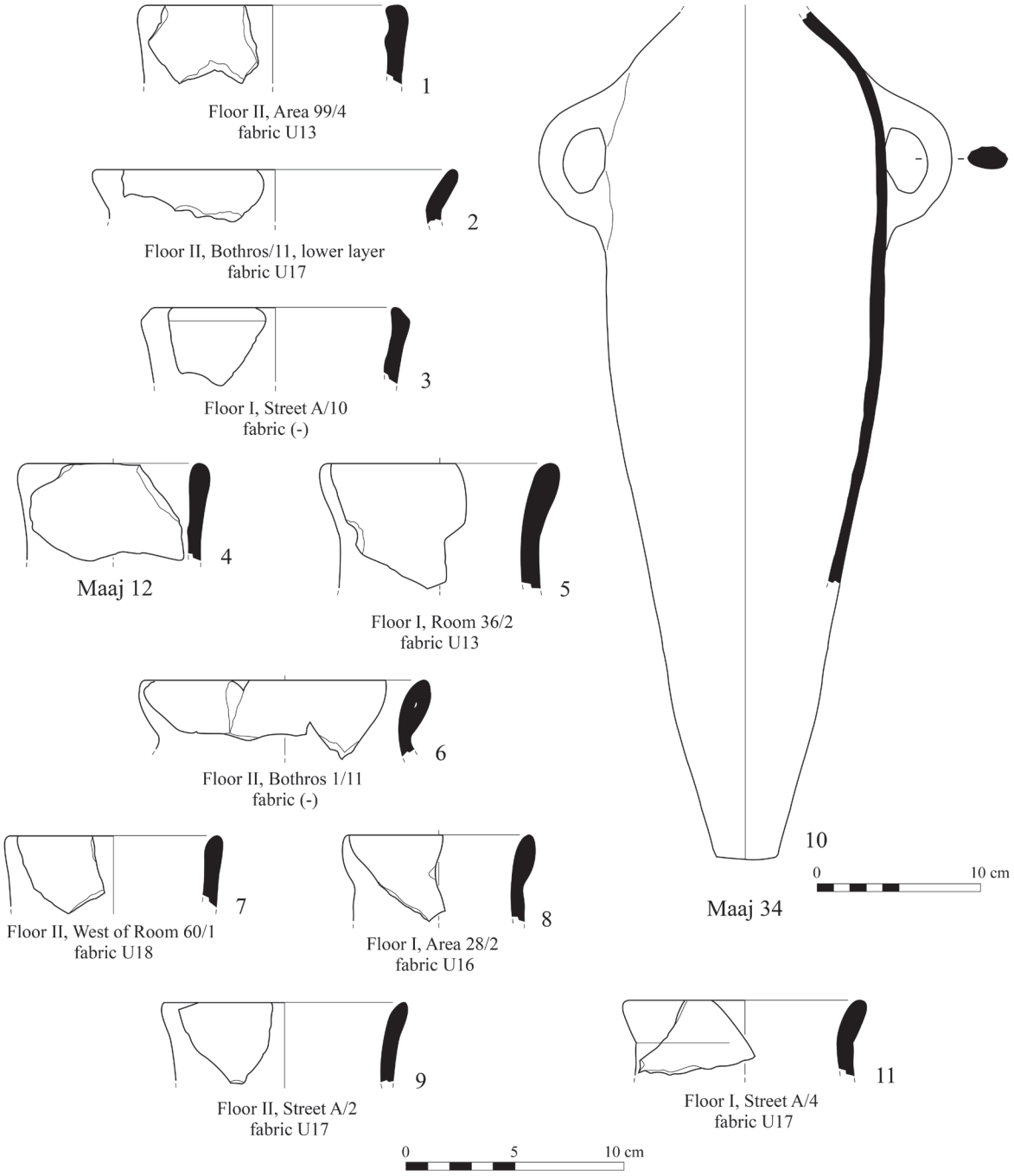


Figure 22. Maa Palaeokastro, Floor II (1–2, 6–7, 9), Floor I (3–5, 8, 11), Floor IA (Maaj 34): Canaanite jars (1–9, 11), Egyptian jar (10). Scale 1:3 (1–9, 11), 1:4 (10) (drawings R. Jung, T. Pedrazzi, digitisation R. Yassine)

A vertical simple rim from Maa (**Maaj 12**, **Fig. 22.4**) could belong to Type 5-1, 5-3 or 5-5 (Pedrazzi 2007), with a slight carination on the shoulder. Canaanite jars with a slight carination on the shoulder are dated to the LBA II and Iron Age I periods (Pedrazzi 2007: 71–85), with many Levantine parallels at Megiddo (Guy 1938: pl. 17.13), Hazor (Yadin *et al.* 1960: pl. 121.5) and at Tell Keisan in Galilee (for Type 5-5, see Briend & Humbert 1980: pls 59–60). A few of the Maa rim fragments (**Figs 21.2**, **4** and **22.7** and possibly also **Fig. 22.1**) belong to Type 5-5, and more specifically to Subtype 5-5-3 with a slightly hollowed neck (Pedrazzi 2007: 80–81), known also at Pyla, with a complete specimen (Karageorghis & Demas 1984: pl. 37, trial A/2; here **Fig. 31**). Almost all these fragments come from Floor I at Maa; this provenance is consistent with the prevalent dating of Type 5-5 to Iron Age I.

The study of Canaanite jar types at Enkomi revealed a partially different picture. First of all, the carinated-shouldered Type 5-4 is more common at Enkomi than at Maa. We can ascribe to this type two bases from Level IIB (**Fig. 23.6–7**, sample **Enkj 41**) and two

bases from Level IIIA (**Fig. 24.1**, **6**, **Enkj 49**). It is more difficult to ascribe rim fragments with certainty to this type, but a rim with a ridge (**Fig. 23.5**, sample **Enkj 42**, from Level IIB) has a parallel in a LBA II Palestinian example from the sea (Zemer 1978: pl. 1.3) and in two more examples from LH IIIB Final Mycenae (French & Stockhammer 2009: 188, fig. 3.2) and from LH IIIC Early 1 Dhimini in Thessaly (Adrimi-Sismani 2014: 376, no. BE 35744), even though similar rims are also known from Type 3-1 (Pedrazzi 2007: fig. 3.11), from LBA II tombs at Megiddo (Guy 1938: pl. 56.10) and Akko (Ben Arieh & Edelstein 1977: fig. 10.5–6); vertical necks with slightly thickened rims (**Fig. 23.3**, **9**) are also hypothetically attributable to the 'commercial' jar Type 5-4, as well as the folded rim (**Fig. 23.4**). A base (**Enkj 43**, **Fig. 23.10**), analysed in our project, could be ascribed to Type 6-2, also documented at Maa.

In contrast to the situation at Maa, at Enkomi the slightly carinated Type 5-5 is more common than Type 4-2. The latter could probably be represented here by a few bulbous bases, (**Figs 23.8** and **24.3**) and, possibly, by a simple everted rim (**Enkj 45**, **Fig. 24.2**), sampled in our project (singleton), from Level IIIA (a parallel can be found in a complete jar from Tell Kazel: Badre & Capet 2018: 110–111, pl. XXVII.294). Type 5-5, a jar with a cylindrical body and a slightly rounded shoulder provided by a carination, is present with several rims (**Figs 23.1, Enkj 46** [end of Level IIB]; **25.3** [middle of Level IIIB], **23.8** rim [end of Level IIB], with parallels in Pedrazzi 2007: 76, fig. 3.24; **Fig. 29.8**, **Enkj 48** [Level IIIC]; **Fig. 25.7** [destruction of Level IIIB]; **Fig. 28.1–2** [both from the destruction of Level IIIB]); some rims have a straight profile, as in Variant 5-5-1-1 (**Fig. 25.4**, **Enkj 47** [middle of Level IIIB]; **Figs 25.8**, **26.5** [both destruction of Level IIIB]; **Figs 26.1–2** and **27.8**, **10** [all destruction of Level IIIB or late Level IIIB]; **Figs 27.6**, **11–12** and **29.1–6** [all destruction of Level IIIB]), while others show a hollowed profile (**Figs 25.9**, **26.4**, **27.7** [all destruction of Level IIIB or late Level IIIB]), as in Variant 5-5-1-2 (Pedrazzi 2007: 78): both variants are well known at Tell Keisan, in Galilee; also Variant 5-5-4-1 (**Fig. 27.5** [destruction of Level IIIB]), with short neck and internally profiled rim, is represented at Enkomi. Type 5-5 is chronologically prevalent in the Early Iron Age, mostly in the late stages of the period, with a higher concentration in 11th century contexts. It is a primarily Southern Levantine type (**Fig. 38**), well known from Tell Keisan in Galilee and Tell Qasile in the Philistine area; at Enkomi this type is in fact documented predominantly in the destruction layer of Level IIIB or late Level IIIB as well as Level IIIC.

Only a few specimens from the destruction Level IIIB at Enkomi find parallels at Tell Tweini in northern Syria, specifically among the storage jars from the Level 6EF destruction level. For instance, the rim from Enkomi (**Fig. 28.1**) is clearly of the same type as the rim from Tweini (**Fig. 30.1**). The ^{14}C dating range for the Level 6EF destruction is the second half of the 11th to the first half of the 10th century cal BCE (three dates on wood charcoal and olive stones, see Kaniewski *et al.* 2010: 212, fig. 4 and table 3; 214), which agrees well with the Cypriot White Painted I deep bowl with high conical foot found in the same level (Bretschneider *et al.* 2019: 9–10, 23, fig. 14). Some of the bases from Enkomi could also belong to Type 5-5. These are the rounded reinforced bases in **Fig. 24.4–5** (both from Level IIIA and made in the same fabric U30 as one of the straight rims discussed above: **Fig. 29.8**, **Enkj 48**) as well as bases ascribed to Subtypes 5-5-1 (**Fig. 25.6** from Level IIIB) and 5-5-4 (**Fig. 29.7** from the destruction of Level IIIB]). Another rim from the destruction of Level IIIB (**Fig. 27.1**) with a higher neck belongs to Variant 5-5-2-1 known at Beersheba (cf. Stratum IX: Herzog *et al.* 1984) in Iron Age I (Pedrazzi 2007: 79, fig. 3.28:a).

Type 5-5 is also represented by a quite complete jar with a cruciform sign on the shoulder (**Fig. 25.1**, sample **Enkj 35** [from the middle of Level IIIB]), which can be specifically assigned to the Subtype 5-5-3 (Pedrazzi 2007: 80), characterised by a wider shoulder, with parallels at Tell Keisan in Galilee, and a complete example from Pyla (see below); another rim from Enkomi could belong to the same Subtype (**Fig. 25.5**, also middle of Level IIIB).

In the destruction layer of Level IIIB at Enkomi some rims seem to refer to a somewhat later evolution of Type 5-5; in particular, a short, slightly introverted rim from Room 13 in City Quarter 4 West (**Fig. 26.3** [destruction of Level IIIB]) can be compared to the rim of a fully preserved jar from **Tell Tweini** (**Fig. 30.2**), which is ascribed to Type 16-1 (Pedrazzi 2007: 131, fig. 3.79), with parallels from Tell Keisan in Galilee (Briend & Humbert 1980: pl. 67.3, even though with a variable neck height) and Palaepaphos *Skales* on Cyprus (Karageorghis 1983: figs LXXXVI.79, CXXXVII.20). This Type 16-1, which shows the same shoulder as Type 5-5, comes into use towards the end of the Early Iron Age, and is characterised by the descent of the maximum diameter below the handles, as well as by slightly introverted rims.

Finally, a very distinct type is represented by the fragment of a cylindrical high neck set on a sloping shoulder. This example from Enkomi, destruction of Level IIIB (**Fig. 27.2**), could belong to Type 9-1, an Iron Age I northern Palestinian jar type, with an elongated ovoid profile (Pedrazzi 2007: 100); in this case, the date in the 11th century BCE seems to be appropriate.

As for Pyla, a hollow vertical neck, with folded rim (**Fig. 32.1**, sample **Pylj 8**), belongs to the Subtype 5-5-3 discussed above. A complete vessel (**Fig. 32.2**), pertaining to the domestic globular jar Type 12-1 (Pedrazzi 2007: 113–115), has also been analysed in this project (**Pylj 11**, **Fig. 32**, a singleton). This typical LBA II jar is known mainly at Hazor, in Galilee (see Yadin *et al.* 1958: pl. CXLI.1, 3, 4, Yadin *et al.* 1960: pl. CXXXVIII.7, 8; Yadin *et al.* 1961: pl. CXCIX.18), but also at Megiddo, or, towards the north, at Kāmid el-Lōz in the Beqaʿa Valley (Miron 1990: pls 63.1, 66.3; Metzger & Barthel 1993: pl. 152.5) and at Ugarit in

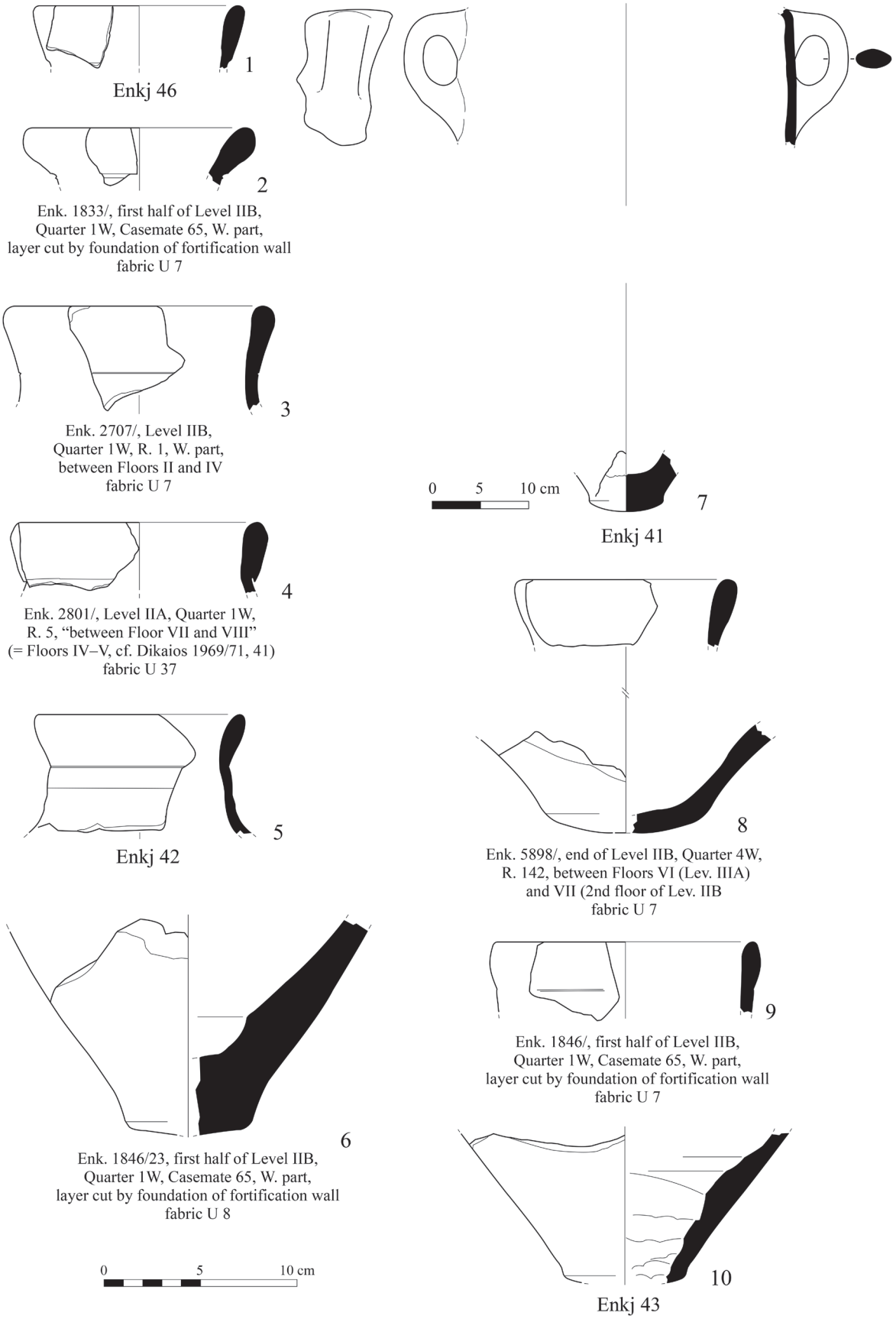


Figure 23. Enkomi IIA (4), Enkomi IIB (1–3, 5–10): Canaanite jars, group Ul97 (Enkj 46) and singletons (Enkj 42–43). Scale 1:3 (1–6, 8–10), 1:6 (7) (drawings R. Jung, T. Pedrazzi, digitisation R. Yassine)

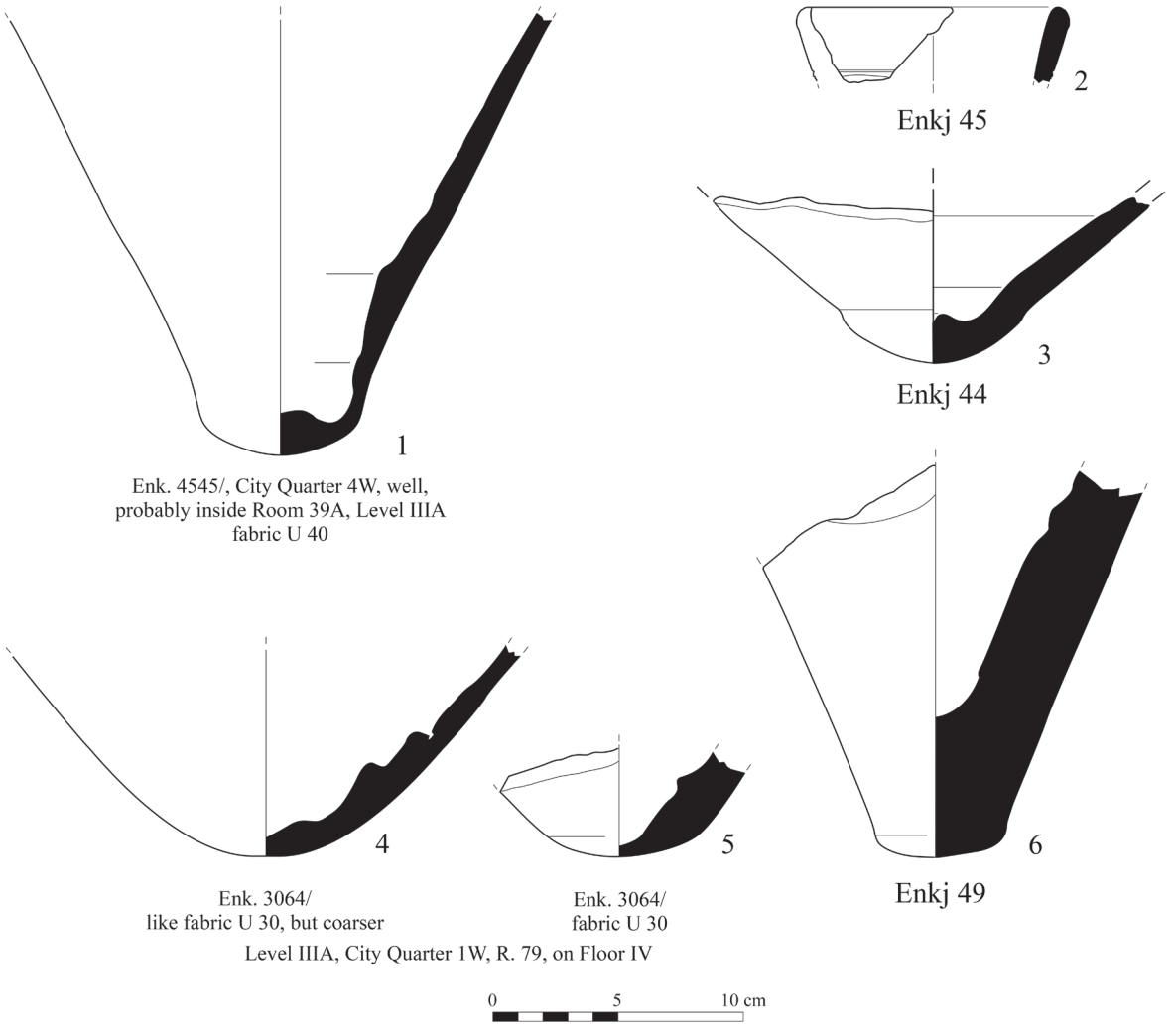


Figure 24. Enkomi IIIA: Canaanite jars, singletons (Enkj 44–45, Enkj 49). Scale 1:3 (drawings R. Jung, T. Pedrazzi, digitisation M. Frauenglas, R. Yassine)

Syria. A similar type, although with a more oblique and broader shoulder (Type 12-2, Pedrazzi 2007: 116), is also attested at LC IIIA Hala Sultan Tekke (Bürge & Fischer 2018: 322, 324, fig. 3.69:4) and finds parallels at Beth Shean and Hazor, in the northern Palestinian area. The last vessel discussed here (**Fig. 31**) is the complete jar from Pyla ascribed to Type 5-5 (and specifically to Subtype 5-5-3, with a wider shoulder) with signs incised on the shoulder and on the handle; many parallels come from Tell Keisan (Pedrazzi 2007: 80).

As for the results of the analyses, in total we have sampled and analysed 19 Canaanite jars, ten from Enkomi (Levels IIB [four samples], IIIA [three samples], IIIB [two samples] and IIIC [one sample]), two from Pyla *Kokkinokremos* and seven from Maa *Palaeokastro* (two from Floor II and five from Floor I). The first thing to note is the very marked variability of clay pastes. Among our Canaanite jar samples, there are only two which belong to the same group, i.e. **Enkj 46** from Enkomi Level IIB and **Maaj 12** from Maa *Palaeokastro*, Floor I, members of Ul97. Two further samples, two jars of Type 2-1-2 from Maa *Palaeokastro*, Floor I, form a pair (**Maaj 32** and **35**, **Fig. 19**). A third piece, again from the Floor I phase at Maa, belongs to a well-known group of Egyptian marl clay (**Maaj 34**, **Fig. 22.10**) and does in fact represent the characteristic Egyptian Type 7-1. All the other samples are chemical singles. Though some vessels belong to types characteristic of the northern coastal regions of the Levant (especially **Maaj 32** and **Maaj 35**, belonging to Type 2-1), none of the samples is a member of the chemical groups we know from sites such as Tell Kazel (Badre *et al.* 2005; Boileau *et al.* 2010) and Tell Tweini.

We can now assign group Ul97 and with it one Canaanite jar imported during LC IIC (Type 5-4, **Enkj 46**, **Figs 23.1**, **34**) and a second imported during LC IIIA (Type 5-1 or less probably 5-3, **Maaj 12**, **Figs 22.4**, **34**) to the region of Sidon in southern Lebanon.

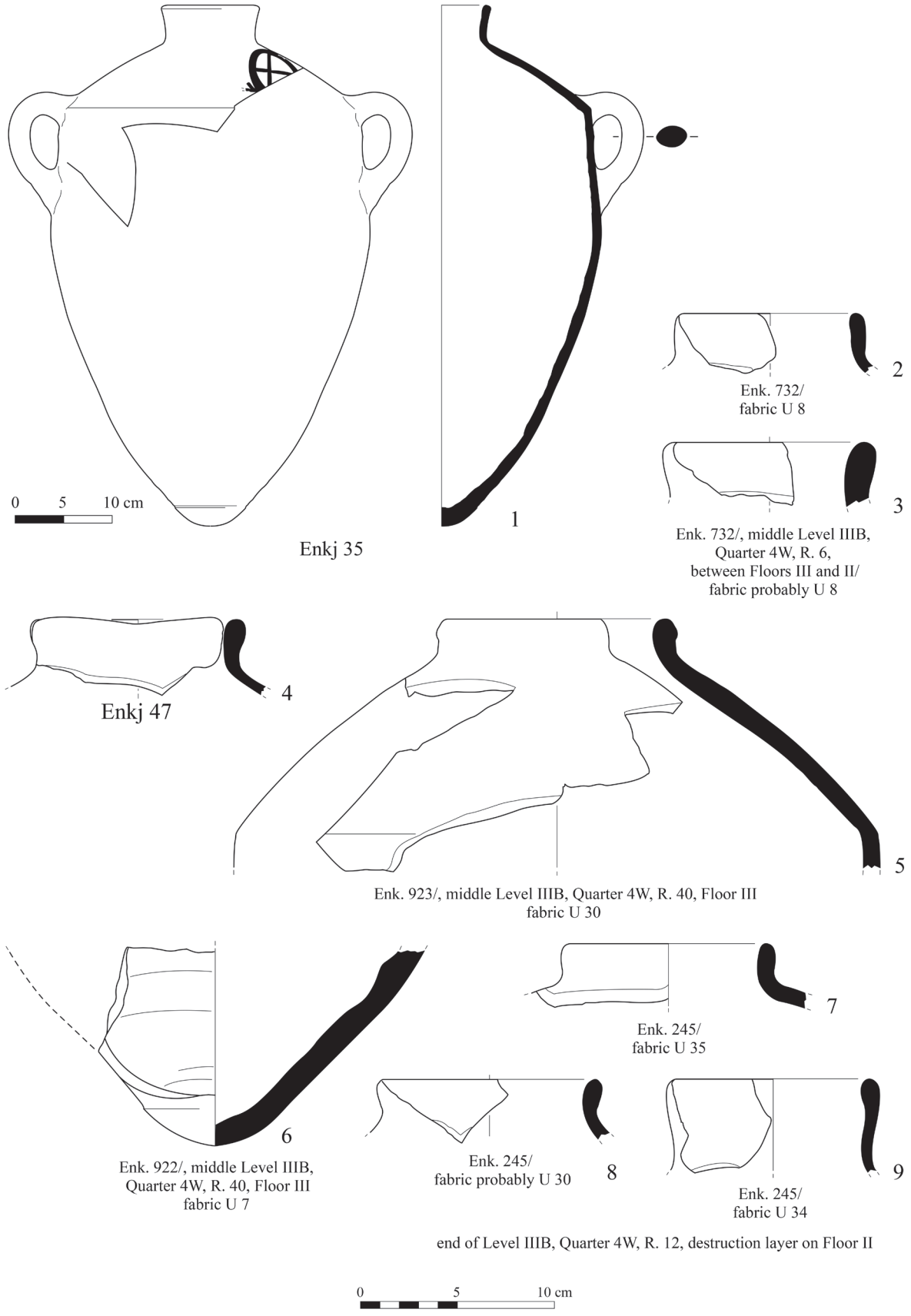


Figure 25. Enkomi IIIB: Canaanite jars, Enkj 35 singleton. Scale 1:3 (2–9), 1:6 (1) (drawings R. Jung, T. Pedrazzi, digitisation R. Yassine)

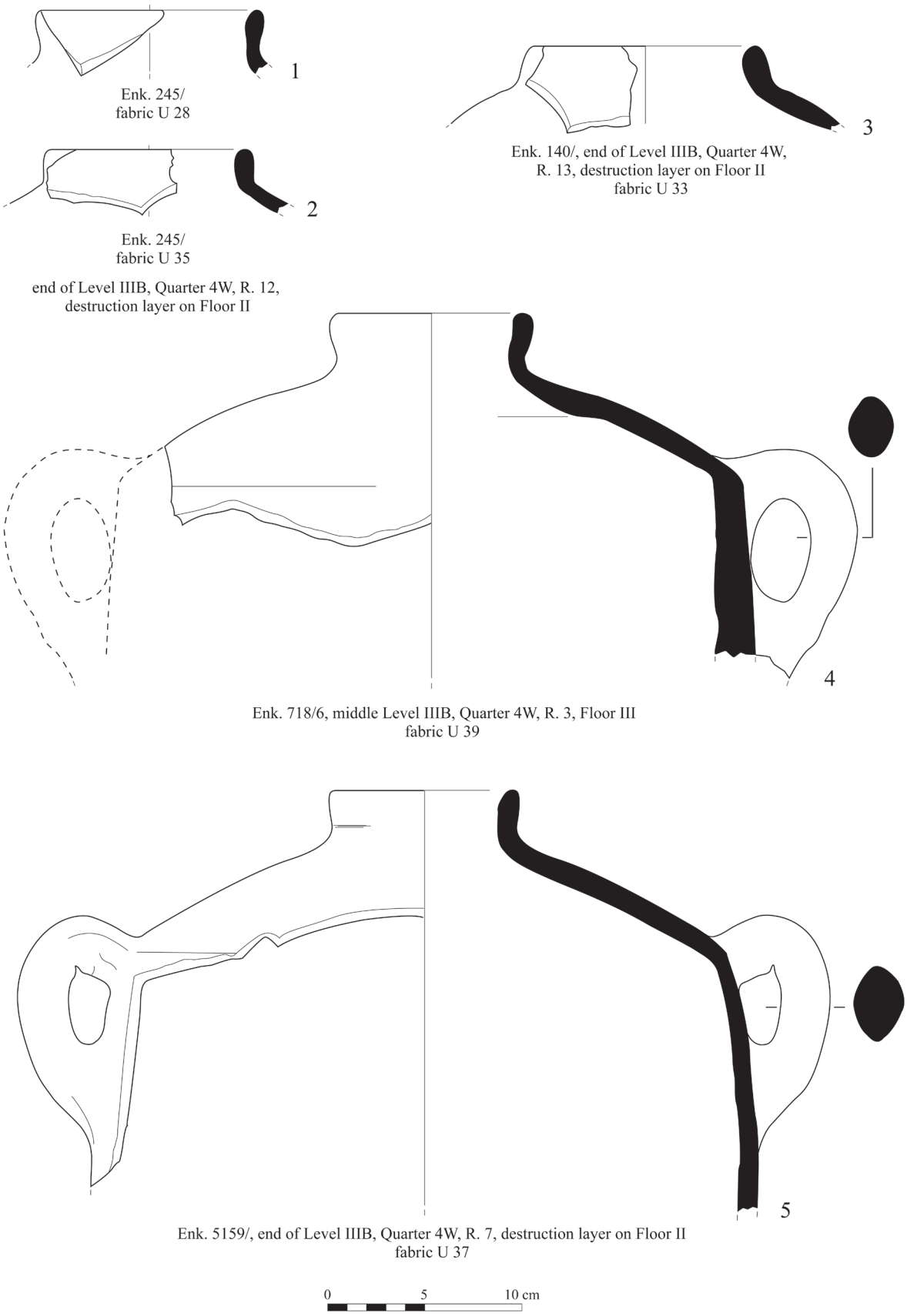


Figure 26. Enkomi IIIB: Canaanite jars. Scale 1:3 (drawings R. Jung, T. Pedrazzi, digitisation R. Yassine)

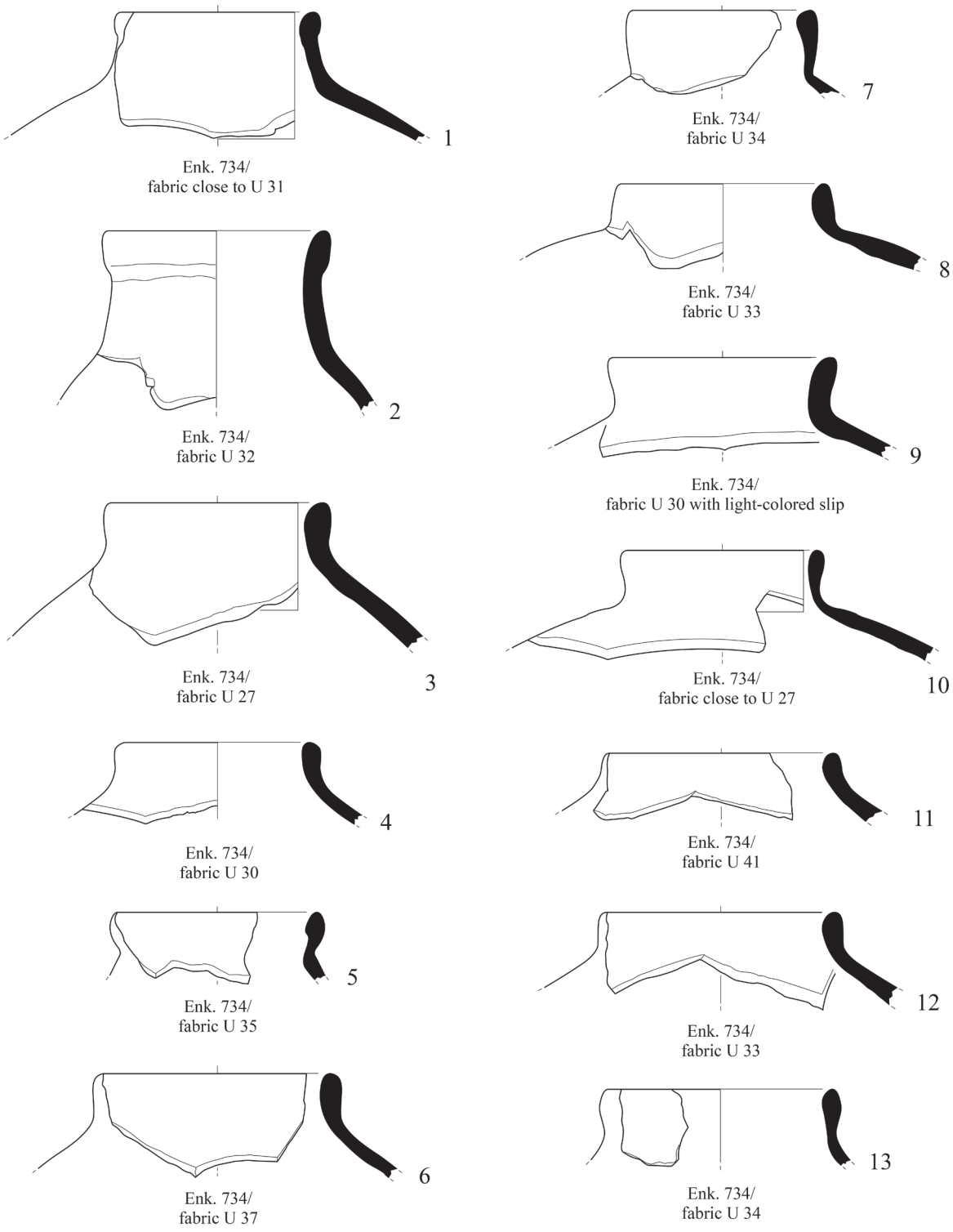


Figure 27. Enkomi IIIB (end): Canaanite jars. Scale 1:3 (drawings R. Jung, T. Pedrazzi, digitisation R. Yassine)

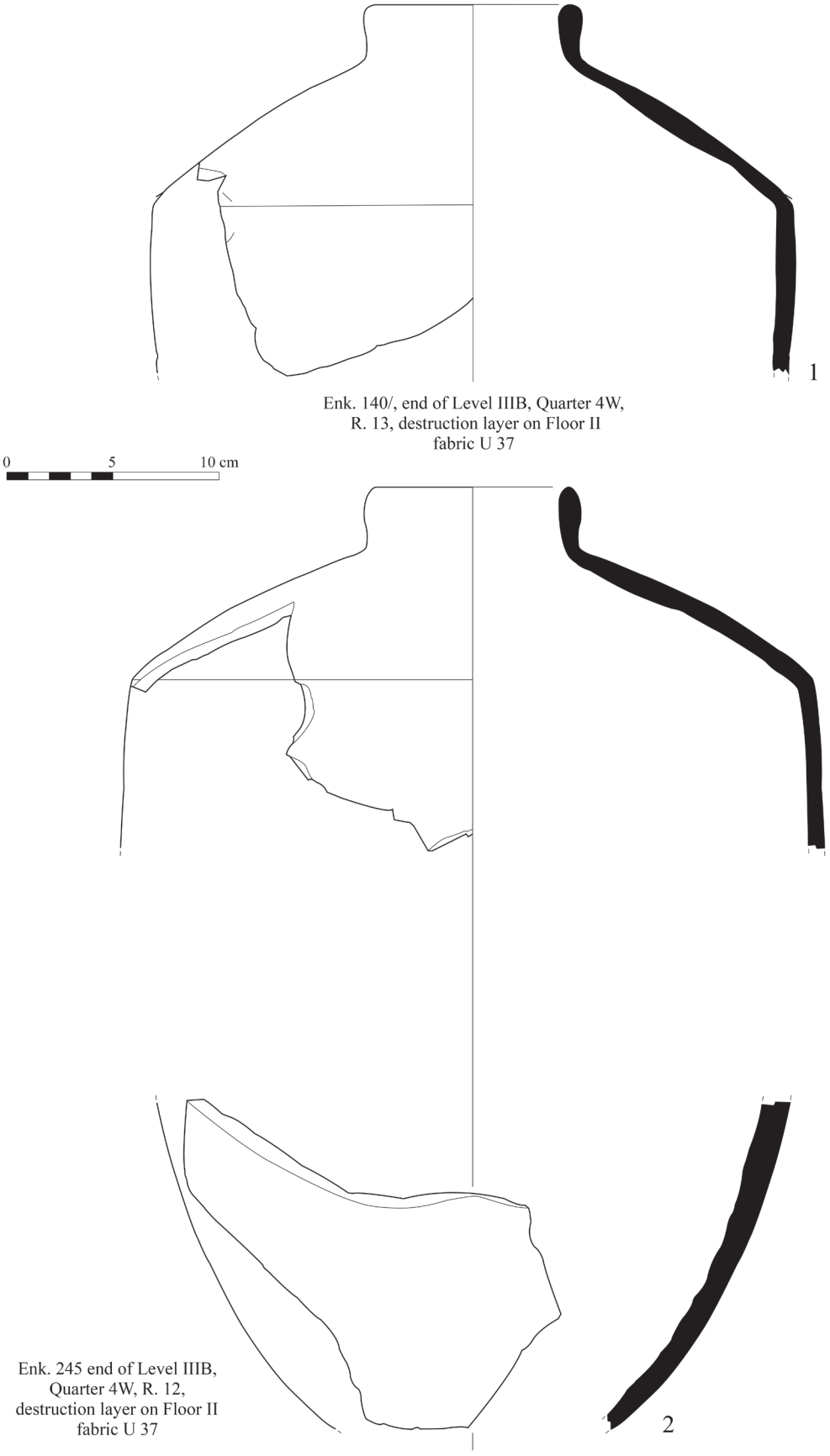


Figure 28. Enkomi IIIB (end): Canaanite jars. Scale 1:3 (drawings R. Jung, digitisation R. Yassine)

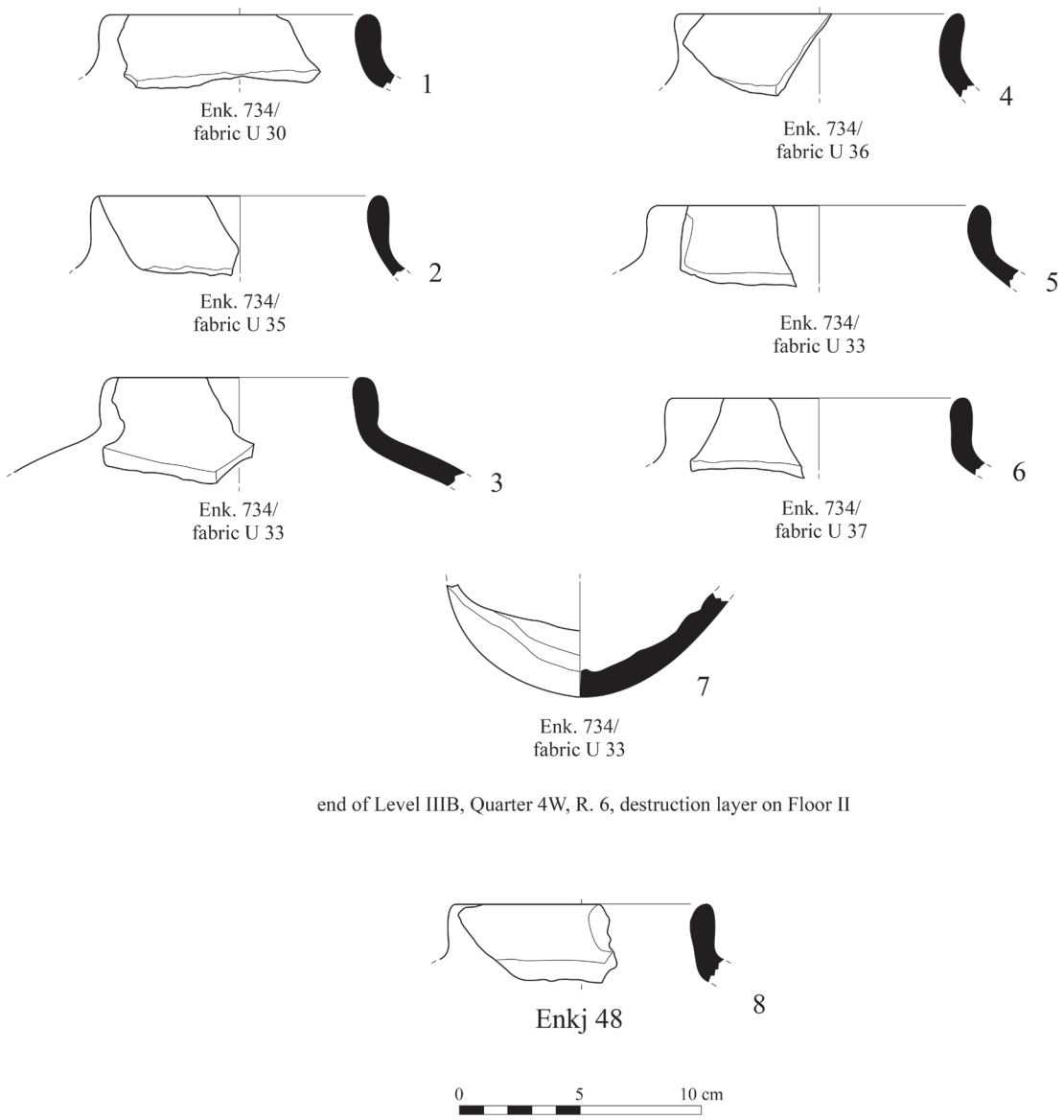


Figure 29. Enkomi IIIB (end, 1–7), Enkomi IIIC (8): Canaanite jars. Scale 1:3 (drawings R. Jung, T. Pedrazzi, digitisation R. Yassine)

At Sidon vessels of quite different typological classes are members of Ul97 (unpublished data from the excavations directed by Claude Doumet-Serhal). They include an unpainted plate with t-shaped rim (sample Sido 68), an unpainted platter/bowl with inward-slanting rim (Sido 71), a Canaanite jar (Sidon 70), a Pastoral Style krater FT 281/282 with two rows of running spirals (Sido 52) as well as a second Mycenaean-type krater with a spiral pattern (Sidon 51). While the mentioned unpainted vessels of Levantine Late Bronze Age types confirm the Levantine production region of Ul97, the two Mycenaean-type vessels of Cypriot style reveal a strong Cypriot connection with that specific pottery workshop at or near Sidon.

Of the singletons among our analysed Canaanite jars, **Maaj 9** (**Fig. 18**), a jar of Type 4-2, is close to Ul96, another group mainly comprising pottery found at Sidon (samples Sidon 1, 2, 9, 10, a deep bowl, a stirrup jar and two flasks, see Karageorghis 2018: 185, pl. 232; 265–266, pl. 488; 329–330, pls 702–703; Mommsen 2018b: 354). A few more pieces of group Ul96 have been found in Palestine, at Tell Abu Hawam (sample AbuH 21), Tel Dan (sample DanM 23), Hazor (sample Hazor 43) and Yoqneʿam (sample Yoqn 2) (Zuckerman *et al.* 2020: 576, 579–580, table 3), in the northern Sinai (a Simple Style stirrup jar, see Mommsen *et al.* 2005: 153, table 1 [sample 13, at the time assigned to QAN-L]), and at Qantir (sample Qant 58, Mountjoy & Mommsen 2001: 152, cat. no. 67). The pair of **Maaj 32** and **35** (**Fig. 19** [both from Floor I]) is chemically close to several groups from the Levant and definitely not to those of Cyprus.

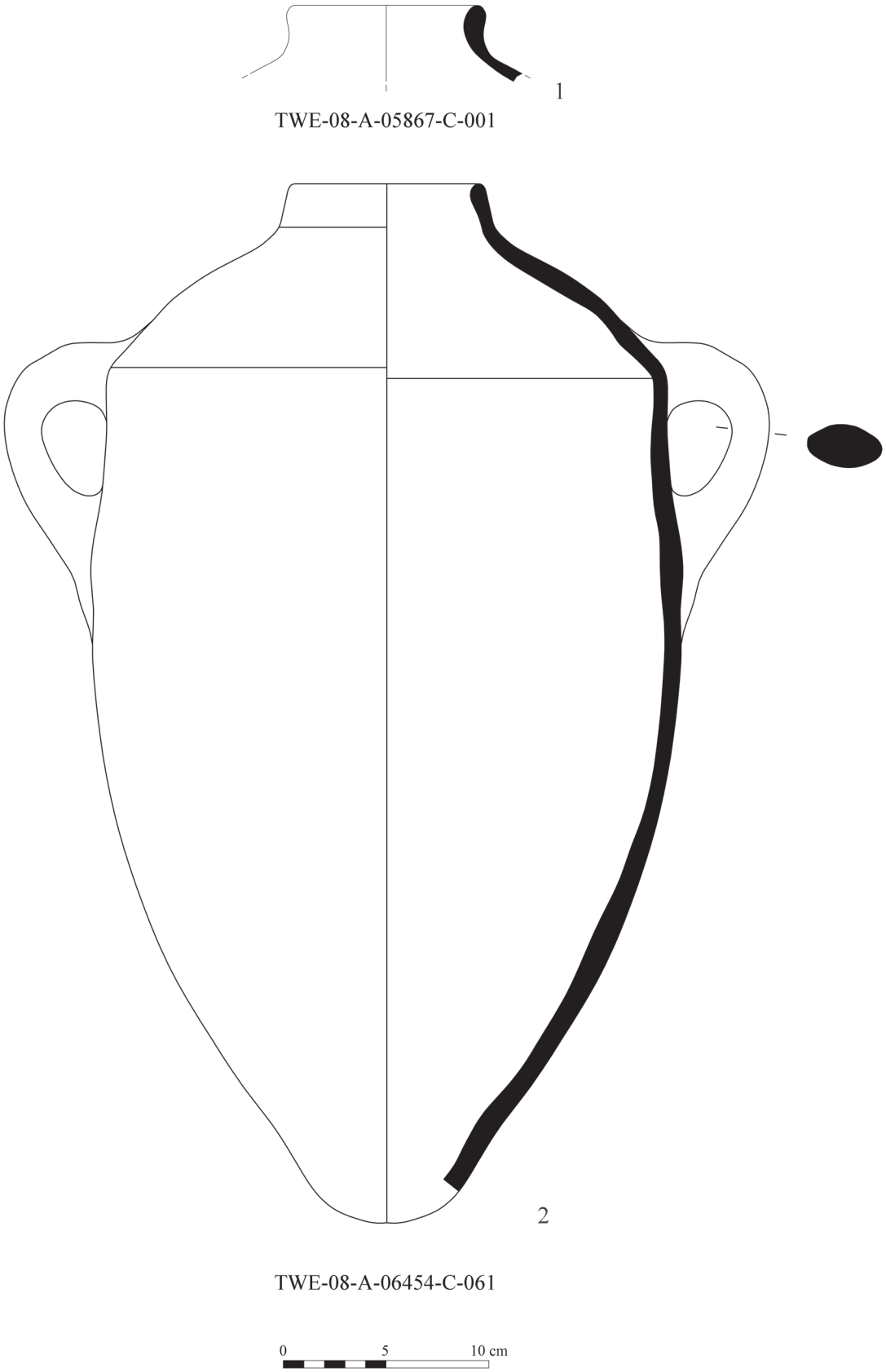


Figure 30. Tell Tweini, Level 6EF: Canaanite jars. Scale 1:3 (drawings by the Tell Tweini ceramic team under the supervision of K. Vansteenhuyse)

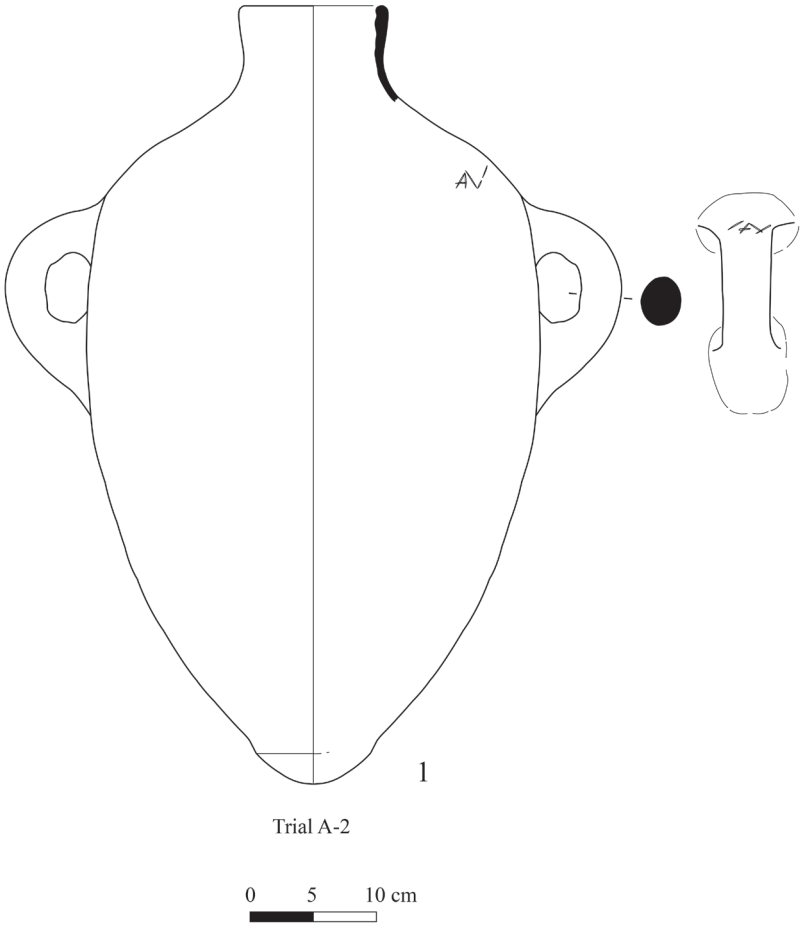


Figure 31. Pyla Kokkinokremos: Canaanite jar. Scale 1:6 (drawing R. Jung, digitisation R. Yassine)

Finally, we cannot confirm the long debated hypothesis according to which there was a Canaanite jar production also on Cyprus. Though one of the sampled Canaanite jars from Enkomi IIIA seemed to belong to the Plain White U1 fabric, NAA proved it to be a singleton rather than a member of CypI (**Enkj 44**, **Figs 24**, **34**). The hypothesis of local Canaanite jar production first centred on the Maa *Palaeokastro* finds (Jones & Vaughan 1988), but none of our seven Canaanite jar samples from that site is a member of any known Cypriot chemical group. In the 1980s, Jones and Vaughan sampled 26 Canaanite jar fragments, which are mainly small rim, body and base sherds. In addition, they analysed four closed vessel fragments, presumably as a control or reference group. Based on petrography, Vaughan assigned four of the Maa samples (nos 18, 22, 34 and 38) to the supposedly local Cypriot group III (Jones & Vaughan 1988: 387), while she concluded three single samples might represent Cypriot products as well (nos 13b, 29 and 30). However, with the statistical analysis of the AAS results leading to the exclusion of samples 22 and 38 from group III (Jones & Vaughan 1988: 393), only five samples were left, three of which belong to 'a loose [chemical] grouping' (Jones & Vaughan 1988: 393). Of the five hypothetically Cypriot products sample no. 34 represents a local painted closed shape (Hadjicosti 1988: 357 no. XI; 367, table 4; Karageorghis & Demas 1988: pl. 224, Area 44A/11+Room 45/3) and sample 13b is a local unpainted closed vessel (Hadjicosti 1988: 357, no. IX; 365, table 4, pl. D.17), so that only samples nos 22 (not illustrated), 29 (an almost complete vessel of Type 4-2, see Hadjicosti 1988: 343, no. 3; 367, table 4, pl. B.1) and 30 (another base fragment, see Hadjicosti 1988: 344, no. 23; 367, table 4, pl. B.16) could stand for hypothetical Canaanite jars made in Cyprus.

In a later discussion of possible manufacturing regions of Canaanite jars, Laurence M.V. Smith *et al.* (2004) clearly stated the difficulties they faced in assigning their petrographic group 6 to Cyprus. Reference groups of local Cypriot-type pottery from several southern Cypriot sites did not exactly match their group 6 Canaanite jars in terms of petrographic details. Likewise, a principal component analysis of the chemical data for group 6 and the data of the local Cypriot reference group showed a separation of the two clusters (Smith *et al.* 2004: 68–71, fig. 4.16). Yet, in the final interpretation of their findings, the authors upheld southern coastal Cyprus as their best guess for a provenance assignment of group 6 (Smith *et al.* 2004: 73, 'generally between Paphos and Enkomi' [*sic* !]).

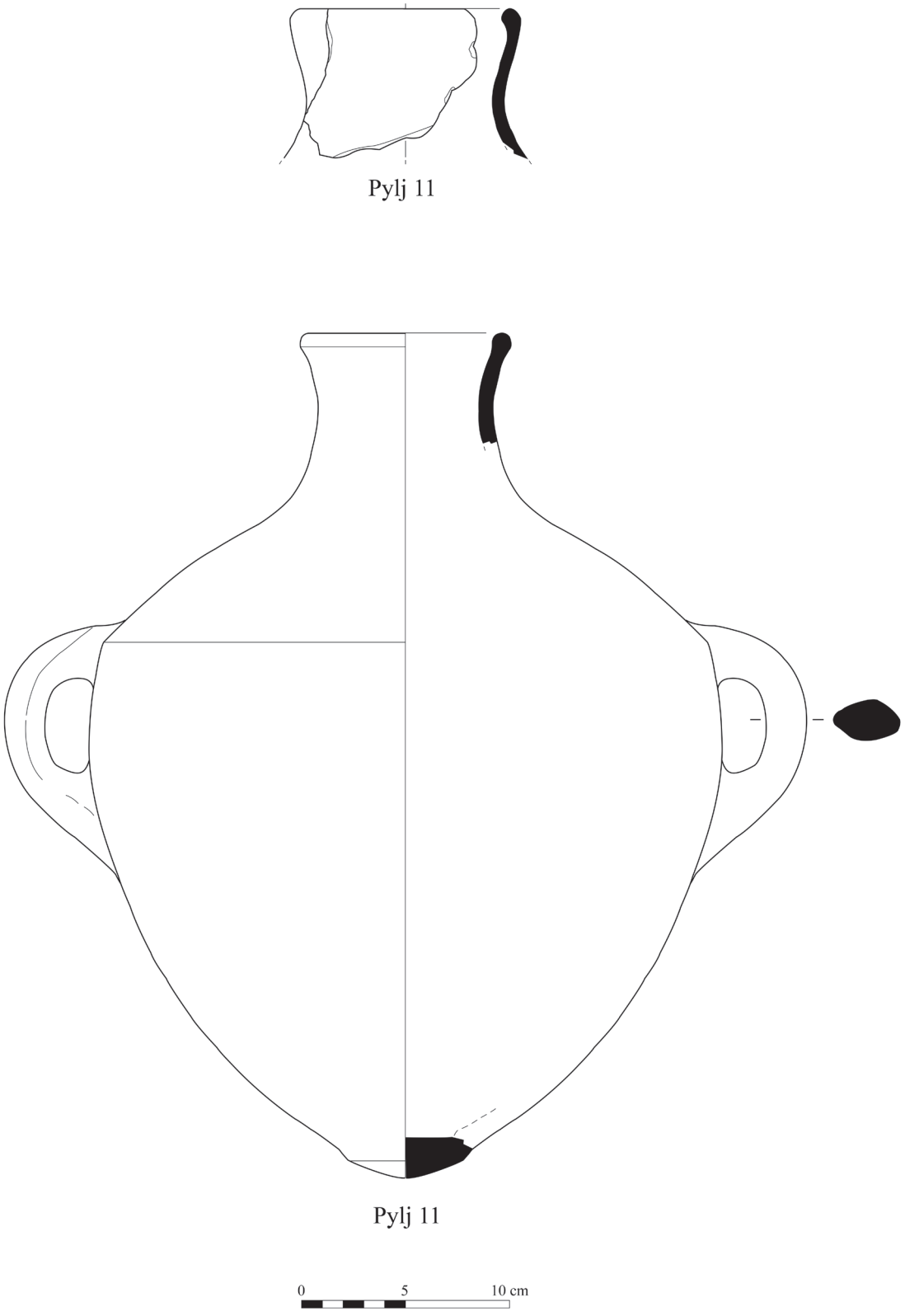


Figure 32. Pyla Kokkinokremos: Canaanite jars, singletons. Scale 1:3 (drawings R. Jung, digitisation R. Yassine)

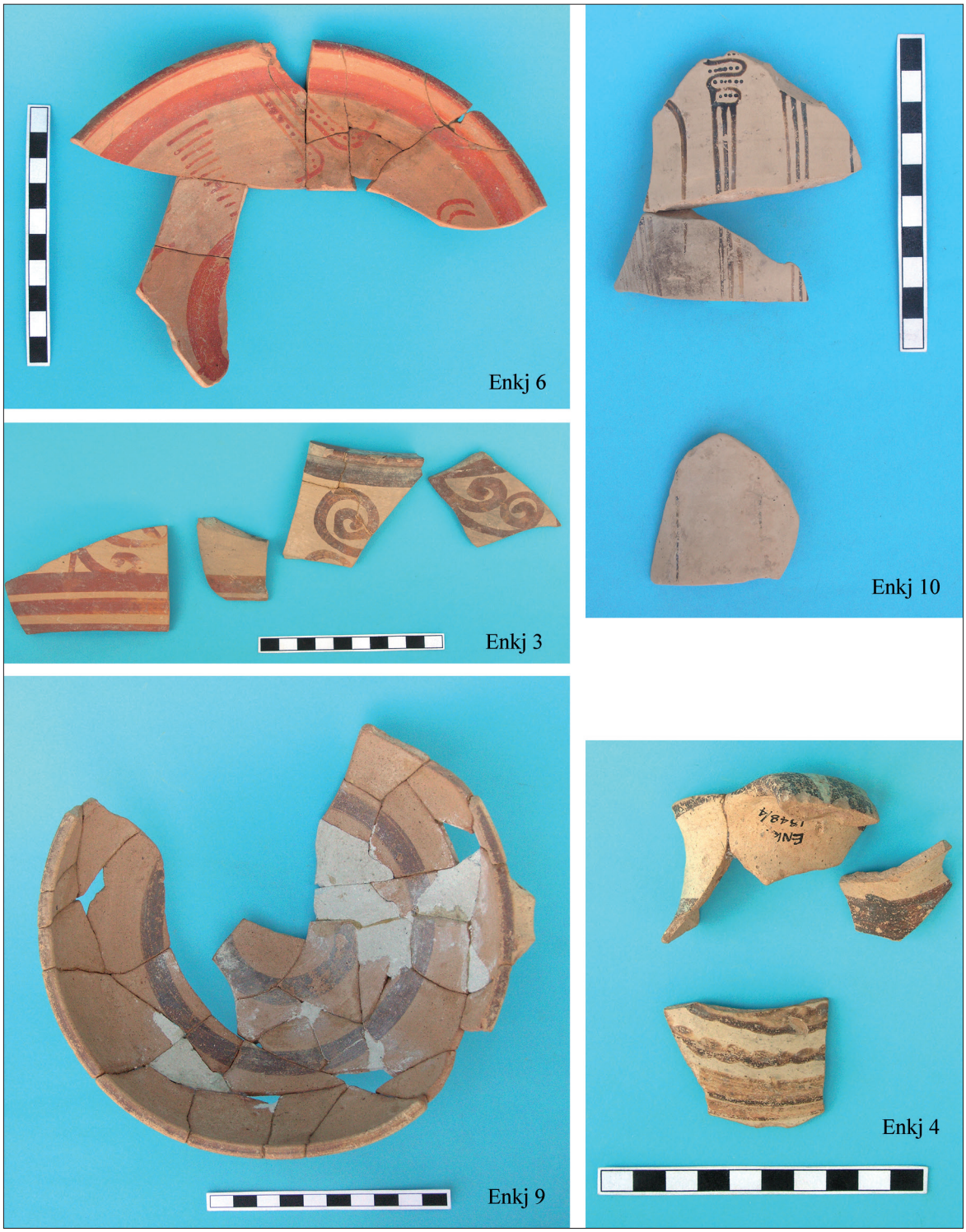


Figure 33. Enkomi IIB (Enkj 4, Enkj 6, Enkj 9), Enkomi IIB–IIIA (Enkj 3, Enkj 10): Mycenaean imports of the MYBE group (Enkj 6, Enkj 10), southeast Aegean import of the MilD group (Enkj 4), local Mycenaean product of the CypI group (Enkj 3) (photos R. Jung)

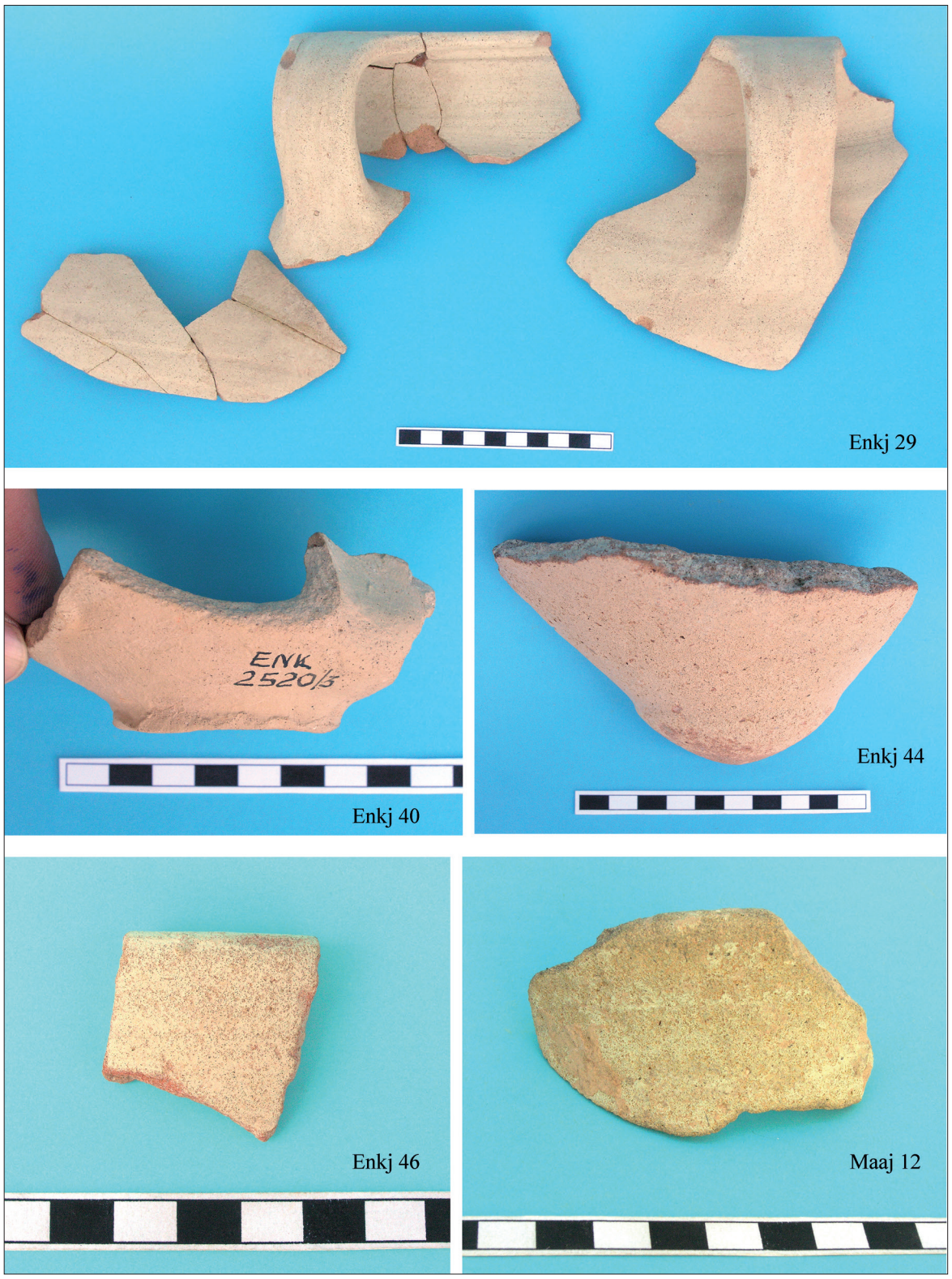


Figure 34. Enkomi IIB (Enkj 29), Enkomi IIIA (Enkj 40, Enkj 44): unpainted Cypriot wheelmade vessels of the CypI group (Enkj 29, Enkj 40), Canaanite jars (Enkj 44, singleton; Enkj 46 and Maaj 12, group Ul97) (photos R. Jung)

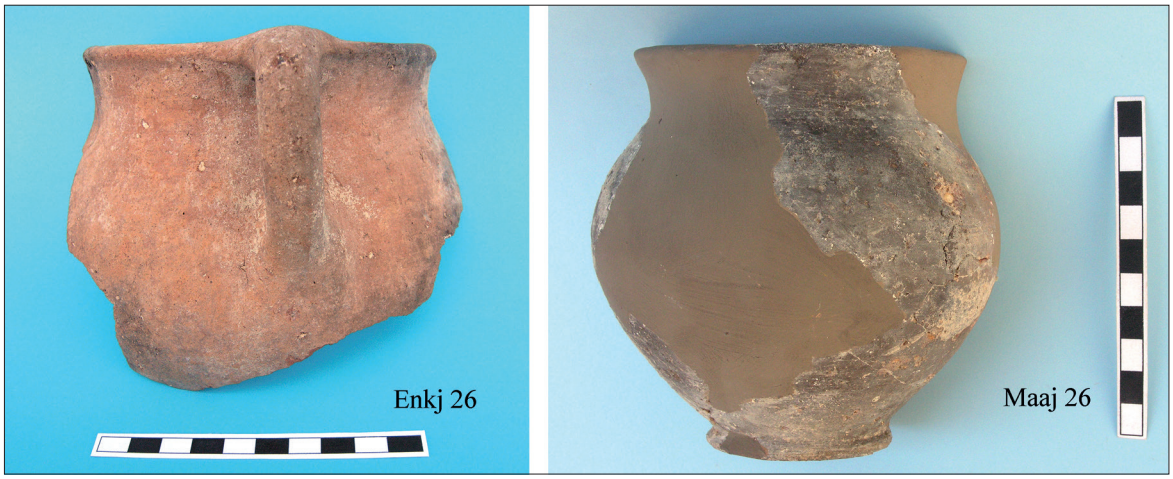


Figure 35. LC IIIA wheelmade Mycenaean cooking pots: Enkomi IIIA, local vessel of group X076 (Enkj 26), Maa Palaeokastro, Floor II, Peloponnesian import (Maaj 26) (photos R. Jung)

Based on our new data and a very large NAA data bank for Late Bronze Age pottery production on the island of Cyprus, we propose to exclude Cyprus from the list of Canaanite jar producing regions until further data prove otherwise.

Summary and general conclusions

During the LC IIC period the settlements of Enkomi and Pyla *Kokkinokremos* imported considerable quantities of fine painted table wares from the northern Argolid. At the first site, the NAA results could already verify this conclusion that was based on macroscopic fabric classifications, while ongoing analyses are expected to allow verification also for Pyla. This predominance of the export-oriented workshops of the region of Mycenae among the 13th-century BCE Mycenaean fine wares on Cyprus adds to the results of other projects and confirms them (Mountjoy & Mommsen 2015), while it fits with the general picture of the centralised and palace-controlled Mycenaean pottery export to all of the Eastern Mediterranean—from northern Syria to Egypt (Jung 2015; Zuckerman *et al.* 2020). Contrary to the ruling class in Egypt that predominantly imported closed vessels from the Argolid, hence packaged liquids such as wine and (perfumed) oil (Podzuweit 1994: 466–469), the society in Alašiya showed a strong interest in Argive open table ware shapes as well (including those with pictorial motifs), which we could further confirm for the major settlement of Enkomi.

To a lesser degree, Crete was another region from which the inhabitants of the two Cypriot settlements procured open and closed painted pottery vessels (more in the case of Pyla, less in the case of Enkomi). For the exact identification of the Cretan production regions for these imports more comparative data from Crete itself are needed. The third rank in terms of the quantity of imports at Enkomi and Pyla can be assigned to products from the western coast of Asia Minor (the Troad and Caria) and the southeastern Aegean islands.

In addition, the inhabitants of both settlements, Enkomi and Pyla, used painted fine wares, which were manufactured in Cyprus either according to Mycenaean prototypes or by combining Aegean elements with local ones. Local production of these Mycenaean and Mycenaeanising classes is certain for Enkomi Levels IIB to IIIB (chemical group CypI). In the Larnaca Bay area more analyses should clarify whether local production can be verified for each of the major settlements of Pyla *Kokkinokremos*, Kition and Hala Sultan Tekke during LC IIC and IIIA.

Our analyses of cooking pots from all three Cypriot sites reveal significant changes in pottery production and consumption occurring between the LC IIC and IIIA phases. For the former phase we can deduce an extensive distribution network that supplied at least the eastern and southeastern coastal regions (but probably also the western ones) with handmade cooking pots of different types, which originated in the wider Troodos region. For LC IIIA no evidence suggests the continuation of that distribution network so far. By contrast, in that phase the workshops at or close to Enkomi started to produce cooking pots which from Level IIIA through IIIB closely reproduced the Mycenaean wheelmade types of the cooking jug (FT 65) and the cooking amphora (FT 66). The same types were in use at LC IIIA Maa *Palaeokastro*, but in that case the FT 65/66 pots apparently came from several different workshops—even including imports from the Peloponnese as an exception.

The radical substitution of handmade cooking pots of Cypriot tradition produced in the Troodos region by wheelmade Mycenaean cooking pots produced in many Cypriot workshops since LC IIIA indicates both a profound economic change in Cypriot pottery production and distribution and—if seen

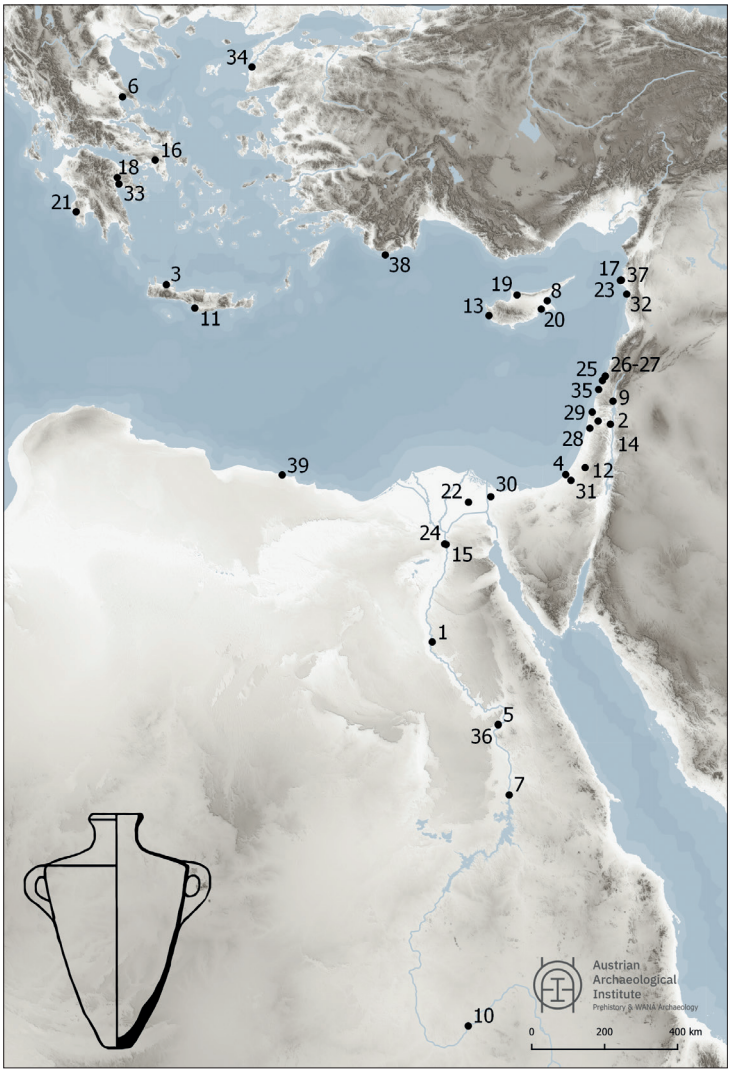


Figure 36. Distribution of Canaanite jars of Type 5-4 according to Pedrazzi 2007, with additions (cartography M. Börner)

1. *Amarna (late Eighteenth Dynasty): Pedrazzi 2007: appendix 3.* **2**. *Beth Shean, Level VII (LBA II), LBA II tombs: Pedrazzi 2007: appendix 3.* **3**. *Chania, Rovithaki plot, Chamber Tomb 2 (LM IIIA): Preve, no year: 176, fig. 8; Rutter 2014: 58, table 5.3.* **4**. *Deir el-Balah, LBA II cemetery: Pedrazzi 2007: appendix 3.* **5**. *Deir el-Medineh, tombs of the Nineteenth Dynasty: Nagel 1938: 4–5, fig. 2.8; 22, 24–25, fig. 14.33–34 and 15.35; 112, fig. 110.34–36.* **6**. *Dhimini, Megaron B, Storeroom 5 (LH IIIC Early 1, Adrimi-Sismani 2014: 376 no. BE 35744; Rutter 2014: 58, table 5.3) and outside the Rectangular Building (LH IIIC Early 1, Adrimi-Sismani 2014: 556 no. BE 44236; Rutter 2014: 58, table 5.3).* **7**. *Elephantine, Phase I (Nineteenth Dynasty): Aston 1999: 23, 25, pl. 3.44.* **8**. *Enkomi, Levels IIB (LC IIC) and IIIA (LC IIIA): see the present article.* **9**. *Hazor, LBA II strata: Pedrazzi 2007: appendix 3.* **10**. *Hillat el-ʿArab: Pedrazzi 2007: appendix 3.* **11**. *Kommos, North House, Room 11 (LM IIIA2): Pedrazzi 2007: appendix 3.* **12**. *Lachish, LBA II tombs: Pedrazzi 2007: appendix 3.* **13**. *Maa Palaeokastro, Floor I (LC IIIA): Hadjicosti 1988: 347, cat. no. 73; 366 no. 24, pl. C.19.* **14**. *Megiddo, Stratum VIII (LBA II), LBA II tombs: Pedrazzi 2007: appendix 3.* **15**. *Memphis (Kom Rabia), Level IIb (Early–Mid-Nineteenth Dynasty) and Level IIa (Mid – Late Nineteenth Dynasty): Bourriau 2010: 287, fig. 76.b–c, e, f, h; 350, fig. 93.j.* **16**. *Menidhi, tholos tomb (LH IIIB Early–Middle): Pedrazzi 2007: appendix 3; Rutter 2014: 58, table 5.3.* **17**. *Minet al-Beida, storeroom (LBA II): Pedrazzi 2007: appendix 3.* **18**. *Mycenae, South House Annex, Room 1 (LH IIIB Final) and Chamber Tombs 58 and 95 excavated by Tsountas (LH IIIA–IIIB): Xenaki-Sakellariou 1985: 179, 184, 271, 273, pls 78.2924; 134.4569; Pedrazzi 2007: appendix 3; French & Stockhammer 2009: 188, fig. 3.2; Rutter 2014: 58–59, table 5.3.* **19**. *Myrtou Pigadhes, Period VI, Room 6 (LC IIC): Pedrazzi 2007: appendix 3.* **20**. *Pyla Kokkinokremos, Area II, Room 2011.45 (LC IIC): Karageorghis & Georgiou 2014: 131, pl. 11.138.* **21**. *Pylos, Tholos Tomb III: Blegen et al. 1973: 94, fig. 174.4a; Pedrazzi 2007: appendix 3.* **22**. *Qantir, Area Q I (Nineteenth Dynasty): Aston 1998: 636–637, nos 2567, 2580; 638–639, no. 2584; 642–643, no. 2604; 646–647, no. 2642; 658–659, nos 2731–2733; 670–671, no. 2766.* **23**. *Ras Ibn Hani, North Palace (LBA II): Pedrazzi 2007: appendix 3.* **24**. *Saqqara, tombs of Horemheb, Tia and Tia, and Maya (Late Eighteenth–Nineteenth Dynasty): Aston 1997: 93, pl. 122.171–174; Aston 2003: 147, 150, fig. 7d [left].* **25**. *Sarepta, Stratum E, Level 6 (Ras el-Qantara): Pedrazzi 2007: appendix 3.* **26**. *Sidon-Dakerman, LBA II tombs: Pedrazzi 2007: appendix 3.* **27**. *Sidon-College Site, on floor of Underground Cella (LBA II) and from disturbed layers: Doumet-Serhal 2011–2012: 341–342, pl. 32.53; 364–365, pl. 45.38.* **28**. *Tel Zeror, LBA II strata: Pedrazzi 2007: appendix 3.* **29**. *Tell Abu Hawam, Stratum V (LBA II): Pedrazzi 2007: appendix 3.* **30**. *Tell el-Borg, Fields II and IV: Duff 2014: 454–455, pl. 3.5; 456–457, pl. 4.4–5; Pinch-Brock 2014: 507–508, pl. 3.2.* **31**. *Tell el-Farʿah South, LBA II tomb: Pedrazzi 2007: appendix 3.* **32**. *Tell Sukas, Period H, Levels 9–10 (LBA II–Iron Age I): Pedrazzi 2007: appendix 3.* **33**. *Tiryns, Lower Citadel (LH IIIB Developed) and Epichosis (LH IIIB Final [–IIIC Early 1]): Day et al. 2020: 17, fig. 3:9; 18 fig. 4:20; 20.* **34**. *Troy VIIa (LH IIIB): Pavúk 2020: 44–45, fig. 17.* **35**. *Tyre, Bikai's excavations (LBA II strata): Pedrazzi 2007: appendix 3.* **36**. *Valley of the Kings, KV 55 ('niche') and around tombs of Ramesses I and Seti I: Pinch-Brock 2014: 506–508, pl. 3.1, 4.* **37**. *Ugarit (LBA II): Pedrazzi 2007: appendix 3.* **38**. *Uluburun, shipwreck (LH IIIA2): Pedrazzi 2007: appendix 3.* **39**. *Zawiyet Umm el-Rakham, Chapel 3 (reign of Ramesses II): Snape & Wilson 2007: 60, 64–65, figs 3.21:C3.1, C3.2, C3.3 and 3.22:C3.4*

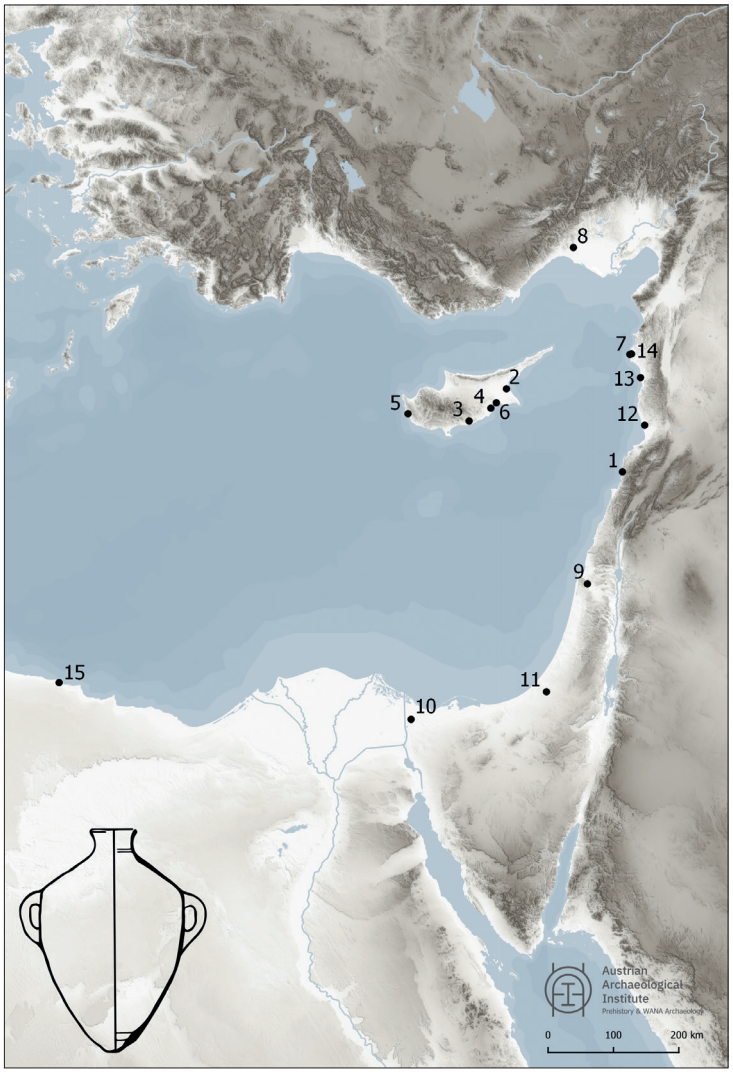


Figure 37. Distribution of Canaanite jars of Type 4-2 according to Pedrazzi 2007, with additions (cartography M. Börner)

1. *Byblos, Cemetery K (LBA II tomb): Pedrazzi 2007: appendix 3.* **2**. *Enkomi, IIIA: see the present article.* **3**. *Kalavasos Ayios Dhimitrios, Building VIII (LC IIC): Russel 1989: 10, fig. 14.K-AD 168; Pedrazzi 2007: appendix 3.* **4**. *Kition, Floor IV (LC IIC): Pedrazzi 2007: appendix 3.* **5**. *Maa Palaeokastro, Floors II and I (LC IIIA): see the present article.* **6**. *Pyla Kokkinokremos (LC IIC): Pedrazzi 2007: appendix 3; Karageorghis & Georgiou 2014: 126, 129, 132, pls 9.49, 106; 11.158, 160.* **7**. *Ras Ibn Hani, North Palace (LBA II): Pedrazzi 2007: appendix 3.* **8**. *Tarsus (LBA II): Pedrazzi 2007: appendix 3.* **9**. *Tel Qashish, LBA II levels: Pedrazzi 2007: appendix 3 .* **10**. *Tell el-Borg, Field IV: Duff 2014: 454–455, pl. 3.9.* **11**. *Tell el-Farʿah South, LBA II tomb: Pedrazzi 2007: appendix 3.* **12**. *Tell Kazel, Area IV, Levels 6–5; Area II, Levels 6–5: Pedrazzi 2007: appendix 3; Badre & Capet 2018, pl. XXVII.288, 290, 292, 293, 295.* **13**. *Tell Sukas, Phases K–L (LBA II – Iron Age I): Pedrazzi 2007: appendix 3.* **14**. *Ugarit, LBA II tombs and houses: Pedrazzi 2007: appendix 3.* **15**. *Zawiyet Umm el-Rakham, Chapel 2 (reign of Ramesses II): Snape & Wilson 2007: 58, 64, fig. 3.21:C2.7*

in combination with other Mycenaean traits newly appearing at the same time (Jung 2011a, 2017)—some immigration of people from mainland Greece to Cyprus at the beginning of LC IIIA. In the case of Enkomi Levels IIIA to IIIB, the fact that (1) unpainted fine ware shapes of local and Aegean tradition as well as painted shapes of Aegean types were made with the same clay pastes and that (2) the clays used for Mycenaean cooking pots were also taken for Cypriot plain table wares suggests a neat integration of Aegean and Cypriot manufacturing traditions in LC IIIA and IIIB workshops.

The LC IIIA settlement of Maa *Palaeokastro* does not show such an integration of painted fine ware and plain fine and (semi-)coarse wares. However, it seems that a few cooking pots with a typological connection to the Levant were produced in southwestern Cypriot workshops that also produced Cypriot shapes of wheelmade plain wares.

Canaanite jars reached Enkomi continuously in LC IIC, LC IIIA and IIIB, while this functional class is also well attested at Pyla during LC IIC as well as at Maa *Palaeokastro* during LC IIIA. The fact that the vast majority of the Canaanite jars from all three sites are chemical singletons may suggest that a multitude of production regions around the Eastern Mediterranean were delivering their products to the island. In LC IIIA, the region of Sidon as well as the Nile valley were

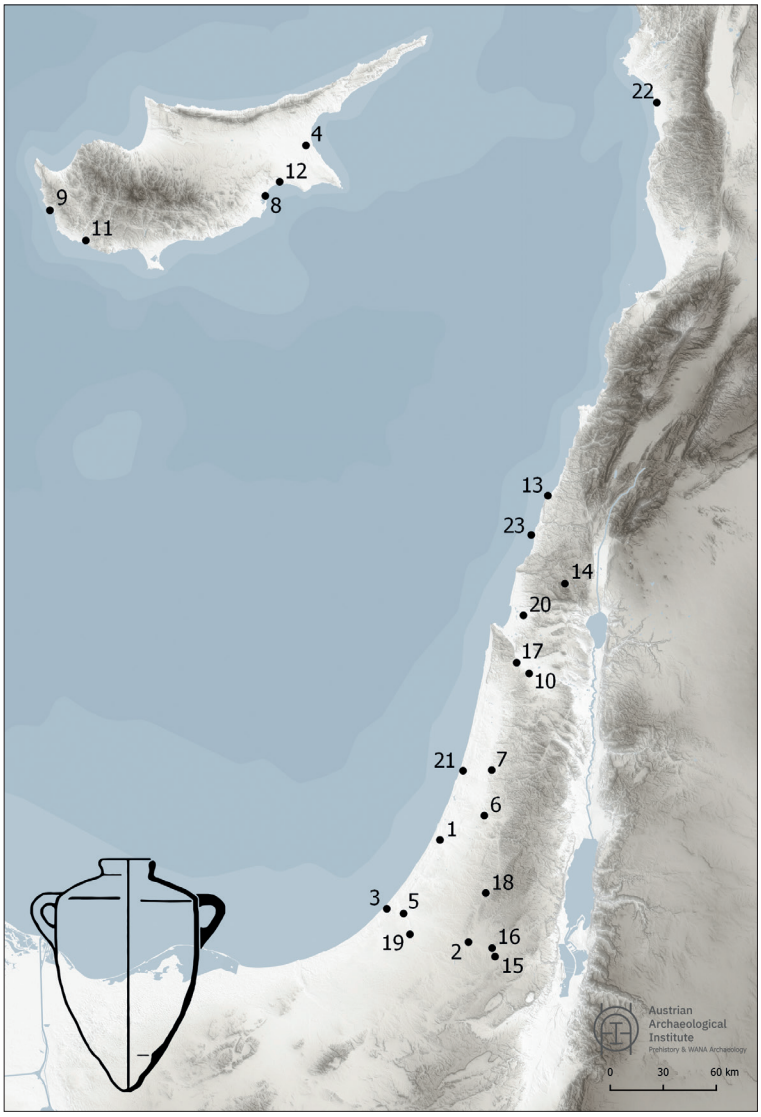


Figure 38. Distribution of Canaanite jars of Type 5-5 according to Pedrazzi 2007, with additions (cartography M. Börner)

1. *Ashdod, Stratum 8 (Iron Age I): Pedrazzi 2007: appendix 3.* **2**. *Beersheba (Tel Sheva), Stratum IX (Iron Age I A–B): Pedrazzi 2007: appendix 3.* **3**. *Deir el-Balaḥ: Pedrazzi 2007: appendix 3.* **4**. *Enkomi, end of Level IIB (LC IIC), mostly Level IIIB (LC IIIA–IIIB), Level IIIC (LC IIIB): see present article.* **5**. *Gerar (Tell Jemmeh), Petrie's excavations (Iron Age I contexts): Pedrazzi 2007: appendix 3.* **6**. *Gezer, Stratum 6A (Iron Age IA): Pedrazzi 2007: appendix 3.* **7**. *ʿIzbet Sartah, Stratum I (Iron Age I): Pedrazzi 2007: appendix 3.* **8**. *Kition, Floor I (CG I): Pedrazzi 2007: appendix 3.* **9**. *Maa Palaeokastro, Floor I (LC IIIA): see present article.* **10**. *Megiddo, LBA II tombs: Pedrazzi 2007: appendix 3.* **11**. *Palaepaphos Eliomylia, Tomb 119 (LC IIC–IIIA) and Palaepaphos Skales, Tomb 80 (CG II): Pedrazzi 2007: appendix 3.* **12**. *Pyla Kokkinokremos (LC IIC): see present article.* **13**. *Sarepta, Period E: Pedrazzi 2007: appendix 3.* **14**. *Sasa, Stratum II (Iron Age I): Pedrazzi 2007: appendix 3.* **15**. *Tel ʿEsdar, Stratum III (Iron Age IB): Pedrazzi 2007: appendix 3.* **16**. *Tel Masos, Stratum II (Iron Age IA–B): Pedrazzi 2007: appendix 3.* **17**. *Tel Yokneʿam, Stratum XVII (Iron Age I): Pedrazzi 2007: appendix 3.* **18**. *Tell ʿEitun (Tel Eton), Philistine tomb (Iron Age I): Pedrazzi 2007: appendix 3.* **19**. *Tell el-Farʿah South, LBA II–Iron Age I tombs: Pedrazzi 2007: appendix 3.* **20**. *Tell Keisan, Levels 9c, 9a–b, 9a (Iron Age I): Pedrazzi 2007: appendix 3.* **21**. *Tell Qasile, Strata XI and X (Iron Age IB–C): Pedrazzi 2007: appendix 3.* **22**. *Tell Tweini, Level 6EF destruction (Iron Age I): see present article.* **23**. *Tyre, Strata XIV, XIII and X (Iron Age I): Pedrazzi 2007: appendix 3*

among them according to our NAA results, while the typological analysis suggests that Canaanite jars from all along the Levantine coast—from northern Syria to southern Palestine—arrived at the different coastal sites of Cyprus, with a predominance, in the case of Maa, of morphological types common in the northern coastal Levant, and with a higher frequency at Enkomi of types spread along the central and southern Levantine coast (cf. Pedrazzi 2007). By contrast, our analytical results strongly suggest that the inhabitants of Cyprus did not produce such storage and transport vessels themselves—at least concerning the periods LC IIC through LC IIIB. This means the Canaanite jars are confirmed as the archaeological correlates *par excellence* for goods exchange between Cyprus and the Levant (and, regarding specific types, Egypt as well) from the 13th through the 11th centuries BCE. Judging by the slightly earlier (14th century BCE) context of the Uluburun shipwreck (Pulak 2005: 73–77) as well as by Egyptian jar inscriptions ('dockets', see Aston 2007), pistachio resin, plant (probably olive) oil, wine and honey may have been imported in these jars.

Excursus: the start of Enkomi Level IIB and of Late Cypriot IIC

The analysed ceramics of LC IIC date from Enkomi all come from Level IIB. The excavator equated this building phase with the whole of the relative chronological phase LC IIC, while he synchronised the preceding Level Enkomi IIA with both the LC IIA and LC IIB phases (Dikaios 1969/71: 438, table; 446, 451–452). The lower chronological borders and Aegean synchronisms of Enkomi Level IIB and the phase LC IIC are securely fixed thanks to recent dedicated pottery studies, the authors of which concluded that the destruction of Enkomi IIB also marks the end of LC IIC and should be synchronised with the first subphase of LH IIIC Early in Greece (Jung 2011b: 58–63; Mountjoy 2018: 21–22, table 1). However, the upper chronological end of Level IIB poses bigger problems. Lindy Crewe has studied the local pottery classes of Level IIA in meticulous detail (Crewe 2007), but so far no-one has conducted a complete study of the Aegean pottery from that Level. Porphyrios Dikaios assumed that the latest Mycenaean imports from Enkomi IIA date to a late stage of LH IIIA2 (Dikaios 1969/71: 308, 310–311, 446–449), which would equal the phase in which the so-called Petsas House at Mycenae was destroyed in a conflagration leaving immense amounts of complete pots in the destruction debris (Schönfeld 1988: 163–164, table 4; Shelton 2022). However, a study of the various stratigraphic subphases of Enkomi IIB and part of the stratigraphically latest contexts of Enkomi IIA brought forward pottery evidence which suggests that the buildings of Enkomi IIB were erected as late as the time of the Argive phase LH IIIB Developed, while the final destruction of Enkomi IIA might have occurred just slightly earlier—either during the same relative phase or in the preceding phase LH IIIB Middle at the earliest (Jung 2011b: 61–63, 73, 82, fig. 5.1–2; 2017: 127, table 11.1). The way in which Dikaios has published the Mycenaean sherds of Level IIA with small photographs and without profile drawings requires a thorough new study of all that material (cf. Dikaios 1969/71: pls 61, 87, 89, 91, 111), but the mentioned evidence available at this moment strongly suggests that his starting date of 1300 BCE for the Level IIB habitation phase (Dikaios 1969/71: 438, table) is in need of revision. Based on the historical-archaeological synchronisms between the Aegean stratigraphies and the Egyptian pharaonic chronology, a date around the middle of the 13th century should be more correct. Whether this entails a re-dating of Enkomi Level IIA in terms of the Cypriot relative chronology (i.e. an end during LC IIC) remains to be seen after further pottery studies. Radiocarbon dates from other LC IIC sites seem to suggest a starting date for LC IIC close to Dikaios' estimate, i.e. slightly earlier than 1300 BCE (cf. Manning 2013: 513–515, fig. A11). Eventually, however, the entire definition of LC IIB and IIC in pottery terms may need a reevaluation (statistics of ceramic classes per site phase, internal Cypriot as well as external synchronisms).

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