Linear A in the Cyclades: The Trade and Travel of a Script
by Dr. Thomas G. Palaima

Significant advances have been made in the study of the Linear A writing system during the last twenty years. In a concise survey of finds, L. Godart mentions over 250 inscriptions (on tablets, roundels, nodules, murals, clay and stone vases, larnakes and metallic objects) from 19 Cretan sites and three Cycladic Islands. More important than the finds themselves have been the careful study and publication of the documents. Separate publication of the major new finds from ARKHanes, KHanias and ZAkro has given us better understanding of the chronological development of the script and of the relationship of the inscriptions to their find contexts. Three of the five projected corpus volumes have been published, presenting each clay tablet, nodule, roundel and sealing discovered up to 1976 in a photograph, a facsimile drawing, a normalized copy, and a tabular copy. Equal care has been taken to determine the general repertory of phonetic, ideographic, and fractional signs and their individual variants. These advances have resulted in a radical revision of views on the use of Linear A and on the genetic relationship of the main stages of Minoan-Mycenaean writing (Hieroglyphic, LA, LB).

For example, in 1960 Sterling Dow could write, with some justification, that the Minoans had made little use of literacy because the tablets then known (essentially the 190 listed in Gorila 1, xviii, excluding the single finds from Pyrgos and KEos) were "so poor clerically as to suggest negligence if not actual incompetence." But study of the finds from ZA, HT ( Hagia Triada), KNossos, ARKH, and KN now indicates a lively and complex bureaucratic use of the Minoan script of such uniformity that Godart has been able to analyze "la koine amministrativa." In fact LA is now seen to have broader applications than LB not only in the long-established dichotomy between religious (e.g. the inscribed votive tables, ladies, miniature double axes, etc., often with recurring formulae, that were recognized by Evans, PM 1, 623-636, as a distinctive class) and secular inscriptions, but also in the diversity of administrative uses from workroom records at smaller sites (TYlissos House A, Platon-Brice, p. 21; ARKH, Lembessi-Godart-Olivier, 114-116) to the records on ephemeral materials to which, for example, the 862 nodules at HT were undoubtedly attached (Gorila 2, xvii).

The discovery of an archives of 30 tablets in a proto-LA from the first palace period at PHaestos and of a linear A tablet, written on a clay bar of hieroglyphic type, from MALlia dating MM III have made necessary a reconsideration of the development of the Minoan scripts. Both chronological and graphic factors have led to the conclusion that Cretan Hieroglyphic writing and LA are parallel developments, not father and son. The expanded body of LA inscriptions has also enabled the chief epigraphers to study the relationship between LA and LB. The similarity of LB characters to characters of earlier stages of LA and the remarkable uniformity of LB at all four mainland sites have persuaded Godart and Olivier to place the creation of LB in LM I, suggesting respectively Shaft-Grave Mycenae and pre-Mycenaean Knossos as the place of origin.

Within the framework just sketched, the traces of LA outside of Crete
assume a clear importance. These inscriptions have never been studied as a group, and only Hooker gives them slightly more than passing notice in trying to understand the cultural contacts between the Minoans and Mycenaeans that produced LB from LA. Since we have no definite examples of LA produced on the mainland,12 it is imperative to assess exactly the extent to which LA was used in the Aegean islands. The corpus volumes have not yet reached the inscriptions on other objects; and, since most of the island examples fall into this category, one encounters, as we shall see, references to "purported" LA finds that are improbable.13 I shall be concerned then with establishing a "corpus" of island inscriptions, analyzing the nature of the verifiable LA inscriptions, and determining how these inscriptions may fit into the trade relations between Crete, the Cyclades and the mainland that led to the creation of a separate mainland script.

Analysis of inscriptions14

Sites with reported LA inscriptions: Keos, Melos, Naxos, Thera, Kythera. Sites with definite LA inscriptions: Keos, Melos, Thera.

Tablets (both fragmentary): (A) Keos (3): IPM Keos, 108-109, fig. 2, 1; (B) Melos (6): LA Melos, 113-116, pl. 2 and fig. 1.

Roundel: (C) Keos (3 and seal impression): IPM Keos, 108-109, fig. 2, 3.

Vase Inscriptions: Thera: (D) ewer (4 signs incised at neck): AAA 4 (1971) 72, fig. 22; Thera IV, 43-45, pl. 109 a, b; (E) rim of pot (3): PM 1, 637-638 note 2; Raison, Kadmos 1 (1962) 56-57, fig. 2.

Keos: (F) straight sided cup (1 sign incised on side): IPM Keos, 109-110, fig. 2, 4; (G) broad jar or jug (1 ligatured sign on body): IPM Keos, 109-111, fig. 2, 6; (H) lamp (3 signs with possible punctuation): IPM Keos, 109-111, fig. 2, 5.

Melos: (I) straight sided cup (2 signs incised on base; 1 nearly identical, including orientation, to sign on Keos cup): Melos, 183, fig. 155; CVA Musee National Copenhague, fasc. 1, p. 28, pl. 34, 4; PM 1, 561, 637; SMI, 35, fig. 16.

Site with probable LA inscription: Kythera.

Clay Weight: (J) Kythera (1): Kythera, 205-206, fig. 59, pl. 60; Nestor (1 Oct. 65) 407.

Sites with inscriptions reported, but unlikely: Thera, Naxos.

Vases: Naxos: 2 sherds (one with an incised mark, another with partially preserved painted lines): Naxos, 84-85, figs. 1-4.

Thera: 2 sherds (both with a single incised mark): Thera II, 44, pl. 38; other pottery with incised marks poorly photographed without accompanying drawings or commentary: Thera IV, pl. 110-111.

Other Objects: Thera: 2 supposed slate writing tablets: (1) found in room A1, a pithoi storeroom, where later found a "whetstone" and handleless cup: Thera II, 47, pl. 37, 2; Thera III, 10, pl. 5, 2; slate has small drawing of a butterfly (?): Kadmos 9 (1970) 96, pl. 1, b; (2) found in room A 16, Thera V, 22, pl. 36a, with "whetstone"; slate unmarked.15

Besides these objects there are frustrating oblique references to inscribed marks on pottery that may be related to LA. For example,
Hogarth, in describing the 1898 excavations at Melos, remarks, "The yield of potsherds had come to average about forty baskets a day, specimens inscribed with 'Aegean' signs, scratched while the clay was wet, being frequent."16 The marks are later analyzed in some detail,17 and Evans lists a few of the marks on Melian ewers from the Temple Repositories.18 These should all be classed as potters' marks even if they do resemble LA signs. At least the appearance of the same marks on similar pottery from different sites offers solid proof of active trade.19

**Commentary**

If we focus our attention on only those sites with definite inscriptions, we still have substantial evidence for the use of LA at those Cycladic sites that maintained close trade contacts with Crete in MM III-LM I. Most significant are the tablets from Keos (MM III) and Phylakopi (LB I). As with other LA and LB inscriptions, neither tablet gives the impression of intentional firing. They are then proof of the use of LA locally for bureaucratic reasons.

The Keos tablet (A) was found together with the roundel (C) and inscribed lamp (H) in area N (all with MM III pottery). Roundels could be used in archives to label records on ephemeral materials or in workroom contexts with storage vessels and other containers.20 The context and finds here are not decisive, but the nature of the other inscribed objects at Keos suggests practical commercial use of writing. These other objects are the straight sided cup (F) (LM IB/LH II) with the cup-shaped phonogram, sign 103, and the jug (G) (LM IB/LH II) with the ligatured sign. The reversed shape of sign 103 is found elsewhere, notably on the Melos straight sided cup (I) and on tablets from different sites (ZA 21b, PH 7a, HT 93a.2, 93b.1). Its use on the Keos cup would be questionable as writing without these comparanda. The ligatured sign is extremely interesting. This particular ligature of sign 82 (used independently as an ideogram for "wine") and sign 53 is found only on ZA 15b.3 and ZA 6b.2. In both cases the ligatured sign is contrasted with different "wine" ideograms (on 15b.2 the plain wine ideogram in a separate total; in 6b.2 "wine" + sign 29). So the Keos jug is inscribed with the symbol for a specific type of commodity known at Zakro. The cup was of characteristic local fabric. The jug came from House A, "the largest and probably the most important single establishment in the town of the Late Bronze Age."21

The Melos tablet (B) is a much fuller fragment. It was found in the important central building that preceded the Mycenaean megaron.22 The tablet is ruled into neat sections, a technique of organization of which we are finding more examples.23 The tablet gives us confirmation of the continued use of LA into the latest stages of Minoan influence in the Cyclades.

Of the two Theran inscribed vases, the ewer (D) with four signs incised at the neck is most significant. We may dismiss Marinatos' fanciful transliteration (this cannot yet be done) and identification of the word with the goddess Ariadne. His explanation of the vase as a type for the transport of liquids, however, is sound.24 The shape of the ever is comparable to an LM IA-B example from Melos that has parallels at Keos.25 We have
already noted the presence of earlier Melian vases of this kind (late MM III) with incised signs in the palace pottery stores at Knossos. This gives us a nexus of LA used on pottery for commercial transactions between Crete and the important Minoanized island sites.

The Kythera inscribed weight (J) contributes to this pattern. An earlier trace of Minoan writing at Kythera is a yellow agate sealstone with hieroglyphic inscription regarded by Kenna as a "local copy of fine Middle Minoan work." The weight has sign 100 in a form paralleled on some nodules from HT (Wa 1171-1172). It comes from a sealed MM III deposit (epsilon) in an area of a dense Minoan colony. The weight suggests that the Minoans took at least simple use of writing with them.

General Conclusions

The Cycladic finds of Linear A point to an active use of the script, definitely for commercial reasons (D, G) and perhaps for administrative purposes (A, C, B). This use of writing comes at a time when Melos, Thera, and Keos were not only actively trading with Cretan centers and each other, but when both Cretan and island pottery was reaching the mainland. In LM IB/LH II there is a marked increase in Mycenaean trade with the islands, as trade with Crete continues. Caskey, noting pottery Minoan in form but Peloponnesian in fabric, even suggests the possibility of Minoan potters working at mainland sites. In such a period of intense cultural and commercial interchange, it is very possible that the mainland Greeks acquired the knowledge and need for writing through the Cycladic Islands.

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Notes


3 CORILA 1-3: Godart, Olivier, Recueil des inscriptions en lineaire A. Etudes Crétoises 21, 1-3 (1976-1979). Volume 4 will contain the inscriptions on other objects: vases, silver and gold pins, libation tables, etc.


5 Dow, Rapports du Xle Congres International des Sciences Historiques (Stockholm, 1960) 15.


8 Olivier, Pelon, Vandenhœck, BCH 103 (1979) 3-27, est. 26-27.


11 Hooker, Origin, 47. The view of Raison-Pope, Index du linéaire A, Inc. Graeca 41 (Rome, 1971) xii, note 23, is typical: "Ces textes trop brefs ne sont pas toujours d'un intérêt ni d'un classement paléographique indiscutables."

12 The one definite example of Linear A found on the mainland is 1 sign on the handle of a bronze vessel (Karo No. 576) from Shaft Grave IV at Mycenae: Grumach, Kadmos 1 (1962) 85; Vermeule, GBA, fig. 6t. The other oft-cited example is the masons' marks from Peristeria: Vermeule, GBA, fig. 60, pl. 16B.
The editors of GORILA stress the difficulty of recognizing LA in inscriptions of a single sign such as potters' marks, masons' marks, marks on weights and ingots, etc. GORILA 1, xi. Further difficulties are caused by: 1) The inattention of early excavators to such marks; 2) failure to establish precise contexts for such finds; 3) lack of full excavation reports, particularly for Thera.

Reference by letter to table. Number in parentheses indicates number of signs on inscribed object. Reference to publication in abbreviated format:

- **Kythera**: Coldstream, Huxley, Kythera Excavations and Studies (1972);
- **La Melos**: Renfrew, "A Linear A Tablet from Phylakopi in Melos, Kadmos 16 (1977) 111-119;
- **Melos**: Excavations at Phylakopi in Melos, BSA Suppl. 1, Paper No. 4 (1904);

This is the best example of an excavator's fancy working its way harmfully into the general literature. Heubeck, Schrift, 12, note 108, refers to "Schiefertafeln und Wetzsteine, die offensichtlich zur Ausrüstung der Schreiber gehört haben." To call two uninscribed slate slabs found in workrooms "writing tablets" is very misleading. The single comparandum is a stone tablet of doubtful authenticity turned in with a bronze engraver by a villager near Palaikastro, Unpublished Objects from Palaikastro, BSA Suppl. 1, 146, fig. 129.

- **BSA** 4 (1897-1898) 11-12.
- **Edgar, Evans, Melos**, 177-185, esp. 179 table of signs.
- **PM I**, 561, fig. 408.
- **For example, two sherds at Keos (IPM Keos, 112, fig. 3, 9 and 10) bear marks resembling LA sign 81b (Raison-Pope). This same mark appears on contemporary (MM III-LM I) pottery at Mallia (Chapouthier, Les Écritures Minoennes au Palais de Mallia (1930) 86, fig. 31), at Thera (Thera IV, 44, pl. 110) and on Melian pottery at Melos and Knossos (Melos, 179, sign 3E = PM I, fig. 408c). Such signs should be catalogued and treated separately. See the model study of Dühl on the graffiti from Tiryns: Kadmos 17 (1978) 115-150; Kadmos 18 (1979) 47-70.

- **Chapouthier**, 10-11, fig. 7, notes 2-3. See also Platon-Brice, 89-91, for the roundel from House A at Zakro that has impressions of textile material along its edge.

22Renfrew, 111-112.

23Brice in Renfrew, 114-116, cites TY 3. But see also HT 96a, PH 8a, PK 1, as well as tablets divided into two large sections by a single line, e.g., KH 7b; HT 101, 106, 108, 117, 130; ARKH 7; Za 6b.

24Thera IV, 44; cf. PM 1, 561. The ewer came from the upper story of quarter Δ 4, Thera IV, 14.

25Barber, "Phylakopi 1911 and the History of the Later Cycladic Bronze Age," BSA 69 (1974) 36-40. The vessel is No. 238 (MM 404). The Thera ewer has the same plastic eyes, flanged mouth, and stud at the top of the handle. It has, however, no visible necking ring and no studs at handle root.

26Kythera, 270, plate 88, 1.

27Kythera, 98-104, 67-73.

28For Kean, Theran, and Melian pottery on the mainland see Scholes, "The Cyclades in the Late Bronze Age," BSA 51 (1956) 38-39; Barber, 50-51. For Cretan trade with Thera, Melos and Naxos, and for an update of Cycladic finds on the mainland, see Davis, "Minoan and Dexithea: Crete and the Cyclades in the Later Bronze Age," Papers in Cycladic Prehistory, Univ. of Calif. Institute of Arch. Monograph XIV, 143-157, esp. 143-146 and 153-155. A further confirmation of active Minoan trade is the common system of weights used in Crete, Thera, Keos during this period, although one should avoid using Was' dubious fractional system as confirmation of the Minoan character of this system. Petruso, Papers, 135-142.


29Scholes, 39.

30Caskey, Hesperia 41 (1972) 396.

*This paper is dedicated to Catherine Comack Meenan on her retirement.
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