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The Cypriot Ceramic Cargo of the Uluburun Shipwreck

N. Hirschfeld

ABSTRACT The ship that sank at Uluburun was carrying about 130 pieces of Cypriot pottery in its cargo, mostly fine bowls and juglets but also lamps and wall brackets. Some coarse-ware bowls, pitchers, kraters, and the pithoi may also have been intended as cargo. This ceramic shipment is diverse in substance and unassuming in quality. By tracing how the Cypriot vases spilled and broke apart during the shipwreck, it has been possible to determine that they were originally packed into three pithoi for transport. The odd assortment of vases suggests that this cargo was not acquired at a manufacturing center. More likely it was collected in the course of stops at one or several trading entrepôts, either in Cyprus or along the Levantine coast.

THE CYPRIOT CERAMIC CARGO OF THE ULUBURUN SHIPWRECK: PRELIMINARY ASSESSMENT

Cypriot ceramics of the Late Bronze Age have been found at many land sites throughout the eastern and some of the western Mediterranean. They are a known export product. But their discovery on land gives us only the picture at the end of the line; we still do not know who was carrying them, in what sorts of quantities, and for what purposes (import or export? gift exchange? small-scale or mass distribution? private or royal enterprise?). The cargo from the Uluburun shipwreck is one of three examples of Cypriot pottery in transit, and the only one carrying the fine tablewares typically exported from the island in the Late Bronze Age.

Preservation of the Cypriot pottery on the wreck is not on the whole as splendid as the objects published in the catalogues of recent museum exhibitions and in the December 1987 *National Geographic* may suggest. Most of the vases fell out of their shipping containers during the wreck process and shattered in the course of their tumble down the slopes of the seabed. Fabric and surfaces, especially slips and decoration, are much deteriorated after three millennia of soaking in saltwater.

Conservation is now complete; all fragments have been desalinated, dehydrated, mended, and catalogued. Analysis is still in progress and final publication is still some years in the future. This contribution is offered as an interim report, presented with a view to making public an overview of the numbers and types of vases comprising

the Cypriot ceramic cargo, and how they were loaded for shipment. This, then, presents an overview of the objective information. Jeremy Rutter is, of course, a man of ideas as much as of hard evidence and I would have liked to honor him by including interpretation here, too, but I have not yet progressed far enough in this study.

The cargo of Cypriot ceramics includes bowls (White Slip, Base-ring, and lug-handled), jugs and juglets (White Shaved and Buccherio), lamps, and wall brackets. The ten pithoi, which certainly functioned as containers for cargo, may also themselves have been part of the shipment. It is similarly not yet clear whether a miscellany of coarse-ware jugs and kraters—some of which may have been made in the Levant rather than on Cyprus—were being carried on shipboard explicitly as cargo or whether they were primarily containers or intended for shipboard use.

NUMBERS AND TYPES

The ship that sank at Uluburun was carrying forty **White Shaved** juglets in its cargo and one imitation. With the exception of the imitation, the fabric and inclusions of all the juglets appear to be essentially the same (based on visual inspection), varying only in the extent of gray core. Most of the juglets are also similar in size, though three (KW 2769, 5895, 5909) are noticeably smaller than average. There are also differences in the relative proportions and shape of neck and body and surely these are indicative of different potters (Fig. 1a). The shipment also varies greatly in quality. Most of the juglets are competently made and a few are even elegant in their taut profiles, crisp rims, and

uniform shave marks that blend smoothly into the shoulder (Fig. 1b). But the shipment also included misshapen and malformed vessels, their uneven profiles, irregular and abrupt shave marks, and drying dents betraying less careful production (Fig. 1c).

The imitation juglet (KW 3223, Fig. 1d) is most obviously different in its fabric (grittier and hard-fired) and heftier weight. An interesting feature of this vase is the hole drilled into the neck, where the upper handle (now missing) would have been attached. This drilling may be a repair for a broken handle, or perhaps this was part of the imitation process, reflecting the typical Cypriot practice of attaching handles by inserting them through the wall of the vase. The origin of this vase remains to be determined

The **White Slip** cargo consisted entirely of handmade hemispherical bowls (“milkbowls”). The ship carried at least thirty-five. They vary in size and there is some variety in style, though this is difficult to tabulate since the slip and decoration of most of the White Slip bowls from Uluburun have either completely disappeared or are terribly degraded. Copper corrosion products or other staining has marred much of what little is preserved.

With five exceptions, the White Slip bowls found on the wreck are consistent in fabric (based on visual observation), shape, and extant decoration. Ten of the bowls are small (Popham’s type 3B) and twenty are large (Popham’s type IC) (Popham 1972, 465–467). Those whose decoration is sufficiently preserved can be identified as White Slip II Normal (Fig. 2a). The characteristic pendant wide ladders are present in arrangements of five (on four or perhaps five bowls), six (eight bowls), or eight (one bowl). The ladders differ in the quality of line, neatness of execution, and how evenly they are distributed around the circumference. Unfortunately, the decoration is too sporadically preserved to allow detailed stylistic comparison and possible identification of individual painters’ products. But surely the distinctly different attentions to execution indicate different painters, and perhaps the variety in the syntax of the ladder motif is another indication of different hands.

The shipment also contained five White Slip bowls which are not the usual export style. A pair of bowls (KW 20, 21), both stored in the same pithos (KW 251), are distinctive in their deeply rounded profiles, thick walls, and heavy handles (Fig. 2b). No trace of surface decoration or slip remains. Michal Artzy (personal communication) informs me that she has found fragments of this fabric (based on visual observation) at Tell Abu Hawam but otherwise I know of no comparanda outside Cyprus.

Three bowls (KW 5882 [Fig. 2c], 5886, 5898) have features conforming to Popham’s White Slip IIA (Popham 1972,

445–447). They are significantly larger and proportionately shallower than the other bowls. Although thin-walled in general, their walls thicken as the body curves into the blunt lip. In contrast to the sleek triangular handles of II Normal, the handles here are thick and arch cumbersomely toward the heavy terminal. The painted decorations give a similarly heavy-handed impression, albeit at the same time very neat and deliberate: the lines are thick and even, the individual elements of the motifs are carefully rendered and placed. The underside of two of the handles preserves rows of dots, a distinctive characteristic of White Slip IIA. The three-line ladders, palm trees, scribbly zigzag, and chains of hatched lozenges that are the primary motifs are also typical of this variant. Popham suggests that White Slip IIA is a regional style, associated particularly with southwestern Cyprus. It has been found elsewhere on the island and there are examples of exports to the Levantine coast.

In summary, the White Slip bowls in the Uluburun shipment are a mixed assemblage of at least three different sizes, three different styles, and displaying a variety of decorative motifs (IIA) or syntax and care in application (II Normal).

The handle of one of the II Normal bowls (KW 3480, Fig. 1e) was broken and repaired before the ship sank. Two holes, both drilled from the exterior, pierce the body of this bowl; one hole goes directly through one of the handle stubs, the other drill hole is adjacent to the second handle stub. Apparently the broken handle had been replaced by something that fit through the drilled holes—a leather thong, for example. Most likely this repaired bowl was not stored on board as an item of cargo, but was used on shipboard, simply an example of keeping a useful container at hand. This hypothesis, however, cannot be proven. The bowl’s findspot—isolated, far to the south of the normal limits of the wreck—cannot settle the question of its context on shipboard. Its surface is so badly damaged that it is impossible to determine if there are any indications (in addition to the broken handle) of wear or use. If this bowl was in fact being shipped in the same cargo lots as the pristine bowls, then it can be surmised that the handle was not integral to the intended use or value of the bowl. This has implications for interpretations of how White Slip bowls were intended to be used and displayed, and why they were exported.

The ship’s cargo comprised at least twenty-two **Base-ring II** bowls and no more than twenty-five. There are three small bowls, but otherwise these are all large (rim diameters ca. 16–18 cm; Åström, ed., 1972, 175–78 type F). They fall into two categories. Five have a rounded shoulder (Fig. 3a). The rims of the other fourteen large bowls are thickened with a band of clay that was then bisected by a horizontal groove; this gives their shoulders a carinated appearance on the exterior, though in fact their interior

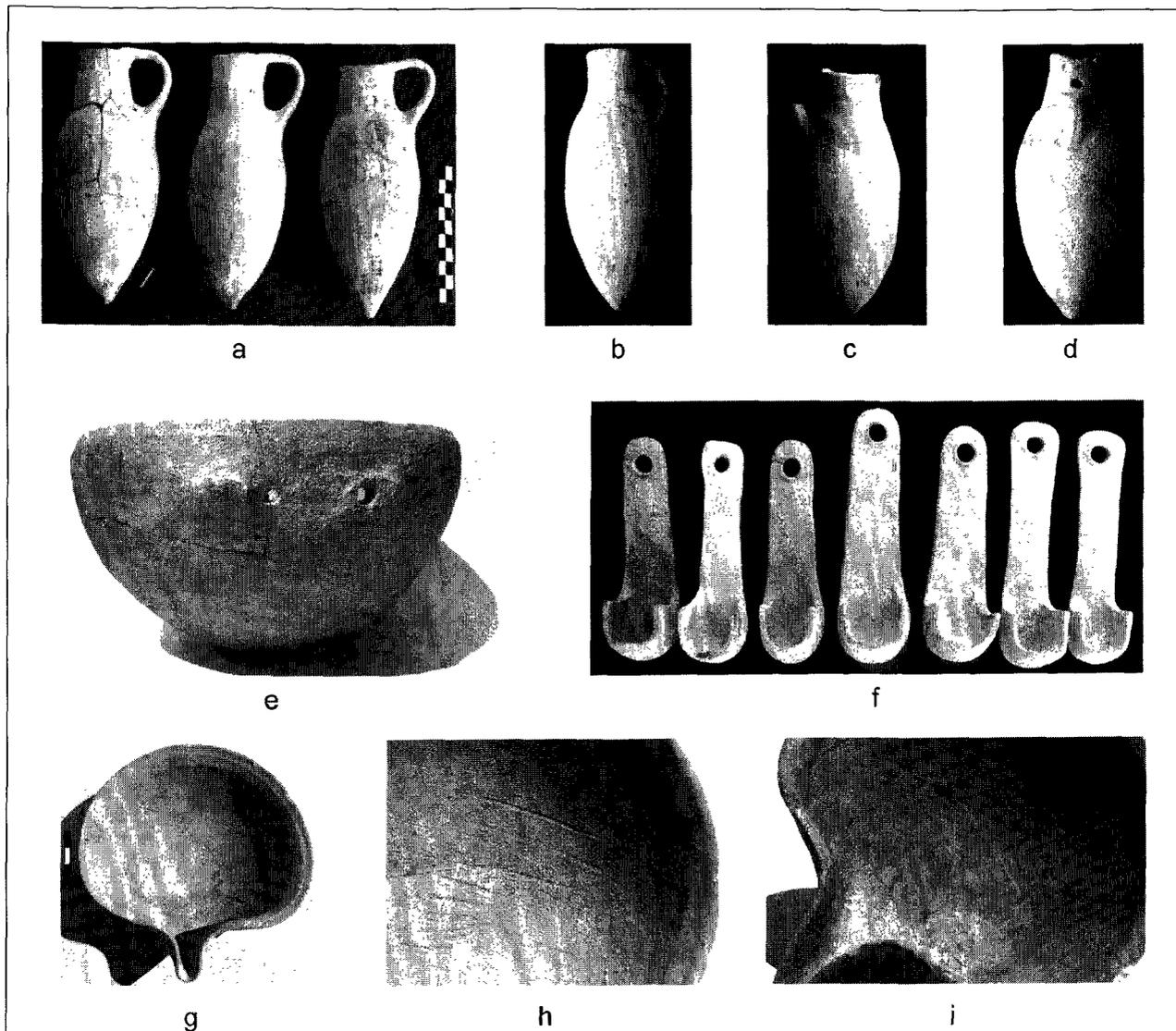


Fig. 1. a. KW 13, 26, 16. b. KW 26. c. KW 2769. d. KW 3223. e. KW 3480. f. KW 304, 1001, 653, 1976, 3484, 759, 229. g. KW 23. h. KW 4859. i. KW 3605.

profile is smoothly rounded in the same way as the group of five (Fig. 3b).

To the non-geologist's eye, the fabric of most of the Base-ring bowls is the same with the exception of one bowl (KW 2704) that differs noticeably in the relative proportion of "mica" inclusions. Three others are distinctive in the quality of their firing (KW 19, 730, 3248). These differences are great enough to suggest production in different workshops or by different potters. This is indicated, also, by the three smallest Base-ring bowls (KW 123, 1443, 1906); they share the common feature of significantly smaller size (rim diameters ca. 10–11 cm) but otherwise this is not a closely matched group. They differ in their overall proportions and shape as well as in specific details of the formation of rim, lower body, and handle, and in the relative proportions of the different inclusions in the fabric.

A handmade, ill-formed juglet (KW 5874) may be Base-ring. It is impossible to say whether it was part of the

cargo. It is the only one of its kind found on the wreck, and its widely scattered pieces do not obviously correlate with the findspots or scatter patterns of the known Cypriot ceramic consignment.

One of the five **lug-handled bowls** is intact (Fig. 3c); the others are preserved only in fragments.

The three **Bucchero jugs** (KW 15 [Fig. 3d], 28, 38), all found inside a single pithos, are the single homogenous component of the Cypriot ceramic cargo. They are alike in every detail, and I wonder whether they could have been mold-made.

The ship that sank at Uluburun carried two varieties of saucer-shaped **lamps**. The blackened nozzles of at least half of the sixteen coarse-ware lamps indicate that these were used on board the ship. None of the twenty-seven fine-ware lamps with thin walls and tapering rims manifest any indications of use and the crisp smoothing lines in the interior bowls of the best-preserved examples provide positive evidence for their

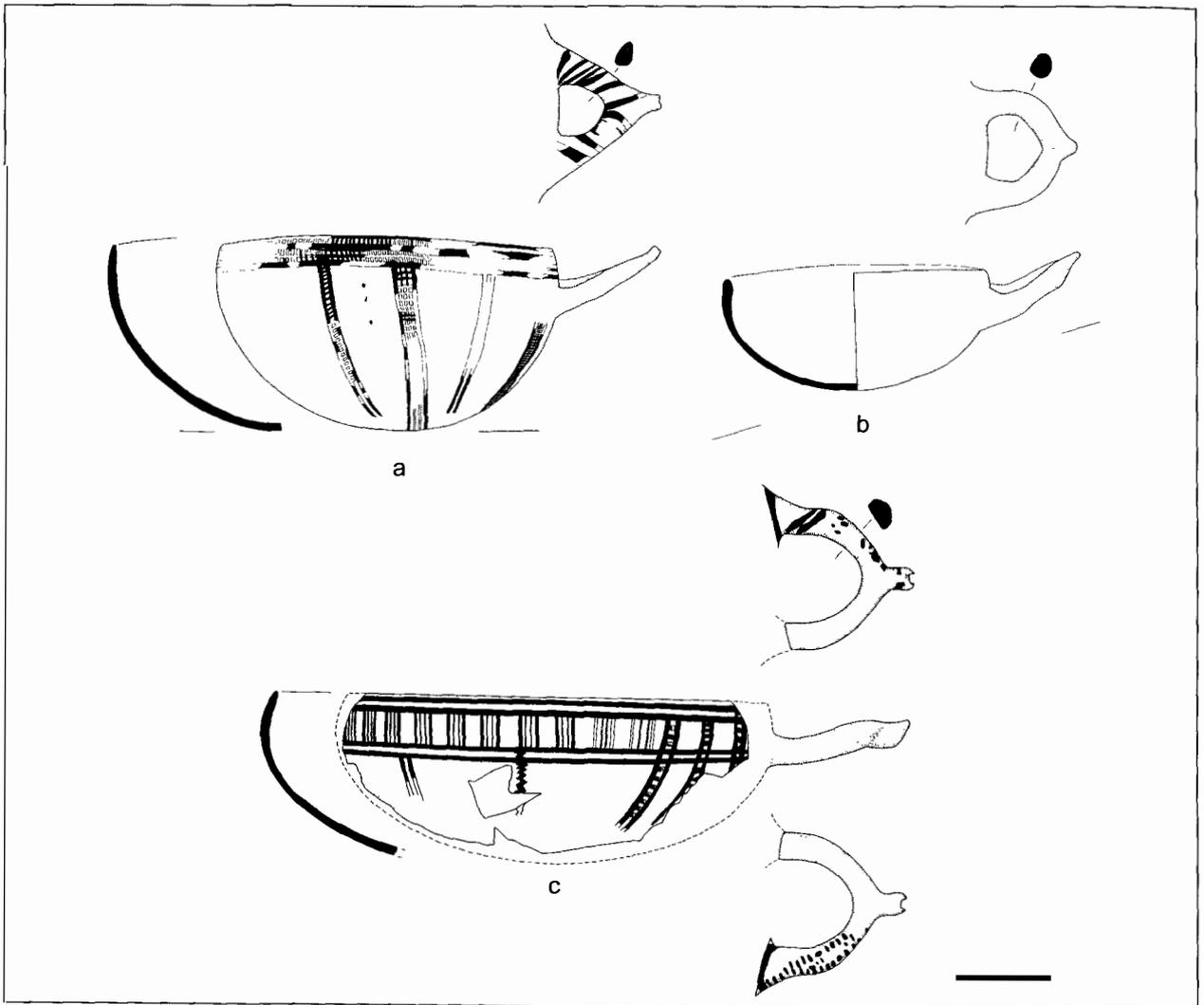


Fig. 2. a. KW 12. b. KW 20. c. KW 5882.

pristine condition (Fig 1g). The apparent variations in fabric are probably due to the effects of various depositional environments rather than differences in composition. But there are discernable variations in size, wall thickness, rim width and verticality, and the tightness and symmetry of the nozzle-pinch. These differences are subtle and the overall impression of this assemblage is of variety along a continuum. Their import is not easily ascertained: Are they indications of different potters? different places of production? or the same (group of) potter(s) on different days, or at different times of a long day? Finger dents and prints may provide some clues. The potter's final step of manufacture was to pinch the nozzle between thumb and two fingers, leaving slight impressions that can still be seen or felt. It is, thus, often possible to determine the position of a potter's hand when pinching the rim. If one then assumes that a practiced lampmaker had developed a habitual routine of holding or addressing a lamp while forming it, then the differently oriented pinchmarks may indicate production by different individuals. In a few instances, the potter's wet, clay-smearred hands left actual fingerprints and it may be possible to compare these. There are two outliers, distinguished from the rest and from each

other by their careless smoothing marks. The potter who made KW 4859 used a sharp, pointed implement to scribble sloppily across the lamp bowl (Fig. 1h). The maker of KW 3605 used an almost painterly technique and a tool with an edge ca. 0.3 cm wide to draw swirling lines along the contours and into the thick, wet surface of this lamp's basin (Fig. 1i). (Perhaps "smoothing" is a misnomer for the treatments of these lamps' interiors.) Surely different potters made each of these lamps, and neither would be claimed by the potter(s) who carefully wiped smooth the interiors of the rest of the lamps in the cargo.

The ten wall brackets are all of the plainest sort, made of coarse or semi-coarse clay, and lack any decoration. Within these parameters they all differ from one another, in details of shape and fabric (Fig. 1f).

MISSING FRAGMENTS

Because it can be assumed that the cargo was comprised of complete, whole vases and because terracotta breaks but does not disintegrate, full recovery of the shipwreck would allow

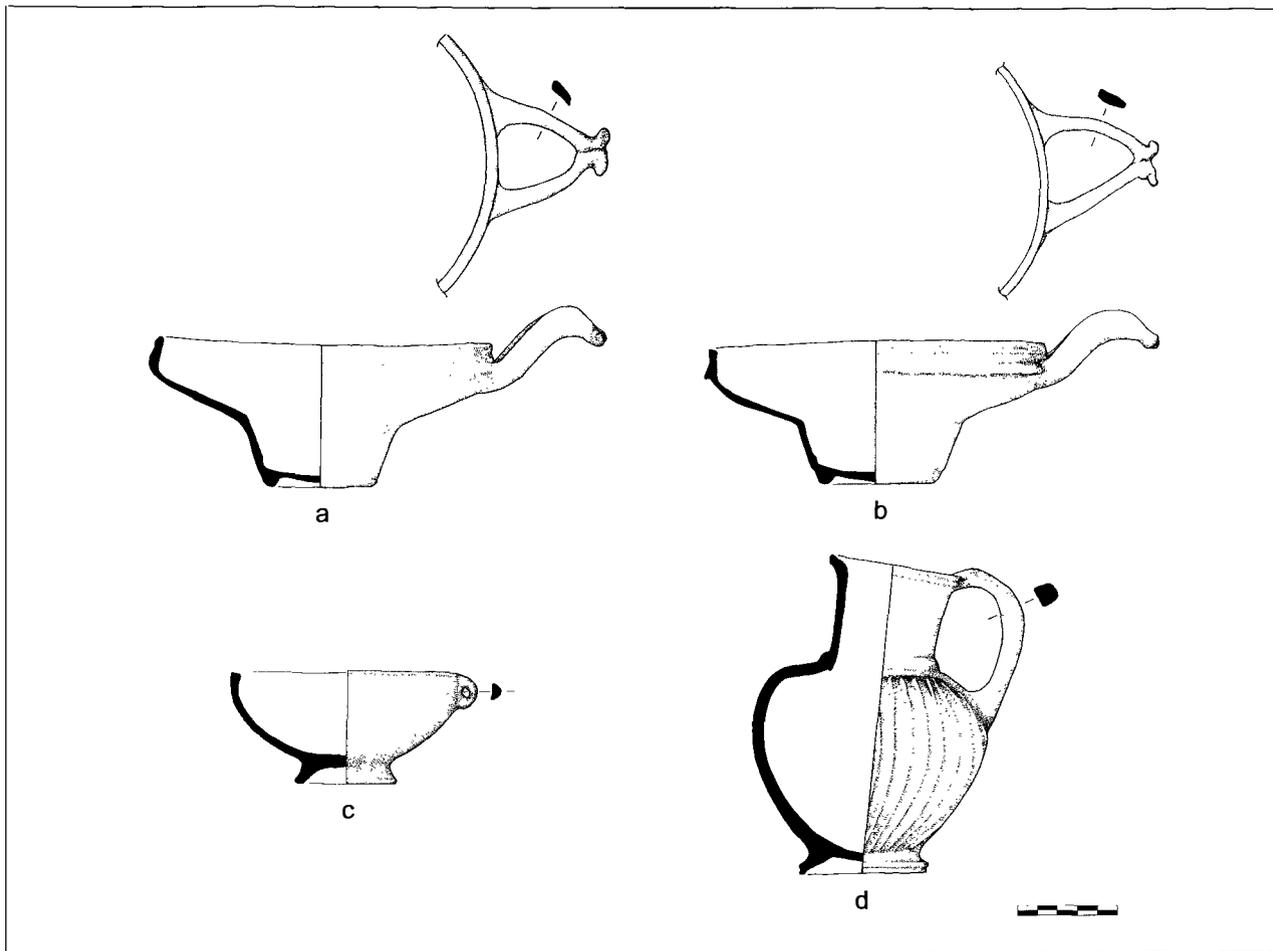


Fig. 3. a. KW 730. b. KW 17. c. KW 87. d. KW 15.

100% reconstruction of all the vases. And so every effort has been made to join every sherd. The results of this intensive endeavor reveal that a significant proportion of the Cypriot pottery is still missing. Of the forty White Shaved juglets, six are missing three-quarters or more of their shape. Of the White Slip bowls, nine, i.e. one-quarter of the assemblage, are missing more than half. Two are represented only by their handles. Only half of the Base-ring assemblage is complete or almost complete; one-quarter is missing more than half. Most of the lamps fell to their final spot of deposition in relatively intact condition or can be completely restored from their fragments, but one-quarter is still missing substantial pieces. In summary, a count of the missing pieces indicates that approximately one-quarter of the Cypriot fine-ware vases is missing, presumably having tumbled down-slope, too deep for recovery by SCUBA divers. This “percentage missing” is not a number which can automatically be applied to the entire cargo. The heavier items, such as ingots, obviously did not tumble far. And even within the ceramic assemblage there are differences in preservation and recovery; the wall brackets, for example, have been recovered mostly intact. Still, the percentage of Cypriot ceramics that has escaped recovery cautions one to consider that other cargo, perhaps in significant amounts, may also have tumbled down-slope and out of reach of the divers.

LADING

The pithos (KW 251) raised in the first season of excavation showed how the brittle and thin-walled Cypriot ceramics were packaged for sea transport. Three White Shaved juglets, five White Slip bowls, three Base-ring bowls, four lamps, and three Bucchero jugs were packed inside the large container, presumably cushioned by some sort of organic matting. (The fact that they were found stacked indicates that they were not dragged in by an octopus, one of the hazards of interpreting the finds in closed containers on the seabed.) Assemblages of stacked pottery recovered on the sea floor are probably the contents of other pithoi, spilled from the giant containers as they rolled down-slope in the wreck process.

But most of the Cypriot pottery on the wreck was found broken and scattered over the seabed. The findspots of the individual sherds of each reconstructed vase were recorded and so it has been possible to trace the “spill line” of every Cypriot vessel. This information combined with considerations of seabed topography allows reconstruction of the original groupings of vases, and the pithos probably associated with each lot. These reconstructions of lading patterns are the product of a team effort and I mention here

especially the careful work of Shih-Han Samuel Lin (Lin 2003, 162–185).

It has not been possible to repack every pot into its container but the working hypothesis is that the Cypriot ceramics were originally packed into three (of ten) pithoi for transport. It has been possible to reconstruct provisional cargo lists for each pithos and these lists raise some interesting observations.

First, no pithos was filled with Cypriot pottery. The Cypriot ceramic cargo, even accounting for bountiful packing material, would have filled only a part (probably less than half) of its container. Something other than Cypriot pottery must have completed each of these “shipments”.

Second, the contents of the three pithoi varied. For example, the three *Bucchero* jugs were exclusively packed in one pithos, all the White Slip IIA was fit into a different container. One pithos lacked any Base-ring, and perhaps carried no wall brackets either. Another pithos carried fewer lamps and a much smaller number of White Slip bowls than the other two containers.

Finally, the pottery within each pithos was characterized by diversity. Each pithos contained not only a variety of Cypriot ceramics, but also odd pieces of other pottery—for example, a Mycenaean ladle was found in association with a spilled stack of Base-ring bowls and wall bracket. In addition to the general variety, there is also diversity within each type of pottery packed into a pithos. Three of the five White Slip bowls found inside pithos 251 are II Normal (KW 11, 12, 25), but the other two bowls (KW 20, 21) are of a completely different type. The three White Shaved juglets (KW 13, 16, 26) found in the same container differ in shape, in the regularity of their shave marks, and in the different standards of finish—details that suggest that at least two different potters made these three juglets. A spill from another pithos—a stack of four nested Base-ring bowls (KW 1916, 1950, 2869, 3248)—includes both the smooth and carinated varieties. Finally, a cluster of bowls excavated in grid-squares LMNO 14-15-16 represents one, at most two, lots of White Slip cargo. Once again, this is a diverse assemblage. It includes both small and large bowls, and both the radial and frontal decorative schemes are represented.

THOUGHTS

These Cypriot ceramic vases were obviously not the primary cargo carried on the ship that sank at Uluburun, nor did they even fill the three containers in which they were stowed. This is unassuming pottery of the types produced in large quantities for domestic use and foreign export, found in Late Bronze Age contexts throughout the east-

ern Mediterranean littoral. The Uluburun cargo included vases that were made by sloppy potters, decorated by careless painters, and left to dry in the sun or set in the kiln by workers without concern for dents, bumps, and cracks. This is not an indictment of the particular quality of this specific shipment, but applies generally to the bulk trade in mass-produced Cypriot ceramic exports.

What is perhaps surprising is that this cargo is not comprised of large lots picked up at places of mass production. Rather, the characteristic feature of this shipment is its variety, even within a type. Fabrics, shapes, decoration, and manufacturing techniques indicate that the vases on board this ship were an accumulation of odd lots from disparate sources. This impression is strengthened when one considers the hodge-podge nature of each pithos' contents, and the differences among the assemblages of the three pithoi.

I suggest (but do not insist) that the simplest explanation for the lading patterns of the Cypriot pottery is that each pithos represents a separate shipment, perhaps the personal interest of a single individual. By piecing together clues like this, we begin to form a picture of the number of allotments on shipboard, and the kinds and quantities of goods of which they are comprised.

This heterogeneous assortment of vases need not necessarily have been picked up in Cyprus; these are the kinds of Cypriot ceramics that circulated in quantity among the coastal emporia of the eastern Mediterranean and surely they could have been picked up second-hand at many stopping points along the Levantine littoral (Pulak 2008, 299).

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