# FISHING FOR MEANING: THE SIGNIFICANCE OF NET SINKERS, FISHHOOKS AND NETTING NEEDLES IN MORTUARY CONTEXTS AT TELL EL-AJJUL

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#### **ABSTRACT**

Many of the items found in funerary assemblages can be understood as objects employed in the performance of funerary ritual or as luxury products reflecting the social status of the deceased. Other utilitarian items seem to fall outside these spheres, and while they may be indicative of former lifestyle or profession, they may also hold symbolic significance. This paper presents one such group, a range of fishing-related items from tombs at Tell el-'Ajjul in the Southern Levant. Confined to a small number of burials dating to the Late Bronze Age, associations with Egyptian-style material and links to objects and practices back in Egypt suggest that this phenomenon may be related to growing Egyptianization of local elites in the Gaza region or even more direct forms of personnel exchange.

## INTRODUCTION

ortuary assemblages are the material reflection of a variety of ancient behaviours and ideologies, linked by the common context of the grave. The individual items within such groups may reflect the performative element of funerary ritual, including feasting and drinking,1 or material used in preparing and presenting the bodies of the dead.<sup>2</sup> Tomb goods may also have a particular relevance to the deceased, either in providing for their future sustenance or well-being, or as ideologically charged status indicators.<sup>3</sup> Yet some of the more utilitarian items found in burials, such as stone and metal tools, do not seem to fit comfortably into any of these categories, and while generally rare in a funerary setting their occasional inclusion warrants some explanation. Were they intended as everyday items to furnish the 'house of the dead', did they have some particular significance for the deceased, or were these items embedded with deeper shades of cultural meaning?

This paper will explore one such group of seemingly utilitarian objects related to the practice of fishing. Fishing equipment is seldom noted in either South Levantine burials or settlement contexts, although it must have been commonly used by coastal and riverine communities. It is therefore striking to see a number of such items appearing in a comparatively small group of tombs at the Bronze Age site of Tell el-'Ajjul in the Southern Levant. The most common of these are folded rectangular lead strips, interpreted as fishing net sinkers, but fishing hooks, a single

netting needle and possible line sinkers of stone also appear. Organic elements that have not survived can only be hypothesised, but may have included fishing rods, lines, floats and net bodies. This paper seeks to evaluate this group of evidence as a whole in order to assess the popularity of fishing tackle in mortuary contexts, their chronological range and patterns of association and use, in the hope of answering some of the questions raised above.<sup>6</sup>

## Sources of Information

Tell el-'Ajjul is a small site located in the estuary mouth of the Wadi Ghazzeh, a short distance to the southwest of modern-day Gaza. Excavated by Flinders Petrie over five seasons from December 1930 to April 1938,7 the site has produced a rich array of material attesting to the cosmopolitan nature of its Bronze Age inhabitants, who appear to have had comparatively good access to a range of imported goods. The position of the site also facilitated contact with Egypt, its nearest neighbour to the south, reflected in the popularity of Egyptian and Egyptian-inspired products such as scarabs and stone vessels during the Middle Bronze II period. The subsequent incorporation of the area into the Egyptian empire during the Late Bronze Age only served to enhance these developments, as Egyptian personnel were eventually brought to serve in the region, increasing the diversity of the local population. Tomb assemblages at Tell el-'Ajjul provide a good

index of these trends, representing as they do a snapshot of consumer choice and decision making, as opposed to the more random disposal and dispersal of material goods over time that settlement remains usually represent.<sup>9</sup>

A total of ten extramural tombs have been identified that include some kind of fishing gear as part of their burial equipment: Tombs 419, 1166, 1514, 1663, 1675, 1687, 1688, 1699, 1816 and 1969.10 A full description of each tomb and its associated assemblage is provided below. It must be noted that this group represents a very small proportion of the total number of burials excavated at the site, which figure in the hundreds, and therefore the patterns detected here are the exception rather than the rule. Information about this material has come primarily from unpublished field records comprising tomb cards and site notebooks held in the archives of the Institute of Archaeology UCL, and excavation documents archived by the British Mandate Department of Antiquities and now held by the Israel Antiquities Authority; thanks are due to both these organisations for permission to include this data in the following discussion. These records have been supplemented with data from the relevant published site reports. The information given in these different sources varies, and it is only by combining them that a complete picture of the 'Ajjul tomb assemblages can be achieved.

The actual site reports mention fishing tackle only rarely. This was a consequence of Petrie's approach to his publications, which

Figure 1: Netting needle, lead net sinkers and barbed fishhook from Tombs 1687, 419 and 1663.<sup>13</sup>

was to discuss only those objects that had been illustrated, and very few of these utilitarian objects from the tombs appear to have been drawn. Indeed, Petrie shows us only 4 out of the more than 300 items found, comprising 2 lead net sinkers, a netting needle and barbed fishhook (see Figure 1). This may be explained in part by the fact that the lead sinkers which form the bulk of these finds tend to be poorly preserved, while they may also have been of broadly similar forms and therefore not considered by Petrie to be worth duplicating in print.<sup>11</sup> It does however mean that most of these objects do not appear in the published tomb registers, which list only illustrated material (a fact that is often overlooked by modern researchers).<sup>12</sup> As a result, this group of objects has remained largely invisible to the research community.

## DESCRIPTION OF THE TOMBS

The following section provides a detailed description of each tomb in which fishing gear has been identified at Tell el-'Ajjul, outlining the available evidence and then discussing associated finds and chronological considerations. This will be followed by a discussion of the possible significance of the group as a whole. A summary is provided in Table 1. This survey also highlights some of the problems of the available dataset, with it often being impossible to determine the exact quantity, form and dimensions of many of the items found from extant records.

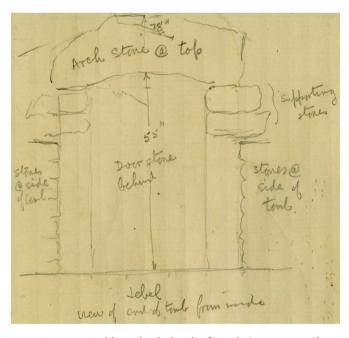


Figure 2: Field notebook sketch of Tomb 419 entrance.<sup>16</sup>

TOMB 419

This tomb was discovered in the Lower Cemetery area of the site during the 1932-3 season, and was christened the 'Egyptian Governor's Tomb' because of its elaborate construction and finds. It consisted of a stepped dromos leading down to a rectangular chamber with walls built of beach conglomerate, covered with angled roof slabs and sealed with a large stone at its

entrance (Figures 2 and 7.1). The tomb was well equipped with burial goods, but the skeletal remains were poorly preserved, so it is impossible to determine how many people were interred there; at least 7 skulls are recorded on the upper level of the plan.<sup>15</sup> Normally excavators filled out one or more small cards in the field providing details about the location, type and size of each tomb, listing the associated finds and often drawing sketches of the position of the body. Unusually the tomb card for 419 has not survived, but in its place are a number of entries in the notebook

used by Carl Pape, who served as site architect that year; this is now part of the archives at UCL. These provide a 1:20 plan of the roofing slabs, sketches of the door sealing and roofing arch (Figure 2), and a plan of the tomb with the roof removed, as well as a loose page listing associated pottery. Fortunately the tomb featured prominently in the site report for that season and this fills in the rest of the details of what was found. The publication also provides us with the most thorough description of fishing equipment from the site as a whole.

Tomb Number	Түре	Date	MINIMUM NUMBER OF BODIES	Disturbed	Fishing Gear	Hunting/ Fowling Gear	EGYPTIAN OR EGYPTIANIZING OBJECTS
419	Rectangular, stone lined, angled stone roof, stepped dromos	LBIB-IIB	7	No, but lower levels much decayed	248 lead net sinkers	71 arrowheads, 2 fowling bolts	Knife, mirror, drinking set, calcite bowls, gold finger ring (Tutankhamen), bronze signet ring, scarabs, steatite cylinder seal, beads, glass vessels, ceramic mug
1166	Trapezoidal chamber tomb cut into fosse, stepped dromos	LBIB-IIB	14	No	Lead net sinkers	None	Scarabs and plaque seals, drop-shaped jar 75N6, bowls 3A, 3C; mirror, udjet amulets, ivory ear plugs, calcite tazza
1514	Rectangular, stone lined, stepped dromos	LBIB-IIB	4	Unknown	At least 4-5 lead net sinkers	31 arrowheads	Glass vases, bone kohl tube, Hathor amulet, bowl 3C
1663	Rectangular pit, angled stone roof, but not stone lined	LBIA-IIA	3	Unknown	24-36 lead net sinkers, fishhook	12 arrowheads or spearheads	Calcite fish-shaped jar, Hathor-head scaraboid, Taweret amulet
1675	Rectangular pit	LBIB-IIA	1	No	Lead net sinkers	None	None
1687	Oval pit	LBI-II	1	Unknown	Lead net sinkers, netting needle	None	Knife, mug 34E2
1688	Rectangular pit	LBI-IIA	1	Unknown	Lead net sinkers	None	None
1699	Rectangular pit	LB	1	No	Lead net sinkers, fishhook	None	None
1816	Rectangular, stone lined, stepped dromos	LBI-IIA	Unknown	Unknown	Lead net sinkers, fishhook	3 or more spearheads	None
1969	Rectangular, stone lined, stepped dromos	LBIIA-B	Unknown	Yes	9 lead net sinkers, 7 pierced stones	3 arrowheads	Alabaster tazza

Table 1: Tombs containing fishing equipment at Tell el-'Ajjul

Fishing tackle was represented by a total of 248 lead net sinkers in varying states of preservation, made from rectangular strips doubled over and originally fastened to a cord lead line for a fishing net (Figure 1.2).<sup>17</sup> These lead net sinkers had been found in several groups at different levels within the tomb fill: from these Petrie inferred that each net might have had 17 or 18 of these weights attached. 18 Assuming that the nets themselves had been included in the graves (rather than just handfuls of loose net sinkers), the tomb may therefore have contained around 14 nets in total. The actual types of nets represented may however have varied. The only two illustrated examples of lead net sinkers from this group had internal openings of 3 and 1.5 mm respectively, giving some indication of the different diameters of the accompanying lead lines, and hence of the different types of nets they belonged to. On these grounds, the narrower example may have been used with a cast net, while the sinker with the wider aperture was probably used with a gill or trammel net.<sup>19</sup>

Tomb 419 also contained 71 arrowheads, 2 fowling bolts, and a bronze s-shaped hook without barbs that could have been used for hanging meat or a string of fish.<sup>20</sup> There was also an Egyptian knife;<sup>21</sup> similar knives are known from 18<sup>th</sup> and 19<sup>th</sup> dynasty contexts at Kom Medinet Ghurab and Amarna.<sup>22</sup> The remaining offerings were a mix of containers and serving vessels, a rare bronze drinking set,<sup>23</sup> and personal accessories including gold jewellery, cylinder seals, scarabs, finger rings, cosmetic containers, an Egyptian style mirror and 2 daggers. Many of these finds are now in the Rockefeller Museum, Israel. It is not known whether the fishing weights are amongst them.

The tomb was clearly in use over a period of time, as witnessed by the three phases discovered, and probably represents a family vault. It can be dated by the imported pottery which include a LHIIIA:2 juglet and 4 alabastra, 3 LHIIIA:2 or IIIB piriform jars, 3 stirrup jars and 2 flasks, and 4 imported or local imitation LHIIIB stirrup jars,<sup>24</sup> and numerous Cypriot vessels including 3 White Shaved ware juglets, a Base Ring I or II ware flask, 9 Base Ring II jugs and a Base Ring II juglet,<sup>25</sup> suggesting an overall date range of LBIB through to LBIIB. The scarabs have a similarly wide date range, with some probable heirlooms dating to between the 13th to 15th dynasties, a gold ring with an inscription of Tutankhamen, and a 19th dynasty scarab dating from the reign of Ramesses II onwards.<sup>26</sup> The 3 cylinder seals also include a probable heirloom dating to the MBIII period.<sup>27</sup> The calcite hemispherical and zoomorphic bowls are both New Kingdom types.<sup>28</sup> The tomb as a whole therefore appears to have been in use from the LBIB through to the LBIIB period.

#### TOMB 1166

This tomb was an isolated burial cut into the slope of the Middle Bronze Age fosse to the west of the Lower Cemetery.<sup>29</sup> It consisted of a deep shaft and short dromos with three steps leading into a roughly trapezoidal chamber. It had been used for what appear to be multiple successive burials, which were arranged in four areas (Figure 3).<sup>30</sup> Group A, on the right side of the tomb comprised five bodies; group B was near the opposite wall and had

the remains of at least 2 poorly preserved bodies; group C comprised 4 bodies in a sub-rectangular installation in the corner of the tomb, and groups D-F comprised 3 bodies in a second rectangular chamber at the far end, which may represent the latest use of the tomb.<sup>31</sup> These appear to have been articulated, and were accompanied by remains of baskets, with two areas near the heads or upper bodies of D and F marked 'lead' on the plan. This lead does not appear in the published register in *Ancient Gaza II*, but presumably should be identified with material from this tomb given by Petrie to the Hancock Museum in Newcastle and itemized on its accompanying list as 'much lead, from decomposed net sinkers'.<sup>32</sup>

The associated finds for this tomb as a whole seem comparatively rich, but perhaps less so when divided up between the 14 individuals involved. They consisted primarily of jewellery or toiletry items and included 23 scarabs, plaques and finger rings, with types ranging in date from the 15<sup>th</sup> to the early 20<sup>th</sup> dynasty;<sup>34</sup> a gold crescentic pendant, bead and earrings; various bone or ivory objects; several cosmetic vessels, including an Egyptian calcite tazza of 18-19th dynasty type,35 and gypsum tazze and a lughandled jar of probable Canaanite manufacture.<sup>36</sup> The pottery is primarily local, but includes 2 imported LHIIIB stirrup jars, 3 Cypriot Base Ring II jugs and a White Shaved juglet, as well as an Egyptian drop-shaped vessel and Egyptianizing bowl.<sup>37</sup> Other Egyptian finds in the tomb include a mirror with traces of textiles on the surface, carnelian and grey quartz udjet-shaped amulets and ivory ear plugs.<sup>38</sup> The tomb also included some kohl and 'bread'. The tomb was probably a family vault used over a long period, and appears to date from the LBIB to LBIB period. Finds were divided between the Hancock, Ashmolean, Manchester and Rockefeller Museums.

## TOMB 1514

This tomb is located in the Lower Cemetery and features a short stepped dromos leading into a rectangular stone lined pit. It contained 3 articulated bodies with the remains of further disarticulated bones at one end of the grave representing older interments.<sup>39</sup> Although it is not mentioned in the publication, the tomb card notes the presence of lead, and fragments of rectangular lead net sinkers from this tomb have been identified in the UCL Institute of Archaeology Collections. One group comprises 3 or 4 examples, made from lead sheeting doubled over with an opening along one long edge (Figure 4). These have a narrow gap of around 1.5 mm through which the lead line would have passed, suggesting that they may have belonged to a cast net;40 their uniform size might also support this usage, although the fragments are too degraded to tell if they were all of similar weight.<sup>41</sup> These sinkers are of the same basic type as the illustrated examples from Tomb 419. Another fragment, accession number EXIII.59/26, is a small rectangular piece that may have been part of a wider type of sinker.

The finds in tomb 1514 included 31 bronze arrowheads, a bronze dagger, 2 shell rings, 3 glass cosmetic vessels and a bone tube that is identified on the tomb card as a kohl container.<sup>42</sup> There was also a gold Hathor head amulet.<sup>43</sup> There were 22 ceramic vessels,

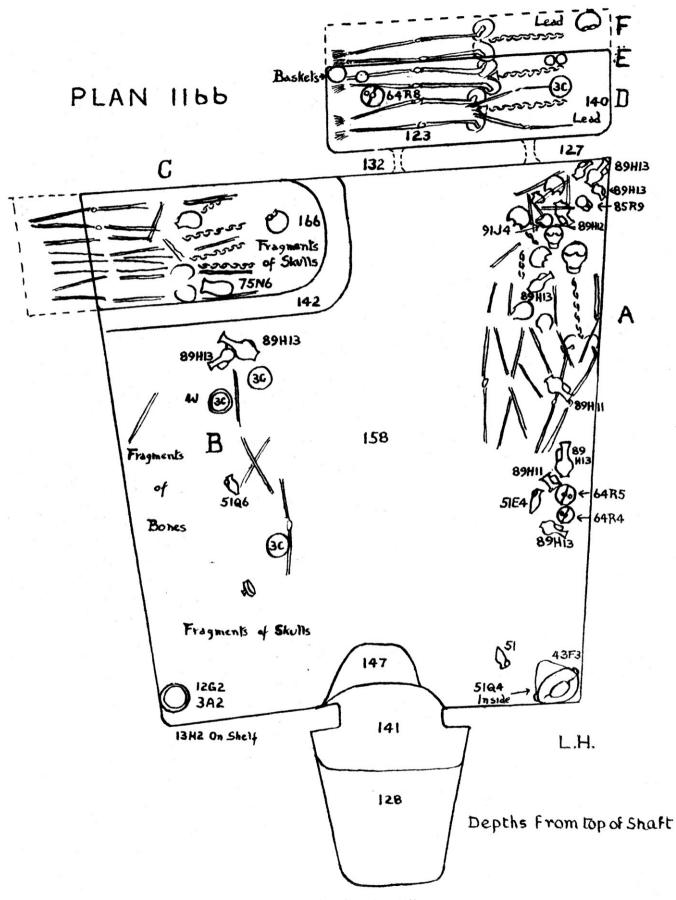


Figure 3: Plan of Tomb 1166.33

with imports including 2 Cypriot Base Ring II flasks and a Base Ring II jug. 44 The tomb also contained a LHIIIB mug that was the only example of this shape found at the site, and a LHIIIB stirrup jar. 45 The glass vessels are of types that cannot date before the 18th dynasty, and if the bone tube has been correctly identified as a kohl vessel, it should date no earlier than the reign of Thutmose III, when this type of cylindrical tube took over from the small piriform jar for this purpose. 46 The suggested date range for this tomb is therefore LBIB-IIB.

#### TOMB 1663

This tomb is located in the Lower Cemetery. The tomb card for this context was incomplete, and neither it nor the published record mentioned the presence of any fishing gear. Fortunately the Department of Antiquities spoke to its excavator, Anne Fuller, at the close of the 1933/4 'Ajjul season and recorded her comments. This resulted in a memorandum, dated 5<sup>th</sup> May 1934, and a letter sent by Fuller the following day to Ernest Tatham Richmond, then Director of the Department of Antiquities of British Mandate Palestine. Both documents are in the archives of the Israel Antiquities Authority (Mandate file ATQ/41(a)/6), and I am



Figure 4: Lead net sinkers from Tomb 1514; the most complete example, bottom centre, measures L. 19, W. 10, Th. 5 mm, with an internal aperture of 1.5 mm. UCL Institute of Archaeology Collections EXIII.59/25.



Figure 5: Angled stone roofing of Tomb 1663.<sup>52</sup>

grateful to them for permission to include these in my discussion. It is possible to get a more accurate idea of the contents of the group by combining these notes with in situ photographs taken by Fuller, and the published plan and tomb register.<sup>44</sup>

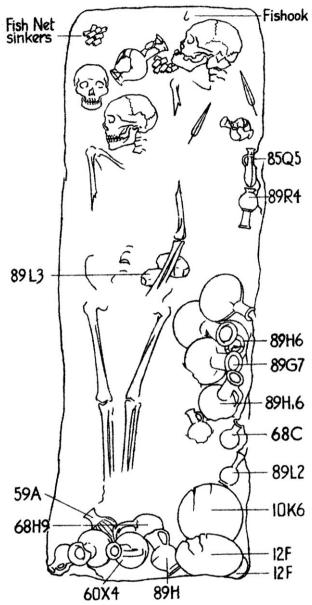


Figure 6: Plan of Tomb 1663 showing lead net sinkers and fishhook *in situ.*<sup>57</sup>

Tomb 1663 was a rectangular tomb with a roof constructed out of angled stone slabs (Figure 5), similar in design to that of Tomb 419, but not stone lined, and if the sketch on the cemetery plan is accurate, without a stepped dromos. It contained the remains of 3 skeletons, only one of which appears to be articulated. Fishing gear is represented by '2 or 3 dozen fish-net sinkers', which are drawn in two groups on the published plan, located in the upper corner of the grave, and by the chin of one of the nearby disarticulated skeletons (Figure 6). Although sketched only crudely, these appear to be of the folded rectangular type already seen in Tombs 419 and 1514. There was also a barbed

fishhook close to the same skull (Figures 1.3 and 6),<sup>49</sup> which Fuller did not mention in her report. Another possibly related item is an Egyptian-style fish-shaped cosmetic jar made out of calcite, which was found under the arm of the articulated skeleton.<sup>50</sup> A similar jar was later found in the Lower Town of Area G, attributable to Petrie's stratum III.<sup>51</sup> The combined impact of these pieces was clearly too much for the excavator, who christened the whole group the 'Tomb of the Mackerel Monarch'.

Other finds in the tomb included up to 23 ceramic vessels, all but one of which are marked on the published plan; apart from two local bowls these were dominated by Cypriot imports comprising 2 Bucchero jugs, a Monochrome jug, Base Ring I jug, 3 Base Ring II juglets, 4 Base Ring II jugs and 2 Base Ring II flasks.<sup>53</sup> There was also a single scarab with lion design,<sup>54</sup> a frog-shaped scaraboid with Hathor head design on the base,<sup>55</sup> a Taweret amulet,<sup>56</sup> and 12 'spearheads', perhaps arrowheads, two of which appear on the published plan in the upper end of the grave near the three skulls. These all point to a date range for the assemblage of LBIA-IIA period. Material from this group has been distributed between the Rockefeller Museum, the UCL Institute of Archaeology, the Nicholson Museum and the National Museums of Scotland in Edinburgh. The specific location of the fishing equipment is unfortunately unknown.

## TOMB 1675

This tomb was not marked on the published cemetery plan, but it appears to have been located in the Lower Cemetery where other tombs in this numbering sequence were found, as location measurements on the back of the tomb card reference the same survey points. The burial, which was undisturbed, took the form of a simple rectangular pit containing a single body, along with 3 Cypriot Base Ring II jugs, <sup>58</sup> a deep everted bowl, <sup>59</sup> and a group of lead net sinkers. These are drawn on the tomb card as a rectangular group over the deceased's chest. The imported pottery suggests a date in the LBIB-IIA period. Some of these vessels are in the Rockefeller Museum, but although records indicate the sinkers were retained they have not yet been located.

#### TOMB 1687

This tomb, which was also omitted from the published cemetery plans, appears to have been located in the Lower Cemetery for the same reasons cited for tomb 1675 above. It contained a single articulated body in an oval pit.<sup>60</sup> In the 'radim' or rubbish above the grave were found a metal hook or staple, a pierced stone, Cypriot White Slip IIA bowl and another bowl that was discarded in the field. It is not clear whether this means these objects were in the upper fill of the grave or were surface finds above it. In the grave were some lead net sinkers and a netting needle for making or repairing fishing nets. This particular form of the tool features inward turning prongs at either end, which allows for a smoother netting action than more open ended varieties (Figure 1.1).<sup>61</sup> Also in the grave were an Egyptian knife

similar to the one from Tomb 419 and an Egyptian-style mug (Figure 8.1-2);<sup>62</sup> their specific locations within the burial are not recorded on the field records. Some of the objects from this tomb are now in the Rockefeller Museum and the netting needle is in the Cambridge Museum of Archaeology and Anthropology (accession number 1938.934), but the sinkers have yet to be located.

The Egyptian-style knife has New Kingdom parallels at Amarna and Kom Medinet Ghurab.<sup>63</sup> The mug is also a well-known New Kingdom form, with parallels at Amarna, Kom Medinet Ghurab and Qantir in Egypt, and at sites such as Tel Sera', Deir el-Balah, Tell es-Sa'idiyeh, Deir 'Alla and Beth Shan in the Southern Levant.<sup>64</sup> This is the earlier version of the shape, with an elongated handle that is attached from the mid-neck to the shoulder and squat body, so should date to the 18<sup>th</sup> or 19<sup>th</sup> dynasties rather than later.<sup>65</sup> This group therefore belongs to a Late Bronze Age horizon.

#### TOMB 1688

Another burial in the Lower Cemetery,<sup>66</sup> this comprised a rectangular pit with single extended body. A sketch on the back of the tomb card shows a large storage jar overlapping the edge of the burial cut, which may mean it was found in the fill above the grave. There was also a jug with fluted body, not typed but described as being based on a metal prototype and therefore probably Cypriot Bucchero; both this and the storage jar were discarded in the field. Two other items were reportedly retained, although their current locations are unknown. These were a Cypriot Base Ring jug of Petrie type 89G8, and a group of lead net sinkers. The position of the sinkers in relation to the other finds was not recorded. The tomb probably dates to the LBI-IIA period.

## TOMB 1699

This burial from the Lower Cemetery was undisturbed, and featured a single extended skeleton in a rectangular grave with its head to the south and facing north.<sup>67</sup> This was perhaps the simplest burial in the group, with the tomb card mentioning one 'long-necked Cypriot' vessel which was discarded in the field, most probably a standard Base Ring jug or juglet,<sup>68</sup> and a group of lead net sinkers positioned next to the skull; a similar positioning is also seen in tombs 1166 and 1663. Although the sinkers were apparently retained, their current location is unknown.<sup>69</sup> The pottery vessel was not assigned a type number, and the crude sketch of it on the tomb card is not clear enough to determine the precise form. If the vessel is Base Ring ware, as seems likely from its description, then a Late Bronze date is indicated.

## TOMB 1816

This tomb is not located on the published cemetery or settlement plans, but Gonen speculated that it was to be located in the Lower Cemetery.<sup>70</sup> This would seem to be supported by

location measurements on its tomb card, which reference survey points used for other tombs such as 1812 whose locations in the Lower Cemetery are assured. The field records did not contain any information about skeletal remains or the burial setting, although it does make reference to further information in the excavator's notebook and a mislabelled drawing, none of which could be located. This was probably the source of the published plan and side elevation; the group also appears in the published tomb register.<sup>71</sup> The tomb had a stepped dromos leading down into a rectangular stone lined chamber (Figure 7.2). Lead was recorded in at least two areas of the tomb, described on the tomb card variously as 'lump' and 'sinkers'. There was also a fishhook, at least 3 'spearheads', a 'round stone', and a selection of fragmentary vessels, including a Mycenaean pilgrim flask, probably LHIIIA:2, and several imported Cypriot vessels comprising a miniature Base Ring II bowl, Base Ring II jug, Bucchero jug, Cypriot White Painted VI juglet, and White Slip II bowl,<sup>72</sup> along with a bullshaped jar that was probably the item reported on the tomb card as a 'pottery animal'. The imports would suggest a date range of LBI-IIA. The current location of this assemblage is unknown, despite the fact that several items were reportedly kept, including the fishing equipment.

#### TOMB 1969

This tomb from the Lower Cemetery had a stepped dromos leading gently down into a rectangular stone lined chamber, said to be similar to Tomb 419 but without the angled slab roof (Figure 7.3).73 The remains were decayed and the tomb had been disturbed; it is not clear how many individuals were interred here. Burial offerings included 9 lead net sinkers and a group of 7 pierced stones that may also have functioned as sinkers. Neither group seems large enough to represent a full-scale net, raising the possibility that the nets were symbolic, rather than practical, or else only parts of one or two nets had been included. Alternatively, some net sinkers could have been lost when the tomb was disturbed, or the lead could have decayed too much to allow individual objects to be identified or counted. The remaining grave goods included 3 bronze arrowheads, 2 ceramic bowls of Petrie type 25G6 and an 'alabaster' tazza with tenon base that is probably of Egyptian manufacture. This type of tazza has a date range in Egypt from the reigns of Amenhotep III down to Ramesses II.<sup>74</sup> Some of this material is in the Rockefeller Museum, but neither the lead weights nor pierced stones have been located.

## DISCUSSION

All tombs were located in the Lower Cemetery, except Tomb 1166 which had been cut into the side of the great fosse surrounding the tell. Some of this group are rather modest in character. Tombs 1675, 1687, 1688 and 1699 are all single interments in simple pits with only a few associated vessels and objects, ranging from 1 to 4 ceramic vessels per tomb. In contrast, the remaining tombs were used for multiple burials and had more complex constructions. Tomb 1166 was unique in this group, not

only because of its physical location at a remove from the usual burial grounds, but also because of its larger trapezoidal chamber form with internal subdivisions and separation of burial groups; here we see horizontal use of space for 14 successive burials. While at first sight this group appears to be quite well provided with grave goods, the ceramic vessels average out at only 2-3 vessels per person.<sup>75</sup>

The remaining tombs can be considered as variations on a theme and consist of rectangular, usually stone-lined chambers with stepped dromoi (1166, 1514, 1816 and 1969). The most elaborate of these was Tomb 419, which also featured an angled stone roof. One tomb, 1663, seems to fall between these two groups, being without dromos or stone lining but possessing a stone-built roof; perhaps it began its life as a simpler grave that was later upgraded. These multiple-use tombs appear to have been filled up vertically, with subsequent burials being placed on top of earlier inhumations, leading to a layering of material. These were used to house between 3 and 7 burials each, and have the highest average number of grave goods, at around 7 to 8 ceramic vessels per individual. As Gonen points out, there are only 8 tombs of this type at Tell el-'Ajjul overall; she suggested they were family vaults belonging to local elites.<sup>76</sup> It is interesting that three quarters of these are linked not only by their design but also by the inclusion of fishing equipment amongst their grave goods.

This variation in tomb construction points to a difference in the amount of labour initially invested in preparing for death, and a different attitude to the organisation of burial space, with the multiple-use built tombs emphasising communal, most probably family relationships, while the simpler pit burials focus more on an individual burial event. Even with single burials it is possible that family or other relationships were expressed in other ways, such as in the creation of cemetery 'zones' where the placement of a grave was chosen because of its proximity to existing burials. Built tombs with angled, stone-slab roofing may have been more visually prominent than other burials, with their projecting roofs creating a focal point for ritual activity and the practice of social memory. However it is also possible that other types of grave markers were utilised, such as partially sunken storage jars or cairns, which have not been detected archaeologically.<sup>78</sup>

None of these differences in investment or visibility should however be automatically taken as proof of differential status or differing access to particular materials. It is interesting that while gold was confined to the larger built tombs, all but one of the graves in this group produced imported materials, either in the form of imported Cypriot or Mycenaean vessels or Egyptian personal items such as knives, mirrors and cosmetic vessels. Whoever they were, these people were able to indulge a preference for foreign products. So how does their apparent preference for the seemingly less glamorous fishing tackle fit in to this picture?

At first glance, the types of equipment found are representative of material also known from settlement areas across the site, and so we find examples of lead net sinkers, 80 barbed and unbarbed fish hooks 81 and netting needles in a range of contexts. 82 As might be expected, fishing tackle appears in deposits that mirror the chronological span of the site as a whole. What is more significant

is the fact that it is not until the Late Bronze Age that such equipment begins to be included in funerary deposits, despite its earlier availability. This does rather suggest that there is some new motivating factor that has emerged to trigger this change in mortuary practice.

In his discussion of the material from the Governor's Tomb (Tomb 419), Petrie linked some of this material to bronze

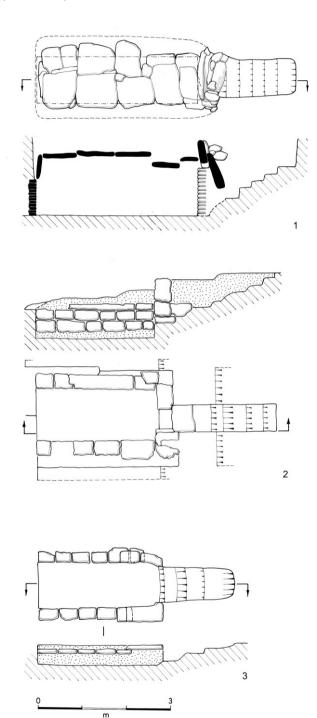


Figure 7: Plans and elevations of built tombs 419, 1816 and  $1969.^{77}$ 

weapons from the same context, suggesting that the lead net sinkers had been included to represent fishing activities, while arrowheads and fowling bolts were provided to represent hunting and fowling.<sup>83</sup> As with the net sinkers, arrowheads do not seem to be commonly included in burial assemblages until the Late Bronze Age.<sup>84</sup> Their appearance at this time is probably to be linked to the emerging significance of the composite bow in contemporary warfare and hunting.<sup>85</sup> However it may be that their inclusion in burials parallels that of fishing gear, and is part of a broader trend. In the majority of cases, the two sets of objects appear separately,<sup>86</sup> but arrowheads do occur alongside fishing gear in 4 of the 10 tombs discussed here, Tombs 419, 1514, 1663, and 1969, as do 'spearheads' (actual size and shape unconfirmed) in tomb 1816. These are all tombs with some form of stone construction, and these joint occurrences are probably not coincidental (see Table 1).

Gonen took the presence of weaponry in these tombs as indicators that they represented some kind of local military aristocracy.<sup>87</sup> Louise Steel on the other hand read this material less literally in her discussion of Tomb 419, as part of her wider study on the interpretation of Mycenaean pottery at the site. Picking up on Petrie's comments, she noted the popularity of scenes depicting elites engaged in fishing, fowling and hunting in Egyptian tombs of the New Kingdom, and hypothesised that the owners of Tomb 419 had included items representative of these pastimes in their tombs in emulation of the Egyptian ideal.<sup>88</sup> The suggested identification of at least some of the lead net sinkers from these tombs as components of cast nets would be in keeping with this idea, with the use of a single-person net emphasising individual skill and prowess, rather than the group success that more communal tools such as the seine net would represent. It may also be significant that in four of the tombs in this group, Tombs 1166, 1663, 1675 and 1699, lead net sinkers were located in the area of the head or upper body, perhaps mirroring how a cast net would be carried and held on the shoulder prior to use.<sup>89</sup>

The idea that these two different object types could have been used as two sides of the same ideological concept is an intriguing one. However their significance may be deeper than an interest in aristocratic leisure pursuits. It should be noted, for example, that the depiction of fish and fishing in New Kingdom Egyptian funerary scenes appears to have been motivated by an interest in their religious symbolism, including ideas about rebirth and the struggle against evil forces, over and above any possible role as representing certain lifestyles.<sup>90</sup> Both hunting and fishing are also brought together in an ivory plaque from the Egyptian residency at Tell Fara, probably a piece of furniture inlay, which Nataf has recently tried to link with a mortuary cult of Hathor being practiced in the region.<sup>91</sup> It is an interesting possibility, and it may be significant that two of the tombs discussed in this paper do have further links with Hathor, in the form of a gold Hathor-head amulet from Tomb 1514, and a scaraboid with Hathor-head base design from Tomb 1663.

The possibility of foreign ideologies having an impact on Canaanite burial customs gains further support when one considers the nature of the material found associated with the

various lead net sinkers, fishing hooks and netting needles appearing in this group of tombs. Individually it is perhaps less obvious, but taken collectively it is noticeable how many of the objects in these groups can be considered Egyptian in character, either as direct imports or locally made Egyptianizing pieces (see Table 1). This is particularly noticeable in Tomb 1687, which is otherwise fairly modest in character, where a rare type of Egyptian knife appears alongside an Egyptian mug and fishing tackle as the only burial offerings. Is this simply a reflection of the general degree of Egyptianization of the population at Tell el-'Ajjul, here perhaps gaining expression in a manner that was not universally taken up by local elites, or might it indicate some closer personal links between the two regions?

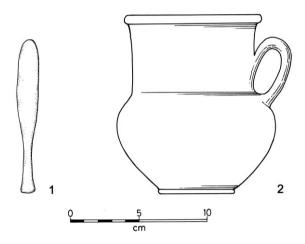


Figure 8: Egyptian-style objects from Tomb 1687.92

To answer this question, it is necessary to examine similar material discovered in Egypt itself. Certainly the individual object types identified by Petrie in the graves at Tell el-'Ajjul can all be paralleled there, such as rectangular lead net sinkers, <sup>93</sup> barbed fishhooks <sup>94</sup> and bronze netting needles. <sup>95</sup> Indeed, it was probably Petrie's familiarity with these types of objects that lead to their identification at Tell el-'Ajjul in the first place, and on the one occasion when he discusses lead net sinkers in detail, they are described as being 'of the usual Egyptian type'. <sup>96</sup> However even in Egypt it does not appear to be common to include this material in graves, and the sorts of patterns of association seen in the Tell el-'Ajjul data discussed above seem to be lacking.

Sporadic examples do occur in contexts contemporary with the Tell el-'Ajjul examples. Abydos Tomb D154 is perhaps the most similar to the Tell el-'Ajjul series, in which a 'large number' of folded rectangular lead net weights were discovered. This was a brick built chamber tomb with vaulted ceiling and shaft, dating to the reign of Thutmose III and containing bronze mirrors, shallow bronze pans with goose-neck handles, various bronze tools, a bronze spearhead, an ivory spoon, faience and glass jewelry and amulets, and a handful of pottery vessels, all Egyptian in character. The finds suggest a certain degree of affluence, although no information is given on the number of individuals interred there. Five similar lead net sinkers were also found in Abydos Tomb

D119, a context with a date range from the early 18<sup>th</sup> Dynasty down to the reign of Thutmose III.<sup>98</sup> A search of the tomb cards from Sedment produced a single lead fishing net sinker of folded type appearing alongside a fish bone in Tomb 1723, dating from the reigns of Hatshepsut to Thutmose III, and a 'netting pin' in Tomb 275. Similarly a single netting needle is reported from Tomb 609 at Kom Medinet Ghurab. Sporadic finds of fishing equipment were also found from New Kingdom contexts elsewhere at the site.<sup>99</sup>

However a physical similarity in the shape of such objects does not have to signify direct cultural contact, a problem that becomes apparent when one looks further afield for parallel forms for all the types of fishing gear that have been under discussion. For example, cut sheets of lead folded over to form net sinkers have been found in groups in LBII contexts on the Ulu Burun and Cape Gelidonya shipwrecks, 100 and in Minet el-Beida Tomb III, 101 but are also present at Tell Jemmeh in a much later Iron IIC deposit, 102 at various sites around the Western Mediterranean in the 6th to 4th Centuries BC, 103 and in numerous underwater sites off the coast of Mount Carmel belonging to the Roman and Early Byzantine periods;<sup>104</sup> the type is still in common usage today.<sup>105</sup> Barbed fish hooks are similarly popular across a range of cultures and periods. 106 Even the seemingly specific form of netting tool discussed here has parallels as far afield as Roman Europe and the Bering Straits and is still in use today. 107

It would appear that all these varieties of fishing gear were developed independently by different cultures at different times, leading to the conclusion that there are certain features inherent in the way these objects functioned that led to the recurrence of remarkably similar designs, whose simplicity and effectiveness made them universally popular without necessarily requiring direct technological transfers to have taken place. This does make it difficult to determine whether the fishing tackle found at Tell el-'Ajjul was inspired by Egyptian models or locally designed. However, the fact that similarities of form did exist between the two regions, when alternative ways of executing each object were possible, makes some connection in terms of fishing practice at least possible, while of course the way in which these objects were integrated into mortuary behaviour at the site remains a distinctive development that does point to some deeper connection.

## **CONCLUSIONS**

It is not surprising that fishing would be important to a coastal community like Tell el-'Ajjul, and an initial response to the appearance of fishing tackle in Late Bronze Age tombs might be that this was nothing more than reflection of an occupation common to many. Yet this does not explain why such utilitarian material does not appear in local burials at an earlier date, or indeed, why when they do appear they are found in only a minority of tombs across the site as a whole.

Closer examination suggests that these are not generally the burials of simple fishermen. While some tombs may be equipped with only a handful of objects, these nonetheless contain what

must have been comparatively expensive Cypriot and Myceanean imports, <sup>108</sup> and in the remainder fishhooks and lead net sinkers appear alongside a wider range of luxuries, including scarabs, stone and glass cosmetic vessels, gold jewellery, mirrors and bronze drinking sets. This might lead to the conclusion that these were the burials of people who had derived their wealth from fishing, hence the desire to include the more humble fishing tackle alongside goods more traditionally indicative of status. Yet the high index of Egyptian-style goods evident in this group of material may suggest that the reasons behind the appearance of fishing equipment were more complex. Parallels between the style of fishing weights, hooks and netting needles found at Tell el-'Ajjul with Egyptian fishing assemblages may well position this collection as part of the same general Egyptianizing phenomenon.

The role of nearby Gaza as a centre of Egyptian administration in the region, and the presence of Egyptian-run garrison to the south at Deir el-Balah, combined with the physical location of Tell el-'Ajjul at a key staging post for both the land and sea route out of Egypt is sufficient to explain the presence of Egyptian and Egyptianizing materials at the site. A population of mixed origin would seem to be more than likely at this period, and this, combined with a trend towards emulation of Egyptian practices amongst local elites more than adequately explains the popularity of Egyptian style products amongst locally based consumers. <sup>109</sup> It

is not the fondness for Egyptian style goods that is significant here, as this is clearly part of a broader Canaanite trend, but the emerging desire to include fishing equipment in mortuary contexts. How does such a practice come about, and why does it seem to be restricted to this site? Links to related practices in Egypt such as the use of fishing and fowling scenes in tombs to signify rebirth and victory over chaotic elements in nature *do* become significant at this point. It may be argued that an interest in these pastimes is more than coincidental, suggesting a transfer of ideas and attitudes towards this type of material culture, quite possibly initiated by a physical transfer of personnel.

Whatever the precise mechanism, Egyptian ideals may have undergone a process of transformation when applied to a specifically Canaanite setting. In this arena, material objects such as line and net sinkers, fishhooks, arrows and fowling bolts embody scenes that would find usually expression in tomb wall paintings back in Egypt. By placing this material as an integral part of a larger funerary assemblage and set of ritual acts, such otherwise mundane objects are made special, and when considered collectively bear witness to the development of new networks of association and cultural meaning, yet another example of Egyptian ideologies being seen through a Canaanite lens.

## **NOTES**

- Daniel Collard, for example, has discussed the psychotropic role of opiates in funerary ritual ("Dead Drunk: Psychoactive Consumption in Late Bronze Age Cypriote Mortuary Ritual", paper delivered at the 7th International Congress on the Archaeology of the Ancient Near East, 14th April 2010), while there is evidence for ritual feasting in the MB cemetery at Sidon (Claude Doumet-Serhal, "Second Millennium BC Levantine Ceremonial Feasts: Sidon a Case Study", in Anne-Marie Maïla-Afeiche, Interconnections in the Mediterranean: Lebanon in the Bronze and Iron Ages, BAAL Hors-Série VI (Beirut: Ministère de la Culture, 2009), 229-244), within the royal tomb at Qatna (Peter Pfälzner, "How Did They Bury the Kings of Qatna?", in Peter Pfälzner, Herbert Niehr, Ernst Pernicka and Anne Wissing (eds), (Re-)Constructing Funerary Rituals in the Ancient Near East (Wiesbaden: Harrassowitz Verlag, 2012), 213) and of possible grave closure ceremonies at Tell es-Sa'idiyeh (John D.M. Green, "Forces of Transformation in Death: The Cemetery at Tell es-Sa'idiyeh, Jordan", in Christoph Bachhuber and R. Gareth Roberts, Forces of Transformation: The End of the Bronze Age in the Mediterranean (Oxford: Oxbow Books, 2009), 89; John D.M. Green, Ritual and Social Structure in the Late Bronze and Early Iron Age Southern Levant: The Cemetery at Tell es-Sa'idiyeh, Jordan, unpublished doctoral dissertation, University of London, 2006, 237, 244, 254-256).
- Green has noted binding and attempted mummification of some of the bodies at Tell es-Sa'idiyeh, which he sees as

- emulation of Egyptian burial practices (Green 2009, 83). Dressing the body in this, and other more Canaanite ways may have also involved the use of perfumed oils, represented in the grave by in various types of small closed vessel such as cylindrical and piriform juglets or stirrup jars (Jill L. Baker, *The Funeral Kit: Mortuary Practices in the Archaeological Record* (Walnut Creek: Left Coast Press, 2012), 160; Louise Steel, "Consuming Passions: A Contextual Study of the Local Consumption of Mycenaean Pottery and Tell el-'Ajjul", *Journal of Mediterranean Archaeology* 15.1 (2002): 39, 46); see also Pfälzner 2012, 209-10).
- Steel 2002, 43-4; Graham Philip, "Warrior Burials in the Ancient Near-Eastern Bronze Age: The Evidence from Mesopotamia, Western Iran and Syria-Palestine", in Stuart Campbell & Anthony Green (eds), The Archaeology of Death in the Ancient Near East (Oxford: Oxbow Books, 1995), 140-154. See also Alfonso Archi, "Jewels for the Ladies of Ebla", Zeitschrift für Assyriologie und Vorderasiatische Archäologie 92 (2002): 161-199, who uses textual evidence to argue that clothing and jewelry placed in the tomb had the aim of maintaining the social status of the deceased in death.
- Jennie R. Ebeling, "Why are Ground Stone Tools Found in Middle and Late Bronze Age Burials?", Near Eastern Archaeology 65.2 (2002): 149-151.
- There may be many explanations for this, including poor preservation of the organic materials from which so much fishing equipment is made, recycling of bronze and lead

- components in antiquity, and a failure to correctly identify relevant objects, such as items used as net weights and sinkers (André Veldmeijer, "Fishing Nets from Berenike", *Trabajos de Egiptologia* 3 (2004): 103-4; Carmen Alfaro Giner, "Fishing Nets in the Ancient World", in Tønnes Bekker-Nielsen and Darío Bernal Casasola (eds), *Ancient Nets and Fishing Gear: Proceedings of the International Workshop on "Nets and Fishing Gear in Classical Antiquity: A First Approach" Cadiz, November 15-17, 2007 (Aarhus: Aarhus University Press, 2010), 77).*
- <sup>6</sup> The author would like to thank Celia Bergoffen for first drawing my attention to this interesting group of material, and the anonymous reviewer of this article who made a number of invaluable bibliographic suggestions. Thanks are also due to Graham Reed for the illustrations used in figures 1, 7 and 8.
- William M.F. Petrie, Ancient Gaza I (London: British School of Archaeology in Egypt, 1931), Ancient Gaza II (London: British School of Archaeology in Egypt, 1932), Ancient Gaza III (London: British School of Archaeology in Egypt, 1933), Ancient Gaza IV (London: British School of Archaeology in Egypt, 1934), and William M.F. Petrie, Ernest J.H. Mackay and Margaret A. Murray, Ancient Gaza V (London: British School of Archaeology in Egypt, 1952).
- Rachael T. Sparks, "Strangers in a Strange Land: Egyptians in Southern Palestine During the Bronze Age", *Archaeology International* (2003): 48-51.
- <sup>9</sup> Rachel S. Hallote, "Mortuary Archaeology and the Middle Bronze Age Southern Levant", *Journal of Mediterranean Archaeology* 8.1 (1995): 94.
- Erring on the side of caution, Tombs 1080 and 1142 have been discounted from this analysis as it is not certain that the s-shaped hooks they contained were related to fishing (Petrie 1932, pl. XIX.279-281), although the Tomb 1080 example has been described elsewhere as a fishhook (Steel 2002, 41; the hook in tomb 419 is of similar form-see note 20). Another tomb, 1986, contained a 'bone netter' according to the tomb card, but this was downgraded to a spatula for the end of season object list, while the other features of the tomb do not seem to fit the overall pattern of the group under discussion.
- One consequence of this attitude to so-called 'duplicates' is that it masks the levels of variability within a group of artefacts. While form variation within and between object types was key to Petrie's presentation of his data, this often led to him neglecting issues of size and scale. In the case of lead net sinkers, it is these kinds of details that help us determine what type of net the sinker may have accompanied, and therefore what type of fishing it represents (see Ehud Galili, Baruch Rosen and Jacob Sharvit, "Artifact Assemblages from Two Roman Shipwrecks off the Carmel Coast", 'Atiqot 63 (2010): 90-92).
- Baker, for example, treats the published registers as a complete record of the contents of each tomb (Jill Baker, *The Funeral Kit* (Walnut Creek: Left Coast Press, 2012), 91, appendix B). In fact the registers omit several items, with unfortunate results for her analysis.

- Drawn by Graham Reed, after Petrie 1934 pls XXXIV.517, XXXIV.525 and Petrie 1933, pl. IX.35.
- Petrie 1933, 5-7, pls VI-XIII, XLVIII, L. This tomb should not be confused with a series of pits that were excavated in the first season at the site, and also given the number 419 (Petrie 1931, pls LV, LXI).
- <sup>15</sup> Petrie 1933, 6, pl. XIII.
- <sup>16</sup> Courtesy of UCL Institute of Archaeology Collections.
- Petrie 1933, pl. IX.35. See Galili et al. 2010, 90, for further discussion of this type.
- Petrie 1933, 6. Their location is marked only roughly on the lowest level of the tomb plan, but Petrie notes groups of these sinkers at the 'top of wall', then at 10 inches, 34 inches and 36 inches below this, which suggests they may have been more widely distributed between the burial layers.
- <sup>19</sup> Galili et al. 2010, 90.
- <sup>20</sup> Petrie 1933, pl. IX.27.
- <sup>21</sup> Petrie 1933, pl. IX.26.
- Petrie 1890, pls XVII.31, XVII.50; see also Petrie Museum of Egyptology, UCL Petrie Collection Online, 10 March 2013, http://www.petrie.ucl.ac.uk/index2.html, accession numbers UC36455, UC45981 (from Amarna) and UC45981, UC7748, UC7749i, UC7750, UC7759i (from Kom Medinet Ghurab).
- <sup>23</sup> Lily Gershuny noted that the strongest parallels for these were to be found in Egypt: *Bronze Vessels from Israel and Jordan* (Munich: Beck, 1985), 16, 18, 46-7.
- <sup>24</sup> Steel 2002, 41-43.
- <sup>25</sup> Celia J. Bergoffen, A Comparative Study of the Regional Distribution of Cypriot Pottery in Canaan and Egypt in the Late Bronze Age (Ann Arbor, 1989), cat. nos 721, 770, 786-7, 792, 794, 797, 807, 833, 841, 978, 984-5, 961.
- Othmar Keel, Corpus der Stempelsiegel-Amulette aus Palästina/Israel. Von den Anfängen bis zur Perserzeit. Katalog Band I: von Tell Abu Farag bis 'Atlit (Freiberg: Universitätsverlag Freiburg Schweiz, 1997), 292, 'Ajjul cat. 560, 558 and 559.
- Petrie 1933, pl. VIII.6; Beatrice Teissier, Egyptian Iconography on Syro Palestinian Cylinder Seals of the Middle Bronze Age (Fribourg: University Press, 1996), 204, cat. 204.
- Rachael T. Sparks, *Stone Vessels in the Levant* (Leeds: Maney Publishing, 2007), 17-19, cat. nos 27, 33.
- <sup>29</sup> Petrie 1932, pls XLV, XLVII, LII.
- Petrie 1932, pl. LIII.
- <sup>31</sup> Petrie 1932, 15.
- <sup>32</sup> Letter from J.L. Starkey to the curator of the Hancock Museum, dated August 23<sup>rd</sup> 1932. All items in this distribution were given accession number 45.32.
- Petrie 1932, pl. LIII.
- <sup>34</sup> Keel 1997, 198-204, cat nos 'Ajjul 284-304, 1209.
- <sup>35</sup> Sparks 2007, 22, cat. 43.
- <sup>36</sup> Sparks 2007, 97, 109-110, cat. nos 832-4, 1107.
- Rivka Gonen, Burial Patterns and Cultural Diversity in Late Bronze Age Canaan (Winona Lake: Eisenbrauns, 1992), 128-130; Bergoffen 1989, cat. nos 830-2, 975; Ruth Amiran, Ancient Pottery of the Holy Land (Jerusalem:

- Masada Press, 1969), pl. 58.7; Hancock Museum 45.32.
- <sup>38</sup> Petrie 1932, pls XV.84, XXIV.18, XXV.125.
- Petrie 1932, 15-16, pls LIV, LIX; Petrie 1933, pl. XLVIII. It should not be confused with intramural tomb 1514 which was excavated on the main tell, just outside room EDG during the 4<sup>th</sup> field season (see Petrie 1934, pl. LXII) and given a duplicate tomb number in error.
- <sup>40</sup> Galili et al. 2010, 90.
- <sup>41</sup> Giner 2010, 79.
- <sup>42</sup> Petrie 1932, pls XVI.136-7, XVII.154-157, XVII.160, XIV.77, XXIV.31, XXVI.140 and XXIV.30.
- <sup>43</sup> Petrie 1932, pl. III.27.
- Bergoffen 1989, cat. nos 829, 856 and 883. A White Shaved juglet originally associated with this tomb has now been reattributed to Tomb 1144 (Bergoffen 1989, cat. 968, formerly UCL Institute of Archaeology Collections EXIII.59/2, now EXIII.16/4).
- 45 Steel 2002, 40 and 45, Ajj. 25-26 (Furumark Shapes 182 and 225-6); these appear in Petrie's records as pottery types 31D' and 64R5. The type numbers cited here and subsequently refer to Petrie's pottery corpus, as initially defined by J. Garrow Duncan in his *Corpus of Dated Palestinian Pottery* (London: British School of Archaeology in Egypt, 1930), and then expanded on in Petrie's subsequent publications including his *Ancient Gaza* volumes.
- William M.F. Petrie, Stone and Metal Vases (London: British School of Archaeology in Egypt, 1937), 11; Rachael T. Sparks, "The Taweret Workshop: Nicholson Museum 00.107 and Related Vessels", in: Karen N. Sowada & Boyo G. Ockinga (eds), Egyptian Art in the Nicholson Museum, Sydney (Sydney: Mediterranean Archaeology, 2006), 249.
- Petrie 1934, pls LVIII, LXV, LXVII.
- <sup>48</sup> Petrie 1934, 19.
- <sup>49</sup> Petrie 1934, pls XXXIV.525, LVIII.
- Petrie 1934, pl. XXXIX.86; Rachael T. Sparks and Stuart Laidlaw, A Future for the Past: Petrie's Palestinian Collection. Essays and Exhibition Catalogue (London Institute of Archaeology, University College London, 2007), 117 cat. 146.
- <sup>51</sup> Petrie et al. 1952, pl. XX.43.
- <sup>52</sup> After Petrie 1934, pl. LXV.
- Bergoffen 1989, 437 and cat. nos 529, 626, 763-4, 769, 806, 847, 858 and 883. Gonen 1992, 82 also discusses this tomb, but refers to it erroneously as Tomb 1665.
- <sup>54</sup> Petrie 1934, pl. IX.286; Keel 1997, 392 cat. 'Ajjul 844.
- Petrie 1934, pl. XXXIV.526; Keel 1997 cat. 'Ajjul 874 (findspot erroneously listed as unknown).
- <sup>56</sup> Petrie 1934, pl. XXXIV.527.
- <sup>57</sup> Petrie 1934, pl. LVIII.
- <sup>58</sup> Bergoffen 1989, cat. nos. 663-4, 801.
- <sup>59</sup> Petrie 1934, pl. LXVII type 12G1.
- 60 Petrie 1934, pl. LXVII.
- Peter I.R. Maclaren, "Netting Knots and Needles", *Man* 105 (1955): 86; Galili et al. 2010, 85-86, figs 36-37.
- <sup>62</sup> Petrie 1934, pls XXXIV.517, XXXI.384, XLIX.34E2.
- 63 See note 23.
- <sup>64</sup> Carolyn R. Higginbotham, Egyptianization and Elite Emulation in Ramesside Palestine. Governance and

- Accommodation on the Imperial Periphery (Leiden: Brill, 2000), 166-7.
- David A. Aston, Egyptian Pottery of the Late New Kingdom and Third Intermediate Period (Twelfth-Seventh Centuries BC), (Heidelberg: Heidelberger Orientverlag, 1996), 65.
- Petrie 1934, pl. LXIV (cemetery plan). The tomb itself was not published.
- Petrie 1934, pl. LXIV (cemetery plan). The tomb does not appear in the published register.
- The same description was given to several vessels in the 1600 cemetery, most probably by the same field excavator. Where a pottery type was also assigned, it references the Base Ring jug or juglet class (e.g.: Tomb 1665, a vessel of type 89H5, Tomb 1675, type 89H2, and Tomb 1688, type 89G8).
- 69 The registered object list for this season only mentions a single object associated with this tomb number, a bronze arrowhead. This appears to be an error, as this object is attributed to Tomb 1649 in the publication, and no arrowheads are mentioned on the 1699 tomb card.
- <sup>70</sup> Gonen 1992, 82.
- Petrie 1934, pls LVIII, LXVIII.
- <sup>72</sup> Bergoffen 1989, 427 and cat. nos 772, 1006.1710, 307, 1259
- Petrie 1934, 18, pls LVIII, LXIV, LXVIII.
- <sup>74</sup> Sparks 2007, 23.
- Celia J. Bergoffen has pointed out that the apparent wealth of multiple-use tombs can be misleading, as it often simply reflects the larger numbers of individuals interred ("Cypriot Pottery in Egyptianizing Tombs at Tell el-'Ajjul. Status Markers or Equipment for the Afterlife", paper delivered at the American Schools of Oriental Research Annual Conference, 16<sup>th</sup> November 2012).
- <sup>76</sup> Gonen 1992, 82.
- Drawn by Graham Reed, after Petrie 1933, pl. XII and Petrie 1934, pl. LVIII.
- <sup>78</sup> Green 2006, 232-233.
- <sup>79</sup> Bergoffen 2012.
- Two unstratified examples were found in the 4<sup>th</sup> season of excavations (Rockefeller Museum 35.4379-80); these consist of two rectangular sheets of lead doubled over along their length and so are of similar design to those identified in Tombs 419 and 1514.
- Barbed examples were found in contexts AT 670 and HA 685 (Petrie 1933, pls XXII.85, XXII.87), level 778, TCO 900 (Petrie 1934, pls XXXIV.518, XXXIV.520), with unbarbed examples in areas MH 1010 (Petrie 1932, pl. XIX.275), LN2 975 (Petrie 1933, pl. XXII.88), T 862 (Petrie 1934, pl. XXXIV.519) and GHA 860 (Petrie et al. 1952, pl. XVL.194).
- Stratum II (Petrie 1931, pl. XX.70), J709 (Petrie 1934, pl. XXXIV.516) and an unstratified fragment (Petrie et al. 1952, pl. XV.153).
- 83 Petrie 1932, 8; Petrie 1933, 6.
- <sup>84</sup> Graham Philip, Metal Weapons of the Early and Middle Bronze Ages in Syria-Palestine (Oxford: BAR, 1989), 145.
- <sup>85</sup> Philip 1989, 147-148.
- 86 Arrowheads, either singly or in groups, are found in the following tombs at the site: 257, 1037, 1044, 1069, 1080, 1093, 1141, 1142, 1149, 1583, 1649, 1801, 1855, 1911,

- 1957 and 1967.
- 87 Gonen 1992, 82.
- 88 Steel 2002, 42.
- 89 I am grateful to the anonymous reviewer for this suggestion.
- Douglas J. Brewer and Renée F. Friedman, Fish and Fishing in Ancient Egypt (Warminster: Aris and Phillips, 1989), 2, 15, 30; Richard Parkinson, The Painted Tomb Chapel of Nebamun (London: British Museum Press, 2008), 132; Susanne Binder, "The Tomb Owner Fishing and Fowling", in Leonie Donovan and Kim McCoquodale (eds), Egyptian Art: Principles and Themes in Wall Scenes (Guizeh: Ministry of Culture, Egypt Foreign Cultural Relations, 2000), 115-116; Susannah Vanek, "Marshland scenes in the Private Tombs of the Eighteenth Dynasty", in Alessandra Nibbi (ed.), The Archaeology, Geography and History of the Delta in Pharaonic Times. Proceedings of Colloquium, Wadham College 29-31 August, 1988 (Oxford: Discussions in Egyptology Publications, 1989), 316, 318
- <sup>91</sup> Katia C. Nataf, "An Egyptian Mortuary Cult in Late Bronze II Canaan", *Tel Aviv* 38.1 (2011): 52-66; see also Binder 2000, 115.
- 92 Drawn by Graham Reed, after Petrie 1934, pls XXXI.384, XLIX.34E2.
- <sup>93</sup> E.g.: William M.F. Petrie, *Kahun, Gurob and Hawara* (London: British School of Archaeology in Egypt, 1890), 34, pl. XVIII.18, from Gurob.
- William M.F. Petrie, *Tools and Weapons* (Warminster: Aris & Philips, 1974 [1917]), pl. XLIV.72-77. For a discussion of fishhook types in Egypt, see Brewer and Friedman 1989, 28-29.
- 95 Petrie 1974 [1917], pl. LXV.98-100.
- 96 Petrie 1933, 6.
- 97 T. Eric Peet and W.L.S. Loat, *The Cemeteries of Abydos Part III 1912-1913* (London: Egypt Exploration Fund, 1913), 31, pl. XI.5.
- See The Pitt Rivers Museum, *Objects Catalogue*, March 10, 2013, <a href="http://objects.prm.ox.ac.uk">http://objects.prm.ox.ac.uk</a>/, accession numbers 1901.40.130-135.
- <sup>99</sup> See Petrie Museum of Egyptology accession numbers UC7938, UC59081-3.
- Cemal Pulak, "The Bronze Age Shipwreck at Ulu Burun, Turkey: 1985 Campaign," American Journal of Archaeology 92.1 (1988): 1-38, 32-33; George F. Bass, Cemal Pulak, Dominique Collon and James Weinstein, "The Bronze Age Shipwreck at Ulu Burun: 1986 Campaign", American Journal of Archaeology 93.1 (1989): 9; George F. Bass, Cape Gelidonya: A Bronze Age Shipwreck, (Philadelphia: American Philosophical Society, 1967): 131-32.
- Yves Calvet and Geneviève Galliano, Le royaume d'Ougarit: Aux origins de l'alphabet. Catalogue Exposition Lyon 2004-2005, Paris-Lyon (Paris: Somogy, 2004), 47.

- William M.F. Petrie, Gerar (London: British School of Archaeology in Egypt, 1928), pl. XXIII.16.
- 03 Giner 2010, 78.
- Ehud Galili, Baruch Rosen and Jacob Sharvit, "Fishing-gear sinkers recovered from an underwater wreckage site, off the Carmel coast, Israel", International Journal of Nautical Archaeology 31.2 (2002): type L.2.3, 187-188; Galili et al. 2010, 90-93. However it would appear that many Eastern Mediterranean Roman and Byzantine examples were decorated, which may prove useful for dating (Darío Bernal Casasola, "Fishing Tackle in Hispania: Reflections, Proposals and First Results" in Tønnes Bekker-Nielsen and Darío Bernal Casasola (eds), Ancient Nets and Fishing Gear: Proceedings of the International Workshop on "Nets and Fishing Gear in Classical Antiquity: A First Approach" Cadiz, November 15-17, 2007 (Aarhus: Aarhus University Press, 2010): 114.
- <sup>105</sup> Galili et al. 2002, 194.
- Later examples include Roman fishhooks from shipwrecks off the Carmel coast (Galili et al. 2010, 82) and at Baelo Claudia in Spain (Darío Bernal, "The SAGENA Project. Fishing Equipment in Baetica in Classical Antiquity", in Tønnes Bekker-Nielsen and Darío Bernal Casasola (eds), Ancient Nets and Fishing Gear: Proceedings of the International Workshop on "Nets and Fishing Gear in Classical Antiquity: A First Approach" Cadiz, November 15-17, 2007 (Aarhus: Aarhus University Press, 2010): fig. 1b).
- Galili et al. 2010, 86; Maclaren 1955, fig. 2g; Carlo Beltrame, "Fishing from Ships. Fishing Techniques in the Light of Nautical Archaeology", in Tønnes Bekker-Nielsen and Darío Bernal Casasola (eds), Ancient Nets and Fishing Gear: Proceedings of the International Workshop on "Nets and Fishing Gear in Classical Antiquity: A First Approach" Cadiz, November 15-17, 2007 (Aarhus: Aarhus University Press, 2010): 234 and fig. 10. The form is sometimes described as the 'Mediterranean filet type' (Giner 2010, 63-64 and fig. 2).
- Regarding value, Bergoffen has pointed out the comparative frequency of Cypriot vessels in the lower cemetery at Tell el-'Ajjul, along with the fact that these tombs are generally sparsely equipped. She argues from this that Cypriot vessels should not be seen as socially restricted status markers (Celia Bergoffen, paper delivered at the 7<sup>th</sup> International Congress on the Archaeology of the Ancient Near East, 14<sup>th</sup> April 2010: "Symbolic Consumption: Imported Vessels in Mortuary Rites"). This said, the vessels and their contents still had to be imported, and so would presumably have had a higher cost than locally made products.
- <sup>109</sup>Higginbotham 2000, 121, 132-136.