ON THE “PHOENICIAN LETTERS”
THE CASE FOR AN EARLY
TRANSMISSION OF
THE GREEK ALPHABET FROM AN
ARCHAEOLOGICAL, EPIGRAPHIC
AND LINGUISTIC PERSPECTIVE
WILLEMIJN WAAL

ABSTRACT
Though it is generally agreed upon that the Greeks borrowed (and modified) the alphabet from the Phoenicians, there is no consensus about the moment when this took place. Over the years, several dates have been proposed, ranging from the 14th to the 8th/7th century BC. In classical studies the prevalent opinion is that the alphabet was introduced in or shortly before the 8th century BC, when the first attestations of Greek alphabetic writing appear. There are, however, quite a number of indications (from existing and new evidence) that plead for a much earlier date. In this article, a detailed analysis of the presently available archaeological, epigraphic and linguistic data will be presented to argue the case for an introduction in the 11th century BC at the latest.
ΠΕΡΙΛΗΨΗ
Αν και είναι γενικά παραδεκτό ότι οι Έλληνες δανείστηκαν (και τροποποίησαν) το αλφάβητο από τους Φοίνικες, δεν υπάρχει συμφωνία σχετικά με το πότε ακριβώς συνέβη το γεγονός αυτό. Με τα χρόνια, έχουν προταθεί διάφορες χρονολογήσεις, που κυμαίνονται από τον 14ο έως τον 80/70 αι. π.Χ. Στις κλασικές μελέτες η κυρίαρχη άποψη είναι ότι το αλφάβητο εισήχθη μέσα ή λίγο πριν τον 80 αι. π.Χ., όταν βεβαιώνονται οι πρώτες μαρτυρίες ελληνικής αλφαβητικής γραφής. Ωστόσο, υπάρχουν αρκετές ενδείξεις (από υπάρχοντα και νέα αποδεικτικά στοιχεία) που συνηγορούν σε μια πολύ πρωινότερη περίοδο. Στο συγκεκριμένο άρθρο παρουσιάζεται μια λεπτομερή ανάλυση των διαθέσιμων αρχαιολογικών, επιγραφικών και γλωσσικών δεδομένων που υποστηρίζουν την εισαγωγή του αλφαβήτου το αργότερο κατά τον 11 αι. π.Χ.

I. THE ORIGINS OF THE GREEK ALPHABET

The Semitic background of the Greek alphabet is undeniable and, with rare exceptions, generally agreed upon. It is evident from the similarity in the shapes, the names as well as the order of the letters. When the Greeks took over the consonantal script of the Phoenicians they are thought to have introduced vowel signs, which is why for some the Greek script is the first “true alphabet.”

1. This article would not have been possible without the support and input of various colleagues. Above all, I am grateful to Marco Poelwijk, Wouter Henkelman, Jorrit Kelder and Alwin Kloekhorst. I further thank Holger Gzella, Theo van den Hout, Amélie Kuhrt, Floris van den Eijnde, Bert van der Spek, Rutger Alan and the two anonymous reviewers for their helpful comments and suggestions. Needless to say, I alone remain responsible for the views expressed here.

2. Note that Greek authors such as Herodotus also mention the origins of writing to the Phoenicians (Herodotus, Histories V 58).

3. Some scholars assume that the Greeks received the vowel-letters (matres lectionis) together with the alphabet (see e.g. Lipiński 1994: 29-30), but this view is not generally accepted, see e.g. Naveh 1982: 183; Ruijgh 1997: 573; Powell 1991: 44-46.
THE WEST-SEMITIC ALPHABET

The history of the West Semitic alphabet is long and complex. Recent insights and discoveries have shown that it may have been longer and more widely in use than has hitherto been assumed. The oldest now known alphabetic inscriptions stem from Wadi el-Hol in Egypt, dating to between 1900 and 1800 BC. 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 debated: for the oldest Sinai inscriptions proposals range from 19th to 15th century BC, whereas the Canaanite inscriptions have been ascribed to the 17th-15th century BC. Though these early Proto-Sinaitic or Proto-Canaanite inscriptions are not yet completely understood, it is clear that they can be considered the forerunners of the later Phoenician consonantal script.

The West Semitic script was pictorial in origin and allowed any writing direction: the early inscriptions are written from left to right, right to left and boustrophedon, both vertically and horizontally. In the course of the 11th century BC the stances of the letters become stabilized and the writing direction is fixed from right to left (see also p. 93-94 below).

4. For an overview of the history of the Semitic alphabet, see Millard 2012 and for a more general introduction to alphabetic writing Robinson 2009: 92-109.
5. For the Wadi-el Hol inscriptions, see Darnell et al. 2005.
6. For the recent find of two Canaanite inscriptions on axes possibly dating to the middle of the second millennium and the 17th century BC, see Lemaire 2012.
7. The first securely attested (consonantal) alphabetic writing stems from Ugarit (modern Ras Shamra in Syria). In this city, cuneiform alphabet was in use from at least 1400 BC to ca. 1180 BC. Ugarit has yielded the oldest examples of abecedaria, which show that the order aleph-bit-gimmel was already established at that time. Interestingly, the rivalling letter order, the so-called Halaham (HLHM) system, which is well known in South Arabia from the first millennium BC onwards, is also attested in Ugarit. The recent discovery that a text on an ostrakon from the Early New Kingdom displays the alphabetic Halaham order shows that this arrangement was already in use in Egypt in the 15th century BC (Haring 2015).
THE GREEK ALPHABET

The oldest extant Greek inscriptions can be dated to the 8th century BC. From this century onwards, Greek alphabetic inscriptions regularly turn up in a large area including the Greek mainland, the Aegean islands and mainland Italy and Sicily. In the first centuries, the Greek alphabets show regional differences; as much as 33 different versions of the alphabet have been distinguished. These local or epichoric scripts are generally divided into "blue" (further split into "light blue" and "dark blue"), "red" and "green" alphabets.

8. In this paper, I follow the conventional Greek chronology proposed by Coldstream (1968). Note, however, that this chronology has been challenged and that the absolute dates are considered to be too low by some (see, e.g., Nijboer et al. 1999/2000, 173-74; Janko 2015: 13-16).
following the division of Kirchhof 1887 (see Figures 1 and 2). Their characteristics may be briefly summarized as follows:

• “Green” alphabets (Crete, Thera, Melos, Anaphe): These alphabets are sometimes also labelled as “primitive” as they bear the greatest similarity to the Phoenician script. The “green” alphabets do not have the supplemental letters Φ, Ψ and Χ, nor the letter Ξ to represent the value /ks/.

• “Red” alphabets (Western regions): The “red” or “Western” alphabets lack Ξ, but use the supplementary letter X to represent /ks/. They further have the letter Ψ for /kh/ and Φ for /ph/.

• “Blue” alphabets (Eastern regions): The “light blue” alphabet has Φ for /ph/ and X for /kh/ and does not have Ξ for /ks/ nor Ψ for /ps/. The “dark blue” variant does have Ξ for /ks/ and uses Ψ for /ps/ and, like the light blue variant, it has Φ for /ph/ and X for /kh/.

The writing direction of the earliest inscriptions is not yet fixed and the letters may be written from right to left, left to right, or boustrophedon (horizontally and vertically). Only from ca. 500 BC onwards dextroverse writing (i.e. from left to right) became the norm. By the early 4th century virtually all epichoric scripts had been replaced by the “dark blue” eastern Ionic alphabet, which featured the new letter omega (Threatte 1996: 271).

9. For discussion of these alphabet groups, see Woodard 1997: 140-141; Powell 1991: 53-63.
10. Athens officially abandoned the old Attic alphabet in favour of this alphabet under the archon Eukleides in 403/2 BC.

<table>
<thead>
<tr>
<th>ALPHABETS</th>
<th>[ph]</th>
<th>[kh]</th>
<th>[ks]</th>
<th>[ps]</th>
<th>LOCATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green</td>
<td>Π</td>
<td>Κ</td>
<td>ΚΣ</td>
<td>ΠΣ</td>
<td>Crete, Thera, Melos</td>
</tr>
<tr>
<td>Dark Blue</td>
<td>Φ</td>
<td>Χ</td>
<td>Ξ</td>
<td>Ψ</td>
<td>Athens, Argos, Corinth, Ionia</td>
</tr>
<tr>
<td>Light Blue</td>
<td>Φ</td>
<td>Χ</td>
<td>ΧΣ</td>
<td>ΦΣ</td>
<td>Euboea, most of mainland, western colonies</td>
</tr>
<tr>
<td>Red</td>
<td>Φ</td>
<td>Ψ</td>
<td>Χ</td>
<td>ΦΣ</td>
<td>Euboea, most of mainland, western colonies</td>
</tr>
</tbody>
</table>

PREVIOUS SCHOLARSHIP ON THE DATE OF THE GREEK ALPHABET

Though nobody disputes its Phoenician origins, there is no agreement about the date of the introduction of the Greek alphabet. The modern discussion started with the influential article of Rhys Carpenter in 1933 in the *American Journal of Archaeology* (*AJA*), the journal which was to become the platform for the debate on this topic. Carpenter strongly argued against "the old illusion of the great antiquity of the Greek alphabet" and instead pleaded for an introduction around 700 BC.\(^{12}\)

Carpenter mainly based his view on a comparative epigraphic study, and in his opinion the Greek material most resembled the Phoenician script from the 9th and 8th century. In addition, he adduced his by now famous argument from silence: the lack of Greek alphabetic writing before the 8th century proved that the Greek alphabet did not exist before that time. Though challenged by some, in general classical scholars have accepted Carpenter’s point of view.\(^{13}\) In light of evidence that has come to light since (see below p. 99-100), most scholars now plead for a somewhat earlier date, around 800 BC, some allowing for a prehistoric "experimental phase" before the first inscriptions appear, but a date before the 9th century is usually not accepted. A notable exception is Cornelis Ruijgh (1995, 1998) who has pleaded for a date around 1000 BC (see below p. 104).\(^{14}\)

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11. The very succinct overview given here is by no means exhaustive and merely serves to give a general idea of the background of the discussion. For a more elaborate treatment of previous scholarship, see e.g. McCarter 1975:1-27; Heubeck 1979: 75-76; Bernal 1990: 1-26 and Bourguignon 2010.

12. The most notable opposition against this view at that time came from Ullman 1934, who argued for a much earlier transmission in the 12th or 11th century BC (see also below p. 96-97).

13. The view of Carpenter was taken over in the standard work *The Local Scripts of Archaic Greece* by Lillian H. Jeffery (1961, revised edition Jeffery & Johnston 1990). Barry Powell (1991) further fuelled the idea of a late introduction by suggesting that the alphabet was invented for the sole purpose of recording Homer. For a recent argument for an 8th century adoption, see Papadopoulos 2016.

14. Further, less convincing examples include Martin Bernal (1990) who dates the transmission of the alphabet to the 15th/14th century BC, Niesiolowski-Spanò 2007 who pleads for an earlier transmission date linking this event to the Philistines and Mavrojannis 2007 who has proposed a 10th century date based on the account of Herodotus, making a very speculative connection between Palamedes and the "heroon" at Lefkandi.
In the field of Semitic epigraphy, the Northwest Semitic palaeographer Joseph Naveh radically challenged established ideas in 1973, claiming that the date should be pushed back to the 11th century BC (Naveh 1973a), presenting “an abundance of rather disquieting evidence”. Though Naveh’s views are not acknowledged by all, one can say that Semitists overall tend to favour an earlier transmission date (11th-9th century) than the classicists.

II. THE EPIGRAPHIC EVIDENCE

LETTER FORMS AND SHAPES

In the discussion about the date of the Greek alphabet, the epigraphic evidence has played a central role. The forms of individual letters have given rise to much debate and literature regarding this topic is extensive. The letter forms are seen by some scholars as proof for an earlier date whereas others claim that they support a late introduction. Naveh, for one, sees more resemblance between the Greek letter forms and the Proto-Canaanite inscriptions than the later cursive Phoenician writing (see Figure 3), whereas Carpenter and his followers see more similarity with the 9th-8th century Phoenician script (see Figure 4). A good illustration of the arbitrariness and subjectivity of individual letter form comparison is

15. Thus Kyle McCarter (1975: 27), who himself reaches the slightly awkward and paradoxical conclusion that the Greeks may have begun to experiment with Phoenician writing in the 11th century, but did not develop a true independent tradition until the beginning of the 8th century—which seems to be a somewhat forced attempt to compromise between the views of Naveh and Carpenter.

16. See, e.g. Frank Cross (1980: 17), though initially opposed to the ideas of Naveh—later argued strongly against the late date supported by the classicists, all the more after new finds including the ‘Izbet-Šarṭah abecedarium from the 12th century BC. Sass (2005), however, favours a later date (but see also the response of Rollston 2008).


18. Note that McCarter, who is in favour of an 8th century borrowing (see note 15 above), admits that the models of some letters such as alpha, beta, lambda and sigma concur with shapes found in the early period.
FIGURE 3.
The Proto-Canaanite letters compared to archaic Greek letters according to Naveh 1982: 180 ('G' is variation of C; 'X' from Greek Ξ).

<table>
<thead>
<tr>
<th>LATE PROTO-CANAANITE VARIATION 1200-1050 BC</th>
<th>ARCHAIC GREEK VARIATION</th>
<th>CLASSICAL GREEK</th>
<th>LATIN</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="https://example.com/proto-canaanite-diagram.png" alt="Proto-Canaanite letters diagram" /></td>
<td><img src="https://example.com/Archae-Greek-diagram.png" alt="Archaic Greek letters diagram" /></td>
<td><img src="https://example.com/Classical-Greek-diagram.png" alt="Classical Greek letters diagram" /></td>
<td><img src="https://example.com/Latin-diagram.png" alt="Latin letters diagram" /></td>
</tr>
</tbody>
</table>

the letter *mu*, which has been used as an argument by both parties: Naveh drew attention to its resemblance to the early pictograph *mem*, whereas those in favour of a late date pointed out that this letter was not used in horizontal orientation before 850 BC.

Another serious difficulty related to comparing individual letters, as has already been pointed out by many, is the paucity of available material on both sides.19 Older forms may not have

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become obsolete everywhere at the same time and/or they may have remained in use after their latest attestation. Vice versa new forms may have come into use long before the earliest example thus far discovered. The style and letter forms also depend on the writing material (cf. Jeffery & Johnston 1990: 17, 63). Yet another complication is the fact that there are still many chronological uncertainties regarding early Greek and West-Semitic inscriptions.

FIGURE 4.  The Phoenician letters compared to archaic Greek letters according to Daniels & Bright (eds) 1996: 262.

<table>
<thead>
<tr>
<th>PHOENICIAN</th>
<th>GREEK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>ca. 900 BC</td>
</tr>
<tr>
<td>'ālef</td>
<td>ק concatenation</td>
</tr>
<tr>
<td>bêt</td>
<td>ב concatenation</td>
</tr>
<tr>
<td>gîmêl</td>
<td>ג concatenation</td>
</tr>
<tr>
<td>dâlet</td>
<td>ד</td>
</tr>
<tr>
<td>hê</td>
<td>ה concatenation</td>
</tr>
<tr>
<td>wâw</td>
<td>ו</td>
</tr>
<tr>
<td>zajin</td>
<td>† concatenation</td>
</tr>
<tr>
<td>hêt</td>
<td>ח</td>
</tr>
<tr>
<td>têt</td>
<td>ת</td>
</tr>
<tr>
<td>yôd</td>
<td>י</td>
</tr>
<tr>
<td>kaf</td>
<td>כ</td>
</tr>
<tr>
<td>lâmêd</td>
<td>ל</td>
</tr>
<tr>
<td>mêm</td>
<td>מ</td>
</tr>
<tr>
<td>nûn</td>
<td>נ</td>
</tr>
<tr>
<td>sâmek</td>
<td>ס</td>
</tr>
<tr>
<td>'ayin</td>
<td>ע</td>
</tr>
<tr>
<td>pê</td>
<td>פ</td>
</tr>
<tr>
<td>şâdê</td>
<td>צ</td>
</tr>
<tr>
<td>qôf</td>
<td>צ</td>
</tr>
<tr>
<td>rêš</td>
<td>רי</td>
</tr>
<tr>
<td>šîn/sîn</td>
<td>ש</td>
</tr>
<tr>
<td>tâw</td>
<td>ת</td>
</tr>
</tbody>
</table>

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The letter *kappa* may serve as an example of the risks of drawing conclusions from individual letter forms. This letter was long seen as a decisive argument against an early adaptation of the alphabet. In Proto-Canaanite this letter is a three-fingered sign and the variant with a long tail only first appeared in 9th century inscriptions. The discovery of the ‘Izbet-Ṣartah *abecedarium* in the late seventies, however, made this argument invalid since this fragment, dating to the 12th century BC, shows a form of *kap* with a long tail. The *kappa* argument is, however, still used in favour of a late date (see, e.g., Swiggers 1996: 268).

A second eloquent warning for caution is the aforementioned Aramaic Fakhariyah inscription. The script of this bilingual inscription from Northeast Syria is palaeographically dated to the 11th century, but historical and other considerations indicate a date around the mid-9th century. If this text is indeed to be dated to the 9th rather than the 11th century, it would mean that a number of archaic letter types were still in use at that time. It would further imply that several independent orthographic traditions descended from Proto-Canaanite existed simultaneously and parallel to each other.

A late dating of the inscription would moreover render an important argument for an early transmission of the alphabet, namely the form of the letter *lambda*, invalid. The *lambda* was written in Proto-Canaanite with the crook at the top or at the base, and both these forms are also found in early Greek. In Phoenician however, we only find the version with the crook at the top. In the Fakhariyah inscription the variant with the crook at the base is now also attested, which—if the late dating of this text is correct—would mean that this form was still in use in the 9th century.

It may be clear from the above that the comparison of individual letter forms does not produce any reliable results with respect to the dating of the Greek alphabet and “conclusive” arguments on both sides have been refuted by later finds. A more fruitful and less arbitrary method is to look at writing habits, such as the direction of writing, the use of word dividers and the pluriformity of the letter forms.

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20. This led Naveh to assume a later reborrowing of this letter. He suggests that the Proto-Canaanite *kap* sign was used for the letter *chi* in Greek and later the letter *kap* was re-introduced in its later form to represent /k/. An argument against this scenario is the fact that *kap* has its original position in the alphabetic order. Note that Naveh 1991: 156 himself admits that he may have been “wrong in detail, or at least inaccurate” in his earlier discussions of letter forms, though this according to him does not change the overall outcome.

21. For the ‘Izbet-Ṣartah *abecedarium*, see Kochavi & Demsky 1978 and Cross 1980: 17. Note that the same form of *kap* also appears on the Fakhariyah inscription, see below.

22. The date of this inscription is fraught with uncertainty. Abou-Assaf et al. 1982: 98-102 cautiously propose a 9th century dating, but leave the possibility for an earlier date open. Lipinski 1994: 21-30 pleads more confidentially for a 9th century date, which now seems to be generally accepted. Note that Naveh 1987: 109 sees the inscription as a very successful attempt of artificial archaizing script.
As mentioned above, the early West Semitic signs could be written in any direction: right to left, left to right, vertical (columnar), and (vertical and horizontal) boustrophedon. From around the middle of the 11th century, the writing direction became stabilized and the letters were written only horizontally from right to left.23

Similarly, the archaic Greek local scripts could be written from left to right and right to left and boustrophedon in horizontal or vertical direction. As demonstrated by Jeffery & Johnston 1990: 43-46, there was no chronological evolution from continuously retrograde to boustrophedic to dextroverse, but these different writing directions were used simultaneously. Eventually, the writing direction was established from left to right—in complete contrast with the Phoenician alphabet. With respect to direction of writing, the early Greek inscriptions are thus more archaic than the Phoenician script. As argued by Naveh (and others) it seems unlikely that the Greeks would have operated a less developed system if they had the standardized 9th-8th century retrograde Phoenician example at their disposal. He therefore argues that the Greek script must have been taken over when there was still variability in the writing direction in West-Semitic, thus around 1100 BC.

Defendants of a later date waive this argument claiming that an unfixed writing order is typical for the initial stage of any writing system (see, e.g., Swiggers 1996: 267). Such experimental phases may indeed be expected for a newly created writing system, but it is doubtful if this also applies in cases when an already established and standardized writing system is taken over. By comparison, when the cuneiform script was introduced to other (illiterate) societies, the direction of writing (along with several other scribal habits) was taken over with the script. In none of these cases there is any evidence for “experimental writing” in different directions.

The explanation offered by Jeffery & Johnston (1990: 45) that the Greeks did not take over the Phoenician writing direction because “neither the Semites who taught, nor the first Greeks who learnt, were concerned with much more than the basic elements of instruction in the art of writing” is not satisfying. Jeffery and

Johnston deem it unlikely that the Greeks would have picked up the writing system merely from contacts with Phoenician traders who came periodically from overseas, but, following Carpenter, they argue that the transmission must have occurred in an established bilingual settlement of the two peoples (Jeffery & Johnston 1990: 7). This would mean that there would have been plenty of opportunity to address aspects such as the direction of writing, which—one could in fact argue—can be considered a “basic element” of writing. The assumption that the boustrophedon system would naturally suggest itself to the unpractised writer is equally debatable (Jeffery & Johnston 1990: 46).

To sum up, if we assume that the Greeks took over the alphabet in the 8th century, this would mean that they ignored the existing Phoenician writing conventions regarding writing direction, but instead invented their own, which coincided with the writing directions that were in use before that time in West-Semitic inscriptions. If we assume that the Greeks borrowed the script at an earlier stage, this would mean that they simply took over the existing writing practices. In this scenario, the Greek and Phoenician scripts developed independently (but probably not in full mutual isolation) from the same source with different outcomes: in the Aegean, the standard writing direction became left to right, in Phoenician right to left.

WORD DIVIDERS

Naveh has further drawn attention to the resemblance between word dividers in early Greek and West Semitic inscriptions. The practice of word division is attested in early second millennium Canaanite inscriptions, such as the Qubur el Walaydah bowl dating to ca. 1200 BC and the 13th century Lachish bowl, which have vertical strokes dividing the words.24 The Lachish ewer, also dating to the 13th century, has word dividers consisting of three vertically placed dots (see Figure 5).

The practice of placing multiple dots between words in the Phoenician script is no longer attested in the first millennium, ex-

cept for the earlier mentioned Aramaic Fakhariyah inscription, if it is indeed to be dated to the 9th century (see p. 92). From the first millennium onwards, the vertical stroke gradually became shorter and was eventually replaced by a (single) dot (Naveh 1973b: 206-207). From the 7th century onwards three systems were in use in West-Semitic scripts; generally speaking, one can say that in the Hebrew script words were separated by means of single dots, in Aramaic by means of spacing, whereas the Phoenician script used continuous writing.25

Archaic Greek inscriptions show both types of word dividers attested in the early West Semitic inscriptions, i.e. the use of vertical strokes as well as multiple dots placed vertically on top of each other (Figure 6).26 Like in the case of the comparison of individual letter


FIGURE 5.
The Lachish ewer inscription with multiple dots as word divider. Tufnell et al. 1940 plate LX.
forms discussed above on p. 89-92, the scantiness of our material does not allow us to draw any firm conclusions, as it cannot be excluded that the use of vertical strokes and multiple dots continued to be in use in the first millennium in West Semitic writing. One can, however, observe that there is a remarkable correlation between Proto-Canaanite and early Greek systems of word division.

**PLURIFORMITY OF LETTER FORMS AND THE DIVERSITY OF THE ALPHABETS**

Perhaps the most important argument for an early transmission put forward by Ullman, Naveh and others is the pluriformity of the Greek letter forms and the variety of the Greek alphabets. As soon as the first inscriptions emerge, there are no less than 33 alphabets in Greece with a great variety in their letter forms.

This diversity from the very start, as well as the quick spread of the alphabet is indeed problematic for the scenario offered by Carpenter, as has already been pointed out by Ullman in 1934: “Between
the introduction of the alphabet into Greece and the earliest extant inscriptions many developments took place. The assumption that the alphabet was not introduced until 700 B.C. reminds one of a hothouse which accelerates the growth of plants: In no time at all the letters changed their shapes, Semitic vau split into consonant digamma and vowel upsilon, the added letters were invented, the so-called western and eastern alphabets were differentiated. Truly the Greek climate does miracles to a young alphabet; we can almost see it growing. It is no wonder that Carpenter sets forth a ‘schedule’ for its development. Everything has to move on schedule if it is to be accomplished." (Ullman 1934: 379).

The reaction of Carpenter (1938: 69) to this criticism is worth quoting as well: “My critics have deemed it absurd that this wonderful invention for recording and preserving unbodied speech should have spread like wildfire down the trade-routes and along the seaways of enlightened Hellenic thought, reaching Corinth in a single generation and distant Etruria in less than fifty years. But for myself, I hold it worse than absurd, I hold it un-Greek and hence unthinkable that it should have lingered for any considerable lapse of time among this intensely active people, in passive abeyance, known but unutilized. ‘Truly, the Greek climate does miracles to a young alphabet; we can almost see it growing.’”

Martin Bernal (1990: 8-15) surely overreacted in seeing Carpenter’s proposal for a late transmission of the alphabet in 1933 in the context of intensified anti-Semitism, but it must be said that the latter’s praise of the “dynamic Greeks” feels a trifle uncomfortable, if only for the implicit underlying contrast with the “passive Phoenicians” whose alphabet apparently developed at a more natural pace. Regardless of any possible subliminal political agenda, Carpenter nonchalantly steps over a number of significant facts, which demand a thorough explanation:

1. **Variety in letter shapes**

The early Greek inscriptions show a great variety in letter shapes. If one is anxious to hold on to the late introduction, one could argue...
that the diversity of the Greek alphabets is due to the fact that they developed from different Phoenician local scripts. This option has been dismissed by Naveh because no such variety of local Phoenician scripts has come down to us. As we have seen above, though, the Fakhariyah-inscription is a warning that it cannot be excluded that more variants existed which have not survived.

There is, however, a more serious objection to this scenario. It is generally agreed that the Greek alphabet must have originated in a limited area and that it was not created independently at a number of locations, because of innovations such as the introduction of vowel signs that are shared by all alphabets (Jeffery & Johnston 1990: 6). This is impossible to reconcile with the idea that the alphabet originated from different local scripts, as this would imply that the alphabet would have been introduced from various sources. This option is therefore unlikely.

Naveh plausibly argues that the diversity can be explained if the alphabets stem from a proto-type which had unstabilized letter forms. This would mean that the alphabet was introduced in or before the 11th century, when the West Semitic script was still developing from pictorial to linear forms and did not yet have fixed letter forms. Alternatively, one could regard the regional diversity as the result of local developments within the Aegean, which took place over a longer period of time. Both scenarios imply an earlier date for the introduction of the alphabet. In addition, a longer development period would explain the at times striking divergence between the early Greek and Phoenician letters (cf. Cross 1979: 109).

2. Differentiation of the various alphabets

Despite the shared innovations, there are some substantial differences between the regional alphabets (see above p. 86-87). These include the uses of the extra signs Φ, ψ and Χ and Ξ, which are not present in all alphabets and that may also have different values per alphabet. This differentiation can only be explained by assuming that the addition of these letters did not happen all at once when the alphabet was taken over, but that this was a longer process.
The distribution of the letters san and sigma for /s/ may also be best explained as the result of a longer development. It is generally assumed that the Greek alphabet originally had both the letters san (between pi and kappa) and sigma (between rho and tau) and that all local Greek alphabets chose between one of these two to render the one Greek sibilant /s/.[28] The assumption that the Greek alphabet originally had both is strengthened by the Etruscan alphabet in which these two sibilants have been retained (Slings 1998: 648, see also p. 100-101). When the first Greek inscriptions appear in the 8th century, they either show sigma or san; there are no inscriptions or abecedaries that have both.[29] This means that by that time all alphabets had already chosen between one of the two sibilants.[30] It has further been assumed that the borrowing of the Phoenician letter waw for the extra letter upsilon is of a later date than the borrowing of this letter for the digamma, which would also imply a lengthier process.[31]

Of interest for this discussion are the so-called Fayum tablets which came to light in 1983.[32] These three copper plaques are inscribed with continuously written abecedaries, the function of which is unclear.[33] The letters resemble those of the Greek alphabet much more than the Phoenician forms (Heubeck 1986: 14-16). Interestingly, the alphabet on the tablets ends with the letter tau (without any of the later added letters) and is thus coterminous with the Phoenician consonantal script. Further, it retains both san and sigma. If these tablets indeed contain early Greek alphabetic writing, they could be seen as a representation of a premature stage of the alphabet in which both san and sigma are still preserved and upsilon (and the other extra letters) have not yet been added. Regrettably, the archaeological context of these plaques, which are said to stem from the Fayum in Northern Egypt, is completely unknown. Alfred Heubeck (1986: 18), who examined the Würzburg exemplar, has epigraphically dated the inscriptions to the late ninth or early eighth century BC, but this dating cannot be confirmed archaeologically.

It is in any case clear that some substantial transformations took place in the Greek alphabet. The available evidence is too scanty to be certain how and when these developments happened, but they
are likely to have occurred in phases over the course of a substantial period of time, most likely several centuries, which would explain the regional diversity.\textsuperscript{34}

**THE WIDE GEOGRAPHIC SPREAD**

As mentioned above, as soon as the first inscriptions start to appear, they are found spread over a large geographical area including the Greek mainland and the islands and Italy.\textsuperscript{35} Recently found inscribed pottery dating to the 8th century BC from Methone (Pieria, central Macedonia) demonstrates that the script was in use in northern Greece at that time.\textsuperscript{36} Similarly, the famous inscription on the Nestor cup (ca. 750-700 BC) found at Pithekoussai, Ischia (see Figure 6) testifies that the Greek alphabet was also in use in Italy by then.\textsuperscript{37} If one assumes a late introduction date, this means that its distribution must have happened at a tremendous speed, as Ullman (1934) already saw. In addition, more or less simultaneously with the Greek alphabet the related Etruscan and Phrygian alphabets would suddenly have emerged.

**THE ETRUSCAN AND PHRYGIAN ALPHABETS**

The Greek alphabet is evidently connected to the Etruscan and Phrygian alphabet. The earliest, in all likelihood Etruscan *abece-darium* from Marsiliania dates to around 700 BC. It most resembles the "red" or Western Greek alphabets, but there are also obvious differences from the first attestations onwards, such as the fact that the sibilants *sigma* and *san* are both retained in the Etruscan alphabet, whereas none of the Greek alphabets contain both these letters (see above p. 98-99). This phenomenon has been explained by assuming that the Etruscan alphabet derives from a period when the Greek alphabet still had both these letters, before the split into 'east' and 'west' of the Greek alphabet (Bonfante & Bonfante 2002: 45), which would imply an earlier date for the origins of the latter.

The Phrygian alphabet is also clearly related to the Greek alphabet (e.g. same vocalisation, double use of *waw*, rectilinear *iota*, see
Brixhe 2004: 276), but it also underwent some independent developments (e.g. the addition of an extra non-Semitic sign ↑, see, e.g., Young 1969: 295). After the redating of the Gordion destruction level, the earliest Phrygian inscriptions known to us are now put at around 800 BC (Brixhe 2007: 278), which makes them contemporaneous with, or earlier than, the oldest Greek inscription. The fact that Phrygian inscriptions may predate Greek inscriptions does not of course automatically imply that the Greeks received the alphabet through the Phrygians—that this is not the case is evident from e.g. the presence of the Phoenician letter thet in the Greek alphabet that was not part of the Phrygian alphabet.38 However, the Phrygian evidence is of great relevance for the discussion of the origins of the Greek alphabet. The earliest inscriptions demonstrate that the Phrygian alphabetic tradition was already well established at the beginning of the 8th century. Claude Brixhe rightly sees this as the result of a much longer development, which must go back to at least the 9th, if not the 10th century.39

In the 8th century we thus see three related, yet clearly independent scribal traditions, Greek, Etruscan and Phrygian. This picture can simply not be reconciled with a late date of the introduction of the alphabet in the 8th century. On the one hand, the shared similarities of the three alphabets imply that they must have had a common ancestor, in which four Semitic letters were already turned into vowels and the upsilon was added (Young 1969: 255-256). Their notable differences, on the other hand, which are already present in the first extant written sources, can only be explained as the outcomes of longer, separate developments.40

**GENRE AND NATURE OF THE EARLIEST INSCRIPTIONS**

Lastly, it is remarkable that all extant Greek writing till ca. 650 BC has a popular and private character. The early corpus includes proprietary and poetic inscriptions on pottery and tombstones, dedications and erotic rock graffiti, which all point to private usage.41 As observed by Teodorsson (2006: 173) this evidence indicates “an astonishingly broad and rapid propagation among the population”.

40. For the possible scenarios of the development of the Greek and Phrygian alphabets, see Young 1969; Lejeune 1969; Brixhe 2004; 2007 and Van Dongen 2013.
41. For an overview see Powell 1991: 123-186.
It is telling that some of the oldest known inscriptions, such as the Nestor cup of Pithekoussai, the Dipylon inscription from Athens and the recently discovered Acesander cup from Methone (see now Janko 2015) contain poetic verses in hexameters. Whereas the remarkable fact that some of the earliest known inscriptions are of such literary nature has by some scholars been taken as evidence that the Greeks introduced writing for the sole purpose of recording Homer (Powell 1991), a more plausible explanation may be that writing was already in use for other, more mundane text genres, such as economic and administrative documents—usually the first type of texts to be put in writing—on perishable materials, before the first surviving literary inscriptions on durable materials.\textsuperscript{42} Indirect evidence for the early use of writing for administrative and public purposes is provided by later sources, such as Strabo, that mention the recording of the Olympic winners from 776 onwards, and the recording of the laws of various city states (see Teodorsson 2006: 174 with references).

With respect to the Phrygian (and Greek) alphabet, Brixhe (2007: 279) connects the emergence of the first epigraphy with the progress of literacy among the population and the expansion of the domains for which writing was used. He suggests that it may first have been limited to economic and administrative uses, which were recorded on perishable materials and later moved into the private domain and as a consequence also became used on more durable materials (e.g. owner’s marks on vases). Considering the available evidence, this scenario it is very conceivable that writing was already in use in the Aegean for commercial, economic and administrative purposes on perishable materials, long before its first preserved attestations—especially if we bear in mind that the Greeks traded and had contacts with numerous (literate) people overseas.\textsuperscript{43} From the 8th century onwards, writing penetrated society more deeply and it started to be used for other, additional purposes, including private texts (proprietary and poetic inscriptions, dedications etc.) on more resilient mediums, such as pottery and stone, which did come down to us.

\textsuperscript{42} Cf. Ruijgh 1995: 37, see for a good critique of Powell’s claim also Woodard 1997: 253-256.
\textsuperscript{43} Cf. Ruijgh 1995: 37, see also below p. 107-108.
SUMMARY

Combining all epigraphic material one cannot but conclude that an earlier introduction date fits the presently available evidence, whereas a late introduction date leads to strained interpretations, improbable assumptions or ad hoc solutions. If one assumes a late transmission, that is in or after the 9th century BC, it implies that Greeks ignored certain accomplishments of the Phoenicians, such as a fixed direction of writing and standardized letters, but instead turned it into a more primitive script without fixed direction of writing or standardization of letters, hence supposedly coincidentally mimicking the situation in the Proto-Canaanite phase. When the Greeks finally did fix the writing order, it was in the complete opposite direction of that in use by the Phoenicians at the time it was supposedly borrowed by the Greeks. The Greek alphabet subsequently would have spread, developed and diverged with enormous speed over a large geographical area and instantaneously circulated among the population being used for all kinds of private purposes—facts that are all the more remarkable after a long “dark age” of 300 years in which writing is assumed to have been unknown. The Etruscan and Phrygian alphabets, which are clearly related to the Greek alphabet, apparently developed independently, but at the same incredible pace.

If, by contrast, one allows for an earlier date, i.e. in or before the 11th century (Naveh), a more plausible scenario unfolds itself: the Greeks took over the script and existing writing conventions (writing direction, letter shapes and word dividers) in the form in which it was in use at that time; the Greek alphabet then gradually spread and developed, which accounts for the regional divergences as well as the dissimilarities between Greek and Phoenician writing. Likewise, the Phrygian and Etruscan alphabets, which share a common ancestor with the Greek alphabet, continued to develop independently at their own (natural) pace.

The earliest records, which have not survived, in all likelihood included administrative and economic records on perishable materials. It was only in a later phase (from ca. the 8th century onwards) that the use of writing also extended to other domains, including
(private) inscriptions on more durable materials, which as a consequence did survive. This scenario has an additional advantage: it would imply that the illiterate Dark Age of the Greeks did not last exceptionally longer than in the neighbouring areas, but that the events in the Aegean were in line with larger, transregional developments (see also below p. 109-111).

III. THE LINGUISTIC EVIDENCE

The Phoenician consonantal script was not entirely suited for the Greek language and therefore some changes and adjustments were made. Letters were added and some Phoenician letters acquired a different sound value in the Greek alphabet. Some of these developments are better explained if one assumes an early introduction of the alphabet. In the following a selection of these will be addressed.

THE LETTER HETA

A scholar who has strongly argued for an early introduction (around 1000 BC) from a linguistic point of view, is Cornelis Ruijgh. In a number of intricate articles (1995, 1997, 1998, 2011), which unfortunately have not received the attention they deserve, he lists several—mainly linguistic—arguments for an earlier date for the introduction of the Greek alphabet. One of Ruijgh’s prime arguments is the letter heta (H), expressing the Greek sound /h/. His theory may be summarized as follows: When the Greeks took over the Phoenician alphabet they could choose between a weak he (the later Greek epsilon) and a strong het (the later Greek eta) to represent the Greek sound /h/. The choice for the latter (i.e. strong het) rather than the weak he implies that the Greek /h/ was strong at the time the alphabet was borrowed. The earliest Greek inscriptions show, however, that in the 8th century BC the Greek /h/ was already weak and no longer functioned as a full consonant. As a consequence, Ruijgh plausibly concludes that the alphabet must have been introduced before that time.44

THE LETTER PHI

The origin of the letter phi (Φ), the second addition to the alphabet after upsilon, is unclear. It has long been noted that it bears a strong resemblance to archaic forms of qoppa.45 A connection between these letters has, however, generally been rejected due to phonological incompatibility.46 Brixhe suggests that the /pʰ/ value for this sign may be explained if the Greek language still had labiovelars when the alphabet was taken over.47

Brixhe postulates that the qoppa initially represented the labiovelar sounds /kʷ/, /gʷ/ and /kʷʰ/ in the Greek alphabet. According to a normal phonological development /kʷʰ/ eventually changed into /pʰ/ and /gʷ/ into /b/. Only before the vowels u/o the qoppa retained the value /k/. In the ensuing situation, the non-aspirate sound /p/ could be expressed by the letter pi (Π) and /b/ by the letter beta (Β). The value /pʰ/ was rendered with pi (Π), or with pi + heta (ΠΗ) in some alphabets, but most alphabets introduced a new variant of qoppa to represent the sound value /pʰ/.48

As with the letter waw, the letter qop was thus borrowed twice to represent two related sounds. The qoppa, which retained its original place in the alphabet, continued to be used for the guttural /k/ before o/u, and the second borrowing, the letter phi, was added after upsilon to represent the sound /pʰ/.49 This scenario would for the first time give a satisfactory solution to the origin of the letter phi. The implication is, once more, that Greek alphabet must be considerably older than the 8th century BC.

45. See Heubeck 1979: 92-93; Miller 1994: 51-52). Note that the qoppa letter was no longer used after the middle of 6th century except in some Doric dialects, which used it well into the 5th century, see Jeffery & Johnston 1990: 34.
46. Wachter 1989; see also Miller 1994: 52.
48. The link with Linear B signs suggested by Miller 1994: 52 seems less attractive.
49. The small adjustment of the sign phi—the vertical continuing in the circle—to distinguish it from qoppa, finds a nice parallel in the Latin alphabet, where the letter G is created by adding an extra stroke to distinguish it from the letter C. I am grateful to Marco Poelwijk for pointing this out to me.
SUMMARY

From a linguistic point of view, an earlier date for the alphabet is attractive. It would explain the choice for the letter ηη (for /h/) and it would offer an appealing solution to the longstanding problem of the origins of the letter ϕϕ. By contrast, to my knowledge no linguistic arguments have been put forward that would favour a later date.

50. Not included here is the complex matter of the sibilants, which is sometimes also used as an argument for an earlier introduction. In the Phoenician consonantal script, there were no less than four sibilants: zayin (voiced s, i.e. [z]), shin [sh], samek (unvoiced s) and sade [ts]. The Greeks used shin for /s/ (sigma) – except for some dialects in which sade (Greek san) seems to have been used for /s/ – the zayin for /dz/ (zeta) and samek for /ks/ (ksi). It has been proposed that samek, sade and zayin were originally affricated, representing [ts - ts'- dz], see e.g. Krebernik 2007: 128; Tropper 2000; Streck 2006). The use of the letters zayin and samek in Greek for /dz/ and /ks/ would be easier explained if the affricated articulation of these letters was still current when the Greeks took over the script. However, it may not have happened till the first millennium BC (see Krebernik 2007: 128; Tropper 2000: 319). Ruijgh (1995: 32-36; 1997: 563-565) suggests that in the Greek alphabet originally the letter sade (san) was used for the value /ts/ and that the normal /s/ was rendered by sigma. Later, initial /ts/ resulted in /s/ or /ss/ in most dialects, but to /tt/ in Attic, Aelian and Cretan. As a consequence, the letter (t)san became redundant as it now coincided with sigma or tau. In most regions, the (t)san disappeared and the sigma remained except for the Aegean islands and the Peloponnesos, where san remained and sigma disappeared. Since initial /ts/ had already developed into /s/ at ca. 800 BC, it follows the creation of the alphabet must have taken place before that time. Though this theory sounds attractive, as pointed out by Slings (1998: 648-649), the Cretan evidence seems to plead against this scenario. In this dialect, the sound /ts/ was still preserved when the first inscriptions start, but it was never written with san (which was used for s) but expressed by means of the letter zeta. One wonders with Slings why the Cretans did not simply (continue to) use san for /ts/. However, it is of interest that archaic inscriptions from Thera and Corinth do seem to use san for /ts/, see Brixhe: 1991: 324. The discussion is further complicated by the letter sampi, which is a later addition to the Ionic alphabets. It has been connected with Phoenician sade by Ruijgh and other scholars, but not this is not generally accepted (for discussion, see Slings 1998: 644-647. Note further that Brixhe (1991: 330-334) questions whether san and sigma originally had different values and discusses the earlier made suggestion that the Greek san (Μ) is in fact a rotated version of sigma (Σ) and that both letters derived from Phoenician shin. All in all, the evidence is too inconclusive to allow any firm conclusions.

51. The objections of Slings 1998 against the arguments of Ruijgh for an earlier date do not necessarily imply a later date. Note that Slings himself remarks in the introduction of his article (p. 641) that he does in principle not have any serious problems with Ruijgh’s hypothesis that the Greek alphabet must have been created earlier.
IV. THE ARGUMENT FROM SILENCE

The most important argument for a late introduction of the Greek alphabet is the absence of evidence: there are no certain Greek alphabetic inscriptions attested before the 8th century BC. Carpenter remarks in his AJA article that “[this] argument grows every year more formidable, and more conclusive” (1933: 27). Yet, an argument from silence is never more than that: it remains inconclusive, even if the silence is thunderingly loud.

First of all, the dominant writing mediums for alphabetic scripts in antiquity were in general perishable materials such as leather, wood or papyrus. If we exclude digital documents, this is still the case today: paper is the most common medium for writing alphabetic texts. Due to their ephemeral nature, survival of these texts under Greek climatic conditions is not to be expected. The oldest papyrus from Greece dates from the 4th century BC, but no one seriously claims that this material was not in use before to record writing (Ruijgh 1997: 536). It is also important to bear in mind that this “silence” not only occurs in Greece, but throughout the entire region in which alphabets were used—which is of course linked to the perishable nature of the writing materials involved.

Joseph Naveh and others have drawn attention to the very similar situation with respect to the Hebrew alphabet. It is generally accepted that this alphabet was adopted in the 12th/11th century BC, soon after the conquest of Canaan, but in fact the earliest Hebrew inscriptions do not predate the 9th/8th century BC. From this period, there is only one inscription—the Gezer calendar, which may in fact be Phoenician. There is thus a period without written sources of some 350 years, which is even more striking if one remembers that Palestine is one of the most intensively excavated areas of the eastern Mediterranean world (Cross 1979: 109).

Cross (1979: 108-109) further points to the ca. 500-year long silence between the branching apart of the ancestral Proto-Arabic script from Proto-Canaanite in the 13th century BC and the earliest inscriptions in Old South Arabic dating to the 8th century BC.
Another telling parallel may be found in Cyprus. It is clear that there must have been continuity in the syllabary tradition from Cypro-Minoan to the Cyprian syllabary, despite the absence of documents in any related script from ca. 950 to the 8th century.\textsuperscript{52} There are many more examples of periods of deep and utter silence in the written record from other historical periods and cultures that can be adduced in order to demonstrate that, though absence of evidence should of course not be disregarded, it is certainly not conclusive.

As shown above, the shortage of written sources is ubiquitous in this period in the Mediterranean and the Near East. Apart from a change in the political landscape and social structures, the transition from the Late Bronze Age to the Early Iron Age witnessed the expansion of alphabetic writing on perishable materials, which may for a large part explain the apparent textual darkness of this period. It is evident that the 8th century brought changes and an explosion of written data, which is not only the case in Greece but also in the Levant.\textsuperscript{53} As argued above on p. 101-102, from the 8th century onwards the use of writing expanded; it was no longer restricted to economic and administrative texts on perishable materials, but, as literacy among the population spread, it also became used for private inscriptions of a proprietary, dedicative and poetic nature on more robust mediums.

It may be risky to assume the existence of material that is not extant, but it is equally hazardous to focus only on the scanty material which just happened to have survived. It is good to bear in mind that since Carpenter’s claim new inscriptions have turned up, such as the Nestor cup (ca. 750-700 BC), the Acesander cup (ca. 700 BC) and the Osteria dell’Osa inscription (ca. 830-770 BC, see n. 37 on p. 100). These discoveries and the redating of the earliest Phrygian inscriptions to ca. 800 BC have already pushed the date back some 100 years from ca. 700 to ca. 800 BC, demonstrating—to quote Sherlock Holmes—“how dangerous it always is to reason from insufficient data”.\textsuperscript{54}


\textsuperscript{53} This overall long and conspicuous absence of (written) records fits in well with the proposal of James et al. 1991 to considerably reduce the length of the Dark Age, but this thesis has not found general support among archaeologists (see I. Morris 1997: 538).

\textsuperscript{54} Doyle 1892: 156.
V. RETHINKING THE GREEK DARK AGE

In the early 1930’s when the current paradigm was established, the early Iron Age in the Aegean was perceived as a true “Dark Age”, in which Greece was in complete decline and isolated from its surroundings regions. The idea of contacts between Greeks and Phoenicians in this period was seen as problematic. Characteristically, in 1933 Rhys Carpenter reportedly dismissed the notion that the Phoenicians may have already visited the Aegean before the 8th century as a “mirage” and a “hopeless illusion”.55

Since then, our perception of the Greek Dark Age and interconnectivity in the ancient world has fundamentally changed. It is explicitly not the aim of this paragraph to present a full discussion of all the now available archaeological evidence, but I will briefly mention some important new insights, which show that the necessary infrastructure for the transmission of the alphabet was already in place long before the 8th century. Over the last decades, it has become more and more clear that contacts between Greece and the Near East have existed for a long time, dating back to at least the third millennium BC. Evidence for contact with Greece and the Levant and the rest of the Near East is abundantly attested for the Late Bronze Age. Greece formed part of an international network of trade and entertained diplomatic contacts with Egypt, Hittite Anatolia and the Levant.

In the following Dark Age our sources are scanty and contacts may have been less intense, but they were certainly not absent.56 Though no-one would deny that there is a breach between the end of the Late Bronze Age and the following Iron Age, recent studies have demonstrated that there was also a fair amount of continuity and that the Mediterranean Dark Ages were not as dark as previously assumed in the entire Aegean.57 Maritime activity continued, and there was still exchange and contact with the ancient Near East.58 Though parts of Greece may have remained poor and isolated, places like Knossos and Lefkandi have produced evidence for the existence of larger and prosperous communities (Crielaard 1995: 264). Recently, Antonis Kotsonas has established that Early Iron Age

55. When addressing the idea of early Phoenician visits to the Aegean in a lecture in 1933, Carpenter is said to have exclaimed: “Mirage, miragel Hopeless illusion!” (for reference, see McCarter 1975: 14 n. 33).
56. For a recent overview of the contacts between the Aegean and the ancient Near East, see Broodbank 2013, especially chapters 8 and 9.
57. Dickinson 2006, esp. p. 246; Kourou 2009: 361. Note that some scholars such as Woodard and Albright have also argued for a continuous tradition of literacy in Greece. Woodard (1997: 257) sees a link between the Cypriot Syllabary with the Greek alphabet, whereas Albright sees a continuous tradition of writing on papyri, but rather prefers to prolong the period in which Linear B was used, not excluding the possibility that the two might overlap (1950: 156, see also 1956: 164 with reference to Alan J.B. Wace).
Knossos was nearly three times larger than previously thought.\footnote{Kotsonas has presented the results of his field research, which form part of the colloquium ‘Long-Term Urban Dynamics at Knossos: The Knossos Urban Landscape Project, 2005-2015’ at the 117th Annual Meeting of the Archaeological Institute of America and Society for Classical Studies in January 2016, for more information see http://www.uc.edu/news/ NR.aspx?id=22648 (viewed 30-06-2018).}

Finds in Cyprus and Crete from the 11th and 10th century show that there were contacts with the Phoenicians.\footnote{See, e.g., Cross 1987: 71; Cross 1980; Negbi 1982; S. Morris 1997: 607; Kourou 2000; Puech 1983. As Dickinson (2006: 197) rightly warns however, one should be careful not to label everything Near Eastern or Levantine as Phoenician.}

Evidence for writing includes a Phoenician inscribed bronze bowl found nearby Knossos. The date of this “Tekke bowl” is debated, and proposals range from the 11th century to ca. 900 BC.\footnote{Puech 1983 dates the grave to 10th century (thus also Kourou 2000: 1070; 2009: 366) and the inscription to the 11th century BC (thus also Cross 1980: 15-17). Dickinson (2006: 199) dates the context to around 900 BC allowing the bowl, which he sees as a gift or ‘heirloom’ to be as much as a century earlier. Vokotopoulos (2007: 261) dates the bowl to ca. 900 BC.} The Phoenician boustrophedonic inscription of the Nora fragment from Sardinia (not to be confused with the 9th century Nora stele), dated to the 11th century by Cross (1987), shows that Phoenician presence extended even more westwards in that period.\footnote{Note that Röllig 1982 has criticized this early dating but his arguments have been countered by Cross 1987.}

In sum, there is sufficient evidence that during the Iron Age the Greeks were in contact with the Phoenicians and a transmission of the alphabet in the 11th century BC is not impossible.\footnote{The fact that Phoenician inscriptions dating to the 9th century and later have been found in the Aegean (see e.g. Kenzelmann Pfyffer et al. 2005; Theurillat 2007; Bourogiannis 2012) may be seen as evidence that contacts with the Phoenicians continued. These discoveries do, however, not exclude earlier contacts, nor an earlier introduction of the Greek language.} In fact, the new insights about this period do not only make such an earlier transmission possible, but also likely. Since the Greeks had contact with the Phoenicians (and other people) who made use of writing, it seems hardly credible that Greece, as the only region in the area, would have remained illiterate for over three centuries—especially since, as we now know, this period was not all bleak and regressive.

What is more, the Aegean was not unfamiliar with writing as it had been in use in for some 700 years till ca. 1180 BC. The decipherment of Linear B in 1952 by Michael Ventris showed that writing was already used to record the Greek language from ca. 1450 BC onwards.
Lastly, as already mentioned above (p. 101-102), an earlier date for the introduction of the Greek alphabet would place the situation in the Aegean in line with the overall developments in the surrounding areas in the ancient Near East.

VI. CONCLUSIONS AND OPEN QUESTIONS

In the above several arguments have been put forward that plead for an early introduction of the Greek alphabet in or before the 11th century BC. They may be summarized as follows:

1. The Greek alphabet shares certain characteristics with West-Semitic inscriptions, which were in use up to the first half of 11th century BC, which include:
   • The unfixed writing direction of the script.
   • The instability and variety of letter forms.
   • The use of multiple dots as well as vertical lines as word dividers.

2. An earlier transmission of the Greek alphabet agrees with a number of important facts, which remain awkwardly unsolved if one assumes a later date:
   • The fact that there existed multiple distinct Greek alphabet traditions already from the 8th century onwards.
   • The fact that the Greek alphabets of the 8th century show a great regional variety in letter shapes.
   • The fact that in the 8th century there are already three clearly related, yet independent, fully developed alphabets: Greek, Phrygian and Etruscan.
   • The fact that the Greek alphabet is attested in a large geographical area in and outside of Greece already from the 8th century onwards.
   • The fact that already in the 8th century the script was used extensively for private purposes.

3. An earlier transmission of the Greek alphabet offers a good explanation for the use and/or phonological value of the letters phi and heta.

4. An earlier introduction of the Greek alphabet would mean that the developments in Greece are contemporaneous with and
similar to those in neighbouring regions and that there was no exceptionally long illiterate phase in the Aegean.

5. An earlier adaptation of writing would fit well with recent archaeological insights that more and more show that the Greek Dark Age was not as dark as has long been assumed, but that there was a substantial amount of prosperity and continuity and that international contacts and trade did not disappear completely.

The only argument for a later date that is currently still standing is the *argumentum ex silentio*. As has been demonstrated above, this silence is not unique to Greece, nor is it surprising considering the fact the alphabetic writing was and is mostly used on perishable writing materials. Above all, the argument cannot be seen as conclusive. Our lack of data is admittedly problematic, but this should all the more force us to leave open the possibility of other scenarios, and look for the most likely one.

The particular constellation of our data can only be adequately explained as the product of a longer development. It is simply not credible that all the above changes happened within less than fifty years, no matter how favourable the intellectual climate or how "intensively active" the people involved. In the present debate, the date 800 BC at times appears to be set in stone, hence impeding academic progress and inviting circular argumentation. New floors, doors and windows are added to the building of the old paradigm, without adequately considering the need for a general overhaul. Against this stand new discoveries, made in the last decades, that have resulted in a substantial revision of our views of the early origins of the alphabet; they are a clear warning of the dangers of relying too heavily only on the evidence presently available to us.

It may be clear that the scenario suggested here does not answer all questions and in addition raises new ones. Many aspects have not, or only briefly, been touched upon. I have not addressed the complex matter of the location of the transmission of the alphabet, for which various proposals have been made, ranging from Cyprus (e.g. Woodard 1997), Crete (e.g. Guarducci 1987: 18-19),
Euboea (e.g. Ruijgh 1995: 38-39; 1997: 556; Teodorsson 2006) to Cilicia (e.g. Young 1969; Brixhe 2004, recently also Van Dongen 2013). Related to this is the question as to the relationship between the Greek, Phrygian and Etruscan alphabets, which deserves further attention (see Waal forthcoming).

Lastly, it should be stressed that most of the arguments presented here have already been made before by eminent scholars. They have, however, mainly done so from the viewpoint of their own discipline. In some cases, new data have come to light since the latest relevant publication from a particular sub-field. By combining the epigraphic, archaeological and linguistic evidence and including recent insights, I hope to have shown that the possibility that the Greek alphabet is considerably older than is usually assumed can no longer be ignored.

VII. APPENDIX: HOMERIC QUESTIONS

The origins of the Greek alphabet are inevitably tied to the question of Homer and the two epics that have been attributed to him, the Iliad and the Odyssey. There has been and still is much controversy about the date of Homer as well as the genesis and transmission of his poems. This immense and complicated discussion falls beyond the scope of this paper, but I would like to briefly address some points here regarding the presumed oral character of Homer.

HOMER AND ORAL TRADITION

Since the 1930’s, the Oralist theory of Milman Parry and his student Albert Lord has dominated the Homeric debate. Based on comparison with the Serbo-Croatian guslari the Oralists concluded that the Homeric poems must have been orally composed by means of an elaborate system of formulas. They established that Homer was an oral poet and that the poems were the result of a centuries long process of oral tradition from the Mycenaean period through the Dark Age.\(^\text{64}\)
The conclusions of Parry and Lord have been generally accepted, though they are not as decisive as they appear. The Oralists made a sharp distinction between “orality” and “literacy” which were seen as mutually exclusive (Lord 1978: 129, 137). There is much evidence against this view and it is now generally acknowledged that the opposition between oral and written is not as clear-cut. The work of anthropologists like Ruth Finnegan and Jack Goody has shown that there is no such thing as the oral tradition. Finnegan (1977: 17) distinguishes three ways in which a poem most readily can be called oral in terms of its (1) composition, (2) mode of transmission and (3) performance (compare also Goody 1987: 80). Some poetry may be oral in only one respect, others in all three, but more than often there exists some form of overlap with written literature. Interaction between written and oral form is extremely common and the concept of oralness must thus be seen as relative (Finnegan 1977: 160).

Further, it has become clear that the so-called oral-formulaic style, which Parry and Lord regard as a typical characteristic of orally composed poetry, is not necessarily restricted to orality. As demonstrated by e.g. Benson (1966) the heavily formulaic style is characteristic not just of Old English "oral" epics such as Beowulf, but also of written compositions in Old English. He concludes that a low or high percentage of formulae reveals nothing about whether or not a composition is literate.65 Jack Goody (1987: 99) cautiously wonders if the tyrannie de la formule may not in fact be a typical written development of features found in oral works. In other words, it is impossible to state with certainty that the Homeric epics were a completely oral product, that is in their composition, transmission as well as their performance, or only in one or two of these respects.66

The fact that one cannot be certain that Homer was an oral poet, does of course not automatically mean that he was part of a literate culture and made use of writing. There are however, a number of elements in Homer that make it worthwhile to (re)consider this scenario, as they may be better explained if one assumes that his poems were the product of mixed oral-written tradition.

65. See also Finnegan 1977: 69-72 who gives more examples of written works in ‘formulaic style’. For discussion hereof, see Lord 1995: 101-113 (with further references).
66. This problem has been acknowledged and discussed by classicists such as e.g. Thomas 1992; Foley 1997; Janko 1982: 18-41; Bakker 1997: 285-288; 2005: 38-55; Merritt Sale 1996: 24; Stanley 1993: 275-279.
ARCHAIC ELEMENTS AND ACCURATE (VERBATIM) ORAL TRANSMISSION

There are a number of archaic linguistic elements in the Homeric epics, some of which date back to the Late Bronze Age, or possibly even before. Both the phonology of the language as well as certain syntactic features such as tmesis have been shown to be of considerable antiquity.\(^{67}\) The archaic elements in Homer are not confined to language: there are also historical parts that refer to an earlier age.\(^{68}\)

If one adheres to the \emph{communis opinio} that the epics were not written down before the 8th century this would imply that archaic linguistic elements, which were no longer used in ordinary spoken language, as well as details of objects, people and places that no longer existed were preserved and orally transmitted accurately and even verbatim over several centuries. Though this cannot be excluded, this assumption is not supported by anthropological

68. A well-known but not undisputed example is the \textit{Catalogue of Ships} in \textit{Iliad} II. This list of over 200 lines that enumerates the Aegean ships leaving for Troy is generally agreed to represent the geopolitical situation in the Late Bronze Age, though with some clearly later interpolations (Page 1959: 120; Hope Simpson & Lazenby 1970; Latacz 2004: 219-228). Not all places mentioned have been identified, but those who have all show Mycenaean occupation. Apparently, many of these locations were abandoned after 1200 and no longer inhabited afterwards (though recent archaeological research in Greece is consistently showing that there was more continuity between the LBA and Iron Age than has been assumed thus far). Admittedly, we cannot be sure how exact the transmission of the \textit{Catalogue of Ships} was, but one may note that, regardless of its accuracy, its presence is in itself remarkable, as such long and detailed enumerations are uncommon for purely oral poetry and more typical for (early) literate societies (Goody 1987: 99; Vansina 1985: 178-182). It has been suggested that the \textit{Catalogue of Ships} was a later addition to the epic, but even so, this information still must have been transmitted over several centuries. The suggestion of Kirk (1976: 20) that the catalogue survived as a "bare list" without descriptions (which he sees as later additions) outside of the epic tradition "for two or perhaps three generations by means of more casual storytelling and reminiscence before being crystallized in poetry" is not convincing, as the long inventory of very specific geographical names, with or without descriptions, hardly qualify as "casual storytelling". And even after being "crystallized in poetry" it is hard to imagine that this type of list could survive for over 500 years, especially if this list no longer reflected the present geopolitical situation. Based on research of oral traditions in Africa, Jan Vansina (1985) estimates that some 200 years seems to be the longest stretch possible for authentic preservation, and only in certain circumstances (see for discussion Sancisi-Weerdenburg 1994: 43-49; Thomas 1992: 108). This is of course not to say that the memorizing of such lists for recital were impossible (see Minchin 1996), but reciting by heart during a performance after endless repetition is still a long way from more or less exact oral transmission from generation to generation for half a millennium.
studies on extant oral traditions, which show that exact, especially literal, oral transmission of (longer) texts is quite uncommon. The example of the relatively accurate transmission of the (short) ballad *Barbara Allen* over a longer period of time quoted by Finnegan (1977: 136-137) is instructive as the early (18th century) and late version (20th century) show quite some differences and the similarity between them is certainly not verbatim.

The Slavic material studied by Lord and Parry also offers little evidence for precise and literal repetition. The same epics recorded on various locations reveal great variety in form and comparison of the songs with text books from 1886 disclose changes in content as well. Parry (1966: 88) comments with respect to a Slavic bard that he is far “from any understanding of verbal accuracy in our sense.”

All in all, though the strict scheme of the dactylic hexameter may of course have helped to preserve older elements, it is not self-evident that archaic linguistic forms and lists of names and places which were no longer in use could have been passed on from generation to generation for centuries in a strictly oral context.

**ORAL VERSUS LITERATE SOCIETIES**

When discussing oral tradition, a further distinction may be made between oral literature produced in a purely oral society and in a society that is familiar with written literature. This implies an essential difference, even if the knowledge of writing is confined to

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69. See e.g. Goody 1987: 82-84; Finnegan 1977: 150-152; Ong 2002: 56-63. The only possible example of exact oral transmission of long compositions are the Vedas. These sacred Indian texts allegedly have been orally composed and transmitted verbatim over centuries. The purely oral nature of these texts has been questioned for various reasons (for a detailed discussion see Goody 1987: 110-122; Ong 2002: 63-65; Finnegan 1977: 150-152). In any case, the Vedas were sacred texts confined to the milieu of the literate (i.e.) Brahmins, who went to extreme lengths to ensure their correct transmission, using all kinds of mnemonic techniques. This is quite a different situation from that of the transmission of the epics of Homer and it for one shows that exact repetition is not a quality that comes easily or naturally in oral transmission.

70. As pointed out by Goody (1987: 88), this is not due to a failure of understanding or a lack of psychological capacity, but without a written text it can be difficult to know whether or not two versions of a long recitation are the “same” or not.

71. Though oral tradition is often associated with archaisms, Finnegan (1977: 111) has concluded that the once-held model of “oral tradition” as necessarily involving the preservation of older strata of language and culture has to be rejected.
a small circle and the poets may not be literate themselves (Goody 1987). According to Goody (1987: 98-100), the Homeric poems are in many respects very unlike those of cultures without writing. Likewise, Stanley (1993: 274) concludes that the Iliad diverges too much from the nine criteria of primary oral culture according to Ong (2002: 36-56) to qualify as a product of “pure” oral culture.72

It is of interest to note that the Slavic oral poetry which formed the main point of comparison for Lord and Parry is also the product of a literate society. Some, though certainly not all, of the bards were literate and written versions existed of some of the songs performed by the bards.73

**HOMERIC INCONSISTENCIES**

Recently, West (2014) has emphasized that the Oralist theory does not answer all questions and difficulties surrounding the Homeric epics—which are after all written texts—and there are certain discontinuities that remain to be explained. From the point of view of oral poetry in the strict sense, the Homeric epics have relatively few inconsistencies, but there are some. The most well-known examples may be that of the Embassy to Achilles which first consists of three and later of two persons and the Catalogue of Ships which shows some discrepancies with the rest of the epic. This list is therefore usually seen as a later addition, possibly originally part of a different tradition (see also n. 68 on p. 115). Such inconsistencies are, however, few and inconsequential in comparison with other cases.

West distinguishes several layers in the Iliad which would account for these inconsistencies. He plausibly concludes that the Iliad was composed over a longer period of time, and that the poet did not advance steadily from alpha to omega without looking back, but made expansions in what he had already written (West 2014: 48). Since West takes the alphabet to have been introduced only in the 8th century, he is forced to date all these different layers after 800 because he needs a literary context. His arguments might, however, gain further strength if one allows for some elements of the epics to have already been put in writing in earlier times, which were subsequently used and reworked by Homer. A further reason

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72. Stanley (1993) also draws attention to the structural connections and complex analytical principles of the organization of the epic, which are hard to reconcile with pure orality.

73. Lord 1978: 132-138; Goody 1987: 84-86; Finnegan 1977: 71. Lord (1978: 132-136) claims that work of writers in the style of the oral epic can be distinguished from truly oral epic, but also notes that some written works have been mistaken for a collection of oral epics. Later, he admits that in some cases the distinction cannot be made (Lord 1995: 231).
to doubt the strictly oral character is, as pointed out by Michael Reichel (1992), the striking resemblance between the Iliad and the (written) epic of Gilgamesh.76

THE GILGAMESH EPIC

When addressing the genesis and transmission of the Homeric epics, the Gilgamesh Epic provides an interesting point of comparison. This monumental work consisting of 12 cuneiform tablets is without doubt the most famous ancient Near Eastern epic that has come down to us. As has often been pointed out, the epic shows some remarkable similarities with the Iliad and the Odyssey. These include similarities in style, themes, metaphors, structure and the use of formulas, epithets and repetition.75 This shows for one how much, in the words of Martin West (1966: 31) “Greece is part of Asia”.

The Gilgamesh epic is generally regarded as a literary product that is ultimately based on popular stories which for a long time must have been transmitted mainly orally (George 2003: 17-33; Henkelman 2006: 628-629). At a certain point, these oral stories were reshaped and reworked to create a new, unified poem. The first written attestations of a united composition about Gilgamesh date to around the 18th century, the last one to the 2nd century BC. Though the earlier copies of the epic are not completely preserved, it is clear that various textual versions existed. The work continued to develop over the first centuries and different, regional traditions outside of Mesopotamia have been documented.76 The epic is best known in the “standard version” which has come down to us in copies from the 1st millennium BC. In the Babylonian tradition, this standard version has been attributed to the Homer-like figure of Sin-lēqi-unninni, whose date and exact role in the composition of the epic are unclear.77

When the epic was put into writing, this did not mean “the death knell” of the oral tradition, as assumed by Lord (1978: 137), but it continued to flourish. The Gilgamesh related motifs in Mesopotamian art and iconography can be seen as evidence that the oral circulating of stories about this hero continued outside of the

74. Alternatively, De Jong (2009: 108), who also points out the striking resemblances between the “oral” Homeric epics and the “written” Gilgamesh epic, sees the complexity of the Homeric epics as a confirmation of the power of oral story telling.
75. See also Reichel 1992, De Jong 2009.
scribal community and narrow circles of courtly entertainment (George 2003: 100). Further, the variety in the written versions is best explained if one assumes a “larger network in which orally transmitted versions of the epic as well as less literary stories on the hero circulated widely and in which public recitations of the epic, with some kind of musical accompaniment, may well have played a considerable role” (Henkelman 2006: 827).

Considering the fact that the epic of Gilgamesh and the Homeric epics bear so many resemblances, it is attractive to consider that their genesis may have been similar as well. Like the *Gilgamesh epic*, the *Iliad* and the *Odyssey* may have their origins in various (shorter) poems and stories (in this case about the Trojan war), which were at a certain moment reworked to create a unified composition. Some (parts of) of these poems may have been written down already at an earlier date, which would account for the many archaic elements in the Homeric epics. In this scenario, the *Iliad* and *Odyssey* are to be understood as the products of a mixed oral-written tradition.

Obviously, these suggestions require much further research, but it is worthwhile to consider that the Homeric epics were not created and passed on strictly orally, but that some form of literary tradition may have co-existed with oral tradition. An in-depth and systematic comparison between the epics of Homer and the *Gilgamesh epic* (and other contemporaneous ancient Near Eastern epics) and the role of Homer and Sin-lēqi-unninni promise to be very fertile grounds for future research. For now, it is important to bear in mind that the assumption that the composition and transmission of the Homeric epics was strictly oral is not self-evident and not without problems. The idea that writing to some extent may have played a part in their genesis should not *a priori* be excluded (cf. Bakker 2005: 45). To conclude with a remark of Jack Goody (1987: 49) with respect to the *Iliad*: “Many have held the present version to represent an earlier oral composition written down at a later date. Is it not more likely to have been a written composition of that same earlier date?”


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