

ETRUSCAN ORIGINS: THE EPIGRAPHIC EVIDENCE

F.C. WOUDHUIZEN
BERGEN (N.H.)

Preface

At the outset of this study, which has brought the decipherment of the Etruscan language within our reach at last, I would like to express my sincere feelings of gratitude to my teacher prof. dr. J.G.P. Best, who truly assisted me in this undertaking and whose method I have in essence applied and hopefully done justice to here.

I am particularly thankful to Mrs. drs. N.M.W. de Vries who kindly permitted me to consult her elucidating study on the transitional period at Tarquinia.

Moreover, my thanks are due to the Hittitologist drs. J. de Roos and to Mr. W. Mank of the Rijksinstituut voor Oudheidkundig Bodemonderzoek for their assistance in the acquisition of some relevant material.

Finally I would like to thank Ina Rike for editing my English version.

Part I: The Origins of Etruscan Writing

The alphabetic writing system of the Etruscans, like that of the peoples of Asia Minor and Greece, derives from a Phoenician prototype. The question is, however: was it in fact brought to Etruria by Greeks?¹ In order to answer this we must examine the characteristics of the Etruscan script and determine their origins.

1. For the Greek origin of Etruscan writing, see Jefferey 1961, p. 238.

1. Iota (Figures 1 - 3)

Etruscan writing is characterized by the use of a straight iota. This particular form occurs as early as the VIIIth century B.C. in inscriptions from Pithecussae, Rhodes and various regions of Asia Minor (see Figure 1).

According to Greek literary tradition, Pithecussae and Cumae were founded by Greek colonists from Chalcis and Eretria, Euboea.² But writing, in contrast with its appearance in the earliest phase of the western colony, was not introduced in Euboea until two centuries later, c. 550 B.C.³

A VIIth century B.C. aryballos with a Greek formula, ascribed to Euboea on epigraphic grounds and supporting the Euboean origin of the script in the West, is characterized by inverted alphas.⁴ This striking feature can be traced to Asia Minor in the early VIIth century B.C. (c. 700 B.C.), most important, even to the Greek-speaking coastal region of Smyrna.⁵ In this light it is interesting to note that Greek colonists from this very region, notably Kumè, are also mentioned in the Greek literary tradition as playing a part in the foundation of the western colony.⁶

In Asia Minor the straight iota is accompanied by other forms of this letter, more closely resembling the Phoenician yod. In Phrygia a complementary sign for /i/ is used from the VIth century B.C. onwards.⁷ On clay tablets ascribed to Cappadocia and in Lydian inscriptions from Sardis we find not only many variant forms of the Phoenician yod, but also its exact parallel.⁸ In Sardis, moreover, we can follow the process of evolution from Phoenician yod to straight iota of the Lydian cursive script.⁹ Therefore it seems likely that the straight iota is a typical Asianic contribution.

2. Strabo V,4,9.

3. Jefferey 1961, p. 481.

4. "Euboea" no 22, Jefferey 1961, p. 81. For the numbering of the inscriptions from the various regions, see Table I.

5. See Appendix, note 8 and note 4.

6. Strabo V,4,4; cf. M.A. XIII, 1903, p. 292. See further Part II, 2 below.

7. Lejeune 1969, p. 41; direct derivation from Phoenicia is proposed for this sign only. But see note 8 below and Appendix.

8. For Cappadocia, see Appendix note 4; Lydia: and (no 30, 600 - 550 B.C.), (Gusmani 1975, p. 126), (C, I, 6; cf. Gusmani 1975, p. 95), ? (B,I,5).

9. Gusmani 1975, p. 50, 57: cursive form .

Early Greek script, on the other hand, is characterized by a crooked iota, presumed to be a derivation from the cursive Phoenician.¹⁰ If this opinion is correct, the consequence would be that we are concerned with two independent derivations from a Phoenician prototype: one by Greeks during the late VIIIth century B.C. (= type 2), and one by the peoples of Asia Minor, probably at some earlier time (= type 1).¹¹

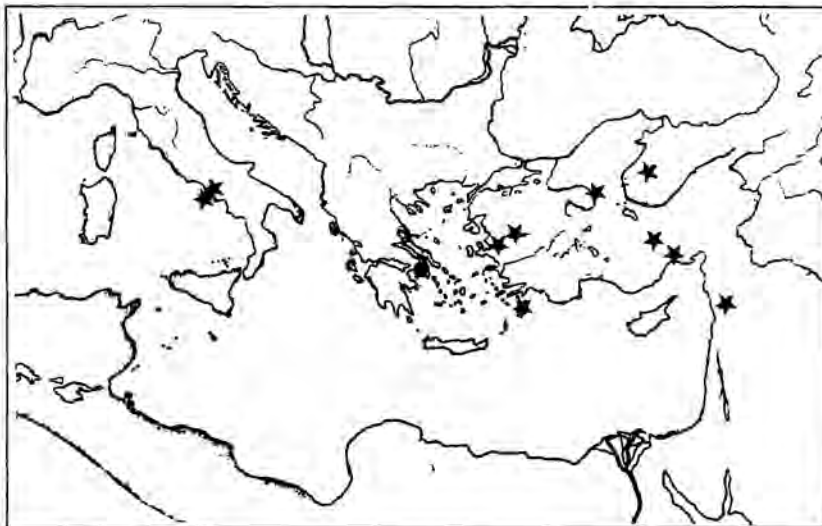


Fig. 1
The Distribution of Alphabetic Writing in the Mediterranean Region
c. 750 - 700 B.C.

- ★ straight iota
- crooked iota

10. Lejeune 1969, p. 40.

11. But note the absence of variant forms in Phoenicia itself and their abundance in Anatolia; cf. Part II, note 25 below.

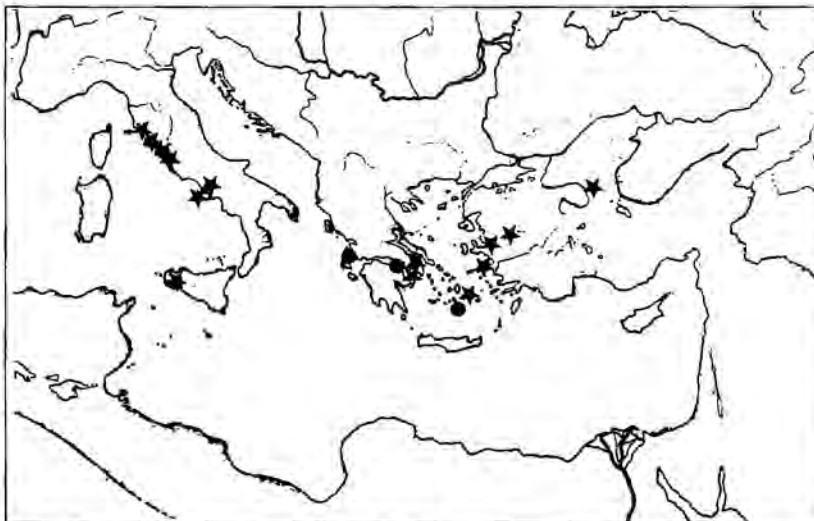


Fig. 2
The Distribution of Alphabetic Writing in the Mediterranean Region
c. 700 - 650 B.C.

★ straight iota
● crooked iota

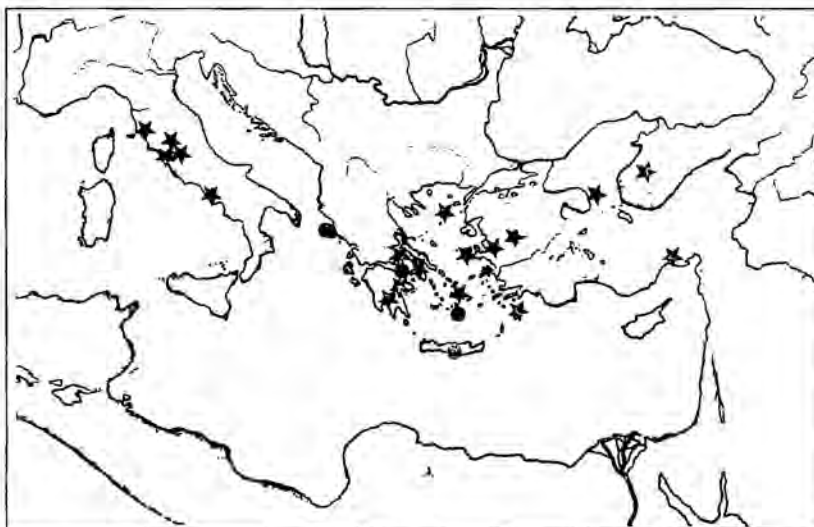


Fig. 3
The Distribution of Alphabetic Writing in the Mediterranean Region
c. 650 - 600 B.C.

★ straight iota
● crooked iota

2. Sibilants and Chi-phase (Figures 4 - 5)

A second characteristic of Etruscan script is the use of all four Phoenician sibilants.¹² This feature is paralleled in archaic Lydian inscriptions from the VIIth century B.C., in which sign no 18 (Λ) still has its original sibilant function.¹³

A consequence of the fact that all four signs are required for their original sibilant function, and secondary sign no 24 (+/x) for /s/ appears to be merely a simplification of sibilant sign no 15 (⊞) = /š/, is the reservation of secondary sign no 26 (Υ/√) for /chi/. This chi-phase, characteristic of the inscriptions from Pithecussae and Cumae, too, is still encountered in the earliest inscriptions from Rhodes, dated to the late VIIIth century B.C., in Phrygian inscriptions from the VIth century B.C. and earlier, probably in archaic Lydian inscriptions from the VIIth century B.C., and remains unaltered in Lycia (IVth century B.C.).¹⁴ Because this sign no 26 is merely an old variant form of the Phoenician kaph used for a closely related Asianic sound /h/, I am inclined to take this chi-phase as the original one.¹⁵

1	2	3	4	5	6	7	8	9	10
									
XIII-IX					900	865	842	825	800

Fig. 4

Development of Phoenician Kaph

From: B.L. Ullman, *How old is the Greek alphabet?*

A.J.A. 38, table I

12. See Pallottino 1974, p. 211.

13. Λ/∧ = s : C, I, 4 (650 - 600 B.C.) and C, I, 3 (600 - 550 B.C.); cf. ξ = s : no 30 (600 - 550 B.C.). See Gusmani 1975, p. 50 for the other sibilants. On the classification as "Carian" (all inscriptions numbered with a 'C' at the start), see Appendix. In Lycian inscriptions (IVth century B.C.) all four sibilant signs are used, too, but two of them for a non-sibilant value, see Kalinka 1901, p. 5. On the clay tablets ascribed to Cappadocia the sibilants no 18 and no 21 are both used, see Meriggi 1967, pp. 77 - 8 and Appendix note 4.

14. Rhodes no 1: X = /ksi/, consequently Ψ = /chi/, attested for the Rhodian colonies on Sicily, Gela and Akragas, founded c. 690 B.C., see Roberts 1887, p. 321. Phrygia nos 37, 40 (VIth century B.C.) and 7b (?): Ψ = /chi/, but no 72 (Vth century B.C.): Ψ = /psi/, see Young 1969, p. 154 and note 12. Lydia: Gusmani p. 50 Ψ and p. 90 Ψ, Ψ are both assigned the value /k/; but the value /h/ seems probable for the latter. On the value of Ψ in Lycian, see Houwink 1961, p. XVI, pp. 125 - 8.

15. Greek transcription of /h/ is K, see Houwink, loc. cit. Cf. Tarhu(nt) = τάρχων (Strabo V, 2, 2).

Typical for Greek-speaking people, on the other hand, is the loss of sibilants, regardless of the type of script they use. Those adapting the type 2 script do have a preference for sibilant no 18 to prevent confusion between the crooked iota (ξ, ζ) and sibilant no 21 (ξ, ζ, ς). This type of script is further characterized by the use of sibilant no 15 for /ksi/. As a consequence secondary sign no 24 can be used for /chi/ and no 26 remains for the Greek sound/psi/. All this in order to be better accommodated to the Greek tongue.

The process of interaction between the two types of script in the predominantly Greek-speaking Aegean region can be traced along the following pattern:

- type 1 + type 2: crooked iota replaced by straight iota
sibilant no 21 substituted for sibilant no 18
- type 2 + type 1: chi-phase replaced by psi-phase

A: type 1 + type 2				B: type 2 + type 1			
		iota sigma				chi	
Attica	I	ξ	ζ	Rhodes	I	Ψ	
	II		ζ		II	$\times$	
Argos	I		M	Syracuse and colonies ¹	I	Ψ	
	II		ζ, ς		II	$\times$	
Korkyra	I	ζ	M	Laconia	I	Ψ	
	II		ζ		II	$\times$	
Melos	I	ζ	M	Eastern Argolis ¹	I	Ψ	
	II		M		II	$\times$	
	III		ζ	Phrygia ²	I	Ψ	
Thera	I	ζ, ς	M		II	$\times$	
	II		M				

Fig. 5

Interaction between the two types of script in the Aegean Region

From: Roberts, 1887

¹ Jefferey 1961, Table of Letters

² See note 14

However, this process does not extend to "outward regions" (from the Greek point of view) such as Lydia and Lycia in the East (where the scripts alter according to their own laws¹⁶), and Etruria and Pithecussae/Cumae in the West.

3. Complementary Signs

A third characteristic of Etruscan is the use of two complementary signs that are altogether absent in both Phoenician and Greek script:

§ or 8 = /f/
 ↑ = /t/

But these signs do have parallels in Asia Minor, where both are attested in Lydia (VIth and VIIth century B.C. respectively), Phrygia (VIIth? and VIIIth century B.C. respectively), and Cappadocia.¹⁷

4. Sign Variants

The archaic form of the f-sign, found in North Etruria, is paralleled in an archaic Lydian inscription, as has already been shown.

The archaic form of sibilant no 18 (∨), used in the alphabet of Caere (no 19: 650 - 600 B.C.), South Etruria, can be compared to the Pamphylian sibilant no 18 (∨), which is paralleled in an inscription from Tarsus (no 1641 (∨): IXth century B.C.).¹⁸ In Tarsus (nos 1663-4) there appears another sign which is identical to the form of sibilant no 15 (⊕), characteristic of the archaic alphabets from South Etruria.

16. E.g. Lydia:

sign no 18 ∨ = /s/ (VIIth century B.C.) + = /ā/ (IVth century B.C.)

sign no 26 ∨ = /h/ (VIIth century B.C.) + = /ē/ (VIth century B.C.). But it does extend to Phrygia, see note 14 above.

17. § : Etruria, stèle Vetulonia (650 - 600 B.C.), Tav. XII - XIII. Lydia no 30 (600 - 550 B.C.). Keyserly (Cappadocia), see H.Th. Bossert, *Orientalia* 28, 1959, p. 238, Abb. 4.

8 : Etruria, see Pallottino 1974, p. 221. Lydia, see Heubeck 1978, p. 62, Tab. 3. Boğazköy no 5: partly written across preceding straight iota.

§ : Pazarli, Phrygia no 26 (VIIth century B.C.).

↑ : Etruria, see C.A.H., Vol. IV, p. 399 and Appendix note 12 below. Lydia, see Lejeune 1969, pp. 42 - 3 (650 - 600 B.C.), Phrygia, *ibid.* (VIIIth century B.C.), Cappadocia, see Appendix note 3.

18. See Roberts 1887, pp. 315 - 6. Cf. Phoenician 𐤍 .

Conclusions (Figure 6)

The evidence, then, seems to indicate:

1. that Greek interference with the introduction of the alphabet in Etruria is ruled out, because:
 - either they take over a different type of script
 - or, using the Asianic type of script, they none the less lack some of the sibilants and the Anatolian complementary signs.
2. that writing was introduced in Etruria directly from Asia Minor, to be more exact: in Northern Etruria from Lydia and in Southern Etruria from Cilicia (see Figure 6).

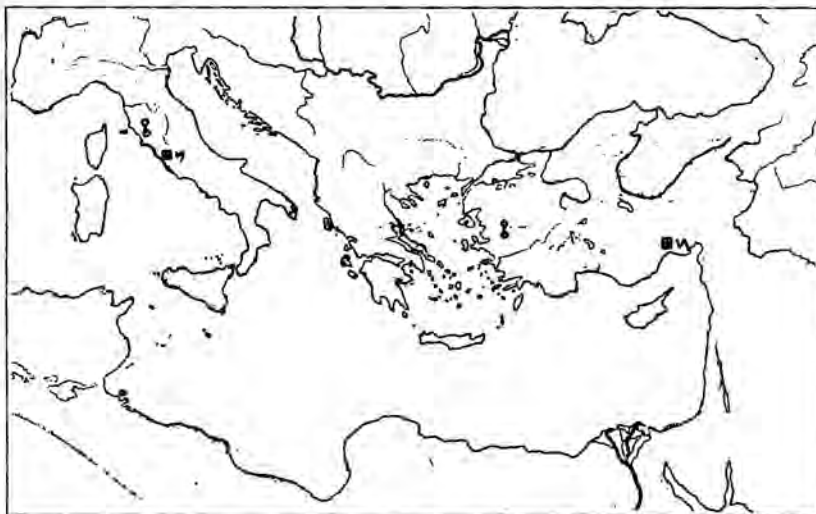


Fig. 6

Archaic Etruscan Signs and their Anatolian Counterparts

Part II: Lydian Traders and Colonists in Al Mina and the Western Colony c. 850 - 696 B.C.

Now that we have arrived at the conclusion that writing was introduced in Etruria directly from Asia Minor (Lydia and Cilicia), the following question immediately arises: are there traces of Anatolian, especially Luwian, influence in the western colony? In order to answer this we must turn first of all to Al Mina, because this emporion in North Syria appears to be intimately connected with western trade during the Archaic period.¹⁹

19. See Ridgway 1973, pp. 8 - 9.

1. Al Mina (Figure 7)

The earliest pottery in Al Mina, belonging to the foundation layer (c. 850 B.C.), is decorated with concentric semi-circles.²⁰ This motif, however, is a common feature during the protogeometric period.²¹ More helpful to determine the origin of the earliest traders appears to be a "convincingly early type of meander".²²



Fig. 7a
Early type of Meander
Sardis



Fig. 7b
Early type of Meander
Smyrna

20. Robertson 1940, p. 3; fig. 1, a - k.

21. Coldstream 1968, p. 378: between c. 900 - 750 B.C. For Sardis, see BASOR no 162, fig. 12 and no 186, fig. 12 - 13: VIIIth century B.C., possibly IXth.

22. Robertson 1940, p. 4; fig. 1, m (only the sherd on the left).

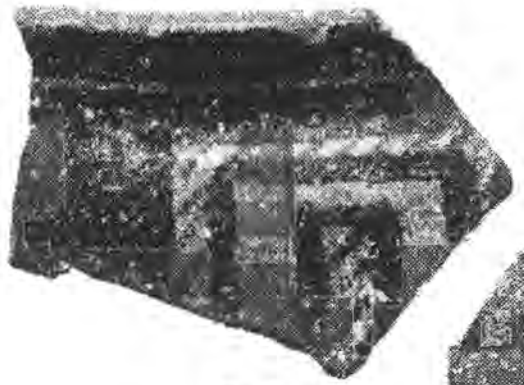


Fig. 7c
Early type of Meander
Al Mina

This motif is paralleled on a fragment from Sardis and, in combination with a "Rhodian tree", on a fragment from Smyrna — the latter securely dated to the first half of the VIIIth century B.C., and according to Coldstream the first appearance of this type of decoration —.²³

Because Smyrna lies at the mouth of the river Hermos which connects the Lydian capital with the Aegean, it seems reasonable to conclude that the presence of Lydian traders at Al Mina, possibly in combination with their Greek colleagues from Smyrna, is indicated by the archaeological evidence.²⁴ This period, then, which is characterized by Lydian presence — and further by some Rhodian and Corinthian 'visitors' during the closing decades²⁵ —, ends abruptly in c. 696, i.e.: at the time of the campaign of Sennacherib and the subsequent destruction of Tarsus.²⁶ At the same time as the Cimmerian invasion into Asia Minor and the subsequent

23. Sardis: BASOR no 162, fig. 5; cf. London Illustrated News 1961, p. 536, fig. 6: destruction layer c. 700 B.C., i.e.: terminus ante quem. Smyrna: B.S.A. 53/4, 1958 - 9, p. 138; Pl. 5c, and Coldstream 1968, p. 284.

24. For Lydian influence on Smyrna, see below.

25. Ridgway 1973, p. 10. At this very time writing was introduced in Rhodes and the mainland of Greece, showing clear Anatolian features in the position of the alpha and sigma (see Appendix).

26. See Goldman 1963, p. 111.

destruction of the Phrygian capital Gordion and, slightly afterwards, the Lydian capital Sardis.²⁷

2. The Western Colony (Figures 8 - 10)

In the earliest layer of Pithecussae fragments have been found of a large Late Geometric krater decorated with the scene of a shipwreck in truly naturalistic style: a variety of fish swimming around the sunken ship and the corpses of the drowned crew, the biggest of them just starting to eat one of the dead; the men are depicted with plaited hair and beards.²⁸ Apparently, figurative decoration, characteristic of the Orientalizing period, was introduced by the first colonists during the early VIIIth century B.C. This mode of decoration seems to have emerged in Greece only at a rather advanced stage of the VIIIth century B.C., but is already attested for Anatolia during the IXth century B.C.²⁹

In Cumae a tholos tomb has been found, known as Tomba Artiaco. On the basis of the objects stored in this tomb it is considered comparable with the Tomba del Duce in Vetulonia dated to c. 675 - 650 B.C.³⁰ However, because the Tomba Artiaco is securely dated to the VIIIth century B.C. — i.e. before the emergence of Etruscan culture³¹ — it should be ascribed to a proto-Etruscan high official.³²

27. See BASOR no 162, p. 22: c. 696 B.C. and c. 670 B.C., possibly earlier?, respectively.

28. S. Brunnsäker, *Opuscula Romana* IV, fig. 1 - 7; pp. 171 - 2. Cf. Ridgway 1973, p. 23 for the date of the foundation.

29. Coldstream 1968, p. 379. The early type of meander from the first half of the VIIIth century B.C. (see above), is found in Attica only in debased form and consequently has to be dated slightly afterwards, see Coldstream Pl. 1, h, who dates to c. 900 - 875 B.C. The earliest representations of animals belong to this period (ibid. Pl. 1, k) and are closely resembling those from Phrygia (slanting legs with a triangular top representing muscles) dated to c. 775 - 725 B.C., see Akurgal, *Phrygische Kunst*, 1955, Pl. 1 - 7. For ships on Attic L.G. vases, see G.S. Kirk, *B.S.A.* 44, 1949, p. 93ff.: most of these vases are dated to the late VIIIth century B.C. and one of those ascribed to an earlier date is redated by Young, *Hesperia* Suppl. II, p. 202, note 2 to the end of this century; there is little variation in subject. On the other hand, a hunting scene from Sardis, comparable in style as well as in artistic originality with the Pithecussean shipwreck, is dated to the early VIIth century B.C., see BASOR no 162, fig. 17: possibly this, too, is a terminus ante quem.

30. *M.A.* XIII, 1903, p. 205ff.; *M.A.* XXII, 1913, pp. 422 - 6, 429 - 30.

31. H. Hencken, *Tarquinius, Villanovans and Early Etruscans* Vol. I - II, Cambridge/Massachusetts, 1968, pp. 578, 631, 640, 645: period III from c. 700 B.C. onwards, because at this time (inter alia) the first inscriptions in Etruscan appeared.

32. For the dating, see I. Strøm, *Problems Concerning the Origin and*

In a retrograde inscription from Pithecussae (Tav. IVa), dated to the second half of the VIIIth century B.C., the sibilants no 18 and no 21 are both used in the same word. Therefore it seems likely that we are concerned with a non-Greek language here; yet this feature is present in Anatolian languages.³³



Fig. 8
Pithecussae Tav. IVa

The archaeological and epigraphic evidence, then, seems to indicate the presence of non-Greek colonists among the founders of the western colony, most probably of Anatolian origin.

Some further data might be deduced from the remaining epigraphic material dating to this early period.

Early Development of the Etruscan Orientalizing Style, Odense, 1971, p. 112. Cf. Buchner 1979, p. 130: 730 - 725 B.C. Strøm, *ibid.*, p. 170 dates two graves in Etruria to the same period. One of them, however, is shown by N.M.W. de Vries, *Graven te Tarquinia uit de overgangperiode van de Villanova naar de Etruskische Kultuur* (unpublished), p. 36ff., i.e. the Warrior Tomb, to be a Villanovan burial.

33. See Part I, 2 and note 13 above.

Two beginnings of an alphabet are added to a non-Greek inscription, in retrograde direction, from Cumae (no 2: 700 - 675 B.C.). In date these abecedaria can only be matched by a beginning of an alphabet from Smyrna (no 53), which is characterized by an inverted alpha and therefore to be dated to c. 700 B.C. on the basis of the analogies. Moreover, the abecedaria are a common feature in Etruria too during the VIIth century B.C. (nos 18, 19, 20, 21).

A disc from Cumae (no 8: 650 - 600 B.C.) is inscribed with a religious text in Greek, starting from the outside to proceed in diminishing circles to the centre. This writing style seems to be present in a Lydian inscription from Smyrna (no 23: late VIIth century B.C.), although in boustrophedon variant. Spiral inscriptions containing religious texts, however, do appear in Etruria, especially on the discus from Magliano, and have been identified as typically Luwian.³⁴



Fig. 9
Spiral inscription from Cumae

34. Wainwright 1959, p. 211; Best 1981, pp. 49 - 56.



Fig. 10
Spiral inscription from Smyrna

On a fragment from Pithecussae (Tav. III: 725 - 675 B.C.), decorated with a sphinx "en face", a Greek formula is inscribed in retrograde direction to denote the maker: "A (P.N.) $\mu\epsilon\pi\omicron\iota\eta\varsigma$ ". The same formula can be found on a fragment from Smyrna (painted no 1: 650 - 625 B.C.), broken off after the first letter of the verb, but to be reconstructed on the basis of the analogies.³⁵ It also appears, in retrograde direction, on the well-preserved "Euboean" aryballos ("Euboea" no 22: c. 700 B.C.) – ascribable to Smyrna on the basis of the inverted alphas³⁶ – supplemented by what seems to be the name of the owner:

07EJ11SA7A33E107EY109Y7

This particular form of the archaic Greek formula is strikingly paralleled in a Lydian inscription (no 30: 600 - 550 B.C.)³⁷:

TITIXIM: YM5 . T13A 95 : 8AB17
YA7T13 YATA

Moreover, similar formulae are a very common feature in Etruria.³⁸

Considering the fact that Lydian inscriptions appeared in Smyrna with the introduction of writing during the VIIIth cen-

35. Jefferey 1964, op. cit.

36. See Part I, 1 above.

37. For a discussion of this text, see Additional Note below.

38. E.g.: mi titasi cper menaxe (T.L.E. 282).

tury B.C., it seems reasonable to assume that the Greeks derived their archaic formula from Lydian prototypes.³⁹

The epigraphic evidence, then, seems to indicate that there were Greeks from Smyrna among the first settlers in the western colony, who were strongly affected by Lydian influences. Therefore it might be inferred with all probability that their proto-Etruscan counterparts of Anatolian origin are to be identified with Lydians. In the light of Lydian presence at Pithecussae during the VIIIth century B.C. the sudden abandonment of the site early in the VIIth century B.C. may be due to the sack of Sardis.⁴⁰

3. General Remarks (Figure 11)

Combining the conclusions drawn for each place independently it is interesting to see that the same groups, viz. Lydians and East Greeks from Smyrna, were involved in trade and colonisation in Al Mina in the East as well as in Pithecussae and Cumae in the West. Trade with the West, moreover, seems to have been regular from about the time of the foundation of Al Mina onwards (as might be indicated by the distribution of Middle Geometric pottery along the route, see Figure 11)⁴¹ and actually culminated in the foundation of Pithecussae (early VIIIth century B.C.) and Cumae (late VIIIth century B.C.). The motive for this "long-distance connection" appears to have been the demand for essential minerals, especially iron, from the rich Italian resources of North Etruria, particularly in view of the fact that Pithecussae was mainly concerned with metalworking during its early phase.⁴² In this light the connection between Al Mina and the western colony was not merely coincidental, but also functional, since both were an essential component of the iron industry spanning the area from the Italian mines to the Near Eastern market. That it was Lydians who organized and controlled this indus-

39. See Appendix note 10. In the Greek pottery industry the archaic formula is replaced by a modern one without "με" already during the early VIIth century B.C. (Ithaka no 2: 675 - 650 B.C., note: type 2 script and Dorian dialect). This seems to be in accordance with the possibility of derivation.

40. Expedition Vol. 14, no 2, 1972, p. 36.

41. R. Ross Holloway, *Italy and the Aegean 3000 - 700 B.C.*, 1981, pp. 136 - 7; cf. Ridgway 1973, p. 26. For the Aëtos 666, see B.S.A. 53/4, 1958-9, p. 139, for the concentrations of "Rhodian" Bird Kotylai, see Coldstream 1968, p. 298ff. and BASOR no 162, p. 23, note 29.

42. Pallottino 1974, p. 86; Expedition, op. cit., pp. 36 - 7.

try during the early period until the sack of their capital by the Cimmerian invaders seems to be strongly suggested by the given material.

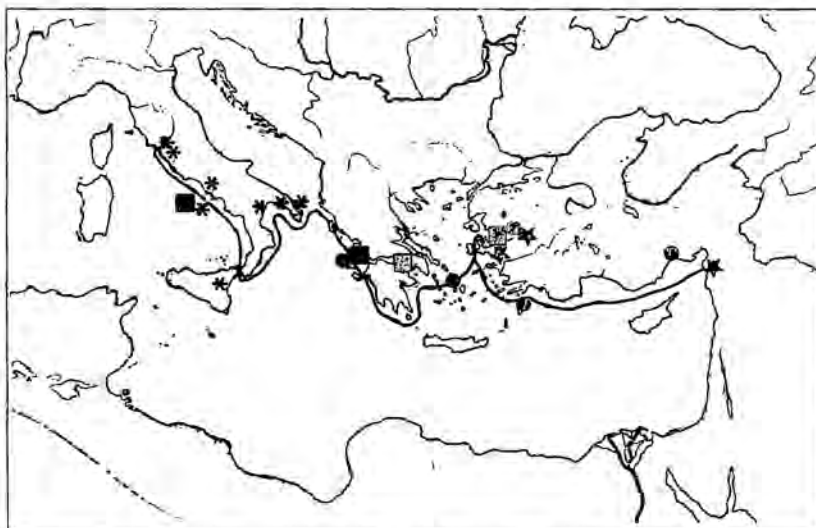


Fig. 11
The Lydian Trade Route c.850 - 696 B.C.

- * M.G. Pottery finds in Italy
- ✱ early type of meander
- Aëtos 666
- concentrations of Bird Kotylai

Final Conclusions

1. Because the Lydians appear to be the organizers and controllers of the iron industry in Italy during the early period, it seems likely that the introduction of the Lydian script in North Etruria at the end of this period indicates a colonisation of the mining area by Lydians as a result of the destruction of Sardis.
2. In the same way it might be inferred that the introduction of the Cilician script in South Etruria indicates a colonisation of this region by Cilicians as a result of the destruction of Tarsus.

Literary Tradition

The views expressed here are indeed confirmed by literary tradition. According to Herodotos I, 94 part of the Lydian popula-

tion was forced by famine to leave their homeland. Under the leadership of Tursēnos, son of Atys, king of Lydia, they built ships at Smyrna and set sail to the territory of the Umbrians in Italy for colonization. In the version of Strabo V, 2,2 Tyrrhenos was assisted in this undertaking by Tarco, which is the Greek rendering of the Cilician God Tarḡu(nt).

According to Strabo VI, 2,2 the Tyrrhenians already possessed naval supremacy in the West at the time of the foundation of the first Greek colony Naxos in Sicily, which is securely dated to the late VIIIth century B.C.⁴³ This naval supremacy was indeed necessary for the Lydians to protect their trade route along which the essential minerals were transported from Italy to the Levant. Moreover, in stating that Cumae was "the oldest of all the Sicilian and Italiotic cities", Strabo V, 4,4 in fact does not regard this city as a Greek foundation, notwithstanding the participation of the Greek population groups mentioned by him. The Anatolian character of the colonists is stressed by Athenaeus' statement that the Cumaeans "continually wore gold ornaments and adopted gaily-coloured cloths and rode into the country *with their wives* in two-horse chariots".⁴⁴

43. Pallottino 1974, pp. 74 - 5.

44. Loeb Vol. 5, p. 385. For the position of women in Anatolia, see Herodotos I, 173 (Lycia) and I, 93 (Lydia).

Appendix: The Introduction of the Alphabet in Asia Minor¹ (Figures 12 - 14)

The script written on three clay tablets of uncertain date and origin, but ascribed to Cappadocia, appears to be the earliest form of alphabetic writing in Asia Minor.² The priority of this type of script seems to be indicated by:

1. the fact that alphabetic signs are used in combination with signs from at least two different writing systems, both being

	Phoenicia	90° left	90° right	value
no 1	𐤀	𐤁	𐤂	/a/
no 5	𐤅*	𐤆	𐤇	/e/
no 10	𐤈		𐤉	/i/
no 15	𐤊	𐤋		/s/
no 21	𐤌	𐤍*		/š/

*
𐤅 and 𐤆
𐤍 and 𐤎

Fig. 12
Rotation of alphabet letters

1. For the Greek origin of the Phrygian script, see Lejeune 1969, p. 40, of the Lydian script, see Heubeck 1978, p. 63. For the possibility of an independent derivation by Asia Minor, see Gusmani 1975, p. 59.

2. J. Friedrich, *Kadmos* 3, 1965, pp. 156 - 169 and photographs. See also F.M.Th. Böhl, *Archiv für Orientforschung* 8, 1932/3, pp. 173 - 4 and photographs, and Meriggi 1967, pp. 100 - 2, whose numbering is followed here.

a Bronze Age heritage, viz. Luwian Hiërogllyphic and Cypriote Syllabary³

2. the rotation of letters of the alphabet, occurring in the same position as their Phoenician counterparts as well as turned 90 degrees either to the left or to the right.⁴

sign	syll. value	alph. value
	/mi/	/m/
	/ti/	/t/
	/tu/	/t/?
	/ru/	/l/
	/da/	/d/

Fig. 13

Alphabetization of syllabic signs

3. Luwian Hiërogllyphic signs:

no 24, cf. Luw. Hiër. Sign for /tá/ or /tà/, see Meriggi 1967, pp. 65 - 6, Abb. 1

Gr. B2, 11, cf. Luw. Hiër. sign for land, Meriggi 1967, p. 71.

Gr. A5, 13, Luw. Hiër.?, Meriggi 1967, pp. 79 - 80.

Cypriote Syllabary signs:

(Gr. A7, 8), (Gr. B2, 13), (Gr. A1, 5) = /tu/, Masson 1961, fig. 3 , fig. 2, 4 . Cf. Meriggi 1967, p. 77.

(Gr. B11, 16-7), (Gr. B4, 14-5) = /ta/, Masson 1961, fig. 1 - 6 .

(Gr. A8, 1) = /ti/, Masson 1961, fig. 1 - 6.

no 25, (P. 34, A2, m), (P. 34, A2, a) = /ro/, Masson 1961, fig. 1-4 , fig. 5 - 6 .

Linear B Sign:

L33, A1m; A3e; Gr. A3, 9; B 11, 12 = /ru/, Documents 1973, p. 23, fig. 4.

4. (a): P. 33, A2m; B4e; (A1e); (A3e).

(u): P. 33, B2m; (B8m); P. 34, A3e; Gr. A10, 8; B2, 16.

(a): P. 33, A3a; A6e; (A7e); B1a; B2e; B6m; B6e; B8e; P. 34, A2a; A6m; B4a; B5a. Gr., see Meriggi 1967, p. 74, no 1 and 1a.

, : see Meriggi 1967, p. 74 no 5, p. 82 no 3 and 3a.

(u): (P. 34, B3a).

(u): Gr. A9, 8; A9, 17; A4, 8?; (P. 34, A2e).

: Gr. A5, 4; A7, 9; B1, 9; B11, 6. : P. 34, B4e; Gr. A1, 16. ? : P. 33, A1m.

: P. 33, B4m.

: P. 33, A6e; A3a?.

: P. 33, B5a; B5e; B7a; Gr. A6, 1, B2, 1; B8, 5.

(u): P. 33, B7e; P. 34, A1e; P. 33, B2a?; (A2m); (B3m); (B4a); (B4m); (B5a).

, : absent.

such as Persepolis (no 23, on identical clay tablets as those from "Cappadocia"), Hama (before 720 B.C.) and possibly Cilicia or Cappadocia (no 22, in combination with a Luwian Hieroglyphic sign).

In Lydian Sardis, on the other hand, the "Cappadocian" phase was prominent in the earliest inscriptions, but was gradually replaced by the new form, most probably as early as the VIIIth century B.C.¹⁰ The difference may be due to the fact that Sardis was intimately connected with the Levant by regular trade over sea from c. 850 B.C. onwards, while Phrygia became actively engaged with the Near East during the second half of the VIIIth century B.C.¹¹

If the evidence, then, seems to indicate a progressive penetration by the Phoenician alphabet into the syllabic writing systems of Asia Minor, this could ultimately provide us with an explanation for remnants of the older "Cappadocian" phase in the earliest Italian inscriptions and the syllabic handling of the alphabet by the Etruscans.¹²

10. Characteristics of the developed phase in Lydia are the four barred epsilon (Ξ : Lyd. no 52 (650 - 600 B.C.), cf. Phryg. nos 24, 44, Bogazköy no 7) and the "Phrygian-Cappadocian" or many-stroked sigma (Σ : Lyd. no 58; A, II, 19, cf. Phryg. no 24 (Σ), Bog. Tav. 31, 13 (Σ) or Σ , Σ : Lyd. nos 30, 31 (600 - 550 B.C.), cf. Smyrna no 2 (late VIIIth century B.C.), painted no 1, Phryg. nos 25, 30, 32 (VIIIth century B.C.)). See Gusmani 1975, p. 111 for the "Carian" character of the earliest inscriptions. Smyrna no 2 is ascribed to Lydian influence, see discussion by Jefferey 1964, loc. cit. Moreover, inscriptions from the first destruction level of Sardis, early in the VIIth century B.C. (see Part II, note 27 above), probably belong to the VIIIth century B.C. (*terminus ante quem*).

11. See Young 1969, p. 256.

12. $\Delta\Delta$: Capua (Cristofani 1979, p. 384).

$\uparrow$: Faliscan (ibid., p. 386)

$\angle$: Pithecussae Tav. IV c (750 - 700 B.C.)

∇ : Tarquinia Pl. 173 (c. 700 B.C.)

∇ : Tarquinia Pl. 173 (c. 700 B.C.)

For the syllabic handling of the alphabet, see A.J. Pfiffig, *Die Etruskische Sprache*, Graz 1969, pp. 23 - 7.



Fig. 14
Tarquinia Pl. 173

Additional Note: The Lydian Formula no 30

The following text was written in boustrophedon on a fragment of a terracotta boat, found in the Sardinian necropole and dated to 600 - 550 B.C.:

¹Titisin ēmi ti-sarḍi fabil ²Ataγ Kituαγ

Translation: "Titisin has made me in Sardis, of Atys, son of Kityes."

Comments:

1 Titisin = Lydian personal name, nominative. Cf. Titis (f) (Zgusta 1964, p. 516) and Etruscan Titasi (T.L.E. 282).

2 ēmi = accusative of the personal pronoun, 1st pers. sing. Cf. Lycian ēmi, accusative of the possessive pronoun, 1st pers. sing. (Houwink 1961, p. 67), which

is related to Luwian Hieroglyphic *amu* (*ibid.*, p. 64); this also appears in Lydian (Meriggi 1935, pp. 71-2: *nak amu*). And Etruscan *mi* and *eme/amu* respectively (T.L.E. 366: *nac eme* (Tomba del Duce, Vetulonia: early VIIth century B.C.), T.L.E. 373 *ka amu kauias* (Populonia)).

3 *ti-* Cf. Lycian *-te*, particle indicating position, also occurring in combination with the locative (Houwink 1961, p. 78: *te-lahadi*).

4 *sardi* = root *sar(d)-*, also present in *zarêtas* (Lyd. nos 3,4 and 50,7). This appears to be the archaic form of *sfar(d)-* "Sardis" (L.W., s.v. *sfar(d)-*), for it can be recognized in the Phoenician rendering *Šrdn* on the stèle from Nora, Sardinia, dated to c. 842 B.C. (W.F. Albright, BASOR no 83, 1941, p. 19, line 3, in combination with *Trš*, line 1). Moreover, this name already occurs in Egyptian documents from the Late Bronze Age, e.g. amongst the so-called "sea-peoples" in the records of Ramesses III (C.A.H.³, Vol II, part 2, p. 368, cf. p. 742: again in combination with the *Trš*, the Phoenician rendering of Tarsus or Tursènoi/Tarsènoi (Wainwright 1959, p. 197f.), which appears in the Etruscan *Linteus* in the form of *e&rscl;se!* (T.L.E. 1)).*
+ *-di* = locative, also *-idi* (*f-ê&tamiidi*, no 24,6). Cf. Lycian *-adi/-edi* and Luwian *-ati* (Houwink 1961, p. 57-8) and the Etruscan locative ending *-(i)/-š(i)* (Pallottino 1974, p. 215).

The additional "in Sardis" is not superfluous, for the text is written on a boat which is supposed to transport the soul of its owner to the hereafter, just like the bronze boats which were found in the graves of northern Etruria (Tomba del Duce, Vetulonia) and Sardinia (Pallottino 1974, p. 85).

5 *fabil* = Indo-European root **dhabh-* "passend fügen, fügen", cf. Lat. *faber, fabrica* (J. Pokorny, Ind. Germ. Et. Wörterbuch I, p. 233).
+ *-il* = verbal ending 3rd pers. sing. of the past tense (Meriggi 1935, p. 70).

6 *Ataš* = Lydian personal name (Zgusta 1964, p. 105 ff.)
+ *š* = genitive ending, also present in the genitive suffix *-li-* (*manelis*, no 4,1). Cf. Hittite genitive ending *-el* (J. Friedrich, Heth. El. buch, 1960, p.

62ff) and Etruscan -al (Atial, T.L.E. 266, 752) and -l- (Larjalš, T.L.E. 135) respectively (see also P. Meriggi, Osservazione sull' Etrusco, S.E. no 11, pp. 129 - 30).

- 7 Kitua^Y = patronimicum, cf. Lydian personal name Kidys (Zgusta 1964, p. 228) and Thracian Kotys + -^Y = genitive ending.

- * The linguistic relations between the Anatolian languages of the Luwian family and Etruscan will be the subject of a forthcoming publication on the decipherment of Etruscan. In advance of this it is noteworthy to mention that at least two distinct dialects can be discerned in the earliest Etruscan inscriptions, melting together as early as the Archaic period: one in the North which is closely related to Lydian (see above) and one in the South more linked up with Lycian, especially Lycian B (e.g. genitive suffix -esi in Kauiesi (T.L.E. 153 (Tarquinia)), cf. Lycian B -asi/-esi and Luwian -ašši- (Houwink 1961, pp. 55-6).

Notes Table I

Based on Jefferey 1961

1. See Goldman 1963.
2. See K. Bittel, Boğazköy I, Berlin 1935 (Pl.) and V, 1975 (no).
3. See Young 1969, p. 256.
4. See Gusmani 1975 and L.W.
5. See Jefferey 1964.
6. See H. Hencken, Tarquinia and Etruscan Origins, 1968.
7. Cristofani 1979, p. 378.
8. For the dating, see Appendix note 10 above.
9. See E. Peruzzi, Origini di Roma II, Le Lettere, Bologna 1973.
10. See M.A. XIII, 1903, p. 218, and for the dating Part II, note 32 above.
11. See M. Guarducci, Epigrafia Greca I, Roma 1967, p. 265.
12. According to G. Klaffenbach, Griechische Epigraphik, 1966, p. 36 the only VIIIth century B.C. inscriptions from Greece are found in Rhodes, Attica and Cumae.
13. The inverted alphas fall in the early VIIIth century B.C., according to Lyd. B. I, 5, but can be dated more accurately on the basis of Tarquinia Pl. 173 to c. 700 B.C.
14. Jefferey 1961, p. 377.
15. For the dating of boustrophedon, see Best 1981, p. 59, 61.
16. Guarducci, op. cit., p. 229.
17. See A. Blakeway, Journal of Roman Studies, 1935, p. 138ff.
18. On the basis of the analogies, see Part II and note 39 above.
19. Cf. Jefferey 1961, p. 120ff. Nos 2 and 3 come from Cumae and Syracuse respectively. No 1 disputed date, see Young 1969, p. 152, note 4.

LIST OF ABBREVIATIONS

A.J.A.	American Journal of Archaeology.
BASOR	Bulletin of the American School of Oriental Research.
Best 1981	J.G.P. Best, <i>Talanta</i> , Supplementum Epigraphicum Mediterraneum, Vol. XIII, 1981.
B.S.A.	British School at Athens.
Buchner 1979	G. Buchner, Early Orientalizing, in: <i>Italy before the Romans</i> , ed. by D. and R. Ridgway, 1979.
C.A.H.	Cambridge Ancient History.
Coldstream 1968	J.N. Coldstream, <i>Greek Geometric Pottery</i> , London 1968.
Cristofani 1979	M. Cristofani, Recent Advances in Etruscan Epigraphy and Language, in: <i>Italy before the Romans</i> (see above).
Goldman 1963	H. Goldman, <i>Excavations at Gözlü Kule, Tarsus</i> , Vol. III, 1963.
Gusmani 1975	R. Gusmani, <i>Neue Epichorische Schriftzeugnisse aus Sardis 1958 - 1971</i> , Cambridge - Massachusetts 1975.
Heubeck 1978	A. Heubeck, Überlegungen zur Entstehung der Lydischen Schrift, <i>Kadmos</i> 17, 1978, pp. 55 - 66.
Houwink 1961	Ph.H.J. Houwink ten Cate, <i>The Luwian Population Groups of Lycia and Cilicia Aspera during the Hellenistic Period</i> , Leiden 1961.
Jefferey 1961	L.H. Jefferey, <i>The Local Scripts of Archaic Greece</i> , Oxford 1961.
Jefferey 1964	L.H. Jefferey, Old Smyrna, Inscriptions on sherds and small objects, <i>B.S.A.</i> 59, 1964, pp. 39 - 49.
Kalinka 1901	E. Kalinka, <i>Tituli Asiae Minoris</i> , Vol. I, 1, 1901.
Lejeune 1969	M. Lejeune, Discussions sur l'Alphabet Phrygien, <i>Studi Miceni ed Egeo Anatolici</i> , fasc. 10, 1969, pp. 19 - 47.
L.W.	Lydisches Wörterbuch, R. Gusmani, Heidelberg 1964.
M.A.	Monumenti Antichi.
Masson 1961	O. Masson, <i>Les Inscriptions Chypriotes Syllabiques</i> , Paris 1961.
Meriggi 1935	P. Meriggi, Die erste Person Singularis im Lydischen, <i>Revue Hittite et Asianique</i> 19, 1935, pp. 69 - 116.
Meriggi 1967	P. Meriggi, Zur Neuen 'Para-Karischen' Schrift, <i>Kadmos</i> 5, 1976, pp. 61 - 102.
Pallottino 1974	M. Pallottino, <i>The Etruscans</i> , London 1974.
Ridgway 1973	D. Ridgway, <i>The First Western Greeks</i> , in: <i>Archaeology into History</i> series, ed. by C. and S. Hawkes, Vol. I, <i>Greeks, Celts and Romans</i> , London 1973.

- Roberts 1887 E.S. Roberts, *An Introduction to Greek Epigraphy*, Cambridge 1887.
- Robertson 1940 M. Robertson, *The Excavations at Al Mina, Sueida IV, The Early Greek Vases*, *Journal of Hellenic Studies* LX, 1940, pp. 2 - 21.
- T.L.E. *Testimonia Linguae Etruscae*.
- Wainwright 1959 G.A. Wainwright, *The Teresh, the Etruscans and Asia Minor*, *Anatolian Studies* 9, 1959, pp. 197 - 213.
- Young 1969 R.S. Young, *Old Phrygian Inscriptions from Gordion*, *Hesperia* 38, 1969, pp. 252 - 296.
- Zgusta 1964 L. Zgusta, *Klein-Asiatische Personennamen*, Prag 1964.