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## **Closing the Gap: writing in the Aegean from the Late Bronze Age to the Iron Age**

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WRITING *from*  
INVENTION TO  
DECIPHERMENT



EDITED BY

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# Writing from Invention to Decipherment



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## Closing the Gap

### Writing in the Aegean from the Late Bronze Age to the Iron Age

*Willemijn Waal*

#### Introduction

The conventional view of the history of writing in the Aegean may roughly be summarized as follows: in the Bronze Age, several logo-syllabic writing systems were in use (of which only one, Linear B, has been deciphered). The usage of this script, which recorded the Mycenaean language, was strictly confined to palatial economic administration. It fell out of use with the collapse of the Mycenaean palaces around 1200 BCE, marking the start of a long illiterate ‘Dark Age’ of some four centuries, which ended with the introduction of the alphabet around 800 BCE. We then witness an explosion of writing; the alphabet suddenly turns up everywhere and is used for all kinds of private purposes, from explicit graffiti to poetry. In this scenario, literacy in the Aegean is viewed as an isolated and unique phenomenon without taking its wider context into consideration. This ‘tunnel vision’ has everything to do with the unfortunate dichotomy according to which Greece belongs to the ‘West’, and all regions on the other side of the Bosphorus to the ‘East’. This division has deeply penetrated the organization of academia; the study of the Aegean and that of the ancient Near East are two distinct disciplines. In reality, of course, no such divide existed; the Aegean formed an integral part of a much larger Mediterranean world and should be studied and appreciated as such. One is faced not only with geographic but also with chronological fragmentation; the Late Bronze Age is usually studied separately from the Early Iron Age and ensuing historical periods in the Aegean. Especially in the light of the growing evidence for continuity between the second and first millennium BCE, however, there is much to be gained by a diachronic approach.

The present chapter aims to situate the use of writing in the Aegean in a broader geographical and historical framework and offer an alternative scenario to the one presented above.<sup>1</sup> It will first adduce evidence that the surviving Linear B clay

<sup>1</sup> Considering the wide scope of this chapter, it is impossible to discuss all aspects in detail. For a more exhaustive treatment of the topics addressed here I refer to some of my earlier publications (Waal 2018, 2019, 2021, 2023).

tablets represent only a small portion of the texts that circulated in the Late Bronze Age, as this script was primarily written on perishable materials.<sup>2</sup> In a similar vein, the alphabet was also mainly recorded on perishable materials, and introduced much earlier than 800 BCE. This implies that there was no long Dark Age of some four centuries without writing, but that developments with respect to writing in the Aegean were to a large extent comparable to those in the wider ancient Near East.

### Writing in the Ancient Near East: An Ultrashort Overview

In the ancient Near East, various writing systems were in use. The most widely spread script was the cuneiform script, which is attested from around 3400 BCE to the first century CE. It was used for various languages and all kinds of purposes in Mesopotamia, Syria, the Levant, and Anatolia. One of the most distinctive features of this writing system is its primary writing material: clay (Figure 4.1).



**Figure 4.1** Private letter in Old Babylonian cuneiform (LB 2061), Iraq, c. nineteenth–seventeenth centuries BCE

*Source:* Courtesy of Nederlands Instituut voor het Nabije Oosten (NINO), Leiden University.

*Photograph:* W. Waal.

<sup>2</sup> Note that ‘perishable’ is a relative concept; most of these writing materials could easily survive for centuries, but not for several millennia.

Unlike most writing materials, such as parchment, papyrus, wood, leaves, or bark, clay is extremely durable and fire resistant, which is why thousands of cuneiform tablets have survived to this day. Around the same time that the first cuneiform sources appear, we also see the first evidence for hieroglyphic writing in Egypt. The Egyptian Hieroglyphs, which are attested until the fourth century CE, were mainly used for monumental inscriptions on the walls of temples and tombs. For more mundane and practical purposes, the Hieratic (and later Demotic) script was used. The primary writing material was papyrus, and in addition use was made of other materials such as wood and leather. Because of the exceptional climatological circumstances in Egypt, these materials have sometimes survived for millennia, though of course much has been lost. Other writing materials included ostraca of broken pottery and (lime)stone.

Another important writing system was the alphabet, which was already in use from at least the beginning of the second, or even the end of the third millennium BCE (Schwartz 2021). In Wadi el-Hol in Egypt, alphabetic inscriptions dating to between 1900 and 1800 BCE were found (Darnell et al. 2005). Before their discovery in 1999, the earliest attestations of consonantal alphabetic or abjad writing were inscriptions attested in the Sinai region and Palestine. The date of these inscriptions is contested, and proposals range from the nineteenth to the fifteenth (or even the thirteenth) century BCE (see on this recently Haring 2019; Rollston 2020: 70; Höflmayer et al. 2021). Though these early West Semitic inscriptions, whose number is steadily growing,<sup>3</sup> are not yet completely understood, it is evident that they can be considered the forerunners of the later consonantal alphabets such as Phoenician, Hebrew, and Aramaic. In Syria and Mesopotamia, alphabetic scripts coexisted with the cuneiform script from the second millennium onwards, becoming more prominent in the first millennium BCE.<sup>4</sup> However, since this script was primarily used on perishable writing materials such as parchment and leather, it is attested much more poorly in the archaeological record than the cuneiform script on clay. An important exception is the consonantal cuneiform alphabet attested at the city state of Ugarit (Ras Shamra) from the fourteenth or thirteenth century onwards, which was written on clay (Figure 4.2). For Egypt, recent evidence suggests a wide presence of alphabetic writing in the mid-second millennium BCE (Haring 2015, 2019; Fischer-Elfert and Krebernik 2016). Early use of the alphabet is further attested in South Arabia (Yemen) on ribs or stalks of date-palm leaves, dating to the late second or early first millennium BCE (Stein et al. 2016) (Figure 4.3).

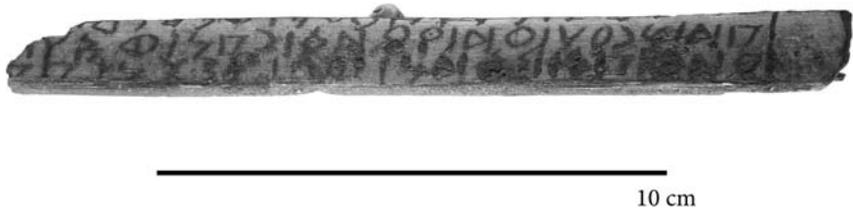
<sup>3</sup> See, e.g., the recent discovery (November 2022) of an inscribed lice comb from Lachish dated to c.1700 BCE.

<sup>4</sup> For an evaluation of the earliest alphabetic writing in Mesopotamia, see recently Rollston (2020: 69).



**Figure 4.2** Clay tablet with an Ugaritic abecedarium (RS 12.063), Ugarit (Ras Shamra), thirteenth century BCE; the letter order shows that the standard *aleph-bet-gimel* order was already in use at that time

*Source:* Courtesy of Project PhoTEO Mission de Ras Shamra.



**Figure 4.3** Palm midrib with incised alphabetic inscription from Yemen (L024), c. eleventh–tenth centuries BCE

*Source:* Courtesy of Stichting Oosters Instituut, Leiden University Libraries.

*Photograph:* Wim Vreeburg.

There is obviously much more that can be said about writing in the ancient Near East. Various writing systems, such as the Anatolian Hieroglyphs or undeciphered scripts, such as the Cypro-Minoan syllabary and the Byblos script, have not even been mentioned here. The very succinct overview presented here merely serves to show that the literary landscape of the ancient Near East was very rich and diverse; writing was used for many purposes, and various writing systems coexisted. Some scripts are, however, much better attested than others, which is mostly due to the choice of writing material and/or climatological conditions.

### **Writing in the Aegean: The Second Millennium BCE**

The first evidence for writing in the Aegean is found at Crete at the end of the third millennium BCE, when Cretan Hieroglyphic signs appear on seals and seal impressions. From c.1800 to 1500 BCE, the Cretan Hieroglyphs are attested on clay tablets; altogether they comprise some 200 (short) documents (Tomas 2010:

341–2). In the eighteenth century, the first documents written in Linear A emerge. This script was used on the Greek mainland and several of the Aegean islands till c.1500 BCE. The Linear A corpus includes some 1,500 inscriptions, mainly on sealed nodules and unsealed clay tablets, as well as some inscriptions on other objects (Tomas 2010: 347–50). Both the Linear A script and the Cretan Hieroglyphs are undeciphered, which makes it hard to establish the precise content of the documents. They are overall quite short and appear to be predominantly economic–administrative records. Other, lesser-known writing systems at Crete include the Archanes script attested from around 2000 BCE (Decorte 2018) and the script of the much-discussed Phaistos disc.

The best-attested script is Linear B, the only deciphered writing system. It was used for the Mycenaean language, a forerunner of ancient Greek, and is documented in mainland Greece and the Aegean islands from c.1450 BCE till the end of the Mycenaean period (c.1200 BCE). The entire corpus consists of about six thousand clay records, which were virtually all found in palatial contexts. They are mostly small ‘palm-leaf shaped’ tablets (Figure 4.4), recording economic and administrative activities, but also included larger, summarizing, page-shaped tablets. In addition, Linear B has been attested on clay nodules and labels. At all find spots, the tablets, which are not dated, appear to cover administrative periods of a year at most (Bennet 2001: 29; Palaima 2003: 153, 172). To the Linear B records incised in clay, we may add the (very short) painted inscriptions on transport stirrup jars and incidental inscriptions on other pottery and stone.

Judging from the available evidence, the literary productivity in the Aegean appears much more limited than that in the contemporary Near East. The number of Aegean clay tablets is dwarfed compared to those found in the archives in Syria, Mesopotamia, and Anatolia. In addition, the purposes for which writing was employed in the Aegean seem much less varied; the Linear B texts are all of an administrative–economic nature; other text types, which are found at many sites in the ancient Near East, such as literary, historical, or religious documents, letters, lexical lists, school texts, or officially sealed deeds, such as sale contracts, wills, loans, and so on, are absent. An often-drawn conclusion is, therefore, that



**Figure 4.4** Palm-leaf tablet with Linear B from Pylos (PY Eb 1176), thirteenth century BCE

*Source:* Courtesy of The Pylos Tablets Digital Project and the Palace of Nestor Excavations, Department of Classics, University of Cincinnati.

the use of writing was more restricted in the Aegean, but this is not the only, and in fact not the most likely, explanation. The first question that needs to be asked is whether the surviving text corpus is representative, or if in fact a large part of the documentation is missing, because it was written on perishable materials.

With respect to Linear A, it is generally agreed that its usage was not restricted to clay, but that documents of a less durable nature also existed. The main reasons for this assumption are the discovery of so-called flat-based nodules with traces of leather or parchment (see, e.g., Weingarten 1983; Hallager 2000: 135–45; Krzykowszka 2005: 155–7; Perna 2017: 72–6), and the fact that Linear A has been attested on other materials, such as metal and stone, in non-administrative contexts. When it comes to Linear B, however, there is less consensus. According to some scholars, writing on perishable material must have existed (e.g. Driessen 2000: 186–7; Palaima 2003: 171–2; 2011; Waal 2021), but others maintain that this script was restricted to writing on clay (e.g. Bennet 2001: 27–8; Perna 2011: 18–19; Steele 2017: 154 with n. 5). The reason why writing on perishable materials is less accepted for Linear B is the fact that, in contrast to Linear A, there are no certain and unambiguous examples of flat-based nodules that were attached to leather documents. Further, compared to Linear A, there is less evidence of the use of Linear B outside strictly palatial administrative contexts. Such evidence is, however, not completely absent, as, for example, the inscribed stirrup jars mentioned above and the discovery of a Linear B tablet at Iklaina in a non-palatial setting demonstrate.<sup>5</sup> Moreover, as will be shown below, there are important other indications that Linear B was indeed written on perishable materials (see also Waal 2021 for a more elaborate discussion).

### Arguments for the Use of Perishable Writing Materials for Linear B

*Evidence from the tablets.* As has long been pointed out (see already Evans 1921: 638; more recently Palaima 2003: 171), the round and complex Linear B characters are much more suited to be written with pen and brush, or to be incised in a soft material, rather than in the coarse material clay. Tellingly, the sign forms hardly underwent any processes of simplification or abstraction that would have facilitated writing on clay, which we do see in the cuneiform script that was written almost exclusively on this material (see Figure 4.1).<sup>6</sup> In addition, the substantial number of scribal hands that have been identified (see on this Palaima 2011: 96–100) would suggest that literacy was not confined to a small elite, and that writing was used for more than short administrative records alone. As observed

<sup>5</sup> Though the inscribed stirrup jars were probably related to the palatial administration, they have also been found outside administrative centres (for a discussion of their function, see Judson 2013). For other examples of Linear B outside of palatial context, see Kelder (2024).

<sup>6</sup> Cf. the Linear A script, of which it is generally agreed that it was written on other materials than clay, which also maintains a degree of pictorial representation.

by Driessen (2000: 186), the external and internal features of the script betray elements that make it more than just a bookkeeping script. The striking overall uniformity and standardization of the script and the scribal habits are also of interest. They imply a rigid training, and it is doubtful whether such an elaborate educational system would have been set up and maintained so consistently only for the detailed recording of a very limited part of the administration.<sup>7</sup> It is evident that the surviving tablets do not represent the complete economic administration, as some aspects are conspicuously missing. Moreover, they cover only a time span of a year or less, which means that records of previous periods were (deliberately or accidentally) destroyed. The tablets at our disposal thus represent only a very selected group of documents, which happened to survive the destruction (by fire) of the palatial centres, because they were written on the resistant material clay.

The shape of the surviving Linear B clay tablets is also of interest. The most ubiquitous type has been dubbed ‘palm-leaf tablet’, as its shape resembles a palm leaf (see Figure 4.4). The most obvious reason why the clay was kneaded in this form is that it was imitating an already existing type of document—namely, one made of palm leaves (see, e.g., Evans 1921, 638; Diringier 1953: 42; Ahl 1967: 188; and now Waal 2021, 2023).<sup>8</sup> The choice for palm leaves as a primary writing material, would not be surprising; it is easy to use, widely available (especially at Crete), and quite resistant, which is why the palm tree has been, and still is, a popular and common source for writing material in many regions of the world (see, e.g., Diringier 1953: 37–44; Padmakumar et al. 2003).

*Archaeological evidence.* When investigating the possible existence of perishable writing materials, archeological evidence is bound to be absent or extremely limited. So far, the remains of two wooden diptychs (one almost complete) from the Uluburun shipwreck are the only surviving wooden documents from the Late Bronze Age. Their original provenance is unknown, but they may have belonged to the Mycenaean officials who were on board the ship (Pulak 2005; Bachhuber 2006: 352–6). As has recently been proposed by Martien Dillo (2021), the best-preserved exemplar possibly contains traces of Mycenaean numerals. Further archaeological evidence for the use of such wooden diptychs in the Mycenaean world are the bronze hinges found at the Archive Complex at Pylos and in the arsenal at Knossos, which may be hinges of wooden tablets, similar to the ones found in Uluburun (Shear 1998). In addition, at Knossos a number of flat-based nodules were found which could have been attached to (leather) documents, though other purposes cannot be excluded (Krzyszowska 2005: 217–18).

<sup>7</sup> Note that the lack of school tablets is another indication that the preserved text corpus is not complete (cf. Waal 2021: 209–10).

<sup>8</sup> In most literature, the term ‘palm leaves’ is used, but it may be more accurate to speak of palm ribs. The alphabetic inscriptions from Yemen show that the central spine (‘rib’) or stalk of palm leaves could be inscribed (see Stein et al. 2016). It cannot, however, be excluded that leaflets were also used for this purpose. With respect to the shape, there is no fundamental difference, as both have a comparable long and narrow format (Waal 2023).

*Evidence from contemporary sources from Anatolia.* Additional evidence for a wider use of writing in the Aegean is the correspondence between the Hittite king and the king of Ahḫiyawa, a region that can be safely identified with Mycenaean Greece (see, e.g., Beckman et al. 2011: 3–6). During the Late Bronze Age, the rulers (Great Kings) of the various empires maintained intensive diplomatic contacts, and the tablet collections of the Hittite capital Ḫattuša (some 200 km east of Ankara) have yielded letters exchanged between the Hittite kings and the kings of Babylonia, Assyria, Egypt, and Ahḫiyawa. Most of them were written in cuneiform in Akkadian, the Late Bronze Age *lingua franca* of the ancient Near East, but some, including the Ahḫiyawa correspondence, are written in Hittite. The Ahḫiyawa correspondence includes at least two letters sent by the Hittite king to his Ahḫiyawan colleague. The fact that these were found at Ḫattuša does not mean they were not sent; they probably represent either drafts or archival copies. There is also an incoming letter that was sent from Ahḫiyawa to the Hittite king. This tablet is written in Hittite, by a Hittite scribe, which prompts the much-discussed question what the original message dispatched from the Aegean would have looked like (see, e.g., Bryce 2003: 199–200; Sürenhagen 2008: 260–5; Hoffner 2009: 299; Beckman et al. 2011: 138–9; Melchert 2020; Waal 2021: 213–14). Theoretically, it could have been transmitted strictly orally, but this would be highly exceptional in the light of the wider Near Eastern context, where letters were an essential tool for the maintenance of diplomatic relations, be it often in combination with oral reports from messengers. Not only the Great Kings, but also vassal kings of smaller states, made use of writing. Apart from Anatolia, the Mycenaeans maintained contacts with Egypt (e.g. Cline 1994; De Fidio 2008: 96–7), so we can safely assume that they were familiar with existing diplomatic conventions. In particular, since the Mycenaeans were no strangers to the concept of writing, there is no reason to think that they would not have participated in the regular practice of exchanging letters. Possibly, they made use of the cuneiform script for this type of international correspondence (though no examples hereof have so far turned up in the Aegean), but it should not be excluded that they (also) made drafts or copies in Linear B. Regardless of the kind of script they used, the contacts abroad suggest that in the Aegean writing was used for more than purely local economic administrative purposes.

*Evidence from later sources.* Last but not least, it is significant that in later classical traditions it was generally believed that the first writing materials were perishable materials such as palm leaves and wood (see already, e.g., Evans 1909: 105–6; Ventris and Chadwick 1973: 109; and now Waal 2021, 2023).<sup>9</sup> Clay, on the other hand, is never mentioned in later sources, which can be seen as a further

<sup>9</sup> In addition, as I have recently argued elsewhere, the expression *phoinikeia grammata*, which Herodotus famously links to the Phoenician alphabet ('Phoenician letters'), is probably to be understood differently. The hybrid word *φοῖνιξ* has multiple meanings and can also refer to palm trees. A closer inspection of the available attestations reveals that the expression *phoinikeia grammata* originally referred not to alphabetic writing, but rather to 'palm leaf writing'—i.e. Linear B (Waal 2023).

confirmation that this was not a common writing material, but that its usage was rather exceptional.

### Concluding Remarks

All in all, there is substantial evidence—from very diverse sources—that suggests that the surviving corpus of Linear B texts does not reflect an accurate representation of literary productivity in the Aegean during the Late Bronze Age. Many more documents on perishable materials, which are now lost, must have circulated, including letters and undoubtedly all kinds of other text genres. The excavated tablets are only a fraction of a much larger written repertoire, and they survived only because they were exceptionally written down on clay, rather than on palm leaves or other comparably perishable materials. This observation begs the question why these particular texts were written on the material clay, and not on palm leaves, a question that is hard to answer based on the presently available evidence. Possibly, there were some very practical, mundane reasons behind this choice, which can no longer be traced (see already Ventris and Chadwick 1973: 109; and now Waal 2021: 219–20). Another question that must remain open is to what extent the use of palm leaves was an innovation, or whether they had already been used for Linear A and Cretan Hieroglyphs. The available evidence indicates that the shift from Linear A to Linear B writing also entailed certain changes in administrative and sealing practices (Tomas 2010; 2017: 65–7; Waal 2021: 206), but it cannot be determined whether the introduction of palm leaves was one of them. In any case, palm leaves were not the only ephemeral writing material available; as mentioned above, there is evidence that Linear A was written on leather and parchment, and the use of other writing materials such as papyri and wood should not be excluded. The coexistence of several writing systems (Linear A, Cretan Hieroglyphs and the elusive Archanes and Phaistos scripts) attests to a diverse and rich literary productivity from the beginning of the second millennium onwards. The awareness that writing in the Bronze Age Aegean was, in all likelihood, much more prolific and varied than has generally been assumed has significant repercussions for our understanding of the following ‘Dark Age’.

### Writing in the Aegean: The ‘Dark Ages’

The last documents written in Linear B date to around 1200 BCE. It then takes about four centuries before written evidence appears again in the form of inscriptions in alphabetic Greek on stone and pottery. Though the Semitic origins of the Greek alphabet are undisputed, there is no consensus about the moment when the Greeks took over this script. The question to what extent the first attestations

reflect the beginnings of alphabetic writing in Greece, or whether this script had already been introduced much earlier but written on perishable materials, is much debated. Ever since Rhys Carpenter in his influential 1933 article did away with ‘the old illusion of the great antiquity of the Greek alphabet’, it is generally accepted among classicists that the alphabet was introduced only shortly before its first attestations, though there have always been voices pleading for a much earlier introduction (e.g. Ruijgh 1995, 1997), especially within the field of Semitic studies (e.g. Ullman 1934; Naveh 1973). New discoveries and developments over the recent decades have made it clear that the dominant scenario in classical studies is untenable, especially if one also takes into consideration the evidence from the Near East. To a large extent, the discussion about the introduction date of the Greek alphabet is similar to the debate about the usage of Linear B; both hinge around the likelihood of the existence of perishable writing materials. And, just as in the case of Linear B, there are several important indications for an earlier (and wider) use of alphabetic writing in the Aegean, of which I will discuss the most important ones below.<sup>10</sup>

### Arguments for an Earlier Introduction of the Alphabet

*Archaic scribal habits of the early Greek alphabet.* As mentioned above (p. 73), the history of the alphabet can now be traced back to at least the beginnings of the second millennium BCE, and there is growing evidence that West Semitic alphabets were used on a regular base in the broader Levant from the mid-second millennium onwards. In the course of the eleventh century, some important standardizations took place. In the case of the Phoenician alphabet, the alleged forefather of the Greek alphabet, the writing direction became stabilized (from right to left) and the letter forms were fixed (Naveh 1982: 42; Millard 2012: 17–18). The writing direction of the early Greek inscriptions, however, is not yet stable; they are written from right to left, left to right, or boustrophedon (horizontally and vertically) until around 500 BCE, from when onwards dextroverse writing became the norm. As pointed out by Joseph Naveh (1973), they resemble the early West Semitic inscriptions, which could also be written in any direction: right to left, left to right, vertical, and boustrophedon (vertically and horizontally). In this respect, the early Greek inscriptions are thus more archaic than the Phoenician script, where the direction of writing had been established from right to left since the eleventh century. A similarly archaic feature is the Greek use of word dividers. In some, though by no means all, of the early Greek inscriptions, words are divided by means of multiple dots and/or short vertical strokes. Similar kinds of word division are

<sup>10</sup> For a more detailed discussion, see Waal (2018). For recent treatments of the early (Greek) alphabets, see now Boyes and Steele (2019) and Parker and Steele (2021).

attested in the early West Semitic inscriptions, but hardly in later Phoenician inscriptions, which are as a rule written in *scriptio continua*.

If one assumes a late introduction date, one is forced to accept that the Greeks ignored the scribal conventions of the standardized ninth–eighth century Phoenician alphabet, but instead coincidentally mimicked writing practices that existed much earlier, and, moreover, ended up writing in completely the opposite direction (left to right) as their supposed Phoenician ancestor (cf. Naveh 1973, 1982). The counterargument that a loose writing direction is typical for early writing in general is not valid, as this applies to only *newly invented* writing systems. When, however, an existing writing system is adopted, elementary scribal conventions, such as the writing direction, tend to be taken over along with the script. A good demonstration hereof is provided by the cuneiform script, which was adopted multiple times by various cultures, together with the most important scribal habits.

A more straightforward solution is that the Greeks did not adopt the alphabet from the Phoenicians in the eighth century, but that they had already done so in or before the eleventh century BCE, taking over the then existing scribal conventions of the West Semitic alphabets.<sup>11</sup>

*Diversity and wide geographic spread of the archaic Greek alphabets.* From the eighth century onwards, Greek alphabetic inscriptions turn up all over the Greek mainland, the Aegean islands, Italy, and Sicily. These early inscriptions show regional variety; no less than thirty three (!) different versions of the alphabet can be distinguished. These local or epichoric scripts are generally divided into the following main groups, after Kirchhoff (1887); the blue (further split into light blue and dark blue), red, and green alphabets. Despite their obvious differences, however, these alphabets all share certain innovations. The most important one is the presence of vowel signs. The Phoenician (and the other Semitic alphabets) were consonantal or abjad alphabets, which did not have signs for vowels. The Greek alphabets all do have vowel signs, which are generally thought to be a Greek innovation (for a different scenario, see Waal 2019). The fact that these vowels are present in all the Greek alphabets means that they must ultimately go back to the same source (e.g. Wachter 1989; Jeffery and Johnston 1990: 6). In order to explain the fact that the Greek alphabets, on the one hand, share the same ancestor, but, on the other hand, show differences from the very start, one is forced to assume an incredibly rapid adoption, development, and spread of alphabetic writing throughout the Mediterranean. This is hardly conceivable, as has already been pointed out by Ullman (1934), particularly after a long illiterate

<sup>11</sup> Such a scenario would incidentally also offer a more satisfying explanation from a linguistic perspective for some of the modifications the Greeks made to the Phoenician consonantal script, such as the choice for the letter *heta* for /h/ (Ruijgh 1995, 1997) and the origins of the letter *phi* (Brixhe 1991). By contrast, there do not appear to be any linguistic arguments that call for a later date.

‘Dark Age’ of some four hundred years. Carpenter’s response (1938: 69) that this unparalleled development speed was possible because the Greeks were ‘intensively active people’ not only implies an undemonstrated cultural superiority and painfully lays bare a very Eurocentric outlook on history, but also is unsatisfying from an academic perspective.

Another fact that is difficult to explain in the current model is the great variety of Greek letter shapes. Naveh (1973, 1982) explains this diversity by assuming that the alphabets stem from a prototype that had unstable letter forms. This implies that the alphabet was introduced in or before the eleventh century, when the West Semitic alphabetic script did not yet have fixed letter forms. Alternatively, one could see the regional diversity as the result of local developments, which must have taken place over a longer period of time. As these signs are present from the start, this would also imply an earlier date for the introduction of the alphabet.<sup>12</sup>

*Related alphabetic traditions.* Another argument for an earlier introduction is the contemporary, independent tradition of the Phrygian alphabet. The Phrygian and Greek alphabets are unmistakably closely related, and it was long believed that the Phrygian alphabet was derived from the Greek. There is, however, no clear single Greek alphabet that can be identified as the source (see, e.g., Young 1969: 254; Diakonoff and Neroznak 1985: 4), and the Phrygian alphabet clearly underwent some independent developments (Brixhe 2004: 277). What is more, redatings at Gordion have pushed back the date of the first Phrygian inscriptions by some hundred years (Brixhe 2007: 278). They can now be placed at around 800 BCE, making them contemporary with or even earlier than the oldest Greek inscriptions, which is difficult to reconcile with the current paradigm. Similarly complicated are the relations between the Greek and Etruscan alphabets, and some of the Anatolian alphabets, notably the Carian alphabet. The relations between the Greek, Etruscan, Phrygian, and Anatolian alphabets would be easier to explain in a scenario in which the origins of the Greek alphabet are older than its first attestations.<sup>13</sup>

*Poetry and porn.* The earliest Greek inscriptions are of a private nature, including (proprietary) inscriptions on pottery and tombstones and rock graffiti. These early personal expressions indicate an extremely broad and fast propagation of writing among various layers of the population.<sup>14</sup> Even more astounding is that some of the oldest known inscriptions—namely, the Nestor cup of Pithekoussai (Figure 4.5), the Dipylon inscription from Athens, and the Hakesander cup from

<sup>12</sup> Naveh (1973) further claimed that some Greek letter shapes resemble the archaic West Semitic more than the Phoenician forms, but this is arbitrary; Carpenter (1938) has claimed the exact opposite, arguing that they are more similar to the Phoenician letters.

<sup>13</sup> For a recent overview of the complex relations between the Greek alphabets and the alphabets supposedly derived from them, see Waal (2019).

<sup>14</sup> Cf., e.g., Teodorsson (2006: 173), and, recently, Bourogiannis (2019: 151–2).



**Figure 4.5** The Nestor cup with an alphabetic inscription in Greek hexameters, Ischia (Italy), eighth-century BCE, Museo archeologico di Pitheculasae, Ischia.

Source: [https://commons.wikimedia.org/wiki/File:Nestorbecher\\_auf\\_Ischia.jpg](https://commons.wikimedia.org/wiki/File:Nestorbecher_auf_Ischia.jpg).

Photograph: Marcus Cyron.

Methone (see now Janko 2015)—present elaborate poetic verses. Some have taken these early literary attestations as proof that the alphabet was invented by the Greeks for the sole purpose of recording Homer (Powell 1991). Generally speaking, however, poetic and fictitious texts are unlikely candidates for the first use of writing.<sup>15</sup> The same applies to salacious and playful rock graffiti, which are also among the oldest Greek inscriptions.<sup>16</sup> A perhaps less romantic, but more pragmatic, explanation is that writing was already in use for other, more prosaic purposes, such as (economic) administration and trade, on perishable materials before the first surviving inscriptions on more durable materials (see, e.g., also Ruijgh 1995: 37).

### Concluding Remarks

In the present model, according to which the Greeks took over the Phoenician alphabet in the late ninth or early eighth century BCE, one is faced with a number of awkward facts. One is forced to assume that the Greeks ignored certain

<sup>15</sup> For a critique of Powell's claim, see, e.g., Woodard (1997: 253–6).

<sup>16</sup> The corpus of archaic inscriptions has grown in recent years: for an overview of discoveries up to 2021, see Matthaiou (2021). Especially significant are the over twelve hundred rupestal graffiti dating to the sixth century BCE that have been found since 1994 in southern Attica; see Langdon (2015); Van de Moortel and Langdon (2017).

Phoenician scribal habits, such as a fixed direction of writing and standardized letter forms, but instead turned their alphabet into a more primitive script without these features, accidentally imitating the early West Semitic inscriptions. The Greek alphabet subsequently would have spread, developed, and diverged with enormous speed over a large geographical area. It instantaneously circulated among the population and was used for all kinds of playful private purposes—facts that are all the more remarkable after a long ‘Dark Age’ of some four hundred years in which writing was presumably completely unknown.

If, on the other hand, one allows for an earlier introduction date—that is, in or before the eleventh century (as advocated by Naveh 1973)—a much more credible scenario unfolds: the Greeks took over the script in its then existing form, including the contemporary writing conventions. The Greek alphabet then spread and developed over a longer period of time, which accounts for the regional divergences, as well as the dissimilarities between Greek and Phoenician writing. In all likelihood, writing was in the first instance primarily used for administrative and economic records, as in many ancient societies. These earliest records have not survived, as they were written on perishable materials. Unlike the cuneiform script, which was closely connected to the durable writing material clay, alphabetic writing was (and for the most part still is) largely tied to more ephemeral materials such as papyrus and parchment (and nowadays paper). It was only in a later phase, when the use of writing extended to other (private) domains, that inscriptions were also made on more durable materials—such as pottery and stone, which as a consequence survived. This would mean that the first inscriptions of the eighth century reflect not the *beginning* of writing, but rather an *expansion* of writing, on other materials, and for different purposes.<sup>17</sup>

The latter scenario gains even more plausibility if one takes the wider context into consideration. Recent archaeological studies have shown that the Greek ‘Dark Age’ was not as dark as was long assumed, but that, apart from decline, there was also a substantial amount of continuity and prosperity, in places such as Knossos and Lefkandi, and exchange with the Near East did not come to an end (e.g. Dickinson 2006: 196–218). The close and constant contact with a region, where alphabetic writing circulated from the second millennium onwards, makes it highly improbable that the Greeks started to use this script only around 800 BCE, especially since writing had been practised in the Aegean for some seven hundred years (1900–1200 BCE), and was already used to record the Greek language from at least c.1450 onwards.

<sup>17</sup> The question why writing on pottery starts to appear from the eighth century onwards is, of course, of great interest. It was undoubtedly related to social–cultural changes in this period, but these fall beyond the scope of the present chapter. In any case, the fact that we do not have examples of inscribed pottery before that time does not mean that there was a complete absence of writing in the preceding centuries. By comparison, during the long three millennia that the cuneiform script was in use, it was rarely inscribed on pottery.

## The Argument from Silence and Chronological Considerations

The key argument against an earlier use of the alphabet as well as a broader use of Linear B on perishable materials is the *argumentum ex silentio*: there are no certain Greek alphabetic inscriptions attested before the eighth century BCE, and no Linear B documents other than elementary economic records on clay have been found. An argument from silence is, however, never more than that: it remains inconclusive, however 'loud' the silence may be. Since the dominant writing mediums for most scripts, including the alphabet, were perishable materials such as leather, wood, or papyrus, which can survive for millennia only in exceptional circumstances, the absence of evidence is hardly surprising, nor unique. Contemporary Cyprus offers a welcome parallel; there are no written records from c.950 to the eighth century, yet the continuity of the syllabary tradition from Cypro-Minoan to the Cyprian syllabary shows writing did not cease. Likewise, there are chronological gaps in the attestation of the Anatolian Hieroglyphic script. Chance discoveries from other regions and time periods, such as the Novgorod birch bark documents or the Runic inscriptions from Bryggen, which have profoundly changed earlier views about literacy, demonstrate the risk of relying solely on the surviving evidence. In the Aegean, no such 'game changers' have yet turned up,<sup>18</sup> though new discoveries have already pushed back the date of the first Greek alphabetic inscriptions by about a century, and possibly they need to be dated even earlier. The absolute date of the so-called Late Geometric Period, the period in which the first Greek alphabetic inscriptions appear, is much contested and considered to be too low by some scholars (e.g. Nijboer et al. 1999–2000: 173–4; Janko 2015: 13–16). Recent <sup>14</sup>C data from Sindos (Gimatidis and Weninger 2020) confirm that the conventional chronology and periodization of the Early Iron Age Aegean are in dire need of revision. The Sindos material implies that the Geometric period was much longer and started roughly a century earlier. As the authors observe, this would have serious repercussions for the date of the introduction of the alphabet (Gimatidis and Weninger 2020: 25) and would significantly reduce the gap in our sources.<sup>19</sup>

Another factor to consider is the so-called Signor–Lipps effect, named after Philip Signor and Jere Lipps. This paleontological principle holds that, since the fossil record of organisms is never complete, it is highly unlikely that the last organism in a certain taxon will be preserved as a fossil. The youngest-known fossil therefore does not represent the last appearance of a taxon. Conversely, the oldest-known fossils

<sup>18</sup> A serious candidate, however, is the recent discovery of a Late Bronze Age alphabetic inscription found at Mycenae, which was presented by Robert Martin (University of Toronto) at an online CREWS seminar, 30 September 2022.

<sup>19</sup> Note that James et al. (1991) have proposed shortening the length of the Dark Age considerably, which would make the 'illiterate gap' virtually non-existent, but their thesis has not found general support. For critical discussions about the problems surrounding the chronology of the Bronze Age, see, e.g., Bietak (2015, 2021); Wiener (2015).

cannot be equated with the first appearance of a taxon—this is sometimes referred to as the Spill–Rongis effect (Signor–Lipps spelled backwards). *Mutatis mutandis*, it would be an exceptional stroke of luck if the oldest samples of writing found in the Aegean are indeed the first (or almost the first) inscriptions that were ever made.<sup>20</sup>

### Final Considerations

The story of writing in the Aegean as it is conventionally told is one of extremes. In the Late Bronze Age, writing was very restricted and confined to palatial administration; it then disappeared completely for some four centuries, from c.1200 BCE until 800 BCE. Then, finally, the alphabet was introduced, causing an immediate explosion of writing (the so-called alphabetic big-bang). These disruptive and drastic developments are very different from what we observe in many regions of the adjacent Near East, where writing was used for all kinds of purposes in the Late Bronze Age. The alphabetic script coexisted with other writing systems from at least the second half in the second millennium, gaining more and more ground in the Iron Age. One should obviously be wary to extrapolate from parallels in neighbouring societies too readily; the fact that regions were in contact and formed part of the same cultural continuum does not, of course, necessarily mean that their use of writing was similar; the presence of various local writing systems is already a nice illustration that regional differences indeed existed. At the same time, however, one needs very cogent and persuasive arguments to single out one region and reconstruct parts of its society in a completely deviant manner, disengaged from its surroundings. In this case, there are no such compelling arguments, but the current paradigm is rather the product of an outdated Hellenocentric world view, which has managed to persist because of the unfortunate academic fragmentation already referred to in the Introduction to this chapter.

The new model presented here is largely based on indirect evidence, and some questions inevitably remain open. We do, for instance, not know exactly when the alphabet was introduced, nor if it coexisted for some time with the Linear B script, and we can only speculate about the exact appearance and usage of the missing documents. These uncertainties may be reason for some to dismiss this scenario as speculative, and to cling on to the security of the old familiar narrative, which appears to offer more solid ground. This is, however, a dangerous fallacy; the prevalent paradigm has become a dogma based on factoids rather than facts and buttressed by convention rather than curiosity. Instead of falling into the certainty trap, we should be prepared, in the words of Bertrand Russell (1950), ‘to endure uncertainty, which is difficult, but so are most of the other virtues.’

<sup>20</sup> By the same token, it should not be excluded that Linear B was in use longer than its last attestations, and for a while coexisted with the alphabet, possibly already before the end of the Mycenaean period around 1200 BCE.