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The Inscribed Bronze ‘Kessel’ from Shaft Grave IV and Cretan Heirlooms of the Bronze Artist Named ‘Aigeus’ *vel sim.* in the Mycenaean Palatial Period*

The contributions of William C. Brice to the history of scholarship on Aegean scripts are widely recognized. In the historical research archives of the Program in Aegean Scripts and Prehistory (PASP) at the University of Texas at Austin, we have the typescript of *Scripta Minoa* III on which Alice Elizabeth Kober was working along with Sir John Myres at the time of her unfortunate early death on May 16, 1950.¹ This volume was to present a

* I thank Kevin Pluta and Ted Somerville for discussing the Ta series with me. I also thank Nassos Papalexandrou for discussing bronze tripod and cauldron dedications in historical Greek sanctuaries. They may be held blameless for the ideas in this paper. I use the following abbreviated references:

CHIC = L. Godart and J.-P. Olivier eds., *Corpus Hieroglyphicarum Inscriptionum Cretae* (*Études Crétoises* 31: Paris 1996).

CTLA = J. Raison and M. Pope eds., *Corpus transnuméré du linéaire A* (*BCILL* 18: Louvain 1980).

DMic: F. Aura Jorro, *Diccionario Micénico* vols. 1 and 2 (Madrid 1985 and 1993).

GORILA = L. Godart and J.-P. Olivier eds., *Recueil des inscriptions en linéaire A* (*Études Crétoises* 21, 1-5: Paris 1976-1985).

ILA = W.C. Brice ed., *Inscriptions in the Minoan Linear Script of Class A* (Oxford 1961).

ITLA = J. Raison and M. Pope eds., *Index transnuméré du linéaire A* (*BCILL* 11: Louvain 1977).

PC 1945 = G. Pugliese Carratelli, “Le iscrizioni preelleniche di Haghia Triada in Creta e della Grecia peninsulare,” *Monumenti Antichi* 40 (1945) 422-610, pls. I-XL.

¹ Cf. T.G. Palaima, E. Pope and F. Kent Reilly, *Unlocking the Secrets of Ancient Writing: The Parallel Lives of Michael Ventris and Linda Schele and the Decipherment of Mycenaean and Mayan Writing*, Catalogue of an Exhibition Held at the Nettie Lee Benson Latin American Collection, March 9–August 1, 2000 (Austin 2000) 12, Exhibition Checklist no. 18. For an overview of work on

definitive corpus of Linear A inscriptions, something in fact which the scholarly world sorely lacked. The absence of a definitive corpus for either linear script was a major impediment to work on the Aegean scripts from the time of their earliest discoveries from the late 1890's until the early 1950's. It continued to stymie work on Linear A throughout the 1950's,² even after the decipherment of Minoan linear script class B by Michael Ventris as Greek in June, 1952.

William Brice changed all that by working with the materials left behind by Sir John Myres when he died on March 6, 1954. Brice worked effectively and collaboratively with Michael Ventris (until his death on September 6, 1956) and with John Chadwick, Emmett L. Bennett, Jr., Maurice Pope, and many other scholars who facilitated his work with the materials in museum collections, with drawing and photography, with making precise transcriptions, and with bibliographical references.³ He also looked hard necessity and ineluctable expediency squarely in their post-war eyes and made judicious compromises that focused the results of the volume on the Linear A inscriptions—excluding, for example, Cypro-Minoan inscriptions—and saw to it that the much-needed volume appeared in a timely fashion. The result was *Inscriptions in the Minoan Linear Script of Class A* (hereafter *ILA*), edited by William C. Brice, M.A., from the Notes of Sir Arthur Evans and Sir John Myres (Oxford 1961). It was a landmark, and it was what other students of prehistoric Aegean writing and I used pre-*GORILA* and pre-*CTLA* in order to learn as much as we could about truly Minoan inscriptions.

Aegean scripts at this time, see S. Dow, "Minoan Writing." *AJA* 58 (1954) 77-129.

² Cf. T.G. Palaima ed., "Alice Elizabeth Kober," in Getzel Cohen and Martha Joukowsky eds., *Pioneering Women Archaeologists* (forthcoming) and "Archaeology and Text: Decipherment, Translation, and Interpretation," in Papers of the Cotsen Institute of Archaeology at UCLA Workshop on 'Archaeology in the Mediterranean: The Present State and Future Scope of a Discipline', March 23-25, 2000 (forthcoming); "Michael Ventris and the Development of His Research Methods," *BICS* (forthcoming).

³ *ILA*, iii-v.

One remarkable feature of *ILA* was its presentation of real and possible Linear A inscriptions on objects other than canonical clay tablets, sealings and roundels. This gave scholars the opportunity to assess through photographs, clear transcriptions and precise publication information the feature of Linear A writing that still so clearly distinguishes it from Linear B writing: its wider geographical extent of use and its use for what we may tentatively call 'wider patterns of literacy'.⁴ William Brice also assured that isolated finds of this kind would continue to be speedily and expertly published. He did this by becoming a founding and active member of the editorial board of *Kadmos. Zeitschrift für vor- und frühgriechische Epigraphik*, together with its first chief editor Ernst Grumach and with Emmett L. Bennett, Jr. in Madison, Wisconsin USA, Porphyrios Dikaios in Nikosia, Cyprus, Konstantinos D. Ktistopoulos in Athens, Greece, Piero Meriggi in Pavia, Italy, Fritz Schachermeyr in Vienna, Austria, and Johannes Sundwall in Helsingfors, Finland. The first volume appeared one year after *ILA*, thus guaranteeing that there would be no time lag in the presentation of important new material. For many years William Brice wrote the Epigraphische Mitteilungen for *Kadmos*. In the days before websites, specialized e-mail networks like AegeaNet, and instantaneous transmission of computer images and complicated texts and fonts around the world, the twice-yearly epigraphical reports in *Kadmos*

⁴ Cf. J.-P. Olivier, "Cretan Writing in the Second Millennium B.C.," *World Archaeology* 17:3 (1986) 377-389; T.G. Palaima, "Comments on Mycenaean Literacy," in J.T. Killen, J.L. Melena, J.-P. Olivier eds., *Studies in Mycenaean and Classical Greek Presented to John Chadwick (Minos 20-22, Salamanca 1987)* 499-510; "Preliminary Comparative Textual Evidence for Palatial Control of Economic Activity in Minoan and Mycenaean Crete," *The Function of the Minoan Palaces*, Proceedings of the Fourth International Symposium at the Swedish Institute in Athens, 10-16 June, 1984 (*Acta Instituti Atheniensis Regni Sueciae, Series in 4°, XXXV, Stockholm 1987*) 301-305; J. Chadwick, *Linear B and Related Scripts* (Berkeley 1987); I. Schoep, "Context and Chronology of Linear A Administrative Documents," *Aegean Archaeology* 2 (1995) 229-65; E. Hallager, *The Minoan Roundel and Other Sealed Documents in the Neopalatial Linear A Administration (Aegaeum 14: Liège and Austin 1996)*; J. Driessen, "Linear A Tablets and Political Geography," in R. Hägg ed., *The Function of the 'Minoan Villa'* (Stockholm 1997) 216-217.

were awaited with great anticipation by early-script scholars worldwide.⁵

I here honor William Brice's contributions to pre- and early Greek epigraphy by discussing an inscribed object from a secure archaeological context that did not make it into *ILA*, nor into its successors as 'corpus volumes', *GORILA* and *CTLA*. It is, I believe, the only object possibly inscribed with a character in the linear scripts from the Shaft Graves; and it is one of the few incised signs of any kind, other than pot marks, predating the final stages of the Mycenaean palatial period on the Greek mainland.⁶ I leave aside all discussion of the so-called inscribed Kafkania *galet* or 'pebble', which, it has been claimed, gives evidence for the use of Linear B near the site of historical Olympia in the MH III period (roughly the 17th Century B.C.E.). We must await the promised definitive publication of this singular *datum*.⁷

In the first fascicle of *Kadmos* 1 (1962) 85-86, published one year after the publication of *ILA*, Ernst Grumach presented a general photograph (figure 1a) of a bronze cauldron with vertical raised handles, attached by rivets, coming from Grave Circle A at

⁵ *Kadmos* still serves to alert scholars to the latest discoveries. Recently, Linear A from Miletus was published in *Kadmos*: W.-D. Niemeier, "A Linear A Inscription from Miletus (MIL Zb 1)," *Kadmos* 35 (1996) 87-99.

⁶ For an overview of the Mycenaean palatial period, cf. C.W. Shelmerdine, "Review of Aegean Prehistory VI: The Palatial Bronze Age of the Southern and Central Greek Mainland," *AJA* 101 (1997) 537-585.

⁷ The piece is problematical in the private views of several leading Mycenologists. The preliminary treatment offered by P. Arapogianni, J. Rambach and L. Godart, "L'inscription en linéaire B de Kafkania," in S. Deger-Jalkotzy *et al.* eds., *Floreat Studia Mycenaea*. Akten des X. Internationalen Mykenologischen Colloquiums in Salzburg vom 1.-5. Mai 1995 (*Österreichische Akademie der Wissenschaften Philosophisch-Historische Klasse Denkschriften* 274: Vienna 1999) 39-43, does not interpret all the signs on face A and leaves unsatisfactorily explained the signs on face B and the curious modern cartoon-like iconography of the 'double axe' on face B. For another possible inscribed *galet*, cf. T.G. Palaima, "A Linear B Inscribed *Galet* from Liège: LIE Ga 1998 A *Gaufre* or '*Galet*,'" in R. Laffineur ed., *Polemos: Warfare in the Aegean Bronze Age* (*Aegaeum* 19: Liège and Austin 1999) 507-511.

Mycenae, Shaft Grave IV, and published by Karo as no. 576.⁸ This cauldron stands 19.5 cm. high and has a diameter of 35-37 cm. In the later cleaning of the bronze cauldron was discovered a linear sign inscribed on the attachment flange which secures one of its handles to the body of the vessel. Grumach drew attention to the sign (figure 1b). He compared the vessel itself to Linear A ideographic signs Lc 43 and 45, which, according to Pugliese Carratelli's classification of Linear A signs, represented respectively a bronze 'lebetes' (with phonetic sign L 52 surjoined), which we here refer to as a cauldron, and a 'lebetes tripodato' (with phonetic sign L 81) surjoined, or what we call simply a tripod.⁹ These ideographic images help to confirm what is known from the archaeological record: neopalatial Minoan Crete manufactured and exported large bronze vessels.¹⁰ We should also note that all together ten bronze cauldrons (and some fragments from others) were discovered in Shaft Grave IV, along with bronze hydriai, a bronze amphora, and a bronze krater. One of the bronze cauldrons (Karo no. 579, plate CLXIII) has three support legs attached. It is effectively a 'tripod' and demonstrates the close connection between these two shapes in the manufacturing process and no doubt in use as well. This is important for our subsequent discussion of the significance of the 'inscribed' bronze cauldron.

Grumach related the inscribed mark on the Shaft Grave cauldron—quite rightly in our opinion—to the question of when and

⁸ G. Karo, *Die Schachtgräber von Mykenai* (Munich 1930) 116, no. 576, plate CLIX lower right. H. Matthäus, *Die Bronzegefäße der kretisch-mykenischen Kultur* (1980) 89, No. 24.

⁹ *PC 1945*, 481. For variant versions of the Linear A tripod sign in numerous attestations on roundels at Khania and on tablets at Hagia Triada, see *GORILA 5*, xxii and lii, signs A 408^{VAS} to A 411^{VAS}.

¹⁰ Cf. the discussion of the evidence for an 'explosion' of the quantity and range of Minoan-manufactured metal vessels in the neo-palatial period and their exportation to the Greek mainland, and particularly the Shaft Graves at Mycenae, in O. Dickinson, *The Aegean Bronze Age* (Cambridge 1994) 136-143 and 248. Matthäus (above n. 8) 90, thinks that this particular variant of bronze cauldron is of Cretan manufacture. Significantly the shape (Matthäus *Zweiheklige Kessel mit einteiliger Wandung Variante C*) is attested also at Pylos (Matthäus No. 22).

where Linear B originated. He cited with a degree of approbation George Mylonas' support of the view of Arne Furumark that "Linear B was formed on the mainland during the shaft grave era (16th century B.C.), when Minoan influence was strong."¹¹ The circumstances for the origin of the Linear B script are still debated, despite our fuller understanding of the palaeographical histories of the scripts and our much fuller archaeological documentation of the influence of Minoan culture during the formative stages of Mycenaean pre-palatial and palatial culture.¹² The sign on the Shaft Grave cauldron is certainly relevant to this discussion. Karo assumed that the cauldron was a Cretan import, and that view still prevails.¹³

Unfortunately this 'inscription' has been ignored in the major publications and treatments of Linear A that appeared beginning fifteen years after *ILA*. The editors of *GORILA* excluded treatment of all "les «inscriptions» qui ne comportaient qu'un seul signe, que ce soient les marques de potiers, les marques de maçons, les marques sur pesons ou lingots," explaining that these were not, properly speaking, instances of true writing, and that excavators in general had been negligent in providing full published repertoires and context information about such pieces.¹⁴ In the event, of course, *GORILA* published 'single marks' on Minoan nodules and even on Knossos pithos Zb 34 and Kea sherds Zb 3 and Zb 5, so they made

¹¹ G. Mylonas, "Mycenaean Greek and Minoan-Mycenaean Relations," *Archaeology* 9 (1956) 277.

¹² The fullest assessment of the development of the Linear B script remains T.G. Palaima, "The Development of the Mycenaean Writing System," in J.-P. Olivier and T.G. Palaima eds., *Texts, Tablets and Scribes: Studies in Mycenaean Epigraphy and Economy in Honor of Emmett L. Bennett, Jr.* (*Minos* Supplement 10: Salamanca 1988) 269-342. Given the appearance of *CHIC* and of specialized publications of such things as Minoan roundels (E. Hallager, *The Minoan Roundel* [*Aegaeum* 14: Liège and Austin 1996]) and the Room of the Chariot Tablets deposit at Knossos (below n. 25) and Knossian palaeography in general, it is time now for a reassessment of this question. For Minoan influence on mainland regions, see n. 38 below.

¹³ Karo (above n. 8) 247-251, esp. 250. Cf. Dickinson (above n. 10).

¹⁴ *GORILA* 1, xi-xii.

allowance for what they considered absolutely irrefutable cases of a formal sign of the Linear A script used in isolation on media other than clay tablets.¹⁵ *CTLA* was somewhat more inclusive *en principe*, but its editors also did not include the Shaft Grave cauldron 'inscription', perhaps because they found its form problematical.¹⁶ However, *GORILA* does not list the Shaft Grave cauldron 'inscription' among *data* that have been rejected as not identifiably Linear A, and, as we have noted (above n. 16), *ITLA* and *CTLA* contain no such explanation whatsoever.¹⁷

The sign itself Grumach likened to a variant of L 100 (classified in *GORILA* as AB 28 along with variant forms separately numbered by Pugliese Carratelli as L 19, L 38 and L 131),¹⁸ while he also pointed out much closer similarities to the sign in Cretan Hieroglyphic that would seem to represent the 'human hand with projecting thumb' (= *CHIC* 008).¹⁹ Sign *CHIC* 008 is found in versions on both Hieroglyphic accounting texts and stone seals; but, according to the *CHIC* editors, who also edited *GORILA*, the sign has no ascertainable Linear A parallel. It does, however, correspond to sign *52 = *no* in Linear B. Since the Linear A syllabary has a conspicuous underrepresentation in the phonetic signs it shares with Linear B that have *o*-vowel in Linear B, the absence of the sign with Linear B value *no* from the Linear A repertory of phonograms might thus be explained. It would also provide a forceful argument against proposing that the Shaft Grave sign is a unique attestation of the linear sign *52 in Linear A. The form of the cauldron sign, however, makes it problematical to identify the sign with *GORILA* AB 28 (Linear B value *i*).

¹⁵ *GORILA* 4, 71, 73, 79.

¹⁶ The editors of *ITLA* and *CTLA* nowhere explain their criteria for including or excluding *data* already published as Linear A or possible Linear A inscriptions.

¹⁷ *GORILA* 4, 21.

¹⁸ Sign Linear B *28 has the phonetic value /i/. Note that G. Owens, "Linear A in the Aegean: The Further Travels of the Minoan Script," in P.P. Betancourt *et al.* eds., *MELETEMATA* (below n. 21) 590, identifies the sign on the cauldron as composite sign A529.

¹⁹ Cf. the table of sign forms in *CHIC*, p. 388.

Grumach rightly stressed that we keep in mind that the sign here was incised into a hard metallic surface, so that its form might deviate somewhat from the range of shapes of the corresponding signs used by scribes on the soft clay of Minoan Linear A tablets. It is fair to assume that the competency of the 'inscriber' might not be as high as that of a practiced tablet-writer. We should also note that Grumach, in relating this 'inscription' to the developmental histories of the two linear scripts, entitled his article "Linear A auf dem Festland" and drew attention to Minoan "masons' marks" from the Greek mainland as other evidence of the influence of extra-mainland marking systems. We now have Linear A at Kythera and Hagios Stephanos.²⁰

The major problem with identifying the sign with the sign *CHIC* 008 and the Linear B sign that would seem to develop from it (*52 = *no*) is that, as explained above, the sign does not appear in Linear A and it should not exist if our reconstruction of the structure of the Linear A phonetic grid with severe weakness in *o*-vowel representation is correct and explicable as corresponding to the absence of the /*o*/ phoneme in the Minoan language or languages represented in the Linear A texts.²¹ If the inscription on the Shaft Grave cauldron does represent the use of a formal sign of an Aegean linear script—and its relatively careful execution would argue for this—the closest parallel, I believe, is Linear B sign *43 = *ai*. The sign on the cauldron has multiple parallel upper vertical strokes above a horizontal stroke and splaying oblique 'leg' strokes beneath. It also has an extra curved element *at left*, which distinguishes it from Linear B *52 = *no*. The left stroke is turned

²⁰ R. Janko, "A Stone Inscribed in Linear A from Ayios Stephanos, Laconia," *Kadmos* 21 (1982) 97-100, pl. I. I. Sakellarakis and J.-P. Olivier, "Un vase en pierre avec inscription en linéaire A du sanctuaire de sommet minoen de Cythère," *BCH* 118 (1994) 343-351.

²¹ Cf. Y. Duhoux, "Le linéaire A: Problèmes de déchiffrement," in Y. Duhoux, T.G. Palaima and J. Bennet eds., *Problems in Decipherment (BCILL 49: Louvain-la-Neuve 1989)* 72, and illustration 7, p. 115. T.G. Palaima and E. Sikkenga, "Linear A > Linear B," in P.P. Betancourt *et al.* eds., *MELETEMATA. Studies in Aegean Archaeology Presented to Malcolm H. Wiener as He Enters His 65th Year (Aegaeum 20: Liège and Austin 1999)* 599-608.

downward here instead of upward, but this would present a problem for the identification of the sign as corresponding to either Linear B *52 = *no* or *43 = *ai* or *28 = *i*, or the Linear A equivalents thereof.²²

The virtue of the identification of the Shaft Grave cauldron sign as a sign corresponding to Linear B *ai* (whether the sign belongs to Linear A or Linear B) is that it is a sign that *could* have existed in a script designed to represent the Minoan language(s). Linear A and Linear B have very full sets of phonograms with *a*-vowel.²³ This may seem like a speculative line of reasoning. However, I have special confidence in using it because Emmett L. Bennett, Jr., and I in 1991 inspected a bronze Minoan axe head, not unlike that known as KA Zf 1 in *GORILA* 4, which has inscribed on it the sign known as *CHIC* 006 = Linear B *46 = *nwa*. The axe head is in a private collection and had been acquired recently from a gallery whose acquisitions have been subject to question. Thus we declined to publish the inscription in any formal way, but it is relevant to signal its existence here as a unique proof that a phonogram for a labialized dental nasal *a*-vowel /*nwa*/ existed in Linear A. It would provide a parallel for finding the Linear A version of a sign of the later Linear B *a*-series attested solely on a non-administrative Minoan object.

Notice that I have so far argued according to the assumption, also made by Grumach, that the sign, whatever its identification, belongs to Linear A. Yet the Shaft Grave cauldron, according to Graziadio's reassessment of the chronology of the Grave Circle burials at Mycenae, comes from a context dated well within the Late Helladic I period.²⁴ Our earliest Linear B, already well-developed, but still

²² It is even problematical for identifying the sign as *GORILA* AB 28. Cf. the palaeographical tables in *GORILA* 5, xxxiii.

²³ Duhoux (above n. 21) 71-74.

²⁴ G. Graziadio, "The Chronology of the Graves of Circle B at Mycenae: A New Hypothesis," *AJA* 92 (1988) 343-372, and especially pp. 371-372, argues that the Shaft Grave burials span four generations, and that the earliest burials in Shaft Grave IV overlap with the latest of the three generations of burials in Circle B. Thus the materials in Shaft Grave IV would come from well within the Late Helladic I period. P. Warren and V. Hankey, *Aegean Bronze Age Chronology*

showing some indications of influence from the former Linear A-system, is the Room of the Chariot Tablets (RCT) material from Knossos and is dated to LM II (within LH IIB).²⁵ Given that the script would need some period of time to develop to the stage where a large number of scribes could use it proficiently to record the many records from the RCT, it is by no means impossible that the sign on the cauldron is in fact a version of sign Linear B *43 drawn on a bronze cauldron manufactured in Crete and destined for transport to the Argolid. This is, however, not necessary for our further discussion below, since our hypothesis will also work if the sign is in fact a Linear A sign with the same value.²⁶

What ramifications might the identification proposed here have? Linear A and Linear B are both fond of acrophonic abbreviation in identifying precisely an ideogram for a physical object or commodity or in indicating some characteristic feature of said objects or commodities. Thus there are a very large number of 'complex ideographic signs' in Linear A.²⁷ Moreover, this feature is used with special frequency with regard to the identification of vessel shapes in Linear B: e.g., *209^{VAS} + A (= *a-pi-po-re-u), *210^{VAS} + KA (= *ka-ra-re-u), *212^{VAS} + U (= u-do-ro), *202^{VAS} + DI (= di-pa). It seems to be used frequently in Linear A as well.²⁸

(1989) 96, would place the later Grave IV burials well within LM IA. The final use of the latest grave in Grave Circle A (Grave I) is in LH II A.

²⁵ J. Driessen, *The Scribes of the Room of the Chariot Tablets at Knossos* (Suplementos a *Minos* 15: Salamanca 2000).

²⁶ If trained Minoan scribes were using the newly adapted script to write records in the Greek language, or at least assisting in the process of training Greek-speaking administrators, then the development of Linear B could have been very rapid.

²⁷ Cf. *GORILA* 5, xxiv-xxvi. Of course, it is understood that some of the adjoined or ligatured signs are fractional signs, but many are phonetic. In Linear B, cf. the large repertory of phonetically ligatured CLOTH ideograms (TELA = *159) and also uses such as SUS + SI and SUS + KA, for pigs that are 'fatted' and 'wild pig' respectively.

²⁸ See, for example, tablet HT 31 (*GORILA* 1, 59) which records five ideographic vase shapes each surmounted by two or three adjoined Linear A phonetic signs. Three of the vase shapes are different, three have sufficient resemblance to each other to be ambiguous. All the sign groups are different, thus

We also have the known principle of designating a commodity by its initial syllable. The most famous example, of course, is sign AB 30 used in both Linear A and B to designate 'figs', the phonetic value of which (*ni*) only makes sense in Linear A as an abbreviation of the later lexicographically attested Cretan word *nikuleon*.²⁹ Greek-writing users of the Linear B script borrowed the sign from Linear A as the ideogram for figs, despite the fact that it did not make sense as a phonetic abbreviation in Greek.

Thus one could argue that the sign on the Shaft Grave cauldron stood as an abbreviation for the object itself. This is made less attractive by the realization that such a writing practice is used within accounting documents to specify the precise type of physical object or item to which reference is being made by means of a pictorial ideogram. Ambiguity only enters in when the object must be identified from the texts. There is little need to disambiguate through writing upon a physical cauldron that the physical cauldron is in fact a physical cauldron. It is difficult to imagine what use such an abbreviation would serve on the object itself.

Much more attractive is to propose that the sign, which we have identified as A?B 43 = *ai*, serves in some way as a descriptive designation of the bronze cauldron itself. Peter van Alfen has demonstrated that the inscriptions painted on the restricted sub-class of mainly Minoan-manufactured inscribed stirrup jars were of use within the internal economic process of preparing olive oil and perfumed oil for transport.³⁰ Those inscriptions are formulaic, and work much like the 'collector' formulae in the Linear B sheep tablets. The 'collector' sheep texts specify shepherd, 'collector' and location. If the inscribed cauldron sign serves some analogous function, we might propose that it has to do with either the place of manufacture, the person who does the manufacturing (i.e., the

supporting, although not proving, that they specify the different names of the different vessels. The most conspicuous vase ideogram on the tablet, a tripod, has no surjoined phonetic characters, perhaps because its shape was clearly recognizable and required no lexical identification.

²⁹ Duhoux (above n. 21) 97.

³⁰ P. van Alfen, "The Linear B Inscribed Stirrup Jars as Links in an Administrative Chain," *Minos* 31-32 (1996-97 [98]) 251-274.

bronze-working artist who made the cauldron = the equivalent of the 'shepherd' on the Linear B tablets), or the party responsible for overseeing the manufacture (parallel to the 'collector' on the tablets and stirrup jars).

One of the trickiest phrases to interpret in Linear B from the earliest days of its decipherment onward occurs several times on tablets of the Ta series at Pylos. These tablets are now properly understood to be an inventory of special cultic vessels, fire implements, exquisitely and exotically crafted furniture (tables, 'thrones' and sitting stools) and sacrificial implements related to a commensal ceremony that took place in the environs of the Palace of Nestor at Pylos.³¹ Among the items inventoried are bronze tripods. They are obviously of some antiquity,³² because one has its legs burned away and another is missing two of its legs. The preservation of ceremonial vessels, even after they are damaged, for cultic purposes is well-attested in historical times within temple inventories (cf. the Hellenistic Delos temple inventories). It is significant that five of the tripods (out of six total) are designated by the problematical phrase *ke-re-si-jo, we-ke* (in two entries on Ta 709.3 and in two entries on Ta 641.1). In two of those entries this phrase is accompanied by the further designation that the tripods in question are *ai-ke-u* (or with an alternative spelling *34-*ke-u*). The spelling of this last term in alternative ways using an alternate sign (*34) inherited from Linear A, where it is of relatively rare

³¹ Cf. T.G. Palaima, "The Pylos Ta Series: from Michael Ventris to the New Millennium," *BICS* 44 (2000) 234-235. Cf. J.L. Davis and J. Bennet, "Making Mycenaean: Warfare, Territorial Expansion, and Representations of the Other in the Pylian Kingdom," in R. Laffineur ed., *Polemos (Aegaeum 19: Liège and Austin 1998)* 114-118. J.T. Killen, "Thebes Sealings, Knossos Tablets, and Mycenaean State Banquets," *BICS* 39 (1994) 67-84; and "The Pylos Ta Tablets Revisited," *BCH* 122 (1998) 421-422. M. Stella Speciale, "La tavoletta PY Ta 716 e i sacrifici di animali," In V. La Rosa et al. eds., *ἐπὶ πόνοτον πλαζόμενοι. Simposio italiano di Studi Egei dedicato a Luigi Bernabò Brea e Giovanni Pugliese Carratelli* (Rome 1999) 291-297.

³² Cf. F. Vandenabeele and J.-P. Olivier, *Les idéogrammes archéologiques du linéaire B (Études Crétoises XXIV: Paris 1979)* 225-233, for a full discussion of archaeological correlates of the Mycenaean ideograms for tripod.

occurrence,³³ argues that the word could be non-Greek. This is the standard explanation for the use of Linear B signs such as *22 and *56 in Cretan place names and technical terminology: e.g., *da*-*22-*to*, *56-*ko-we*, *56-*ra-ku-ja*. The fuller phrase *ke-re-si-jo*, *we-ke* is now correctly explained as a 'compound in the making' with the scribe making a special effort to understand and represent graphically its component parts.³⁴ It is interpreted as *krēsīowergēs* 'of Cretan workmanship'.³⁵ The accompanying *ai-ke-ul**34-*ke-u* (which itself may alternate with *o-pi-ke-wi-ri-je-u*) has been interpreted as a shorthand specification of the style of the tripod, most likely the name of the artist who manufactured it, listed in asyntactical *rubric* fashion, although clearly influenced by the *we-ke* element of the term for 'of Cretan workmanship'.

It is rare within the Linear B corpus of inscriptions to specify the provenience or 'regional style' of an item. No other vessels or implements in the Ta inventory are thus identified according to their region of manufacture. There are few examples of ethnic adjectives used in a comparable way for any manufactured items. Some chariot wheels at Pylos are designated as 'Zakynthian' (Sa 751 and 787.B). These offer the best parallel. That five of these tripods are described in this way marks them out as distinctive. They are recognizable by their 'Cretan' style of workmanship. To further designate three of the Pylos ceremonial tripods as 'Aigeus' vessels *vel sim.* would indicate an ability among palatial administrators also to recognize—and to assume that others could recognize—a specific Cretan tripod type as the work of a master bronze-vessel maker named 'Aigeus' *vel sim.*³⁶ This would have serious implications for Mycenaean art history and imply a developed sense of connoisseurship among Mycenaean palatial elites.

³³ GORILA 5, xxxiv, 199.

³⁴ Y. Duhoux, "Le mycénien connaissait-il la tmèse?" *Minos* 29-30 (1994-95) 187-202.

³⁵ Cf. *DMic*, s.v.

³⁶ Cf. *DMic*, s.v. I fully agree with the original proposal of C.J. Ruijgh, *Études sur la grammaire et le vocabulaire du grec mycénien* (Amsterdam 1967) 194.

What is then even more tantalizing is to recognize, as Grumach did in his original publication of the Shaft Grave cauldron 'inscription', that tripods and cauldrons are frequently associated with each other in ceremonial, dedicatory and burial contexts in Aegean prehistory and history.³⁷ Recall that this is even the case in Shaft Grave IV where the single bronze tripod (Karo no. 579) is simply a cauldron with three attached 'legs' or 'feet' for support. I would propose that the 'inscribed' bronze cauldron from Shaft Grave IV might be inscribed with a manufacturer's 'initial' that would be specifying that it was made by the same 'Aigeus' *vel sim.* whose tripods were likewise famous and preserved as ceremonial heirlooms in Messenia, a palatial territory with other indications of strong Minoan influence particularly during the early Late Helladic period.³⁸ We might even wonder whether Hand 2 in the process of compiling the Ta inspection inventory, or *pu₂-ke-qi-ri* who is recorded as performing the inspection, observed on the attachments of two of the tripods at Pylos an incised sign *43 and on one of the other tripods an incised sign *34, and therefore recorded the name of the manufacturing artist in different ways.

³⁷ I thank Nassos Papalexandrou for confirming this point for me (*per litteras electronicas*) from his considerable knowledge of bronze tripod dedications in the archaic through Roman periods. Cf. N. Papalexandrou, "Boeotian Tripods: The Tenacity of a Panhellenic Symbol in a Regional Context," in John M. Fossey and Michael B. Cosmopoulos eds., *Boiotia Antiqua VII-VIII: Studies in Boiotian Archaeology, History, and Institutions* (including Papers Presented at the IX International Conference on Boiotian Antiquities, Winnipeg 29-31 October 1998) (Chicago forthcoming).

³⁸ For Minoan influence upon Messenia, cf. G.S. Korres, "The Relations Between Crete and Messenia in the Late Middle Helladic and Early Late Helladic Period," in R. Hägg and N. Marinatos eds., *The Minoan Thalassocracy* (Stockholm 1984) 141-152; and G.S. Korres, "Messenia and Its Commercial Connections in the Bronze Age," in C. Zerner ed., *Wace and Blegen. Pottery as Evidence for Trade in the Aegean Bronze Age* (Amsterdam 1993) 231-248; R. Hägg, "On the Nature of Minoan Influence in Early Mycenaean Messenia," *Opuscula Atheniensia* 14 (1982) 27-37. On the special associations between Messenia/Pylos and Crete (and perhaps Knossos) during the pre-palatial and Mycenaean palatial periods, cf. S. Hiller, "Knossos and Pylos. A Case of Special Relationship?" *Cretan Studies* 5 (1996) 73-83.

In this analysis of the cauldron 'inscription' from Shaft Grave IV, I hope to have demonstrated what William Brice always knew: single small pieces of *data* are important and might have broader implications. In this case, the cauldron 'inscription' is important as a further confirmation of Minoan influence upon the Shaft Grave Argolid. It also is related to the still complicated question of how, when and where Linear B developed from Linear A. The discussion of the bronze tripods of Cretan workmanship recorded in the Pylos Ta series stressed that these pieces must have been considered 'masterworks' of a kind. They were preserved as heirlooms even when damaged and used in important palatial ceremonies. A scribe, who was, or who assisted, a member of the palatial elite named *pu₂-ke-qi-ri*, was able to distinguish certain of the tripods as Cretan manufactured and perhaps even to pinpoint the master craftsman who made certain of the tripods. That the name of one of these Cretan craftsmen is *ai-ke-u* and the Shaft Grave IV cauldron has what *might* be an abbreviation of this name (*ai*) incised upon its handle attachment in Linear A or Linear B is either a wild coincidence that is too good to be true, or it is our just reward for following in the footsteps of the scholar who succeeded Sir Arthur Evans, Sir John L. Myres, and Michael Ventris and who worked with Ernst Grumach and other noted scholars of *Kadmos* as a student of Minoan Linear Script Class A.

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FIGURE 1a. Inscribed Bronze Cauldron (Karo No. 576) from Mycenae Shaft Grave IV (after *Kadmos* I [1962] Abb. 4).

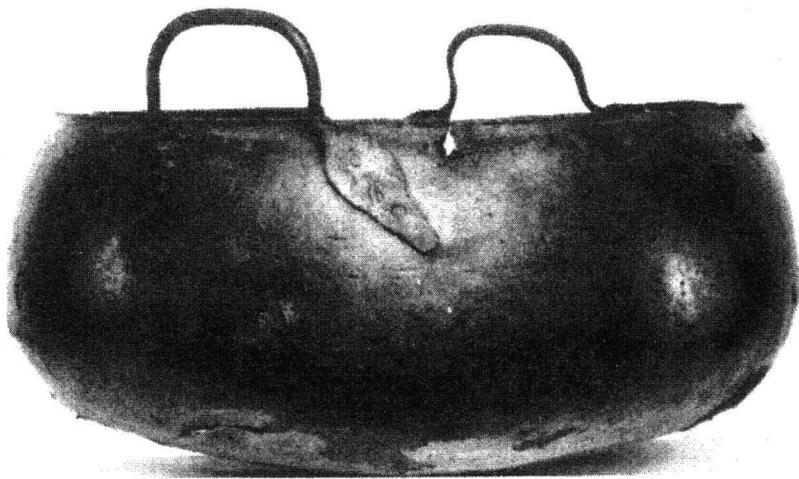


FIGURE 1b. Close-up View of Inscribed Sign on Handle Attachment (after *Kadmos* I [1962] Abb. 4).

