

A COPPER JAVELIN HEAD IN THE UCL PALESTINIAN COLLECTION

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Il giavellotto di rame presentato in questa sede, conservato nella collezione palestinese dello University College di Londra, è ritenuto proveniente dagli scavi condotti da W.M.F. Petrie nel sito di Tell el-'Ajjul agli inizi del XX secolo. L'arma si presta ad un'analisi tipologica che consente di sostanziare meglio le ipotesi circa il contesto di provenienza e l'attribuzione cronologica.

Keywords: UCL; javelin; Tell el-'Ajjul; W.M.F. Petrie; Early Bronze IVB

The javelin discussed in this paper is presently preserved in the Palestinian Collection of the Institute of Archaeology of the University College - London, bearing the accession number 2006/19.¹ As it is stated in the Institute report, it was devoid of marking or labels indicating its provenance. However, according to the Collection Register it probably belonged to the W.M.F. Petrie Palestinian Collection,² most probably from the excavations at Tell el-'Ajjul in the Wadi Gaza, conducted by the British School of Archaeology under William Matthew Flinders Petrie's direction from 1930 to 1934. I was informed about this weapon by Dr. Rachael Sparks, who also allowed me to study it as part of my PhD research project concerning Early Bronze Age metal weapons in the Southern Levant.³ I wish to express to her my sincere gratitude.

1. UCL COPPER JAVELIN N° 2006/19

The UCL javelin is made of copper alloy, and it has a massive body, a long leaf-shaped blade, and a coiled and folded tang (fig. 1). The blade has a lozenge-shaped cross-section and a midrib on both faces; the body has a round cross-section; the tang has a squared cross-section due to the hammering and work hardening.

The whole length of the javelin is 29 cm, the blade is 9.8 cm long, the tang is 7 cm long; the width of the blade is 1.9 cm; the diameter of the body is 1.1 cm; the thickness of the blade is 0.5 cm; the thickness of the tang is 0.4 cm; the weight is 176 g.

Since no data are available in the UCL Museum Register concerning the provenience of such interesting item, one has, thus, to rely upon a comparative study and on the formation of the UCL collection in order to trace back the origin of the metal weapon.

The leaf-shaped javelin was presumably found during Petrie's archaeological excavations in the cemetery of Tell el-'Ajjul in Southern Palestine.⁴ Two of similar javelins in the UCL Collection were retrieved in Tell el-'Ajjul by W.M.F. Petrie. Even though this find does not appear in Petrie's field reports, there is a certain range of possibility that it was retrieved at Tell el-'Ajjul, such as it is proposed by the Collection Register and as it

¹ Ucko - Sparks - Laidlav 2007, 81, cat. 53.

² Ucko 1998; Sparks 2005; 2013a; 2013b; Ucko - Sparks - Laidlav 2007. A catalogue of of Petrie Palestinian material is available on-line at <http://archcat.museums.ucl.ac.uk/>.

³ I would like to express my thankfulness to Prof. Lorenzo Nigro, my tutor and guide over the years, who encouraged this my study trip and motivated my PhD research.

⁴ The Cemetery 100 - 200 is published in Petrie 1931, 8; the Cemetery 1500 is published in Petrie 1932, 14-16.

suggested by the comparison with the other coeval specimens.⁵ Specifically, as it will be detailed further (§ 3.), the javelin 2006/19 shares some features, such as coiled and folded tang and elongated blade, with two specimens from Tombs 227 and 275 of Tell el-‘Ajjul.

2. SOUTHERN LEVANTINE JAVELINS: AN OVERVIEW

Javelins are deemed a reference class of metal weapons for Southern Levant during the Early Bronze Age. Especially in the Early Bronze IV, javelins figure out as a meaningful presence, in relationship with warfare and social change in that period.

Javelins are long-distance weapons, suitable to be thrown,⁶ composed of two parts of different material: a perishable wooden handle, and a metal point, the head. This weapon was made by melting bronze in a mould, and by hammering and work hardening the molten product.

EB IV Southern Levantine javelin heads usually have a coiled and folded tang to be inserted into the wooden handle; sometimes this part of the haft could be outer reinforced by metallic bends, like as in the case of a specimen from ‘Ain Samiya,⁷ strings or fibre strips wrapped around the wooden pole. The tang inserted in the handle corresponds roughly to a third of the whole length of the weapon.

Javelins can be basically subdivided in two main types: the simple one and the leaf-shaped one. The former type⁸ is represented by a bipartite weapon, with folded, coiled tang,⁹ plain body, squared cross-section, that is the classic “poker-spear”,¹⁰ or with circular cross-section, and a pointed tip. The latter type¹¹ is tripartite: it has a folded, coiled tang, a short central body, with alternatively squared or circular cross-section, and the leaf-shaped blade.

The javelin head preserved in the UCL Palestinian Collection belongs to the leaf-shaped type.

2.1. *Leaf-shaped javelins*

Leaf-shaped javelins were mainly found in funerary contexts of Early Bronze IV Southern Levant. More precisely, they were retrieved in Early Bronze IVB¹² tombs in the

⁵ The report of the UCL Collection indicates that the javelin has not yet been matched to a published source.

⁶ Yadin 1963, 10.

⁷ Dever 1972a, 103-106, fig. 5:3.

⁸ The simple type corresponds to De Maigret’s types A4ii and A4iii (De Maigret 1976, 70-77, figs. 14, 15), and to Philip’s types 5 and 13 (Philip 1989, 75-77, fig. 15). It is sometimes in literature referred as “pike”.

⁹ Only in a few cases a straight tang is attested to, like as it is shown by specimens recovered at Byblos (Dunand 1937-1939, 375, pl. C:5493), ‘Ain Samiya (Dever 1972a, 103-106, fig. 6:6-7), and at el-Musherifeh (Ibrahim - Qadi 1995, 88, fig. 8:3).

¹⁰ Woolley 1934, 303; Kenyon 1965, 49.

¹¹ The leaf-shaped type corresponds to De Maigret’s types A3iv (De Maigret 1976, 63-67, fig. 12), and to Philip’s types 6 and 13 (Philip 1989, 76-77, figs. 17-18).

¹² The attribution to that sub-period of the Early Bronze IV is allowed by some pottery vessels recorded in each tomb, characterized by specific features (Nigro 2003a, 134; D’Andrea 2012, 22-23, fig. 3). They are: jars with wheel-made rim and combed band on shoulder, such as in Tomb G 83 at Tell es-Sultan/Jericho (Kenyon 1965, fig. 80:2), in Tombs 2032 (Tufnell 1958, fig. 13, pl. 67:477), 2100 (Tufnell 1958, fig. 13, pl. 67:471), and 2111 (Tufnell 1958, fig. 13, pl. 67:469) at Tell ed-Duweir/Lachish; jar with incised decoration below the

sites of: Tell es-Sultan/Jericho,¹³ el-Jib/Gibeon,¹⁴ Tell ed-Duweir/Lachish,¹⁵ Tell el-‘Ajjul,¹⁶ and in the necropolis of Tiwal esh-Sharqi¹⁷ in Transjordan. In four cases, leaf-shaped javelins were associated with another weapon, the dagger,¹⁸ that is: at Tell es-Sultan/Jericho, Tombs G 83 and M 13, at Tell ed-Duweir/Lachish, Tomb 2111, and at Tiwal esh-Sharqi, Tomb SE.1.¹⁹

Moreover, six specimens bought on the market, though belonged to funerary equipment, and were probably plundered at ‘Ain Samiya,²⁰ Jebel Qa‘aqir,²¹ and Khirbet el-Kirmil.²² They too are dated to late Early Bronze IV.²³

Leaf-shaped javelins might be subdivided into two groups according to the length of the blade in respect of the whole length of the weapon. They could be short or long; the short type has a blade length between 4 and 6.7 cm, and usually exhibits a blade with rounded

wheel-made rim, such as in Tomb 227 at Tell el-Ajjul/Gaza (Petrie 1931, pl XLIV:33, M10); “teapots” with wheel-made rim and combed band on shoulder, such as in Tomb 2032 at Tell ed-Duweir/Lachish (Tufnell 1958, pl. 67:487), or completely combed, such as in Tomb M 13 at Tell es-Sultan/Jericho (Kenyon 1965, fig. 80:11); beaker with wheel-made rim and incised spiral below the rim, such as in Tomb M 13 at Tell es-Sultan/Jericho (Kenyon 1965, fig. 80:12).

¹³ Tombs G 83 and M 13 (Kenyon 1965, respectively 150, fig. 41:11; 153, fig. 41:13; Nigro 2003a, 137).

¹⁴ Tomb 13 (Pritchard 1963, 20-21, 98, fig. 18:9). This javelin might be dated to the Early Bronze IVB following the guideline established by the author (Pritchard 1963, 21), who linked the weapon to a combed sherd (Pritchard 1963, fig. 18:8), comparable with Early Bronze IVB wave-combed beaker and jar recovered at Tell ed-Duweir/Lachish (Tufnell 1958, pl. 66:404, 423).

¹⁵ Tombs 2032, 2100, 2111 (Tufnell 1958, 75-78, respectively pl. 22:2, 3, 1).

¹⁶ Tombs 227, 275 (Petrie 1931, 11-12, respectively pl. XIX:49, 48); there is unfortunately no published record belonging to Tomb 275, but the javelin. The Cemetery 100 - 200 is generally dated to Early Bronze IVB (Kenyon 1956, 47).

¹⁷ Tomb SE.1 (Tubb 1990, fig. 40b).

¹⁸ Garfinkel - Cohen (eds.) 2007, 63. A ceremonial meaning has been proposed for javelins and spearheads associated to daggers (Lapp 1966, 53) or a status-symbol value (Prag 1974, 102; Greenhut 1995, 31); but it is also possible that these weapons were a hallmark of the military specialization of the owner, after accompanied the deceased most of his life, these go together with him also in the tomb (see below § 4.).

¹⁹ The Tomb SE.1 contained two individuals, identified as a male and a female. It seems reasonable to attribute the weapons to the male deposition, though these were recovered in the centre of the chamber away from both skeletons, placed near the northern wall (Tubb 1990, 54-55, fig. 39b).

²⁰ Dever 1972a, 103-106, fig. 5:1-3. These weapons were originated together with some Early Bronze IVB pottery vessels, such as combed jars, jars with incision below the rim, wave-combed and incised “teapot” jars, and incised and combed beakers (Dever 1972a, figs. 2-3) from the cemetery of ‘Ain Samiya (Dever 1972a, 97).

²¹ Dever 1972b, 233; 1997, 210-211. The Jebel Qa‘aqir cemetery is dated to the final part of the Early Bronze IV according to the pottery recorded, like as combed jars, combed and wave-combed beakers (Dever 1970, fig. 3-4; 1972b, 233). Other two javelins, probably of the leaf-shaped type (Dever 1975, 32), were recovered at Jebel Qa‘aqir (London 1985, 97-98).

²² Dever 1975, 31-32, fig. 6:6-7. The pottery repertoire from the cemetery of Khirbet el-Kirmil can be dated to Early Bronze IVB (Dever 1975, figs. 4, 6), except a few vessels that are slightly recent (Dever 1975, fig. 6:2, 4).

²³ Cemeteries of central and south of Palestine are more representative of the later part of the Early Bronze IV (Oren 1973, 56, 59-60), as it is confirmed by pottery vessels previously illustrated (figs. 15-17). Looting activities, however, made this dating limitedly reliable.

tip, rounded base, and a lozenge-shaped cross-section.²⁴ The long type, that has a blade length between 7 and 7.5 cm, could have a triangular shaped blade, sometimes with base corners, a marked midrib, and a lozenge-shaped cross-section, that sometimes shows concave sides.²⁵

Leaf-shaped javelins generally do not exceed 33 cm in length and 200 g in weight.

3. COMPARISONS TO THE UCL JAVELIN

On the ground of typological analysis, the UCL javelin 2006/19 represents a well-known Southern Palestinian type of Early Bronze IV, sharing distinctive features with some already known leaf-shaped specimens. It has a coiled and folded tang, with squared cross-section, such as the javelins recovered at Tell es-Sultan/Jerico, Tomb M 13,²⁶ at el-Jib/Gibeon, Tomb 13,²⁷ Jebel Qa‘aqir,²⁸ Tell ed-Duweir/Lachish, Tombs 2032 and 2100,²⁹ Tell el-‘Ajjul/Gaza, Tomb 227,³⁰ and a circular central body, like as the other leaf-shaped javelins, (with the exception of two specimens from ‘Ain Samiya³¹ and Tell es-Sultan/Jericho, Tomb G 83³²). The blade is elongated, as like as of the javelin from Tomb 275 of Tell el-‘Ajjul, which shows a dorsal ridge and concave sides, quite similar to another specimen from ‘Ain Samiya.³³

It may be observed that EB IVB cemeteries and tombs where leaf-shaped javelins were retrieved are concentrated in the central and southern region of Palestine, even though a javelin of this type was collected also at Tiwal esh-Sharqi, in Jordan.³⁴

4. CONCLUSIONS: CHRONOLOGICAL, ARCHAEOLOGICAL AND SOCIAL CONTEXT OF UCL COPPER JAVELIN N° 2006/19

If the UCL javelin was part of the conspicuous heritage of antiquity brought to London by Petrie from the Palestinian site of Tell el-‘Ajjul, it seems highly probable that it belonged to a funerary context, as it was the case of the other known specimens mentioned above (§ 2.1., 3.). It might be attribute to a tomb of a grave of the Cemetery 100 - 200, where other two leaf-shaped javelins of the same type were recovered, in Tombs 227 and

²⁴ These features are shown by specimens from el-Jib/Gibeon (Pritchard 1963, fig. 18:9), Tell ed-Duweir/Lachish (Tufnell 1958, pl. 22:1, 3), and Tell el-‘Ajjul (Petrie 1931, pl. XIX:49).

²⁵ Concave sides are shown by specimens from Khirbet el-Kirmil (Dever 1975, fig. 6:6-7), and Jebel Qa‘aqir (Dever 1972b, 233). Two specimens exceed the maximum blade length of 7.5 cm, they are one from Khirbet el-Kirmil (Dever 1975, 31-32, fig. 6:6), with a 10 cm blade, and one from Jebel Qa‘aqir (Dever 1972b, 233), with a 14 cm blade. The UCL javelin head has overall dimensions and tripartite measures almost equal to that of Khirbet el-Kirmil.

²⁶ Kenyon 1965, fig. 41:13; this item seems to have a squared cross-section only at the tip of the tang.

²⁷ Pritchard 1963, fig. 18:9.

²⁸ Dever 1972b, 233.

²⁹ Tufnell 1958, respectively pl. 22:2, 3.

³⁰ Petrie 1931, pl. XIX:49.

³¹ Dever 1972a, fig. 5:1.

³² Kenyon 1965, fig. 41:11.

³³ Dever 1972a, fig. 5:3.

³⁴ Tubb 1990, 96.

275,³⁵ while no javelins at all were retrieved in the Cemetery 1500,³⁶ the other necropolis of Tell el-‘Ajjul.

On the basis of the considerations illustrated above, UCL javelin head 2006/19, sharing common features with a series of leaf-shaped specimens (§ 3.), may be convincingly attributed to a distinguished type attested in Southern Levant during Early Bronze IVB. It seems strongly distinctive of a group of funerary equipment, which may be attributed to EB IV warriors,³⁷ also because javelins are usually associated with other weapons, namely daggers.³⁸

Moreover, the appearance of javelins, and especially of the leaf-shaped type during the Early Bronze IVB should be reconsidered in regard to the introduction of new technologically advanced skills and to the spreading of new weapon types. Throughout the Early Bronze IV in addition to javelins some new weapons make their appearance in funerary contexts, such as fenestrated axes of the broad earlier type,³⁹ hooked and socketed spearheads,⁴⁰ all of them possibly characteristic of warrior burials too.⁴¹

³⁵ Petrie 1931, 11-12, respectively pl. XIX:49, 48.

³⁶ Petrie 1932, 14-16.

³⁷ Palumbo 1990, 109; Philip 1995, 140, 151; Nigro 1999, 16. Despite the fact that bronze objects in general and weapons in particular were precious items, they were nevertheless buried with their owners. This suggests that during this period weapons were the personal possessions of a warrior and were not controlled by a central authority or stored together in a community arsenal. Weapons were considered personal belonging; at the warrior's death, they were buried with him, letting go out of circulation costly weapons (Garfinkel 2001, 156-157).

³⁸ Simple javelins, as it is shown by Tomb A41 at Dhahr Mirzbaneh (Lapp 1966, fig. 24:12-13), Tomb 50 and 52 at el-Jib/Gibeon (Pritchard 1963, 54-56, figs. 56:8-9, 58:6-7), Tomb A1 at el-Musheirfeh (Ibrahim - Qadi 1995, 88, fig. 8:1-3), Tomb M16 at Tell es-Sultan/Jericho (Kenyon 1965, 153-155, fig. 41:14-15), and Tomb 1 at Amman (Zayadine 1978, 66, fig. 4:6-7), and leaf-shaped javelins, such as in the case of Tomb 2111 at Tell ed-Duweir/Lachish (Tufnell 1958, 75-78, pl. 22:1, 4), Tombs G 83 and M13 at Tell es-Sultan/Jericho (Kenyon 1965, 150, 153, figs. 41:10-11, 41:12-13), and Tomb SE1 at Tiwal esh-Sharqi (Tubb 1990, 53-58, fig. 40b) can be associated to daggers in funerary equipments.

³⁹ Fenestrated axes recovered in tombs are those from Tell el-Mutesellim/Megiddo (Guy 1938, 115, pl. 163:8), Ma'abarot (Gophna 1969, 174-177, fig. 2), 'Enot Shuni (Caspia *et al.* 2008, fig. 1:a-b), and Tell Mastaba (Beth Shan; Tzori 1962, 153). To these already mentioned as belonging a new type the anchor axes from Beit Ulla and Kfar Malek should be added (Nigro 2003b, 15, fig. 8; www.antiques.com/classified/1040823/Antique-Bronze-Fenestrated-Axe-Head---FZ-075; www.antiques.com/classified/1040829/Antique-Bronze-Fenestrated-Axe-Head---FZ-079).

⁴⁰ Hooked spearheads were recovered in tombs at Tell el-Hosn/Beth Shan (Oren 1973, X, 77, figs. 20:3; 21:14, 20), Tiberias (Tzaferis 1968, 19, pl. 1A); Geva-Carmel (Amiran 1974, fig. 1:5), Kinnutz Hazorea (Meyerhof 1989, 128, pl. 35:3:103), Fureidis (Hess 1980, fig. 1:7), Ma'abarot (Dar 1977, 62:7, 13, 14, 16), Ginosar (Epstein 1974, 3*, fig. 4:11), Khirbet Beth Mizza/Motza (Bahat 1975, fig. 5:1), Horbat Gilan South (Mahajna 2006, fig. 3), and in the Wadi Hamra (Stepansky 2005, fig. 1). Socketed spearheads were registered in tombs at Tell el-Mutesellim/Megiddo, in Tombs 1101B Lower and 84C (Guy 1938, 26-27, 115, 163, fig. 174:1, pls. 86:3; 163:9), el-Jib/Gibeon (Pritchard 1963, 61, fig. 64:12-13), and in two dolmen in the Golan (Epstein 1985, 43, figs. 2:9; 3:18).

⁴¹ Usually spearheads are not associated to javelins in burials, but sometimes spearheads are in the same funerary equipment together with fenestrated axes, as it is in the case of Tombs 1101B Lower and 84C (Guy 1938, 26-27, 115, 163, fig. 174:1, pls. 86:3; 163:9).

The occurrence and association of different weapons within funerary equipment⁴² (javelin + dagger or dagger + spearhead) first of all show that only a single ranged weapon was usually added to warrior burial. Secondly, it suggests that warriors existed with a specific weaponry, possibly depending on their specialization.⁴³

Warriors burials are a distinguishing feature of the final phase of the Early Bronze IV in the Southern Levant, which is indeed the Early Bronze Age sub-period with the highest attestation of weapons. Warriors burials have been seen as strongly connected with similar tombs of following Middle Bronze Age period, thus pointing to the emerging of a warriors class in Southern Levant in this period.⁴⁴

New types of weapons, as the UCL leaf-shaped javelin, and new burial patterns, as the warrior tombs, reflect social changes and the formation of new social balances during the non-urban interval at the turn of the 3rd millennium BC.⁴⁵

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⁴² Doumet-Serhal - Griffiths 2007-2008, 202.

⁴³ Palumbo 1990, 131.

⁴⁴ Oren 1971, 109; Philip 1995, 145, 153; Thalmann 2000, 50-53; Doumet-Serhal 2004, 175; Doumet-Serhal - Kopetzky 2011-2012, 9-10; Cohen 2012, 309.

⁴⁵ Nigro 2003a, 121.

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Fig. 1 - Photo and drawing of Early Bronze IVB UCL javelin 2006/19, courtesy of Institute of Archaeology of University College London (photo and drawing by the author).