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WEAPONS FROM THE MIDDLE BRONZE AGE BURIALS AT SIDON

38

Amongst the various finds uncovered at different stages throughout the Sidon excavations, metal weapons appear from the early second Millennium BC (MBI/IIA) onwards. They were almost all found in the constructed graves belonging to Sidon's phase 1. Their presence indicates a clear distinction of rank with respect to the prestige of the grave's occupant, namely that of a warrior. Two notable exceptions were a socketed arrowhead found in the jar burial of a 13-year-old juvenile from Sidon's phase 4 and a knife found in a constructed grave in Sidon's phase 5. Eight weapons have so far been recovered amongst the grave goods in the Middle Bronze Age burials. These eight bronze weapons consist of two spearheads, two duckbill fenestrated axes, a notched chisel-axe, one dagger, one arrowhead and one knife. The tradition of placing weapons in graves is widespread in the Near East but the Sidon material bears regional differences in chronology, types and in the groupings of weapons used.

WEAPONS IN WARRIOR BURIALS

PHASE 1.

In phase 1 all burials were primary. Skeletons were deposited in constructed graves, which were lined either with stones or with mud bricks. They corresponded to mature adult males (burials 12, 5, 25) buried in a flexed or a supine position (for a full description see Doumet-Serhal forthcoming in *Levant*). In terms of energy expenditure these burials are the most elaborate as testified by their labour intensive construction as well as by their association with metal artifacts. The bronze found in the tombs marks them as part of the MBI/IIA group "Levantine warrior burials" (Schiestl 2002, 331) whose standardized set of weapons, as found in these tombs, usually consists of a combination of the duckbill axe and the spearhead.

BURIAL 12:

This was a rectangular grave cut into the sand in a north-south direction. It measured 2.10 m long and 26 cm wide. Two large stone slabs lined the grave by the head of the skeleton though the remainder was constructed of three lined courses of irregular stones. These consisted of flint, pebbles and limestone. A sandy/clay mortar filled the gaps between the stones.

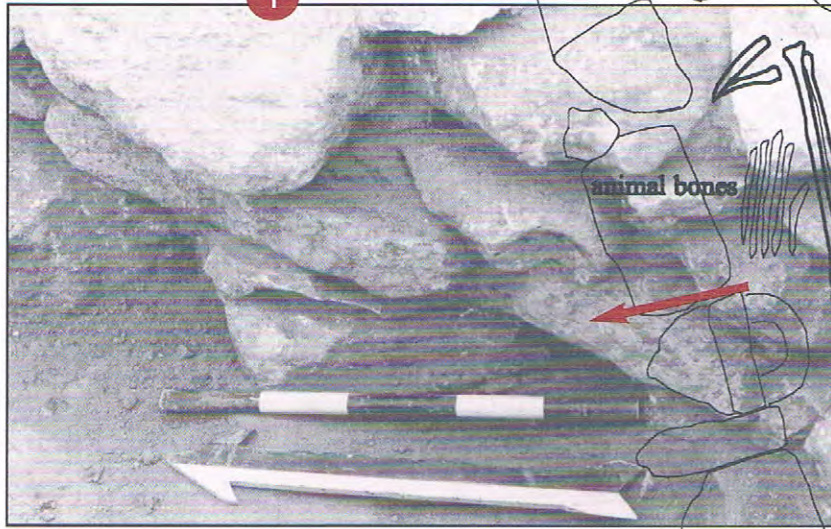
The body of a mature adult (Ogden & Schutkowski forthcoming) was in a supine position, head to the north, face turned to the east. The arms were crossed on the pelvic area. This is where three scarabs were found on the finger bones (see p. 11). They were probably worn as rings. A stone slab supported the skull. A typical MBI/IIA "duckbill" axe was found under the skull with the blade facing west. A spearhead was found on floor level embedded in the wall of the grave to the left of the body near the legs with the blade facing north. Six ceramic vessels were also found placed in the grave.

Narrow fenestrated axe, the so-called "duckbill" axehead (S/1820)

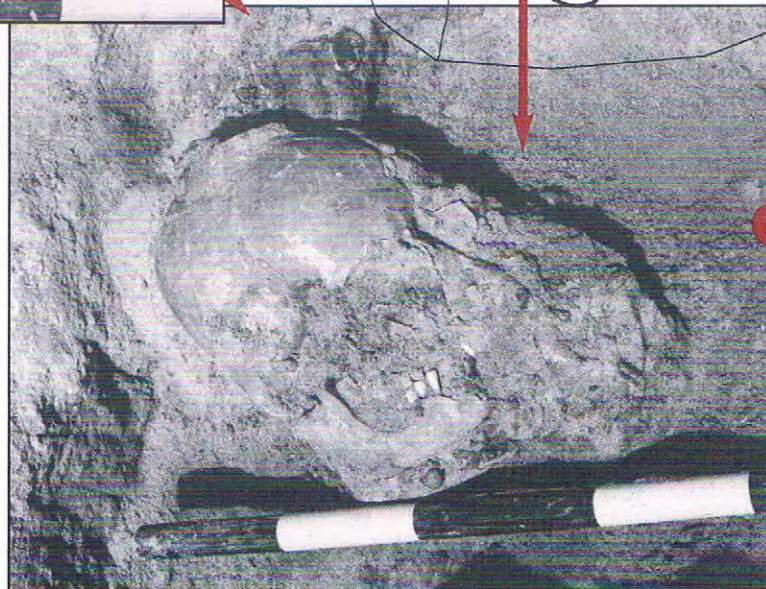
Overall length:	105 mm
Length of blade:	80 mm
Length of socket (with knobs):	85 mm
Internal length of socket:	20 mm
Internal breadth of socket:	16 mm
Maximum breadth of blade:	52 mm
Maximum thickness of blade:	15 mm
Shape of fenestrations:	ovoid
Profile of blade:	tapering

Typical MBI "duckbill" axes (Gerstenblith 1983, 89-92, 104, the duckbill axe type may be dated to ca. 1890 B.C.) developed from the late EB fenestrated "eye" variety (Philip 1989, 49-50; Tubb 1983, 59; Oren 1971, 111-113; Dever 1975, 29; Garfinkel 2001, 144 for the geographical distribu-

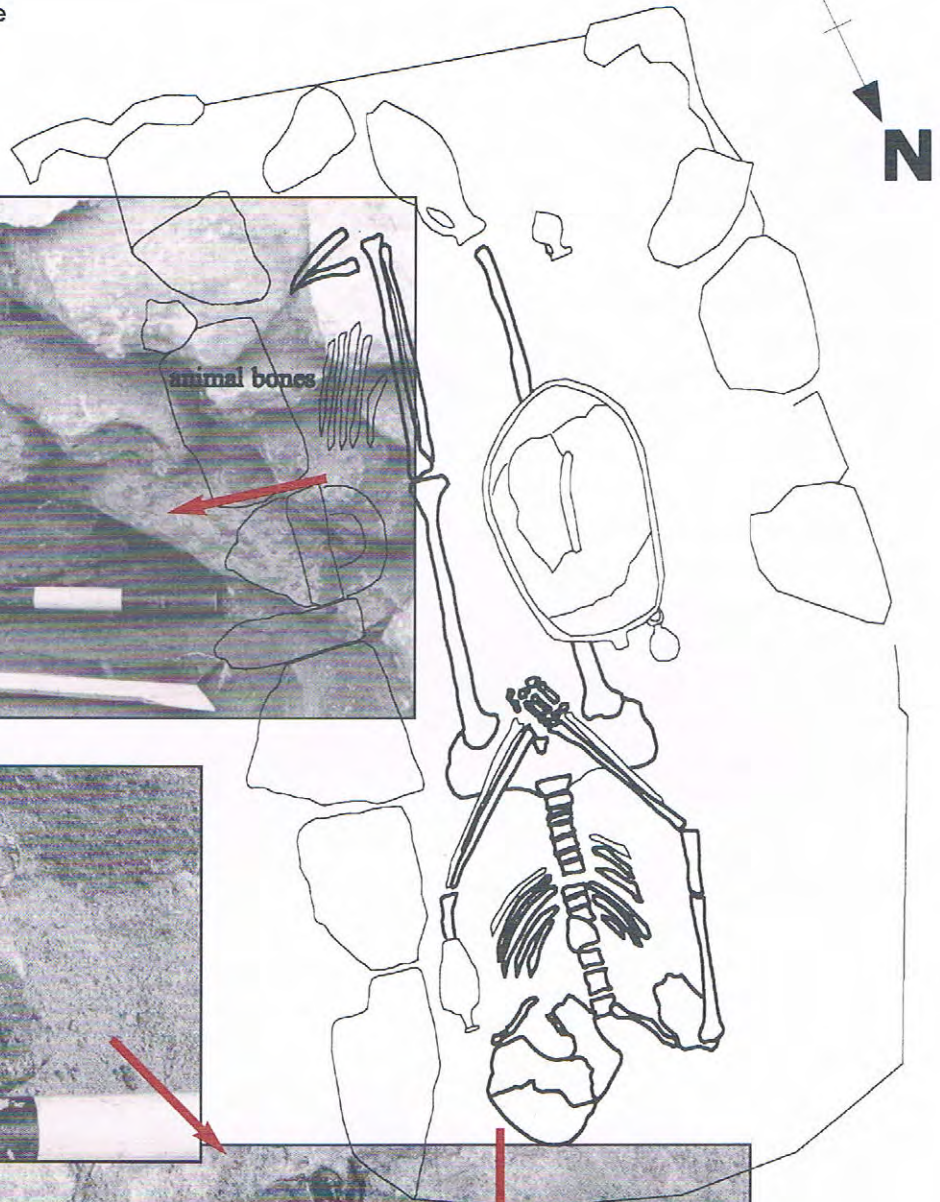
- 1 Burial 12: Spearhead S/1821 in the wall of the grave.



- 2-3 Burial 12: Duckbill axe S/ 1820 with the blade under the head.



- * Plans, Hugh Barnes.
- * Drawings, Norma Sfeir.



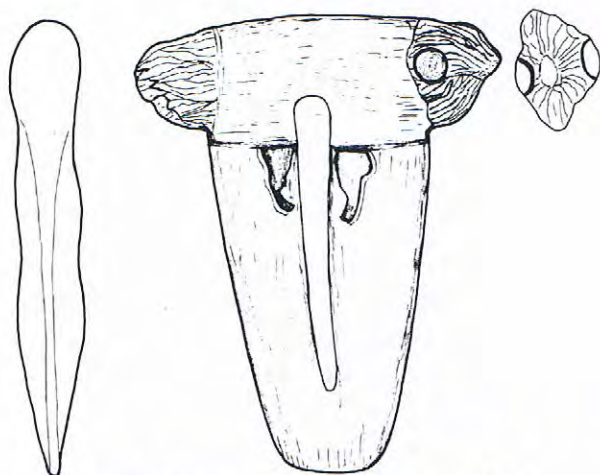
tion of duckbill axes; Nigro 1997, 278, ..."the presence of the duck-bill axe is not confined to the early part of MB I only, but persists to the end of the period ... is attested at Ebla in the Tomb of the Lord of the Goats, dated to MB I (1750-1700), Philip 1989, 50).

This axe is extremely fine and fragile. It is unusual in that it was not designed to be mounted. The socket is sealed with a knob on either side. These knobs are ovoid with a pointed end and measure 2 cm x 2 cm. A plug on each side of the knobs was probably only a decorative element. This strongly suggests that the axe had no practical use and was either made for ceremonial purposes or for placement in the burial (Tubb forthcoming, on the duckbill axe as a sign of rank). The position of the said axe near the head is a classic one as axes are generally found with the blade lying behind, or near the skull, suggesting that they were carried resting on the shoulder (Philip 1989, 180).

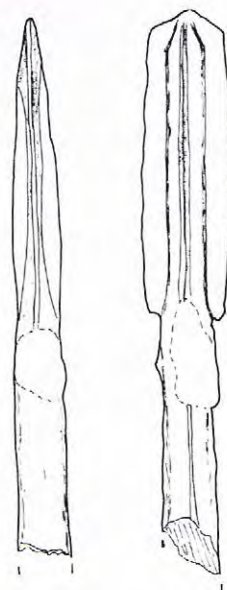
Socketed spearhead (S/1821)

Surviving length:	13 mm
Length of blade:	70 mm
Breadth of blade:	(minimum: 17 mm; maximum: 20 mm)
Thickness of blade:	(minimum 7 mm; maximum: 10 mm)
Surviving length of socket:	6 mm
Inner diameter of socket:	11 mm
Point:	rounded
Midrib:	rounded

Spears have only been found with axes, never alone. They may have been used as javelins (Philip 1989, 93). S/1821 has a distinctive broad blade and is similar to S/ 1747 (see below). Its socket is broken and it is therefore not possible to ascertain its original length (Oren 1971, 115 on the two distinctive version of spearheads in accordance with the ratio of length of socket and blade). Both this and spear S/1747 from burial 5 (see p. 42) were manufactured in a two-piece mould as attested by the join on the socket.

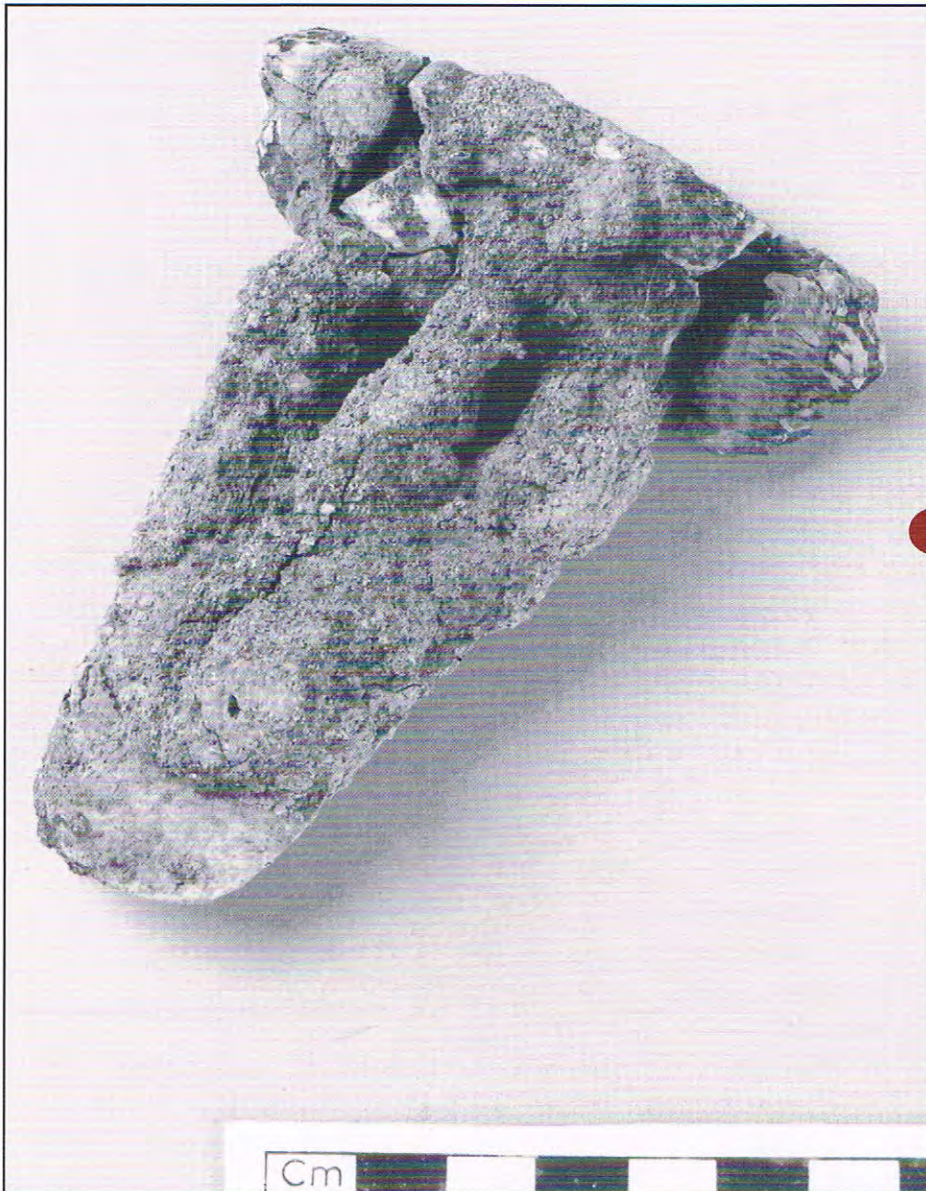


Narrow fenestrated axe the so-called
"Duckbill" axehead S/1820

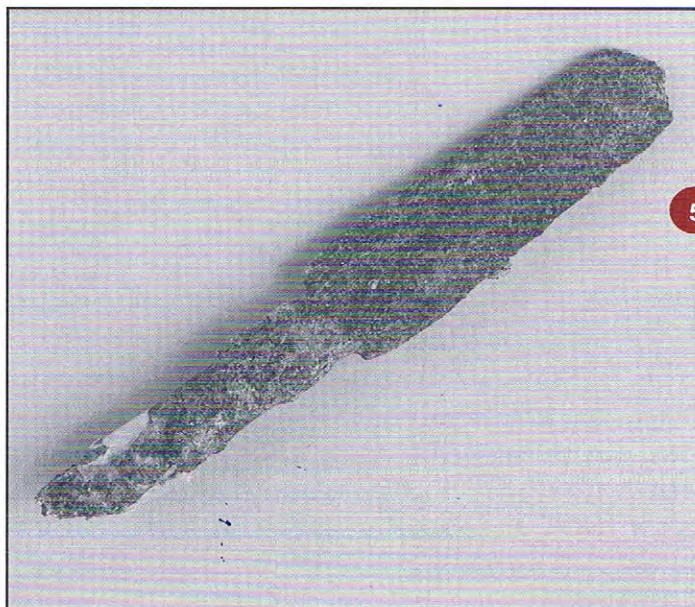


Socketed spearhead S/1821

0 5 10 cm



4



5

4 Duckbill axehead S/1820 found in burial 12.

5 Spearhead S/ 1821 found in burial 12.

BURIAL 5:

Burial 5 was a grave constructed on an east-west axis and measured 1.40 m x 70 cm. Grey clay lined the floor and sides of the grave. The skeleton of an adult (Ogden & Schutkowski forthcoming) lay

on its right side in a flexed position, framed by two large stones placed at the head and foot of the grave. Shaped lumps of clay supported the head and body. A narrow-bladed axe was found 10 cm to the north of the skull, just above the shoulder, the blade facing away from the body. A red discoloration in the sand near it was probably caused by the remains of a wooden shaft. A spearhead was found near the axe. A jug lay by the feet of the skeleton.

Notched chisel-axe (S/1744)

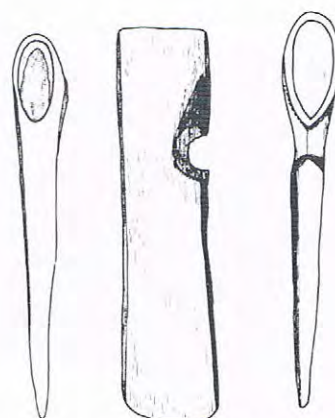
Overall length:	106 mm
Length of blade:	79 mm
Breadth of blade:	21 mm
Section of blade:	trapezoidal
	(maximum: 10 mm; minimum: 2 mm)

Internal length of socket:	25 mm
Internal breadth of socket:	10 mm
Maximum height of socket:	30 mm
Minimum height of socket:	24 mm
Height of cutting edge:	25 mm

The axe has a notch in the lower edge of the blade next to the socket designed for a thong attachment to a wooden handle. It belongs, according to Philip, to type 1 (1989, 266) which consists of a relatively short blade, (for comparison see T 66 at Ruweise and Megiddo T 911 D, Philip 1989, 268, 270) and a narrow cutting edge. The notched chisel-axe is distributed throughout the coastal Levant and can generally be dated to the end of MBI (duration between 2000/1950-1750 BC) (Yadin 1963, 60; Philip 1989, 37, 39). It has been suggested (Philip 1989, 39-40) that type 1 narrow-bladed axes may appear relatively late in the MBI period but this is not the case at Sidon (see p. 54).



6 Notched chisel axe S/1744 from burial 5.

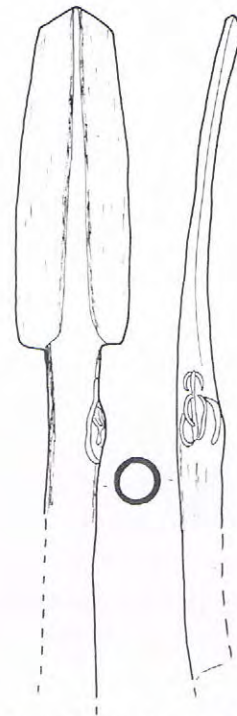


Notched chisel - axe S/1744

Socketed spearhead/javelin (S/1747)

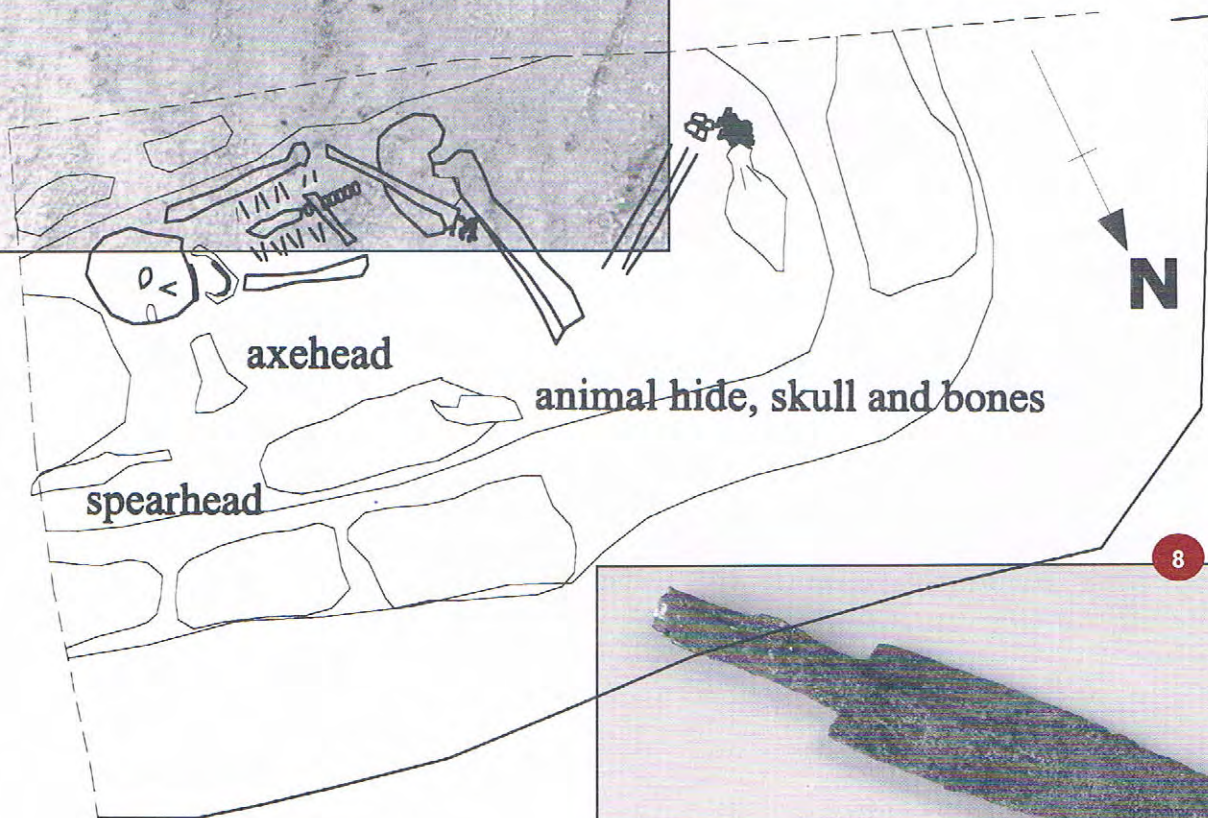
Overall length:	180 mm
Length of blade:	(maximum) 95 mm
Thickness of blade:	(maximum) 10 mm
	(minimum) 7 mm
Breadth of blade:	30 mm
Length of socket:	85 mm
External length of socket:	30 mm
Diameter of socket:	14 mm
External thickness of socket:	14 mm
Point:	rounded
Midrib:	rounded

Both the length of the blade and the socket are practically equivalent (see Philip's type 6 for comparison, 92-93, a locally produced weapon). The blade with its straight-sloping shoulders is thin as is the socket which makes it a light weapon probably designed to be thrown from a relatively short distance (see p. 40).



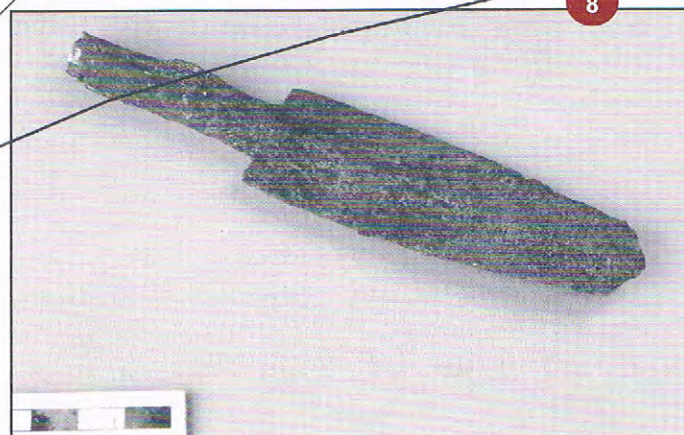
Socketed spearhead S/1745

0 5 10 cm



7 Burial 5 with an axehead near the shoulder.

8 Socketed spearhead S/1747 from burial 5.



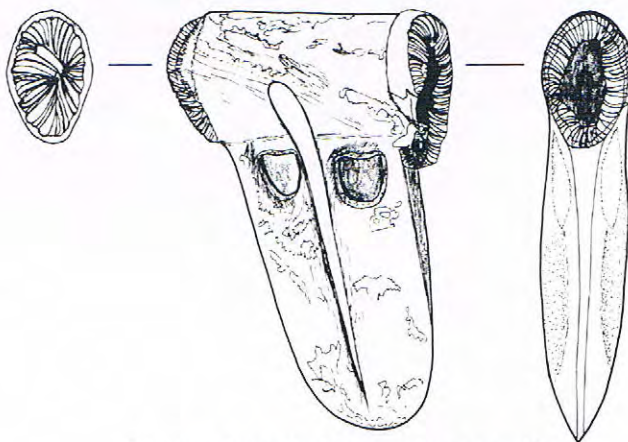
BURIAL 23:

This grave is constructed of three layers of stones laid on sand. The grave itself is 1.34 m long, 46 cm deep and 85 cm wide at its eastern end narrowing to 68 cm at its western end. The long north side of the

burial had three courses of stones. The grave was filled with yellow loose sand. The almost complete skeleton of a male was lying on its left side in a flexed position in an east/west alignment, head to the east. The skull, slightly inclining to the left was partly cut by a modern foundation pillar. The right and left arms were flexed across the chest. Lumps of grey clay were mixed in with the sand fill. This clay was found in almost all the constructed graves. Animal bones had been placed below the feet. There was an axe-head beside the left shoulder. The wooden handle of the axe was partly preserved.

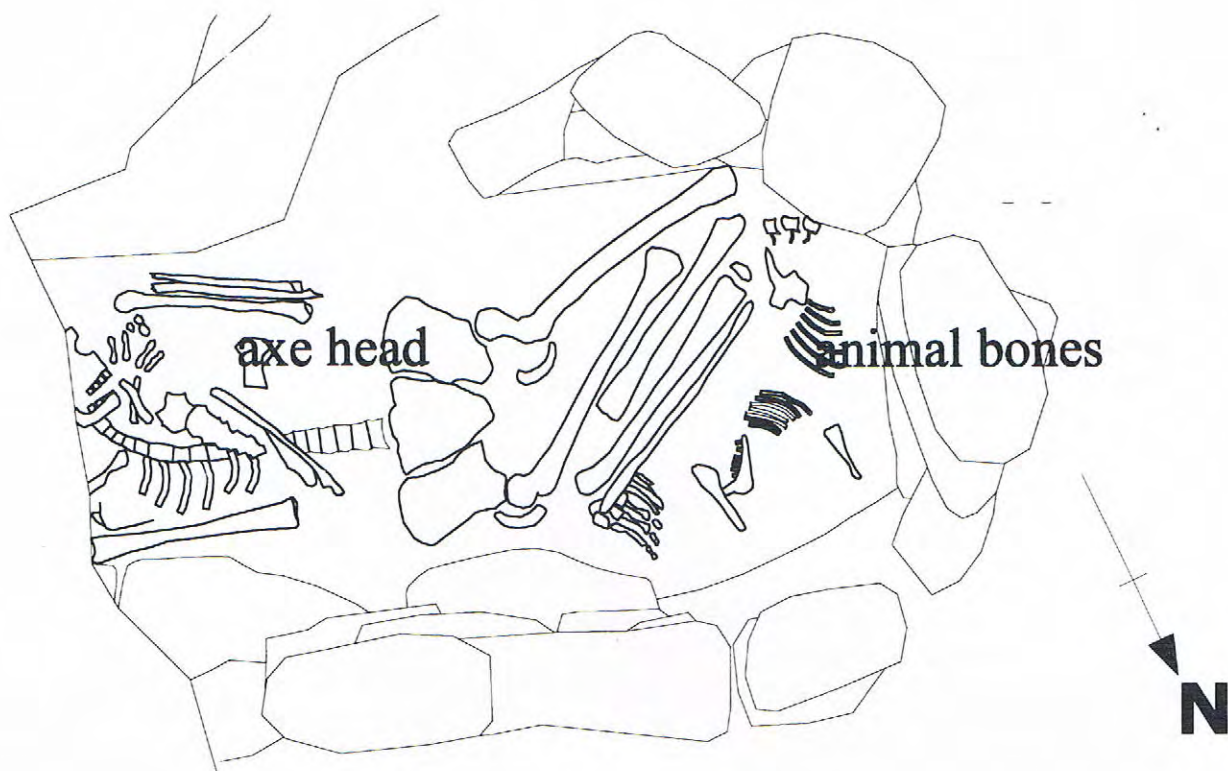
This narrow fenestrated axe is a so-called “duckbill” axe S/3003 with a prominent central ridge. Traces of the wooden shaft which was inserted in the socket are still present.

Overall length:	115 mm
Length of blade:	80 mm
Maximum breadth of blade:	47 mm
Maximum thickness of blade:	25 mm
Internal length of socket:	25 mm
Internal breadth of socket:	12 mm
Shape of fenestrations:	circular
	truncated
Profile of blade:	tapering
Light rib around the fenestration	



Narrow fenestrated axe the so-called
“duckbill” axehead S/3003

0 Burial 23 10 cm



10



11

10 Duckbill axe S/3003.

11 Duckbill axe beside the left shoulder in burial 23.

PHASE 1

BURIAL 13 - A CHILD BURIAL

Burial 13 was in a rectangular grave measuring 94 cm long and 28 cm wide and was cut into the sand layer on an east-west axis. It was lined with grey clay. This clay also lined the floor of the grave which sat on top of a curving Early Bronze Age wall. The body of a child approximately 5 years old (Ogden & Schutkowski forthcoming) was lying on its right side, in a flexed position head to the east. Stones were laid against the skull. The knees lay on a stone slab measuring 22 cm x 20 cm. There was a silver bracelet around one anklebone, a gold leaf on the ribs, a flask near the skull and a dagger by the child's side.

Dagger (S/1825)

Overall length:	128 mm
Maximum breadth of blade:	20 mm
Maximum thickness of blade:	6 mm
Shape of blade:	tapering
Point:	sharp

A simple long flat narrow-blade dagger with a conical butt and a single pair of rivet holes was found in burial 13 (Philip 1989, 103, with usually at least three rivet holes; also Maxwell-Hyslop 1946, 19). This type was commonly found in late EB III tombs at Jericho. It predates the EB-MB period and has a wide distribution throughout Palestine and Transjordan (Philip 1989, 104).

12-14 Burial 13 with a dagger by the child's side.

13 Dagger S/1825.





13



14



PHASE 4

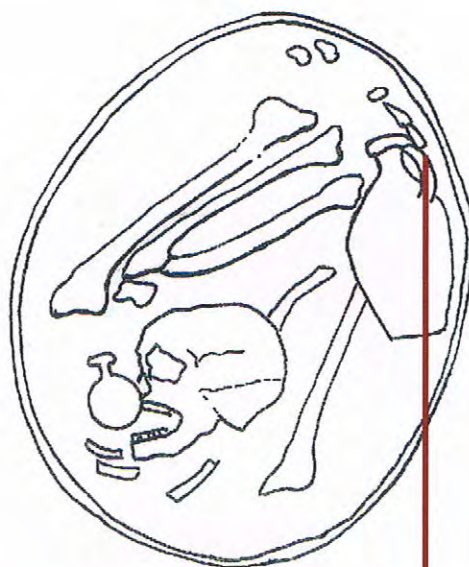
BURIAL 14:

Jar burial 14 (jar S/1853) lay on an east west axis; its opening was covered with the base of another jar (S/1854) and faced east. A large stone, probably a burial marker, was found above it. The skull of a juvenile approximately 13 years old (Ogden & Schutkowski forthcoming) had been placed at one end of the jar to the east with the leg and arm bones at the sides. The burial was found on top of the sand layer. Amongst the pottery offerings was a socketed bronze arrowhead.

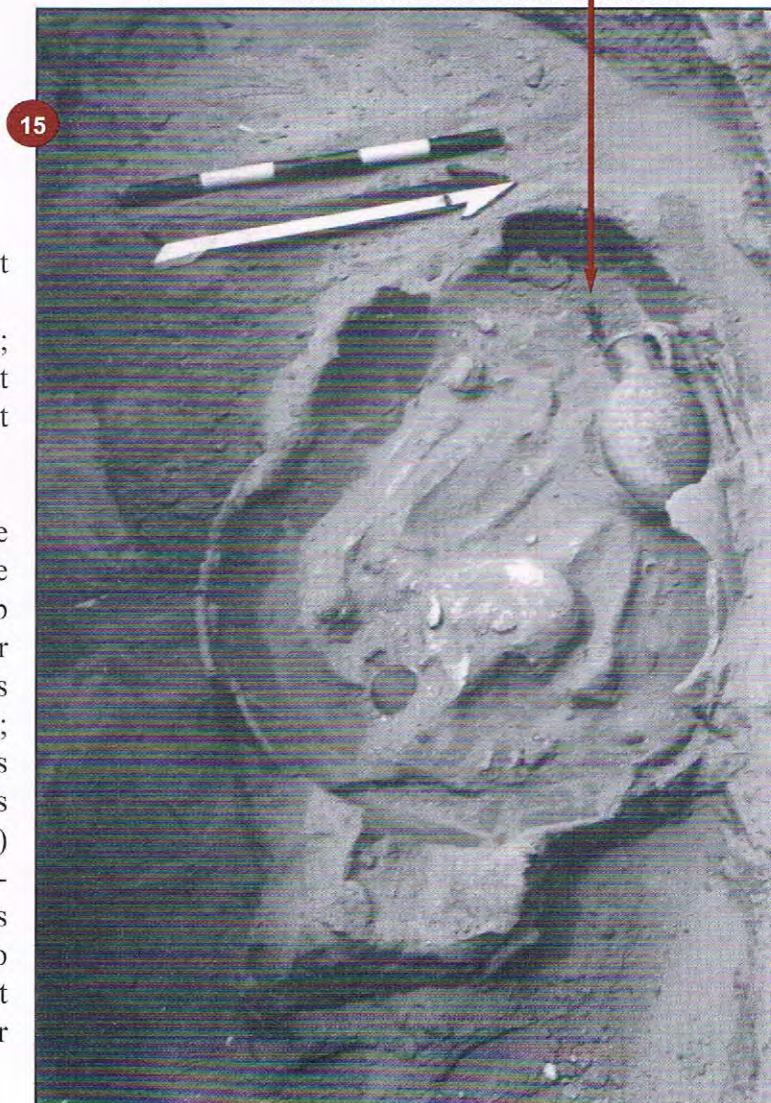
Socketed arrowhead (S/1855).

Overall length: 75 mm
Length of blade: 41 mm
Thickness of blade: 2 mm (minimum)
8 mm (maximum)
Length of socket: 30 mm
Max. diameter of socket: 10 mm
Max. inner diameter of socket: 8 mm
Point: sharp
Evidence of peg driven through the socket walls
Well-defined midrib; very thin sharp blade; socket completely closed at top as cast, but very thin-walled. Well preserved except one edge of the socket.

Socketed arrowheads of this type have been recognized as belonging to the MBI/IIA period (Dever, 1975, 23; Tubb 1985, 189; Bietak, 1991, 57, pl. 10-11) or even earlier. There are very few examples from MB II B-C (Oren 1971, 117, 126; Dever 1975, 28). The rarity of arrowheads from both graves and deliberate deposits is significant according to Philip (1989, 145) suggesting that they were not seen as "suitable" in such circumstances. Sidon's arrowhead is the only bronze artefact to have been found in a jar. It is possible that this may have been a javelin-head made for a child.



15 Jar burial 14 with a socketed arrowhead.

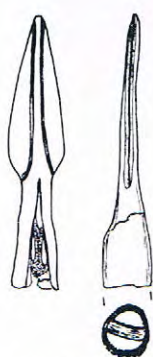




16

16 Burial 14: socketed arrowhead S/ 1855.

Burial 13



Socketed arrowhead
S/1855

Burial 14

0 5 10 cm

PHASE 5

BURIAL 4:

Burial 4 lay N/S. This constructed grave 1.80 m long and 1.25 m wide, held an abundance of offerings, mainly pottery as well as a bronze knife. It contained the skeletal

remains of a child approximately 15 months old and some elements from an adult (Ogden & Schutkowski forthcoming). The west side of the grave was lined by two dressed stone courses 30 cm high in blocks of about 30 cm x 20 cm x 15 cm. Another two blocks, one round and one rectangular, on the south side, marked the other end of the grave. A bronze knife had been laid west of the burial on an animal bone deposit (Vila forthcoming) and was in very poor condition.

Knife (S/1734) :

Overall length:	220 mm
Blade length:	168 mm;
Width of blade:	20 mm (maximum)
	12 mm (minimum)
Length of handle:	62 mm
Thickness of handle:	11 mm
Handle shaped like an animal hoof	

This knife was made of thin metal with a distinctive curved cutting edge and is turned up at its point. Handle and blade were cast in one piece. The blade was then further hammered to give it its shape. It is however insufficiently robust to have functioned as a weapon and might instead have been connected with the presence of meat offerings in the grave. These knives appear elsewhere only in a minority of tombs, suggesting a degree of exclusivity. The knife's handle is short and distinguishes itself by being shaped like an animal's hoof. Curved-blade knives are common in the southern Levant, north-eastern Egypt and at coastal sites such as Byblos and Ruweish. The type appears late in the MBI period but is more common in the MBII period (Philip 1989, 142, 171). Sidon's knife is comparable to Late Bronze Age knives by the way the blade was moulded with the handle in a single cast (Deshayes 1960,

308, 309, pl. XLI, 16). In some of the later knives the handle is shaped like an animal hoof. They have been found at Gerar, Tell Abou Hawam, Lachish and Ras Shamra and in Egypt during the XVIII th Dynasty (see p. 53, drawings not to scale).

- 17 Burial 4: knife S/1734 with handle shaped like an animal hoof.

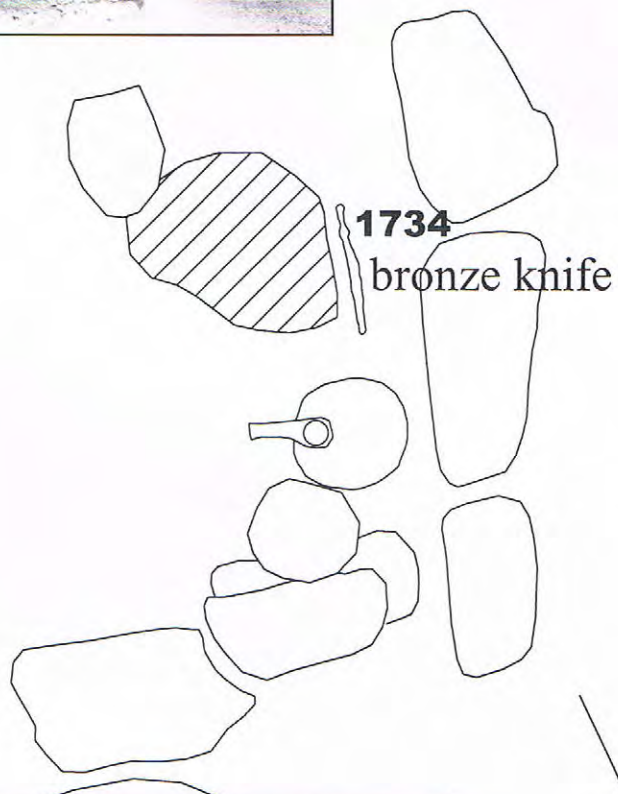


18-19 Burial 4 with knife on animal bone deposit.



929N

18



1734
bronze knife



19

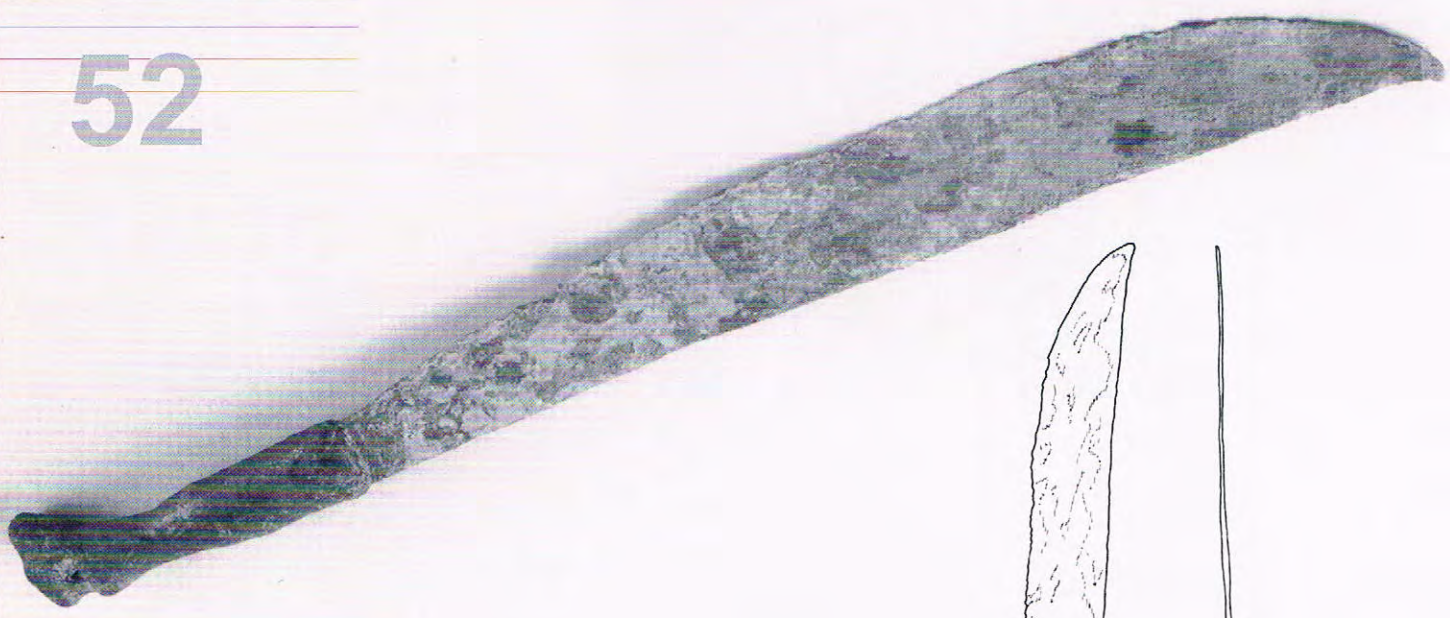


927N

28E

0m .5m 1m 1.5m

52

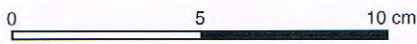


Knife S/1734

20

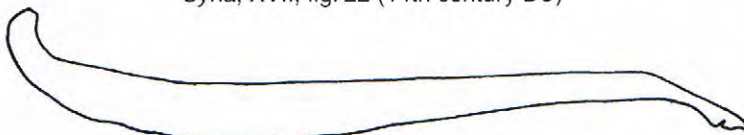
Knife S/1734 from burial 4.

20

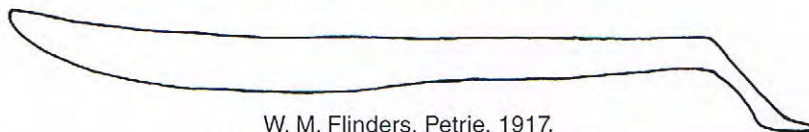




Ras Shamra, C. F.-A. Schaeffer, 1936, " Les fouilles de Ras Shamra - Ugarit
septième campagne (printemps 1935) rapport sommaire "
Syria, XVII, fig. 22 (14th century BC)



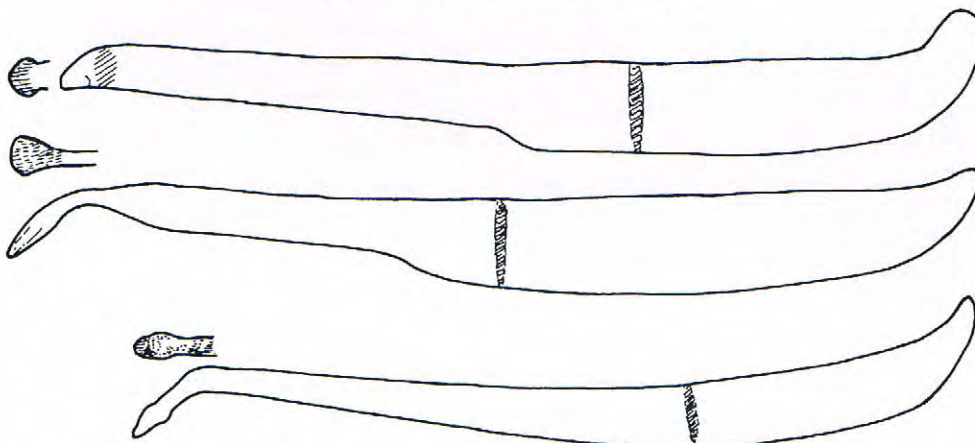
W. M. Flinders, Petrie, 1917,
Tools and Weapons, London, pl. XXIX, 231



W. M. Flinders, Petrie, 1917,
Tools and Weapons, London, pl. XXIX, 232



Tell Abu Hawam, R. W. Hamilton, 1935,
Excavations at Tell Abu Hawam, vol. V, p. 60



Lachish, O. Tufnell, Lachish IV, *The Bronze Age*, 1958
pl. 15, 16, 17, 23



Gerar, F. Petrie, *Gerar*, 1928, London, pl. XXVI, 144



Gerar, F. Petrie, *Gerar*, 1928, London, pl. XXIII, 9



F. J. Bliss, 1894, *A Mound of Many Cities*, London, p. 59, n° 104

SIGNIFICANCE OF THE SIDON MATERIAL IN TERMS OF CON- TEXT AND GROUPING

The Sidon material is significant in many ways:

WARRIOR BURIALS

- Warrior burials occur in phase 1. The skeleton is usually lying in a flexed position. The offerings placed in the graves are quite limited as usually encountered in warrior burials. Assemblages have 1 to 3 items, weapons included.

The only burial that differs from this pattern is burial 12 which is unusual in that:

a) The supine position of the body (Palumbo 1987, 45, 49 has suggested that this position characterizes the burial of a high ranking individual).

b) The surprisingly large array of goods placed in the grave, namely six pottery vessels, three scarabs and two weapons, a total of eleven offerings. If we agree that items were not placed in the grave at random but rather according to an accepted norm (Garfinkel 2001, 155) then it could be argued that this is the most important burial found until now, in terms of social status.

- The position of the duckbill axe from burial 12 found under the head finds its closest parallels at Baghuz ((Du Mesnil du Buisson 1948, 53-55, pl. LVI, LX, LXI).

- The knob at each end of the axe S/1820 is the first weapon to corroborate the suggestion that weapons had more to do with an individual social position than with everyday military equipment (Philip 1989, 155-156; Tubb forthcoming).

- The fenestrated axe and spear combination is the main component of Syrian warrior burials (Philip 1989, 168-169), a common practice in the cemetery at Baghuz in the Euphrates valley (Du Mesnil du Buisson 1948, 63, 69).

- Spears appear regularly in Syrian graves dating back to the Early Bronze Age (Philip 1989, 164-165) and only become archaeologically visible in Early Bronze-Middle Bronze Age in

Palestine (about similarities between Palestinian EB-MB material and that of third Millennium Syria, Philip 1989, 199). They are rare in graves from the southern Levant and only appear in tombs where according to Philip (1989, 151-152) the occupant was already equipped with other weapons. At Sidon spears are found associated with axes in two burials (12 & 5).

- In Sidon we note the contemporary occurrence of the duckbill and narrow-bladed axes (the contemporary occurrences of these two axe types and their distribution has already been discussed in numerous publications, for example Gerstenblith 1983, 89-92; Yadin 1963, 60).

OTHER BURIALS

- Daggers have not so far been found with warrior burials (Philip 1989, 168-169). The single dagger in burial 13 was considered an adequate offering for a child.

- Only one jar burial contained a possible arrowhead. The very fact that it was deposited at Sidon in the burial of a 13 year old juvenile may mean that it might have been considered suitable for a child of that age.

- The knife was deposited on animal bones. The presence of cutmarks on some of the animal bones suggests that butchering had taken place before they were deposited (Vila forthcoming). The bones deposited in these graves are probably food offerings rather than the remains of funeral repasts. Considering how finely the metal of the blade was worked the knife might have had a ceremonial role.

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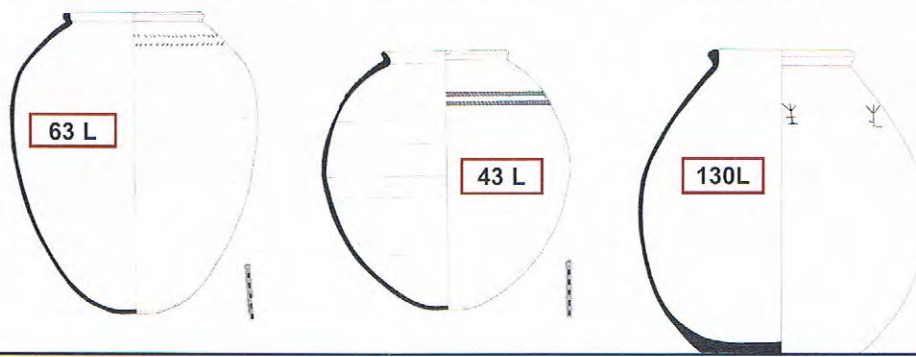
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Phase 1
MBI = MBIIA



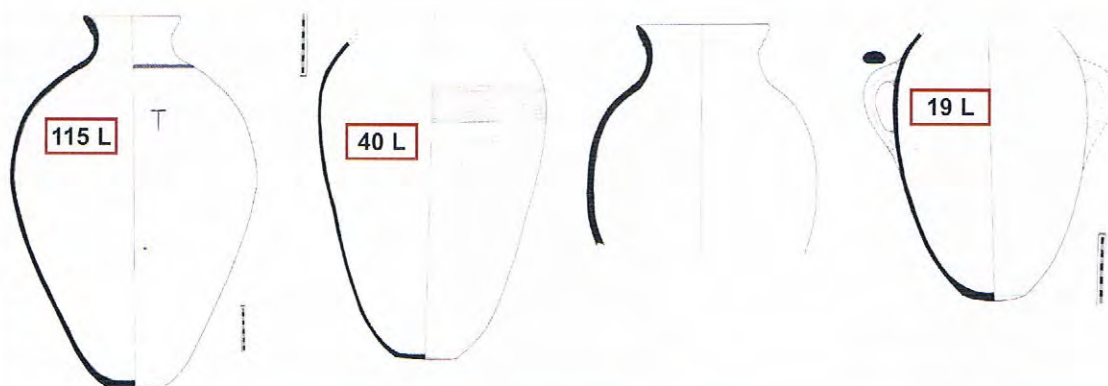
Phase 2
MBI = MBIIA



Phase 3
MBI = MBIIA



Phase 4
**MBI=MBII A/
MBII=MB IIB**



Phase 5
**MB II / III =
MBIIB/C**



