Trinity University Digital Commons @ Trinity

Classical Studies Faculty Research

Classical Studies Department

3-2008

How and Why Potmarks Matter

Nicolle E. Hirschfeld Trinity University, nhirschf@trinity.edu

Follow this and additional works at: https://digitalcommons.trinity.edu/class_faculty Part of the Classics Commons

Repository Citation

Hirschfeld, N. (2008). How and why potmarks matter. Near Eastern Archaeology, 71(1-2), 120-129. doi:10.1086/NEA20361356

This Article is brought to you for free and open access by the Classical Studies Department at Digital Commons @ Trinity. It has been accepted for inclusion in Classical Studies Faculty Research by an authorized administrator of Digital Commons @ Trinity. For more information, please contact jcostanz@trinity.edu.



HOW AND WHY POTMARKS MATTER

Nicolle Hirschfeld

otmarks lie in a no-man's land, not quite within the usual parameters of ceramic studies, not usually a concern for epigraphists. Although many excavations have yielded some potmarks, they are not a regular feature of publication. But potmarks found in Bronze Age contexts in Cyprus occupy an unusual position in the archaeology of the Bronze Age Mediterranean: they are regularly noticed and published.

The term potmark is intentionally neutral. A potmark might be a sign borrowed from the formal script of written texts, or it might be a numeral, an abbreviation, an ideogram, or monogram. Or it may be just a mark, randomly conceived. The term potmark also gives no indication of function. A potter's mark is made before the vase is fired and usually relates to some aspect of the manufacturing process, but a potmark can be made after firing and can be applied at any point of a vase's use, transmission, or deposition, for many possible reasons. In spite of this variety of form and disposition, potmarks do not randomly occur in the archaeological record of Bronze Age Cyprus. They cluster at certain periods, on certain wares and shapes, and even sometimes at certain sites. The fact that specific patterns of marking can be identified indicates that marking was not a haphazard practice. Those patterns are our clues to the meaning(s) of the potmarks.

Early analyses were often closely intertwined with inquiries into Cypro-Minoan, the still-undeciphered script(s) of Bronze Age Cyprus, with varying results. More recently and especially since the middle of the twentieth century, scholars have paid increasing attention to the non-epigraphical aspects of potmarks, focusing on details such as their findspots, the types and functions of the pots being marked, and regional variations in the methods of marking. The study of potmarks as archaeological data and the traditional focus on potmarks as signs of writing can provide complementary perspectives on Cypriot Bronze Age culture.

The Catalyst: Potmarks and "Cypro-Minoan"

In 1896, the British Museum sponsored one of the earliest scientific explorations of the archaeology of Cyprus. The highly selective final report twice mentions the marks incised or painted on Mycenaean pottery (Murray, Smith, and Walters

1900:9, 27). This early attention to potmarks can be attributed to interest in the history of writing on Cyprus, sparked by discoveries both on and off the island in the decades just before and after the turn of the twentieth century. A bilingual inscription unearthed at Dhali in 1869 provided the key to the decipherment of the already-recognized indigenous Cypriot Iron Age script. Hints of a Bronze Age predecessor surfaced sporadically, most convincingly in the form of short inscriptions that the British expedition of 1896 found cut into five small clay balls discovered at Enkomi and Hala Sultan Tekke (E. Masson 1971:11–13, nos. 1–5).

The abbreviated format of those inscriptions, in which it seemed that single signs could stand as meaningful elements, encouraged the recognition of isolated marks on other Bronze Age objects as evidence of writing: the single signs incorporated into the decorative schema of two cylinder seals and a gold ring, and the individual marks scratched onto the handles or painted on the bases of vases. The contexts and dates of the balls. seals, and ring were uncertain, and so it was on the basis of the





This Mycenaean piriform jar with a single incised mark on each of the two handles (see also the drawing above) was found in a tomb at Hala Sultan Tekke by the British Museum Expedition in 1896. This expedition was a turning point for the study of potmarks on Cyprus because, for the first time, marks incised and painted on ceramic vases were noted and discussed in publication. All illustrations courtesy of the author unless otherwise indicated.

	SIG	GNS	SOUND VALUE IN CLASSICAL SCRIPT	PLACE WHERE FOUND	OBJECT ON WHICH SIGN IS INSCRIBED	REFERENCE	NUMBER OF EXAMPLES
	12.	\mathbf{Y}	la	Katydhata	Jug of plain ware: incised on handle	Markides, C.A.R., 1916, p. 17, No. 5	
				Larnaka (Hala Sultan Tekke)	do. Painted jar: incised on handle	Op. cit., No. 6 B.M. Cat., I, ii, p. 90, C. 434. See No. 48 in this table	3
	13.	×		Katydhata	Plain jug: incised on handle		I
	14.	¥		Cyprus	Plain ware: incised on handle	No. 1501 in Cyprus Museum (unpublished)	1
100	15.	Ψ		"	do.	No. 1505 in Cyprus Museum (unpublished))
				"	Painted on base of vase	Schaeffer, No. XV (Cyprus Museum)	3
				, 22	do.	Schaeffer, No. XIX. B.M. Cat., I, ii, C. 555	
	16.	ñ		Enkomi	Plain ware: impressed before firing		} 2
				Klavdia, near Larnaka	Impressed before firing on red wheel-made flask	B.M. Cat., I, ii, p. 34, C. 191	
	17.	1	? si	Enkomi	Clay balls	Persson, b and d. Evans, P. of M., IV, ii, 760	1.
				? Larnaka	Bronze plaque	In private possession. Ashmol- ean Mus.replica. Unpublished.	} 4

This list is an excerpt from Casson's catalogue of potmarks, in which he carefully records all occurrences of each sign, including the media in which they occur. In the sample page shown here, no. 12 on Casson's chart makes clear that the mark incised into one of the handles of the piriform jar from Hala Sultan Tekke was attested only one other time, also as a potmark. From Casson (1937:100); used with permission.

marked Mycenaean vases (which could be dated stylistically) that the British team argued for the existence of Late Cypriot writing. Interest in finding a Bronze Age predecessor for the Cypriot Syllabic script was joined from the outside by Sir Arthur Evans, who was searching to establish the broader context of his discoveries of writing on Bronze Age Crete. It was in fact Evans who fully recognized the importance of the early Cypriot evidence, first studied it intensely, and coined the term "Cypro-Minoan" to refer to the Bronze Age script of Cyprus (Evans 1909:70-73). The presence of writing on Cyprus parallel with Mycenaean scripts appearing in the Aegean provided support for Evans' thesis of Mycenaean presence and strong cultural influence on Late Bronze Age Cyprus (Evans 1900:216–17).

While Evans did not include the marks on vases in his later publications of Cypriot writing, his successors did. So, for example, among the earliest official records of the accomplishments of the newly established Department of Antiquities in 1935 is a detailed catalogue of marked local vases uncovered at various Late Cypriot sites. The author of the catalogue, the then curator of the Cyprus Museum, describes these marks as evidence of an Aegean-inspired

writing system in use on Late Bronze Age Cyprus (Markides 1916:16-20). As the pace of archaeological excavations increased, the corpus of Bronze Age vases with potmarks grew accordingly. Stanley Casson's 1937 publication, Ancient Cyprus, Its Art and Archaeology, included a chapter titled "The Cypriot Script" for which the centerpiece was a table of sixtysix signs inscribed on 125 objects of many sorts, including seals, gold rings, ingots, clay balls, and vases (Casson 1937:72-109). Because Casson meticulously listed all examples for each sign, the number of occurrences and the media on which each sign is found can easily be tabulated. More than half of the marks in Casson's list are attested only as potmarks. Many of these occur on imported vases, most made after firing. Casson considered all as instances of Cypriot writing and on this basis argued that writing was widespread, regionally and socially, in Late Bronze Age Cyprus.

The corpus of potmarks increased steadily with the escalating pace of excavations undertaken in the 1920s and 1930s. Just before the onset of World War II, the epigraphist John Franklin Daniel published eighty-six sherds and vases with incised and painted signs found by the American expedition to Kourion-Bamboula (Daniel 1941). Analysis of the new material led Daniel to a full review of the evidence for the Cypro-Minoan signary including the chronological range for the use of the script, its distribution on the island, and theories of interpretation. Daniel's catalogue differed significantly from that of his scholarly predecessors in that he separated inscriptions into different classes according to the ware or object on which they appeared (local, Mycenaean, coarse-ware stirrup jars, Red Lustrous Wheelmade, or cylinder seals) and their method of application (painted or incised). As a starting point, Daniel assumed each class exhibited a separate marking system; he only accepted that different classes shared a marking system if they used the same corpus of marks and any variance could be satisfactorily explained. Using these criteria, Daniel confirmed that his initial distinctions were valid, and that the different classes indeed used separate marking systems. Daniel's Class I is especially important because it included only signs found on objects of indubitably Cypriot manufacture, and he identified only these marks as connected with the Cypro-Minoan script. The marks painted and incised on imported pottery (such as the Mycenaean piriform jar from Hala Sultan Teke found in 1896 by the British Museum Expedition) should not, Daniel argued, be identified as "Cypro-Minoan."

Daniel did not hesitate to make use of potmarks in his study of the Cypro-Minoan script. The great majority of "inscriptions" found at Kourion-Bamboula were isolated marks on pottery, and Daniel incorporated these into his catalogue, along with those noted in earlier studies by Markides, Casson, and others. The significant difference between Daniel and his predecessors is that Daniel did not assume all isolated marks on all pottery found in Cyprus to be signs of the Cypro-Minoan script. Furthermore, in assessing Class I (the local material), he was also selective and laid out a specific methodology for distinguishing signs of script from potmarks:

Since the study of script is concerned primarily with characters which possessed fixed syllabic values, it is essential to distinguish such signs from those which were only potters' marks or monograms. The surest criterion for identifying signs with syllabic values is their occurrence together in polysyllabic inscriptions. Failing this, if a Cypro-Minoan sign is identical with a character used syllabically in the Minoan or the Classical Cypriote script, or in both, that sign probably had an accepted sound value in the Cypro-Minoan script. A secondary criterion is the frequency with which a sign occurs. The more it was used, the greater the probability that it was in general currency (Daniel 1941:253).

Based on these criteria, Daniel identified all but six (of approximately sixty) marks appearing on Cypriot pottery as signs of the Cypro-Minoan script. To a great extent, then, Daniel's conclusion confirmed the previously assumed equation between marks on Cypriot pottery and the Cypro-Minoan script. But he never made that blanket assumption, instead presenting a carefully reasoned methodology by which new finds of potmarks could be assessed and incorporated (or not)

into the established Cypro-Minoan corpus of signs. Daniel's methodology was groundbreaking, but he was traditional in his focus on the potmarks in terms of their possible relationship to the Cypro-Minoan script.

After Daniel's death, another brilliant epigrapher, Olivier Masson, took up the study of potmarks and Cypro-Minoan¹ before the torch passed to his wife, Emilia Masson. Through the 1970s and 1980s, E. Masson dominated the study of Late Bronze Age Cypriot script(s). An abundance of new discoveries made these decades especially exciting times for an epigraphist/ linguist. Tablets with long texts were found at Enkomi and Ras Shamra. Twenty more inscribed clay balls came to light. Numerous other objects with multi-sign inscriptions were uncovered at Kition, Kalavassos-Ayios Dhimitrios, and other sites across the island. And at all of these sites too, potmarks were found. Between the time of Daniel's publication in 1941 and E. Masson's work in the 1970s and 1980s, the corpus doubled. E. Masson was the primary publisher for most of the new discoveries. Naturally enough, she directed most of her energies toward the texts and longer inscriptions. She duly noted the potmarks, but in general analyzed them only insofar as they might be "des témoignages d'écriture" (E. Masson 1972:132). The culmination of her labors was the publication of a Cypro-Minoan signary that remains to the present day the primary reference for the script(s) (E. Masson 1974).² In the context of this article, it is important to note that her signary includes signs that are attested only as isolated potmarks, though this is not obvious because the author has not provided a concordance. In other words, the existing reference signary for Cypro-Minoan is muddled by the inclusion of marks whose identity as signs of writing remains to be convincingly demonstrated. The examples of Casson's catalogue (with its detailed listing of every occurrence of each "sign") and Daniel's careful methodology were ignored. E. Masson contributed immensely to the study of Late Cypriot potmarks in her publication of individual marks, their archaeological context, and their possible place in the signary, but she never presented an overarching analysis of the relationship of potmarks to Cypro-Minoan writing. Daniel had shown that potmarks can contribute to our understanding of the Cypro-Minoan script; he also demonstrated the strict methodology necessary to avoid circular reasoning.3

Almost a century after the British expedition discovered the piriform jar at Hala Sultan Tekke, I reexamined the identification of its marks as signs of Cypriot writing. Following in Daniel's footsteps, I considered this question within the context of the entire class of Mycenaean vases bearing incised marks (Daniel's Class II, then consisting of thirty-one examples, now numbering more than two hundred), but separately from other types of marked vases. I was able to demonstrate that my predecessors had been correct in characterizing these marks as related to the Cypriot Bronze Age script(s). My contribution here has been to provide a more substantive basis for that identification and the implications that follow from it. So, for example, the marks incised into the handles or bases of twenty-





The mark incised under the base of a Red Lustrous Wheelmade spindle bottle, found in Tomb 2 at Hala Sultan Tekke by the Department of Antiquities in 1968, was impressed into the clay while it was still wet. Marks made before firing are common on Red Lustrous Wheelmade pottery, but otherwise appear infrequently in the Cypriot ceramic record (Eriksson 1993:219 no. 521).

five Mycenaean vases found at Tiryns indicate that these circulated within an exchange system administered by people familiar with Cypriot writing.

The base of a Red Lustrous Wheelmade (RLWm) spindle bottle—also found in a Late Bronze Age tomb at Hala Sultan Tekke—illustrates the confusion that still persists in deciding whether a mark is Cypro-Minoan, and what difference that decision can make. The mark is very simple: two short parallel strokes jabbed into the clay while it was still wet. (It is not clear whether a third shorter and shallower stroke, angled away from the end of one of the parallel strokes, was deliberately intended or whether it should be considered as part of the mark. Even so, it would be a simple form.) Unlike the large marks boldly incised into the handles of the Mycenaean piriform jar discussed above, the mark under the base of the spindle bottle would not have been visible at first glance. These features—simple, small, inconspicuously placed, made before firing—are common to RLWm pottery but unlike all other marked pottery found on Cyprus. In general, RLWm pottery is like nothing else that has been found on Late Bronze Age Cyprus. Even tiny sherds are instantly recognizable by their fine pinkish wheelmade fabric (Late Cypriot pottery is typically handmade) and highly burnished surfaces. Finally, several of the most characteristic RLWm shapes—including the spindle bottle—are completely idiosyncratic within the context of Cypriot ceramics.

The distinctiveness of RLWm has engendered questions about where these vases were made. Until the mid 1990s,

the strongest evidence for Cypriot manufacture had been the quantities, diversity of shapes, and temporal range of RLWm vases found on Cyprus compared with elsewhere in the eastern Mediterranean. But new discoveries, especially in Anatolia, continue to alter the relative percentages and very recently the accumulating totals outside Cyprus catalyzed a scientific review of the origin(s) of RLWm ware, by means of visual examination, ceramic petrography, and instrumental neutron activation analysis (Knappett, Kilikoglou, Steele, and Stern 2005). These examinations point to a single production center for all RLWm, tentatively located on the northern coast of Cyprus. But the investigators stress that this identification of place still requires extensive prospection and examination of clay sources and ceramic samples before it can be regarded as more than a suggestion.

The potmarks that frequently appear under the bases or sometimes at the base of handles of RLWm vases have been an integral factor in the debate over the origins of this ware. More than a quarter of the vases catalogued by Kathryn Eriksson in her seminal study of RLWm ware had potmarks, all clearly made in wet clay. Eriksson states that some of these marks are Cypro-Minoan, and that they thus prove Cypriot involvement in the production of RLWm vases (Eriksson 1993:145, 147). However, she does not cite any specific examples to support her claim, nor are such examples self-evident in the corpus of pot-marks she presents (Eriksson 1993:146). Most of the marks are very simple, and the author acknowledges that they could be identified with non Cypro-Minoan scripts or even none at all. Given the long tradition of indiscriminate identification of potmarks as Cypro-Minoan signs, Eriksson had precedent for seeing these marks as signs of writing. But, in fact, there is no mark on any RLWm vase known to me that can surely be identified as a Cypro-Minoan sign, and in form and application the corpus of marks on RLWm vases differs in every respect from the kinds of marks found on Daniel's Class I. The marks on RLWm vases cannot be cited as evidence for Cypriot manufacture of these vases.

Potmarks and Regionalism

Even as we work towards a clearer picture of what is and is not Cypro-Minoan, studies of potmarks found at Kouklia and Toumba tou Skourou illustrate what can be said about marking systems, whatever their relationship to the formal signary. The corpus of Late Cypriot inscribed objects from Kouklia, a site on the southwest coast famous for its temple to Aphrodite, includes twenty-nine jar handles with incised or painted marks consisting of groups of parallel lines, or a single simple sign in combination with parallel lines (Mitford 1971). The frequency and consistency of the markings are indicative of a marking system, and the distribution of vases marked in this way indicates that this was a *local* marking system, developed and used almost exclusively in the area around Paphos. Later, in the Iron Age, the Paphian variant of the Cypriot Syllabic script manifested a strongly local character; the potmarks found at Kouklia suggest that Paphians had developed idiosyncratic means of recording already in the Late Bronze Age.





The simple configuration of cross and parallel lines painted and incised on Plain Ware jug handle fragments is distinctive to a marking system used at Kouklia.



The three cavities impressed into the handle of a plain-ware jug, a stray find from Kourion Bamboula, are characteristic of the relatively simple kinds of marks in use during Early and Middle Bronze Age Cyprus, before the introduction of writing on Cyprus.

The situation at Toumba tou Skourou, located on the northwest coast of the island, is precisely the opposite. Fifteen marked vases were found at this early Late Cypriot pottery production site (Vermeule and Wolsky 1990:351-54). There is nothing distinctive about the potmarks from this site, and it is precisely this lack of distinguishing features that is of interest: "The potmarks of Toumba tou Skourou can almost all be matched from other parts of the island, and are of common forms, suggesting that one should not expect any differentiation in the northwest sector of Cyprus. . . . " (Vermeule and Wolsky 1976:75). Analysis of the potmarks found at Kouklia and Toumba tou Skourou demonstrates that much can be learned about the degree to which recording practices at a site are integrated with those of the rest of the island.

The Precursors: Early and Middle Cypriot Potmarks

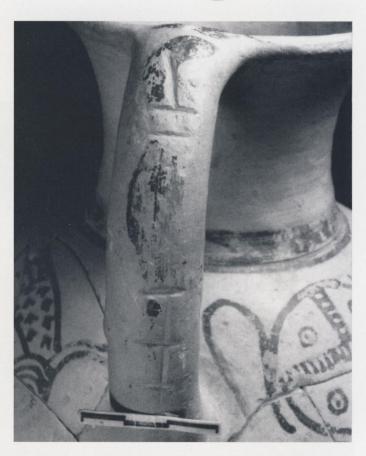
The discussion so far has revolved around the Late Bronze Age, but marked pottery has been found in all periods of the Bronze Age. Paul Aström's publication of the Early and Middle Cypriot material (Åström 1966:149-62, pls. 44-48) marks a turning point in Cypriot potmark studies. Åström presented a classification scheme that was purposefully neutral, with potmarks organized into strictly formal categories described in terms of their components, including vertical lines, horizontal lines, circular cavities, diagonal and regular crosses, semicircular lines, and combinations of these elements. Where appropriate, Astrom discussed possible identifications with signs of script or numeric systems, but the catalogue is organized irrespective of any specific script or numbering system. The material lent itself to this independence, since it precedes the earliest extant indubitable Cypro-Minoan inscriptions and because the simple forms of the marks—for example, the three impressed cavities on a Plain ware jug handle from an undated Bronze Age context at Kourion-Bamboula—do not readily suggest comparison with signs of any specific writing system.

Perhaps because he was unconstrained by the ghosts of Cypro-Minoan, Åström was able to take a long and wide

view of the potmarking traditions of prehistoric Cyprus. He observed that Cypriot Bronze Age potmarks fall into four chronological groupings, each exhibiting different patterns of use (Åström 1966:189–91). So, for example, he notes a general shift from pre-firing marks characteristic of Early Cypriot to a predominance of post-firing marks in the Late Bronze Age. He outlines the changing patterns of distribution, in terms of the shapes that are marked and the types of contexts in which marked vases are found. Many of Åström's observations on chronology and function continue to hold true, even as four decades of new discoveries have greatly increased the corpus of potmarks. Aström also surveyed the possible functions of potmarks and suggested how those meanings might be ascertained from the archaeological record (Åström 1966:191-92). He was not the first scholar to consider how Cypriot potmarks functioned, but he differed from most of his predecessors in addressing the issue comprehensively and systematically.

Other scholars working with Early and Middle Cypriot material continued to take on the challenge of discovering how potmarks functioned or what they can tell us about the people who made them. The difficulty has been to find archaeological material appropriate for testing a hypothesis, or vice-versa. Åström was finally able to collect eighteen vases well enough preserved to measure capacity (Aström 1969). The results were negative, with no correspondences between potmarks and capacities. David Frankel devised the most creative study yet undertaken in his

examination of 116 pre-firing potmarks recovered from an Early Cypriot I cemetery at Vounous. Through a process of elimination, he posited that the marks were used to identify the products of individual potters (Frankel 1975:38) and he then examined the distribution of potmarks among the various tombs of the cemetery with the hope of identifying relationships among the various burial groups. He was able to identify consistent patterns of linkages and clusterings and, on this basis, he suggested that "the distribution of pot marks reflects major family connections in a context of household pottery manufacture" (Frankel 1975:51). In this way, Frankel used potmarks to reconstruct social organization. Soon after, Ellen Herscher wrote a dissertation that, among other things, contradicted Frankel's basic assumption about the potmarks from the Early Cypriot I cemetery at Vounous (potmarks = potters' marks). Herscher examined two groups of marked late Early/Middle Cypriot pottery found in the necropolis of Lapithos-Vrysi tou Barba—from the same general region as Frankel's material—but somewhat later in date. The marks and their vases are of the same types as those found at Vounous. But here Herscher found no support for the hypothesis that these marks were a way of identifying the potter: "Pots bearing identical marks show no particularly close similarities in shape or fabric which would imply that they were made by the same person. On the other hand, groups of vessels which are notably identical in these respects either have no potmarks at all or different ones within the group" (Herscher 1978:734). Does Herscher's observation negate the basis of Frankel's theories? Or did marking practices change over the intervening kilometers or years? More potmarks need to be found and studied. A major contribution of Frankel's and Herscher's studies is the proven value of considering potmarks within the context of social organization and technological and exchange processes.



This Mycenaean pictorial jug with two marks incised into its handle was found in Tomb 18 at Enkomi by the Swedish Cyprus Expedition in 1930 along with eleven other similarly marked vases. The excavator interpreted the marks on all of the vases as abbreviations of the name of one of the individuals buried in the tomb.

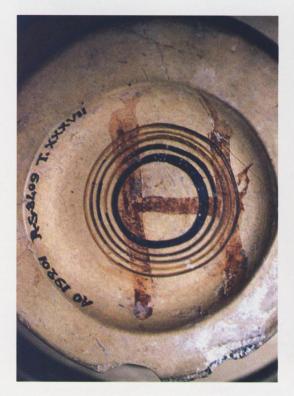
Potmarks and Archaeological Context

The depositional context of a marked vase can also provide fundamental information for interpreting the function of the mark. Axel Persson, a member of the Swedish Cyprus Expedition whose projects and publications set the precedent for so many facets of Cypriot archaeology, was the first scholar to consider archaeological context in his analysis of potmarks. His publication of the twenty-three "inscriptions" discovered by the team at Enkomi and Idalion—is exemplary in its complete and detailed recording of the new discoveries (including photographs of the potmarks of a quality that is desirable, but rarely achieved, even in current publications: Persson 1937). Writing in the 1930s, Persson shared with his contemporaries the mindset of seeing potmarks in terms of scripts, but he differed from them because he considered archaeological context as integral to evaluating the marks as elements of the formal writing system. The Swedish Cyprus Expedition's "inscriptions" mostly consist of one or two marks incised on the handles of vases, all of which Persson identified as "Cypro-Minoan." His identification of the single marks as signs of script was partially based on analysis of their archaeological context. Fourteen of Persson's "inscriptions" were found in a single tomb (with multiple burials) and twelve of these included the mark at the base of the handle seen in the photo. Persson interpreted the one- and two-sign markings as abbreviated versions of the single "long" inscription (a four-sign sequence, beginning with the same mark mentioned above)

found in the same tomb (Swedish Tomb 18). He hypothesized furthermore that abbreviations and inscription referred to the name of one of the individuals buried in the tomb. Persson's methodology was perhaps partially inspired by the material he had to work with—multiple "inscriptions" from a single context. Such circumstances are relatively rare in Bronze Age Cyprus but as the number of potmark discoveries gradually increases, this avenue of inquiry warrants periodic revisits. In addition, the broader patterns of contextual distribution should be continuously reevaluated, for in the absence of a direct means of deciphering the marks, the contexts in which marked vases are found should not be overlooked as possible indicators of the reasons for marking.

Before or After Firing?

The context of a potmark includes not only where the vase (or fragment) is found, but also, more immediately, the vase on which the mark is inscribed and the manner of inscription. Four years before Persson published his study of marks from Enkomi, Claude F. A. Schaeffer issued





This Mycenaean stirrup jar with painted mark under its base was found in a tomb at Ras Shamra in Syria. Even though the vessel is not a Cypriot type nor was it found on Cyprus, the presence of the potmark alone, it has been argued, is enough to suggest a Cypriot connection. The nature of that connection remains to be resolved; an essential key to that puzzle is whether the mark was painted before or after the pot was fired.

his preliminary report of the discovery of Mycenaean pottery with painted marks in tombs V and VI at Minet el-Beidha, Ugarit's port, now in modern Syria (Schaeffer 1933). Schaeffer (i) identified the marks as potters' marks, painted before firing and (ii) noted the "identité absolue" of fabric and decoration of these vases with Mycenaean pottery found on Cyprus, at Ialysos on Rhodes, and Gurob in Egypt, as well as (iii) the appearance of similar painted marks on the bases of vases from Ialysos and Gurob. On the basis of these observations, he posited a single production center for all Mycenaean vases with painted marks, in Rhodes.4 The following year (1934), Schaeffer began to dig at Enkomi and his work on Cyprus led him to revise some of his ideas. In part because after digging on Cyprus he came to identify the painted marks as "empruntés à l'écriture égéochypriote" (Schaeffer 1936:76), he now placed the workshops on Cyprus. Thus, according to Schaeffer, painted marks were evidence of the manufacture of Mycenaean-style vases on Cyprus, the variety of marks attests a large number of different production centers on the island, and "Mycenaean" vases with painted marks found elsewhere in the Mediterranean such as Late Helladic (LH) IIIB stirrup jars, found at Ras Shamra/Ugarit—must have been exported from Cyprus. If true, these hypotheses would be of tremendous significance to reconstructing the routes and processes of exchange in the Late Bronze Age eastern Mediterranean. In the following year, Schaeffer amended his ideas again, though not substantially. While he still believed that most of the marks were Cypro-Minoan, he did not exclude the possibility that some might be otherwise (Schaeffer 1936-1937:233-34).

Frank Stubbings, a Cambridge doctoral student and ceramic specialist, took up the topic of the relationship between painted potmarks and Mycenaean pottery in the eastern Mediterranean. The central thesis of his dissertation was that production of high quality Mycenaean pottery was not confined to mainland Greece and that regional production centers existed outside the Aegean, especially in the LH IIIB period. His argument rested primarily on the identification of regional styles based on localized distribution of distinctive shapes and decorative motifs. Painted potmarks were also important to Stubbings' line of reasoning. For Stubbings, the important feature of the painted marks was the point of manufacture for vases on which they appear and he identified most of them as Cypriot products. Thus, in Stubbings' analysis, it was the vase that proved the mark to be Cypriot, that is, exactly the opposite of Schaeffer's argument. But the implications are the same; painted potmarks are primarily a Cypriot feature, and are evidence of Cypriot manufacture when found on pots elsewhere (Stubbings 1951:52).

Stubbings was too honest a scholar to ignore certain details that might lessen the force of his arguments. He admitted uncertainty about whether the painted marks were made before firing and concluded that "this cannot be regarded as proven" (Stubbings 1951:45). He also qualified the identification of the painted marks as Cypro-Minoan: "The fact is that knowledge of the Cypro-Minoan script is still too vague for us to state definitely what signs do belong to it" (Stubbings 1951:51). The need to clarify what is Cypro-Minoan and what is not has been pointed out above; here, my plea is to develop an objective technique for determining whether the painted marks on Mycenaean vases were applied before or after firing. The issue is still of considerable importance to our understanding of the production and exchange of Mycenaean painted pottery.

A final illustration of both the potential and current limitations of Late



There is no agreement whether this mark, incised into one handle of a Minoan coarse-ware stirrup jar found at Kourion Bamboula by the American expedition (1948-1958) was cut before or after firing. But all agree that it is a sign of the Cypro-Minoan script. If it was indeed made during manufacture, it is an indication either of Cypriot presence on Crete, or Cretan knowledge and active use of Cypriot Bronze Age notation! Photos courtesy of the University of Pennsylvania Museum (image #173605, 1735606).

Cypriot potmark studies is a coarse-ware stirrup jar with a single sign incised into one handle, found at Kourion-Bamboula (Cyprus). Petrographic analysis establishes that the jar was probably made on Crete. The sign is distinctively Cypro-Minoan. The moment of the application of the mark is more difficult to establish: authors of the seminal study of this marked vase conclude that it was inscribed while the clay was leather hard, when the pot was set out to dry before firing. As the authors point out, this assessment has significant implications:

A pot marked Cypro-Minoan while leather-hard would indicate that the potter or someone at hand knew that a particular lot of vessels was meant for a Cypriote merchant or market . . . The inscribed mark on B 1129 may indicate Cypriote presence in western Crete, or at least an awareness of trade with Cyprus during the initial stages of the production and distribution of these jars and their contents (Palaima, Betancourt, and Myer 1984:72–73).

Like so many preceding studies, the before-or-after firing problem comes to the forefront. In this case, examination with a handheld magnifying lens reveals that the cutting blade or edge has bumped around grits held fast in hardened clay (whereas it would have dragged them through soft clay). I interpret these features as indicators that the mark had been cut into fired clay (Hirschfeld 1999:33–39). But it is impossible to determine on the basis of visual examination alone. An objective way to make this determination needs to be found. Whether a mark was incised before or after firing is a significant factor in any evaluation of the mark's function(s), and it can make a tremendous impact in reconstructing the circumstances of the vase's production and/or exchange.

If one laid out all extant multi-sign Cypro-Minoan inscriptions on a standard office desk, they would fill perhaps half of it. ⁷ The paucity of Cypro-Minoan texts and the absence of a bilingual have motivated scholars, hoping to decipher the script, to consider every possible scrap of writing, and thus Cypro-Minoan has long dominated the discussion of Cypriot potmarks. The relationship between marking and writing systems continues to be a necessary aspect of potmark research, and one that has the potential to contribute significantly to an understanding of the script(s) and perhaps even the language(s) of Late Bronze Age Cyprus. But so much more can and should be asked: Were the marks made before or after firing? Are they intended to be seen easily? What kinds of vases are marked? Where are those marked vases found within a site, a region, the island, the Mediterranean? Consideration of these questions can lead to answers to such questions as who made it, who sent it and how, who sold it and for how much, who used it, when, and why. Potmarks have the potential to hint at distribution patterns, cultural or economic interactions, or social practices—if appropriate questions are asked.

Notes

1. O. Masson (1957), Benson and Masson (1960), O. Masson (1962), Karageorghis and Masson (1968).

- 2. E. Masson made many changes and additions to her 1974 signary in subsequent reports of newer discoveries of inscriptions and potmarks. I am in the process of publishing a concordance that will provide cross-references for E. Masson's various publications and especially the addenda to her signary.
- 3. We still await a clear presentation of the Cypro-Minoan syllabary, unmuddled by stray marks. Potmarks and single marks found on sling bullets, lead weights, rings, and sealstones, for example, should be incorporated into the formal signary, if at all, only under clearly defined conditions, such as those outlined by Daniel (1941).
- 4. Schaeffer (1933:101–4). Schaeffer also noted the existence of vases marked with incised signs but he judged these as made after firing and therefore not relevant to the question of production centers (Schaeffer 1933:104 no.1).
- 5. Contra Palaima, Betancourt, and Myer (1984).
- 6. Explicit discussions of the criteria used to identify potmarks as pre- or post-firing are rare in the Cypriot bibliography. You (1985:178) is one of the few other examples.
- 7. I owe this vivid image to Emmett L. Bennett, Jr. (personal communication).

References

Åström, P.

- 1966 Excavations at Kalopsidha and Ayios Iakovos in Cyprus. Studies in Mediterranean Archaeology 2. Lund: Åströms.
- 1969 Pot Marks of the Late Bronze Age from Cyprus. Opuscula Atheniensia 9: 151–59.

Benson, J. L., and Masson, O.

1960 Cypro-Minoan Inscriptions from Bamboula, Kourion: General Remarks and New Documents. *American Journal of Archaeology* 64: 145–51.

Casson, S.

1937 Ancient Cyprus: Its Art and Archaeology. London: Methuen.

Daniel, J. F.

1941 Prolegomena to the Cypro-Minoan Script. *American Journal of Archaeology* 45: 249–82.

Eriksson, K. O.

1993 Red Lustrous Wheel-made Ware. Studies in Mediterranean Archaeology 103. Jonsered: Åströms.

Evans, A. J.

- 1900 Mycenaean Cyprus as Illustrated in the British Museum Excavations. The Journal of the Anthropological Institute of Great Britain and Ireland 30 (n.s., 3): 199–220.
- 1909 Scripta Minoa: The Written Documents of Minoan Crete, with Special Reference to the Archives of Knosses. Volume I. The Hieroglyphic and Primitive Linear Classes, with an Account of the Discovery of the Pre-Phoenician Scripts, their Place in Minoan Story, and their Mediterranean Relations. Oxford: Clarendon.

Frankel, D.

1975 The Pot Marks of Vounous – Simple Clustering Techniques, their Problems and Potential. *Opuscula Atheniensia* 11: 37–51.

Herscher, E.

1978 The Bronze Age Cemetery at Lapithos, Vrysi tou Barba, Cyprus: Results of the University of Pennsylvania Excavation, 1931. Ph.D. Dissertation, University of Pennsylvania.

Hirschfeld, N.

1999 Potmarks of the Late Bronze Age Eastern Mediterranean. Ph.D. Dissertation, University of Texas at Austin.

Karageorghis, V., and Masson, O.

Late Bronze Age News from Cyprus (1967–1968). Kadmos 7: 100-103.

Knappett, C.; Kilikoglou, V.; Steele, V.; and Stern, B.

The Circulation and Consumption of Red Lustrous 2005 Wheelmade Ware: Petrographic, Chemical and Residue Analysis. Anatolian Studies 55: 25-59.

Leonard, A., Jr.

1994 An Index to the Late Bronze Age: Aegean Pottery from Syria-Palestine. Studies in Mediterranean Archaeology 114. Jonsered: Åströms.

Markides, M.

1916 Annual Report of the Curator of Antiquities. Nicosia: Department of Antiquities, Cyprus.

Masson, E.

Étude de vingt-six boules d'argile inscrites trouvées à Enkomi 1971 et Hala Sultan Tekke (Chypre). Studies in Mediterranean Archaeology, 31:1. Göteborg: Åströms.

1972 Quelques inscriptions chypro-minoennes du nord-ouest de Chypre. Report of the Department of Antiquities, Cyprus 1972: 129–33, pls. XX–XXI.

1974 Cyprominoica: Répertoires, documents de Ras Shamra: essais d'interprétation. Studies in Mediterranean Archaeology, 31:2. Göteborg: Åströms.

Masson, O.

1957 Répertoire des inscriptions chypro-minoens. Minos 5:9-27.

1962 Vases de Dhenia portant des signes chypro-minoens. Opuscula Atheniensia 4: 301-3.

Mitford, T. B.

1971 The Cypro-Minoan Inscriptions of Old Paphos. Kadmos 10: 87-96.

Murray, A. S.; Smith, A. H.; and Walters, H. B.

Excavations in Cyprus. (Bequest of Miss E. T. Turner to the British Museum). London: Trustees of the British Museum. Reprint, 1969.

Palaima, T. G.; Betancourt, P. P.; and Myer, G. H.

An Inscribed Stirrup Jar of Cretan Origin from Bamboula, 1984 Cyprus. Kadmos 23: 65-73.

Persson, A. W.

1937 Appendix III: More Cypro-Minoan Inscriptions. Pp. 601-

ABOUT THE AUTHOR



Nicolle Hirschfeld is an Assistant Professor in the Department of Classical Studies at Trinity University, San Antonio. She became interested in marking systems while keeping the field catalogue at Uluburun and recording the various marks chiseled into the surfaces of copper ingots. Other current projects include publication of the Cypriot ceramic

cargo found on that same wreck and directing a return to the site of the Late Bronze Age shipwreck at Gelidonya.

18 in The Swedish Cyprus Expedition: Finds and Results of the Excavations in Cyprus, 1927-1931, Vol. III, by E. Gjerstad, J. Lindros, E. Sjöqvist, and A. Westholm. Stockholm: Swedish Cyprus Expedition.

Schaeffer, C. F. A.

1933 Les fouilles de Minet-el-Beida et de Ras-Shamra, quatrième campagne (printemps 1932). Syria 14: 93-127.

1936 Missions en Chypre, 1932-1935. Paris: Geuthner.

1936-37Sur un cratère mycénien de Ras Shamra. Annual of the British School at Athens 37: 212-35.

Stubbings, F. H.

1951 Mycenaean Pottery from the Levant. Cambridge: Cambridge University Press.

Vermeule, E. D. T., and Karageorghis, V.

Mycenaean Pictorial Vase Painting. Cambridge, MA: Harvard University.

Vermeule, E. D. T., and Wolsky, F. Z.

Pot-Marks and Graffiti from Toumba tou Skourou, Cyprus. 1976 Kadmos 15: 61-76.

1990 Toumba tou Skourou: A Bronze Age Potters' Quarter on Morphou Bay in Cyprus. Boston: Harvard University and Museum of Fine Arts.

Yon, M.

1985 Appendice 3: Marques sur céramique. Pp. 175-87 in Kition-Bamboula III: Le Sondage L-N 13, ed. M. Yon and A. Caubet. Paris: Éditions Recherche sur les Civilisations.

