

SIDON: MEDITERRANEAN CONTACTS IN THE EARLY AND MIDDLE BRONZE AGE, PRELIMINARY REPORT

ARCHAEOLOGY & HISTORY IN THE LEBANON ISSUE TWENTY FOUR: WINTER 2006, Pp. 34-47.

CLAUDE DOUMET-SERHAL

35

Evidence of the existence of international trade is encountered in the Levant from the Early Bronze Age onwards in the form of imported objects uncovered on sites and by Levantine artefacts discovered throughout the Mediterranean. During the early part of the Middle Bronze Age textual references highlight the movement of raw materials including diverse types of metals, wood etc. and pottery and luxury items found at Sidon indicate sustained communication and interactions with Egypt, the Aegean world, Cyprus and Syria.

THE THIRD MILLENNIUM BC

At the end of the fourth and beginning of the third millennium BC, the inhabitants of Sidon left their original settlement at Dakerman and moved a kilometre further north to what became their permanent location. This site was much closer to the natural harbour¹ (see Marriner & Morhange in this issue p. 144) which paved the way for the beginning of commercial activity through its port.

Egypt

Egypt's connection to the Levant existed from as early as the fourth millennium BC thus the close connections between Egypt and the Levant are now a well-established fact². In the Early Bronze Age, imports from the Levant to Egypt are seen in burial gifts in graves found at Abydos and Saqqarah. Larger vessels of Levantine origin (probably from Sidon or Byblos), were brought to Egypt as containers for agricultural products (oil or wine)³ (see p. 10-11, fig. 8, 9 in this issue). A locally made juglet⁴ found at Sidon that probably held a small amount of oil or other liquid such as perfume dating from EB II was also found in Egypt. The synchronization of EB II with the First Dynasty of Egypt is based on this type of foreign pottery.

- The Aegean world

Seals and seal⁵ impressions were used in some distributional system of goods. The running or interlocked spiral motif which was found in stratum 4 (EB IIB)⁶ at Sidon is similar to that found at Lerna in the Early Helladic period (2500-2400 BC⁷). Similarities have been noted between Palestinian geometric seal impressions from Tel Dan and Hazor and those from Lerna⁸.

- Syria

At the end of the third millennium BC much of the most popular vessels

belong to a pottery repertoire common to both Sidon and Syria. The hole-mouth jars found at Sidon are close in style to those produced in the Tell Mardikh-Hama milieu⁹. This suggests contacts between Syria and Sidon in terms of cultural diffusion¹⁰ (see p. 9, pl. 8-11, in this issue).

THE SECOND MILLENNIUM BC

The Middle Bronze Age I/IIA marked the beginning of a new urban society¹¹ with the development of international trade and cultural exchange¹² in some coastal cities of the Levant. This is shown by the stratified sequences of pottery and other objects found at Sidon in this period. Within this corpus, closed contexts such as tombs or offering deposits, provide us with complete shapes whereas sherds found on a settlement floor are an indication of domestic vessels. This variety in contexts highlights continuity as one of the most characteristic features of the settlement.

The nature of the settlement

At the end of the third and the beginning of the second millennium BC the area so far excavated at Sidon changed its function from a domestic settlement to become a burial site. A fine sand layer 90 cm to 1.40 m thick was brought to the site from the nearby sea shore¹³ and laid over the Early Bronze Age settlement (see p. 13 & 20 in this issue). From a total of 60 burials excavated so far, 26 were buried directly in the sand with no architectural features. No destruction or interruption has been recorded so far and the continuous sequence of occupation between the third and the second millennium can be seen by the position of some burials which were laid in the sand on top of early Bronze Age walls and floors. Sidonian cultural identity at the beginning of the MBI/IIA can therefore only be deduced from mortuary remains and tomb offerings. A floor found above the sand indicates that the site was inhabited again around the middle of the 13th Dynasty of Egypt (1750 BC). Burials however continue, allowing us to follow the development of mortuary practices until the end of the MBII/III.

Three stratigraphic levels have been recognized in the sand layer corresponding to patterns in burial practice.

Level 1

Is the earliest phase* of the Middle Bronze Age MBI/1 (= Early MB IIA¹⁴). In this level all burials (9 in total to date) are constructed graves lined with stones or mud brick and contain burial goods including wheel-made pottery and various luxury items such as bronze artefacts, weapons and jewellery. The graves contain single warrior burials (5 in total, one containing only the bones of two adult human feet) with weapons, two child burials with a weapon and jewellery, one female burial and one empty grave. Animal offerings are present in all burials including complete animals (two goats in burial 27 and one in burial 12).

From the care given to the construction of these single burials and from their luxury weapons, level 1 attests to the existence of a special group of individuals. In terms of energy expenditure the most labour intensive and elaborate burials are associated with metalwork.

* As work on the Sidon's stratigraphy in the Middle Bronze Age is progressing all burials including those published in *Levant* have been re-allocated in their respective stratigraphic levels. This is why the word "phase" is in this paper replaced by levels and a full publication is underway.-

1 Seal impression with interlocked spiral motif.





Level 2.

In this level, mainly jar burials of children have been found. Of the constructed graves burial 42 is a multiple burial that was probably disturbed in level 3 and burial 55, (fig. 2) lined with mud bricks, is a single burial of a child. Luxury items from these two include weapons, a bronze belt embossed with concentric circles found in burial 42 and two silver rings in burial 55.

Jar burial 49 (fig. 3) was placed in a re-used constructed mud brick grave and the disarticulated bones from the earlier burial 51 were pushed to one side. The appearance of red slip burnishing is the most characteristic feature of the pottery from this phase whereas in the earlier phase, jugs were either painted in the Levantine painted style or were plain.

2 Burial 55.

3 Jar burial 49.



4 Burial 19.

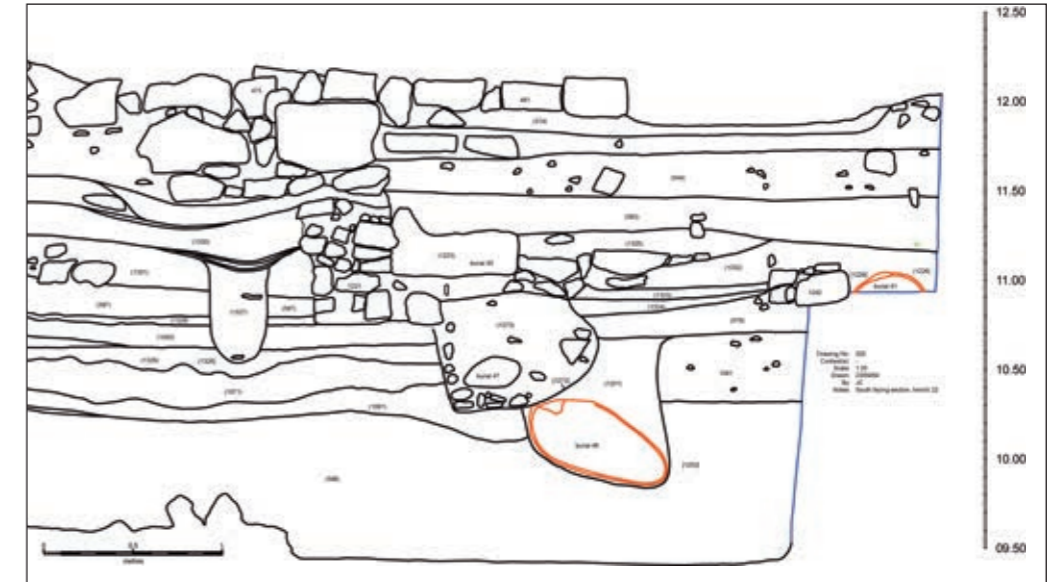


Level 3.

Jar burials are the dominant type of burial. The single constructed grave from this level did not contain any metal weapons or jewellery only pottery (fig. 4). The burials are those of children 3 to 4 years old. The red burnishing which began in level 2 becomes an important decorative element in level 3.

Level 4.

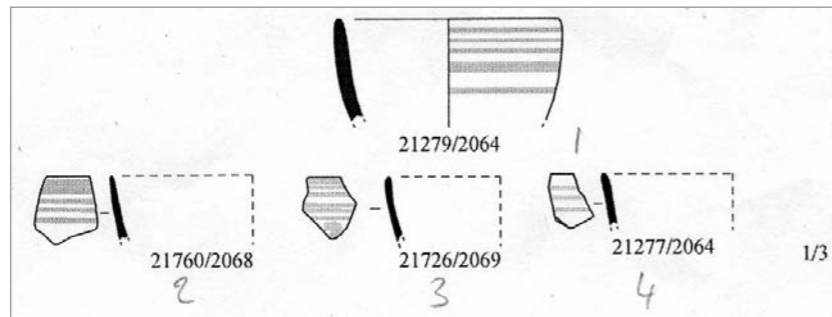
This level is the first occupation layer on top of the sand (fig. 5-6). It consists of a heavily burned plaster floor. No complete pottery shapes were found but bowl fragments decorated with red bands¹⁵ (fig. 7) appear, typical of the southern Lebanese coast¹⁶. Other fragments include storage jars with flaring neck, triangular sectioned-rims either plain and grooved¹⁷ or elongated rim¹⁸; craters and cooking pots; no handmade cooking pots are found instead there were the wheel-turned type with gutter-like rims.



5-6 Section showing the sand and the occupation levels on top of the sand.

7 Bowl fragments decorated with red bands.

Some pottery found with the burials was imported from Egypt, the Aegean world, Cyprus and some of the locally made pottery was influenced by Palestine and Syria.



38



8 Jar S/1826.



9 Zir S/3024.

Opinions on Egypt's relations with the Levant vary¹⁹. To some, the Levant was an urbanized society and to others a non-urban and poorly developed region. If we consider more specifically Egypt's relations with the Lebanese coast, evidence of Egyptian activity is known from the Mit Rahina inscription which lists tribute from Lebanon²⁰. This inscription lists the goods brought back to Egypt from Amenemhet II's (1901-1866 BC) maritime expedition to the Lebanon and itemizes several precious metals with a particular emphasis on silver. Silver jewellery was discovered in three burials at Sidon (burials 13, 27 and 55²¹). Several silver objects were found in burial 27²² consisting of a headband, a bracelet, an anklet, the remains of a belt, and at least 18 nails. Burial 13 produced a silver anklet and burial 55 two silver rings. Lead isotope analysis of the silver²³ has established that its most likely source is the Ala Daglari range in the Central Taurus Mountains. This is supported by evidence from Byblos, a city which played a role during the fourth millennium BC in the silver trade with Anatolia²⁴.



10-12 Scarabs
S/1696, S/1691, S/1690.

13 Jar S/2078.



Egyptian contacts with Sidon are represented by complete pottery shapes (fig. 8-9, 13) and in the large number of Egyptian imported pottery sherds (see Forstner-Müller, Kopetzky & Doumet-Serhal in this issue, p. 52).

39

In level 1 luxury and utility goods appear. One grave offering an Egyptian jar, was found with burial 13²⁵ (fig. 8). This has been dated²⁶ to the early 12th Dynasty. Scarabs from the fingers of a warrior in burial 12 have also been dated to the first half of the 12th Dynasty²⁷ (fig. 10-12).

In level 2, Egyptian contacts with Sidon are represented by six pieces of pottery, two of which are complete. A globular Marl C 2 Zir was used as a container for burial 24 (fig. 9). It had been dated²⁸ to the early or middle of the 12th Dynasty, though a date contemporary with the reign of Amenemhat III cannot be excluded. The only other parallel to the Sidonian Zir, is the Marl A jar from Tell el-Ifshar²⁹, dated to the first half of the nineteenth century (1878-1853 BC)³⁰. Three other fragments of Zirs and one Upper Egyptian jar were also found in this phase. The highly polished³¹ jar, a complete vessel of Marl clay A2 (fig. 13), finds parallels at Ezbet Rushdi and Kerma in Nubia and dates to the time between Sesostri I and pre-Sesostri III (Forstner-Müller & Kopetzky in this issue, p. 60).

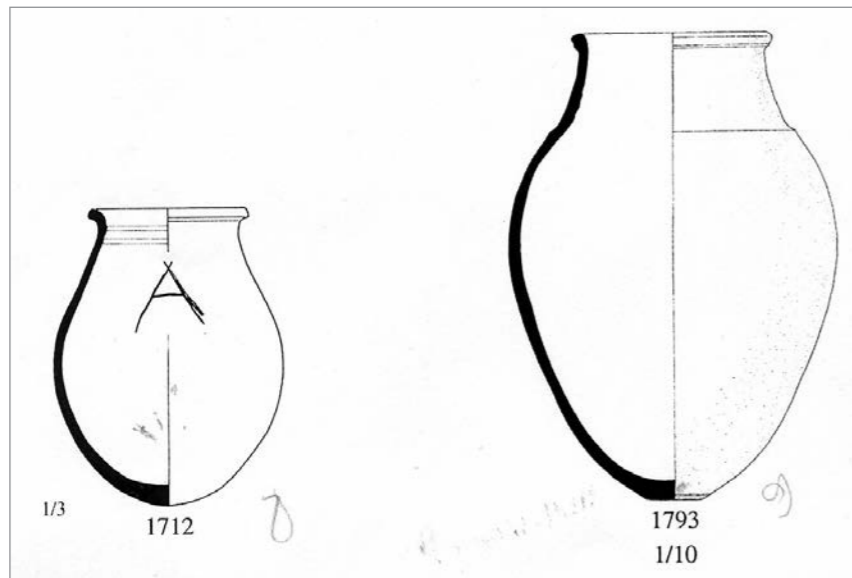
Level 3 shows a slow increase in imports with this becoming more significant in phase 4. Nineteen fragments were found in phase 3 of which twelve are Zirs and seven were of small globular or long corrugated jars³².

In level 4, we counted a total of fifty one sherds of which thirty nine are Zirs and twelve are jars. This difference suggests an influx of Egyptian pottery to the Levant at the beginning of the 13th dynasty which then increased around 1750.

It is important to note at this stage that this increase relates mainly to vessels which were highly suitable for the transport of commodities³³. Ceramic imports are solely represented by storage jars of various types and sizes which are produced in Marl clays. This means that exchanges with Egypt were necessary to a market in search of comestible goods³⁴ needed by the Levantine population. More importantly, that trade was reciprocal. This is shown by the large numbers of Canaanite jars containing olive oil and wine being shipped from the coast of Lebanon to Tell Dab'a in the Delta³⁵.

Two later vessels, one Marl C small jar (fig. 14-15)³⁶ belonging to level 5 and one jar from level 7 of a possible Nile A clay³⁷ were also found at Sidon.

Analysis of the Sidon Marl fabrics is being undertaken (see Griffiths & Ownby in this issue p. 63) to ascertain whether their composition is consistent with their having been made in Egypt and imported to Sidon as opposed to perhaps being a similar fabric that was made outside



14 Jar S/1712, burial 4 and jar S/1793, burial 11.

of the princes of the city-state of Iay, which had commercial dealings with Egyptians who came to the Levantine coast to trade in a variety of products for import to Egypt. Sadoq may well have had a seal engraved with hieroglyphs, to facilitate business, and to simplify his dealings with the Egyptians.

The Aegean world

The Minoan cup

The excavation has produced the first tangible connection between Sidon and Minoan Crete. A Minoan cup³⁸ made at Phaistos is one of the earliest Minoan imports to the Levant. It was found among the burials, inverted over a deposit of sheep bones together with a plate and two jugs which had been placed on a floor covered in lime plaster about 4 cm thick.

Carbon 14 analysis undertaken at the Radiocarbon Accelerator Unit in Oxford on the sheep bones has given a date between 1984-1859 BC. According to Alexander McGillivray who published the cup³⁹, the C14 date provides an important chronological link between MM IIA and MB I/IIA and in Egyptian terms the cup also fits well with the larger picture of the imported Mesara pottery in Egypt in the middle of the twelfth dynasty. If the MM IIA Sidon cup and bones were deposited around 1908 it may be necessary to push the start of MMIIA back by a generation to approximately 1925 BC.

The dolphin jar

In 2004 five sherds were published belonging to jar S/ 1785⁴⁰ with fish or dolphin decoration found at Sidon in burial 7⁴¹ and identified as being a multiple burial⁴². More sherds were found in the 2005 season belonging to the same vessel which is now almost complete. The motif of the leaping dolphin and the waves⁴³ is now even more distinctive. Burial 7 turned out to be a layer of disarticulated remains with around 13 adults and 3 subadults.

Egypt, perhaps in the Lebanon or perhaps elsewhere (see Griffiths and Ownby's article in this issue p. 63).

40

One scaraboid found in level 6 (MB II/IIB) (see Loffet in this issue, p. 78) engraved with hieroglyphs was used by a Semite in a position of power, engaged in commerce with Egypt. The inscription on this scaraboid reads: 'Sadok-Re, beloved of Seth-Ba'al, lord of Iay'. Sadok may possibly have been one



15 Dolphin jar S/1785.

Jar S/1785⁴⁴ (fig. 15-18) is characterized by a vertical neck with everted square rim, a ridge at the junction of neck and body (covered by a red band on its upper part, a black band on the lower part in addition to white paint applied on top) and the presence of a distinct carinated shoulder. The design of the base is most unusual⁴⁵. The jar itself is round bottomed but it is stabilized by a tripod comprising three separate pieces of clay applied to the base. That the three supports are separately applied to the jar is clearly seen in a break that runs through one of them. The vertical ends and the lower edge of the three supports have a protruding rounded ridge on the outer side, with the upper part of the outer side of each foot being concave and smoothed to blend into the contours of the jar. Red polished paint covers the neck and the outside facing of the rim as well as the upper part of the ridge.

In shape jar S/1785 does not compare to pithoi with short neck and ovoid body found in Crete either at Pachyammos or Akrotiri⁴⁶ and was manufactured locally⁴⁷ (see Mommsen in this issue p. 48).

On the shoulder of the jar six dolphins are plunging to the right. The bodies of all dolphins are incised, while the reserved surface of the body is



16-18 Dolphin jar
S/1785.

42



filled with black paint. The dolphins have one dorsal and two pectoral fins with a bifid tail. Only one creature has two diagonal wavy line incisions on the body. Only the upper outline of the waves with black paint are incised while the lower part is bordered by a large red band topped by a white band covering the carination. Each wave curve also has another incision as if a change had been made from the original design to suggest the motion of waves.

43

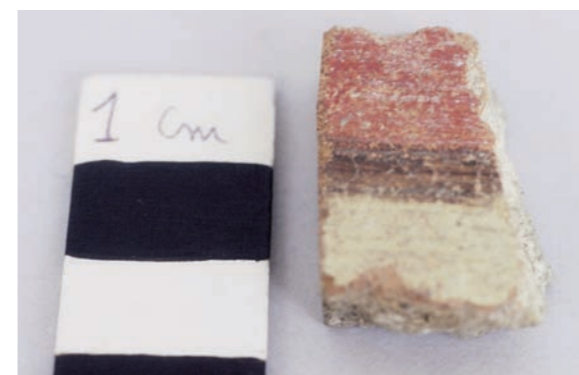


Dolphins and birds represented in motion is a purely Cycladic theme from the third millennium onwards⁴⁸. Bichrome decoration in which the black and red technique is used was rarely employed by Middle Cycladic potters for the decoration of large vessels. One example which was badly fired was found at Akrotiri not with a mass of storage vessels but separately in a room suggesting it was a rare and valuable item⁴⁹. The shape of the Akrotiri jar does not suggest it was intended to transport goods but rather as a gift.

The type of decoration however combining bichrome painting and incisions⁵⁰ with the fish motif is very interesting. It was also found on the "Dolphin Vase"⁵¹ from el Lisht in Egypt dated ca. 1750-1700 BC⁵². This vase, so named because of its naturalistic depiction of dolphins, appears to be Minoan in style but belongs, because of its shape and manufacture, to the southern Palestinian region. The fish are very distinctive with their plunging bodies and dorsal fins. The el-Lisht jug, of Levantine inspiration, with dolphins which appear Aegean in style and found in Egypt, illustrates the complexity of iconographical transfers⁵³.

Cyprus

Middle Cypriote pottery arrived at Sidon later than Egyptian and Cretan imports. A Middle Cypriot jug (fig. 20-21) of White Painted (WP) II-III Pendant Line style was found in jar burial 54⁵⁴.



19 A Red, White and Blue sherd S/ from Sidon.

Palestine

One sherd painted in a polychrome decoration (fig. 19), is mainly known from Ashkelon as Red, White and Blue Ware (RWB)⁵⁵ as early as MB I/IIA; it was made only on the southern coast of Canaan⁵⁶.

Syria

Other finds showing Syrian influence are more complicated showing interactions and influences in the forms of painted motifs on pottery: a jug

from Sidon has parallels at Tell Tweini/Gibla; the decoration of a stylized quadruped animal between the bichrome red and black "butterfly" decoration on the body (fig. 22), is seen on jugs of the Syro-Cilician⁵⁷ family. This style is found at Sidon in level 1 at the beginning of the MB I/IIA at the same time as Levantine Painted Ware⁵⁸. Some new jug shapes are introduced in level 2, namely highly polished red burnished surfaces of trefoil-mouth jugs and carinated bowls imitating metal artefacts, a common feature which was particularly popular at Ebla⁵⁹.

From this distribution of items of foreign origin at Sidon, a network of maritime

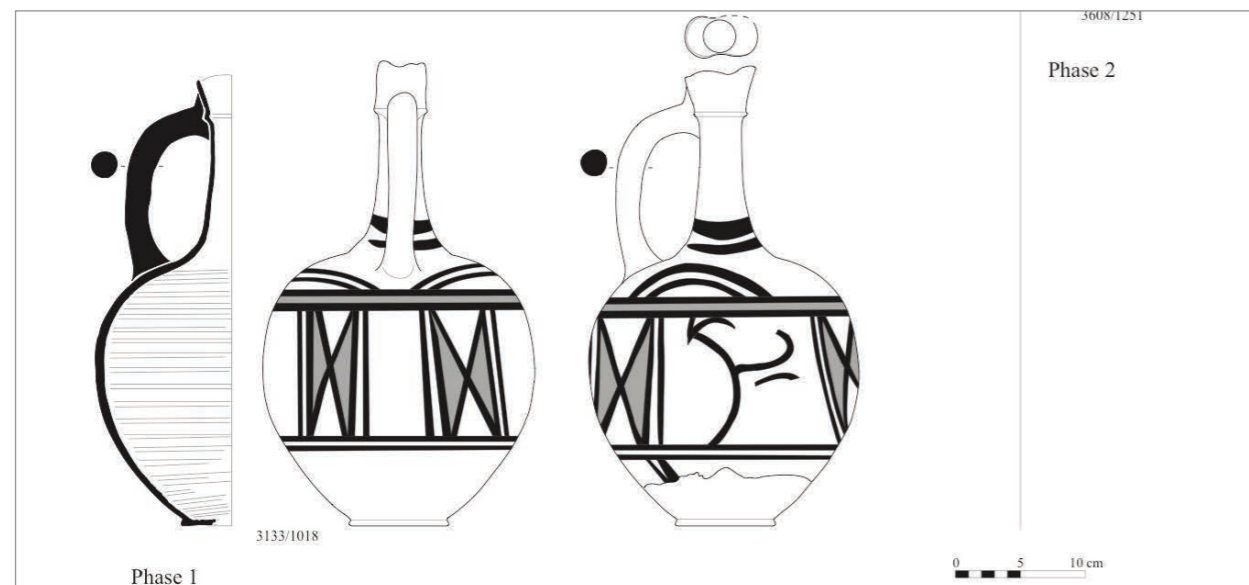
20-21 A Middle Cypriote jug of White Painted (WP) II-III Pendant Line style.



traffic as early as the middle of the 12th Dynasty can be constructed⁶⁰. Egypt was Sidon's main economic partner and the driving force behind this trade is the supply of basic commodities. The Egyptians produced agricultural crops for which a market existed in the Levant. Luxury grave goods came from Crete and Cyprus. Silver came from Anatolia. A closer study is needed to establish the relative chronology between Tell Dab'a and Sidon and this is already under way (see Forstner-Müller-

22 Jug S/3133 with "butterfly" decoration.

Kopetzky & Doumet-Serhal in this issue p. 52). It is now clear however that material input from Sidon will open up new perspectives on the nature of Mediterranean trade and inter-relations.



NOTES

1 Ch. Morhange *et al.*, 2003, p. 71, 77-80; C. Doumet-Serhal, 2006, p. 12-13.

2 E. S. Marcus, 1998, p. 10.

3 See comments in C. Doumet-Serhal, 2006, p. 52, 74.

4 See C. Doumet-Serhal, 2006, p. 44, 70.

5 D. J. Pullen, 1994, p. 44.

6 C. Doumet-Serhal, 2006, p. 259, 262, plate 167, 5.

7 H. Joffe, 2001, p. 368; M. H. Wiencke, 1970, p. 105.

8 A. Ben-Tor, 1995, p. 74-76.

9 S. Mazzoni, 2002, p. 78.

10 W. G. Dever, 1980, p. 52; S. Mazzoni, 1985, p. 11-13.

11 S. L. Cohen, 2002, p. 1.

12 E. S. Marcus, 2002, p. 241.

13 C. Doumet-Serhal, 2004 a, p. 89-90.

14 Throughout we have used the MB I (MB II A) II-III terminology, P. Gerstenblith, 1983, p. 2-3; 103-106.

15 P. Beck, 2000, fig. 10.2, strata AXVII-AXVI, with zigzag bands.

16 P. Beck, 2000, p. 180.

17 P. Beck, 2000 fig. 8.7, p. 112, fig. 8.10:16, str. BVI & BV, SJ-1.

18 P. Beck, 2000, p. 177, SJ-2.

19 S. L. Cohen, 2002, p. 33.

20 I thank Nicolas Grimal for drawing my attention to this text; H. Altenmüller & A. M. Ahmed, 1991, p. 14.

21 C. Doumet-Serhal with contributions from A. R. Ogden, E. Vila & W. Van Neer, 2006, (in press).

22 C. Doumet-Serhal, 2004, p. 24-26.

23 A. Véron & L. Leroux, 2004, p. 34-38.

24 C. Doumet-Serhal, 2004, p. 28; C. Doumet-Serhal, in press.

25 C. Doumet-Serhal, 2004 a, p. 94.

26 B. Bader, 2003, p. 32.

27 H. Taylor, 2004, p. 155-158; C. Mlinar, 2004, p. 63.

28 B. Bader, 2003, p. 36.

29 S. M. Paley and Y. Porath, 1993, p. 611-612.

30 E. S. Marcus, 2003, p. 98.

31 E. Czerny, 2002, fig. 27, p. 138, 142.

32 See M. Bietak, 1991, p. 36-37.

33 E. Czerny, 2002, p. 138.

34 L. E. Stager, 2002, p. 360-361.

35 M. Bietak, 1996, p. 20.

36 C. Doumet-Serhal, 2004 a, p. 89-154

37 D. Griffiths, 2004 a, p. 142.

38 J. A. McGillivray, 2004, p. 124-131.

39 J. A. McGillivray, 2004, p. 124-131.

40 C. Doumet-Serhal, 2004 c, p. 106-109.

41 C. Doumet-Serhal, 2004 a, p. 139-143.

42 C. Doumet-Serhal, 2004 a, p. 139-141; A. Ogden & H. Schutkowski, 2004, p. 162-163; E. Vila, 2004, p. 169.

43 R. B. Seager, 1916, pl. VIII-IX (pithos IX a) and pl. XIV (pithos XIIb); see also, P. Warren & V. Hankey, 1989, p. 136, pithos XIIb, dark ground with dolphins in outline white paint, is datable to MMIII, possibly IIIA.

44 Rim Diam.: 25 cm.
Thickness: 1 cm.
Body Diam.: 53.5 cm.
Height: 44 cm.

45 I thank Dafydd Griffiths for the numerous discussions we had on the manufacturing techniques.

46 R. B. Seager, 1916, pl. VIII, IX a, pl. IX, MM III-LMI periods, pl. XIV, XII-b, MM III period; ΕΡΗΣΤΟΣ Γ. ΝΤΟΥΜΑΣ, 1999, p. 55, 62; I thank Vassos Karageorghis for this reference.

47 See D. Griffiths, 2004, p. 10-17 and H. Mommsen's article in this issue p. 48.

48 G. Papatheasopoulos, 1981, p. 170-171; ΕΡΗΣΤΟΣ Γ. ΝΤΟΥΜΑΣ, 1999, p. 60.

49 ΕΡΗΣΤΟΣ Γ. ΝΤΟΥΜΑΣ, 1999, p. 55, 62.

50 M. Artzy, 2002, p. 12 note 8, the incised decoration with white fill appears in the Cyclades before it appears in Egypt, or in Syro-Palestine.

51 P. E. McGovern, J. Bourriau, G. Harbottle, S. J. Allen, 1994, p. 31-43.

52 For a new dating to 1710-1680 BC, see K. Kopetzky in press.

53 P. Warren, 1995, p. 2, 3, 12.

54 See C. Doumet-Serhal, 2004 b, p. 61.

55 L. E. Stager, 2002, p. 355; A. M. Maier, 2002, p. 229.

56 A. M. Maier, 2002, p. 235.

57 T. Bagh, 2003, p. 219 note

BIBLIOGRAPHY

- H. Altenmüller & A. Moussa, 1991, "Dis Inschrift Amenemhets II aus dem Ptah-Tempel von Memphis. Vorbericht", *Studien zur Altägyptischen Kultur*, 18, p. 1-48.
- M. Artzy, 2002, "The Aegean, Cyprus, the Levant and Bichrome Ware" in E. D. Oren & S. Ahituv, *Aharon Kempinski Memorial Volume. Studies in Archaeology and Related Disciplines*, Beer-Sheva Studies by the Department of Bible and Ancient Near East, vol. XV, Beer-Sheva, Ben-Gurion University of the Negev Press, p. 1-20.
- M. Artzy & E. Marcus, 1992, "Stratified Cypriote Pottery in MBIIA Context at Tel Nami", in G. Ioannides ed., *Studies in Honor of Vassos Karageorghis*, Nicosia, p. 103-110.
- B. Bader, 2003, "The Egyptian Jars from Sidon in their Egyptian Context", *AHL*, 18, p. 31-37.
- T. Bagh, 2003, "The Relationship between Levantine Painted Ware, Syro/Cilician Ware and Khabur Ware and the Chronological Implications", in M. Bietak, ed., *The Synchronisation of Civilisations in the Eastern Mediterranean in the Second Millennium B.C. II, Proceedings of the SCIEM 2000-EuroConference Haindorf, 2nd of May-7th of May 2001*, Österreichische Akademie der Wissenschaften, Denkschriften der Gesamtakademie, band XXIX, Wien, p. 219-238.
- T. Bagh, 2004, "Levantine Painted Ware from the Middle Bronze Age Tombs at Sidon. New Material from the Lebanese Coast", *AHL*, 20, p. 40-57.
- P. Beck, 2000, "Area B: Pottery", "Area A: Middle Bronze IIA Pottery", in M. Kochavi, P. Beck & E. Yadin, *Aphek-Antipatris I, Excavations of areas A and B, the 1972-1976 Seasons*, Tel Aviv University Sonia and Marco Nadler Institute of Archaeology, no 19, Tel Aviv, p. 93-133 & 173-238.
- A. Ben-Tor, "The Trade Relations of Palestine in the Early Bronze Age", *Journal of the Economic and Social History of the Orient*, XXIX, p. 1-27.
- A. Ben-Tor, 1995, "Cylinder Seal Impressions of Early Bronze Age Israel", in J. G. Westenzol, *Seals and Sealing in the Ancient World*, Proceedings of the Symposium held on September 2, 1993, Jerusalem, p. 65-79.
- M. Bietak, 1991, "Egypt and Canaan During the Middle Bronze Age", *BASOR*, 281, p. 27-79.
- M. Bietak, 1996, *Avaris, the Capital of the Hyksos*, British Museum Press, London.
- S. L. Cohen, 2002, *Canaanites, Chronologies and Connections, The Relationship of Middle Bronze IIA Canaan to Middle Kingdom Egypt*, Harvard Semitic Museum Publications, Winona Lake.
- E. Czerny, 2002, "Egyptian Pottery from Tell el-Daba' as a Context for Early MB IIA Painted Wares", in M. Bietak, *The Middle Bronze Age in the Levant*, Österreichische Akademie der Wissenschaften, Denkschriften der Gesamtakademie, band XXIX, Wien, p. 133-142.
- W. G. Dever, 1980, "New Vistas on the EB IV ("MBI") Horizon in Syria-Palestine", *BASOR*, 237, p. 35-64.
- C. Doumet-Serhal, 2004, "Warrior burial 27 at Sidon", *AHL*, 20, p. 21-29.
- C. Doumet-Serhal, 2004a, "Sidon (Lebanon): Twenty Middle Bronze Age Burials from the 2001 Season of Excavation", *Levant* 36, p. 89-154.
- C. Doumet-Serhal, 2004 b, "Sixth and Seventh Seasons of Excavation at Sidon, Preliminary Report", *BAAL*, 8, p. 47-82.
- C. Doumet-Serhal, 2004 c, "Sidon: A Jar with Fish or Dolphin Decoration", *Archaeology and History in Lebanon*, 19, p. 106-109.
- C. Doumet-Serhal, 2006, - *Excavation at Sidon 1998-2000-2001. The Early Bronze Age*, Institut Français d'Archéologie du Proche-Orient, Bibliothèque Archéologique et Historique, T. 178, Beyrouth.
- C. Doumet Serhal, with contributions from A. R. Ogden, E. Vila and W. Van Neer, (in press), "Three burials with silver artefacts from 46 the Middle Bronze Age I/II A at Sidon: British Museum Excavations, Mélanges Jean-Paul Rey Coquais.
- P. Gerstenblith, 1983, *The Levant at the Beginning of the Middle Bronze Age*, Winona Lake.
- D. Griffiths, 2004, "The Fabric of a Ceramic Jar from Sidon Decorated with Fish or Dolphins", *Archaeology and History in Lebanon*, 19, p. 10-117.
- D. Griffiths, 2004 a, "Jars from the Second Millennium BC at Sidon: Child Burials or deposited Goods in Graves", in *Decade, A Decade of Archaeology and History in the Lebanon*, Beirut, p. 132-145.
- H. Joffe, 2001, "Early Bronze Age Seal Impressions from the Jezreel Valley and the Problem of Sealing in the Southern Levant", in S. R. Wolff (edit.), *Studies in the Archaeology of Israel and Neighboring Lands in Memory of Douglas L. Esse*, The Oriental Institute of the University of Chicago Studies in Ancient Oriental Civilization, no 59, Chicago, Illinois, p. 355-375.
- A. Kempinski, L. Gershuny & N. Scheftelowitz, 2002, "Middle Bronze Age", in A. Kempinski, *Tel Kabri, the 1986-1993 Excavation Seasons*, Tel Aviv University Sonia and Marco Nadler Institute of Archaeology.
- K. Kopetzky, "The Dolphin Jug: A Vessel of the MB IIB Period", (in press).
- J. A. McGillivray, 2004, "A Middle Minoan Cup from Sidon", C. Doumet-Serhal edit. in collaboration with A. Rabate & A. Resek, *A Decade of Archaeology and History in the Lebanon*, Beirut, p. 124-131.
- A. M. Maeir, 2002, "Red, White and Blue Ware: A Little-known Group of Painted Pottery of the Middle Bronze II Period", in *Aharon Kempinski Memorial Volume, Studies in Archaeology and Related Disciplines*, Ben-Gurion University of the Negev, edit. E. D. Oren & S. Ahituv, Jerusalem, p. 228-240.
- E. S. Marcus, 1998, *Maritime Trade in the Southern Levant from Earliest Time Through the Middle Bronze Age II A Period*, vol. I-II, Thesis submitted to the University of Oxford in fulfillment of the Requirements for the Degree of Philosophy, Trinity Team, Wolfson College.
- E. S. Marcus, 2002, "The Southern Levant and Maritime Trade during the Middle Bronze Age IIA Period", in *Aharon Kempinski Memorial Volume, Studies in Archaeology and Related Disciplines*, Ben-Gurion University of the Negev, edit. E. D. Oren & S. Ahituv, Jerusalem, p. 241-263.
- E. S. Marcus, 2003, "Dating the Early Middle Bronze Age in the Southern Levant: A Preliminary Comparison of Radiocarbon and Archaeo-Historical Synchronizations", in M. Bietak, ed., *The Synchronisation of Civilisations in the Eastern Mediterranean in the Second Millennium B.C. II, Proceedings of the SCIEM 2000-EuroConference Haindorf, 2nd of May-7th of May 2001*, Österreichische Akademie der Wissenschaften, Denkschriften der Gesamtakademie, band XXIX, Wien, p. 95-110.
- S. Mazzoni, 1985, "Elements of the Ceramic Culture of Early Syrian Ebla in Comparison with Syro-Palestinian EB IV", *BASOR*, 257, p. 1-18.
- S. Mazzoni, 2002, "The Ancient Bronze Age Pottery Tradition in Northwestern Central Syria, Cultural Identity, regional perspective and geographical framework", in M. Al-Maqdissi, Valérie Matoïan & Ch. Nicolle, *Céramique de l'âge du Bronze en Syrie, I, la vallée de l'Oronte*, Institut Français du Proche-Orient, bibliothèque archéologique et historique, T. 161, Beyrouth, p. 69-96.
- P. E. McGovern, J. Bourriau, G. Harbottle, S. J. Allen, 1994, "The Archaeological Origin and Significance of the Dolphin Vase as Determined by Neutron Activation Analysis", *Bulletin of the American Schools of Oriental Research*, 296, p. 31-43.
- C. Mlinar, 2004, "Sidon. Scarabs from the 2001 Season of Excavations: Additional Notes", *AHL*, 20, p. 61-64.
- Ch. Morhange, K. Espic, C. Doumet-Serhal, M. Bourcier, P. Carbonel, 2003, "The Ancient Harbours of Sidon Attempt at a Synthesis (1998-2002)", *AHL*, 18, p. 71-81.
- ΕΡΗΣΤΟΣ Γ. ΝΤΟΥΜΑΣ, 1999, "A Pictorial Pithos from Akrotiri, Thera", *Τιμητικό Λογίο* στη μνήμη του Νίκου Ζαφειρόπουλου, *ΦΙΣ ΚΥΚΛΑΔΙΚΟΝ*, ΑΘΗΝΑ, p. 54-73.
- L. Nigro, 2003, "The Smith and the King of Ebla. Tell el-Yahudiyeh Ware, Metallic Wares, and the Ceramic Chronology of Middle Bronze Age Syria", in M. Bietak, ed., *The Synchronisation of Civilisations in the Eastern Mediterranean in the Second Millennium B.C. II, Proceedings of the SCIEM 2000-EuroConference Haindorf, 2nd of May-7th of May 2001*, Österreichische Akademie der Wissenschaften, Denkschriften der Gesamtakademie, band XXIX, Wien, p. 345-364.
- A. Ogden & H. Schutkowski, 2004, "Skeletal Report for the British Museum, Sidon Excavation (2001 Season)", *Levant*, 36, p. 159-166.
- G. Papathanasopoulos, 1981, *Neolithic and Cycladic Civilization*, Melissa, Athens.
- Y. Porath & S. Paley, 1997, "Early Middle Bronze Age IIA Remains at Tell el Ifshar, Israel: A preliminary Report" in E. D. Oren, edit., *The Hyksos: New Historical and Archaeological Perspectives*, University Museum Monograph 96, University of Pennsylvania, Philadelphia, p. 369-378.
- R. B. Seager, 1916, *The Cemetery of Pachyammos, Crete*, Philadelphia.
- D. J. Pullen, 1994, "A Lead Seal from Tsoungiza, Ancient Nemea and Early Bronze Age Aegean Sealing Systems", *American Journal of Archaeology*, 98, p. 35-52.
- L. E. Stager, 2002, "The MB IIA Ceramic Sequence at Tel Ashkelon and its Implications for the "Port Power" Model of Trade", in M. Bietak, *The Middle Bronze Age in the Levant, Proceedings of 47 an International Conference on MB IIA Ceramic Material, Vienna, 24th-26th of January 2001*, Österreichische Akademie der Wissenschaften, Denkschriften der Gesamtakademie, band XXVI, Wien, p. 353-362.
- H. Taylor, 2004, "Scarabs from the Bronze Age Tombs at Sidon (Lebanon)", *Levant*, 36, p. 155-158.
- A. Véron & Leroux, 2004, "Provenance of Silver Artefacts from Burial 27 at Sidon", *AHL*, 20, p. 34-38.
- E. Vila, 2004, "Survey of the Remains of Mammals Recovered in the Middle Bronze Age Burials at Sidon (Lebanon)", *Levant*, 36, p. 167-180.
- P. Warren, 1995, "Minoan Crete and Pharaonic Egypt", in W. V. Davies & L. Schofield, *Egypt, the Aegean and the Levant, Interconnections in the Second Millennium BC*, London, p. 1-18.
- P. Warren, & V. Hankey, 1989, *Aegean Bronze Age Chronology*, Bristol.
- M. H. Wiencke, 1970, "Banded Pithoi of Lerna III", *Hesperia*, XXXIX, p. 94-109.

Pottery drawn by Norma-Sfeir-Khoury and scanned by Ramy Yassine.