

The Phoenician Script of the Tel Zayit Abecedary and Putative Evidence for Israelite Literacy

CHRISTOPHER A. ROLLSTON

Emmanuel School of Religion, a Graduate Seminary

Literacy: Ancient and Modern

The definition of literacy for antiquity (and modernity) is the subject of substantial debate. Some suggest that in “oral cultures” the capacity to use language (that is, the spoken word) in a functional or sophisticated manner constitutes literacy. However, some wish to argue that literacy is a term that is to be understood as referring to the ability to read and write texts. Occasionally, there are those who propose that functional literacy be defined as just the capacity to write one’s name. The United Nations Educational Scientific and Cultural Organization (UNESCO) has produced the following minimalist definition for the contemporary period: “Literacy is the ability to read and write with understanding a simple statement related to one’s daily life. It involves a continuum of reading and writing skills, and often includes also basic arithmetic skills (numeracy).”¹ The bibliography for the subject of literacy in antiquity (and modernity) is vast and varied.²

For the southern Levant during antiquity, (1) I propose the following as a working description of *literacy*: substantial facility in a writing system, that is, the ability to write and read, using and understanding a standard script, a standard orthography, a standard numeric system, conventional formatting and terminology, and with minimal errors (of composition or comprehension). Moreover, I maintain that the capacity to scrawl one’s name on a contract, but without the ability to write or read anything else

1. This definition is provided in a UNESCO position paper entitled “The Plurality of Literacy and Its Implications for Policies and Programmes.”

2. For some discussion and bibliography, see Treiman and Kessler 2005; Seymour 2005; B. Byrne 2005; Frost 2005. For bibliography and discussion on the world of ancient Israel, see especially Niditch 1996; Schniedewind 2004; Carr 2005; Rollston forthcoming a.

is not literacy — not even some sort of “functional literacy.” Rather, individuals with this low level of capability should be classed as illiterate. (2) However, I also argue that there were some in ancient Israel who should be classed as semiliterates. That is, there were ostensibly those who were capable of reading the most remedial texts with at least a modest level of comprehension and often the ability to pen some of the most common and simple words. (3) Naturally, I also posit that there was much variation within each of these categories, but precise penetration into the nature of this variation is not something that the data (ancient or modern) can accomplish.

Since the discovery and publication of the Tel Zayit Abecedary (Tappy et al. 2006), there has been discussion about its import for the subject of literacy in the 10th century and early 9th century B.C.E. Of particular interest is the argument that the Tel Zayit Abecedary can serve as evidence supporting the notion of widespread literacy in ancient Israel. Thus, within an article that uses the Tel Zayit Abecedary as an *Ausgangspunkt*, Hess states the following: “The announcement of the discovery of a tenth century B.C.E. abecedary . . . provides further opportunity for reflecting on the development of literacy in ancient Israel.” Hess believes that the abecedary “served the purposes of learning how to read and write in Hebrew.” Then — and this is a critical point — he affirms that the Tel Zayit Abecedary augments his arguments and “serves to emphasize the presence of numerous writers and readers of Hebrew, and perhaps other neighboring scripts.” He posits that “the effect is to increase the evidence for the presence of a literacy that could be found in rural areas as well as in state capitals and administrative centers” (Hess 2006: 342–43).

Within this article, he also refers to monumental display inscriptions and affirms, “the presence of such inscriptions assumes that a significant number of people could read them.” Most significantly, he also states that he believes there is “continually increasing evidence for a wide variety of people from all walks of life who could read and write.” In addition, he affirms that he believes “the whole picture is consistent with a variety of [literate] classes and groups, not merely a few elites.” For Hess, the Tel Zayit Abecedary functions as a “dramatic attestation” to the “increasing evidence for the presence of writing during the Israelite monarchy” and also attests to the “early and ongoing presence of readers and writers at many levels of Israelite society.”

Making his position crystal clear, he states that the epigraphic evidence “argues against the view that only priests, government officials, and professional scribes could read or write” (Hess 2006: 345 n. 10). Obviously, Hess is here arguing that both elites and non-elites were literate in ancient Israel. Hess’s prior work contains similar statements: “it is not possible to



EISENBRAUNS

Offprint from:
Ron Tappy and P. Kyle McCarter (eds.),
*Literate Culture and Tenth-Century Canaan:
The Tel Zayit Abecedary in Context*

limit those who wrote and read to specific classes or places,” and “there is no evidence from the epigraphy to assume that members of any class could not learn how to read and write” (Hess 2002: 95).³ Moreover, Hess (2002; 2006) is very critical of Young’s tandem articles that argue that within the Hebrew Bible it is elites who are portrayed as reading and writing (Young 1998a; 1998b; cf. 2005). Nevertheless, I argue that Hess’s conclusions about widespread non-elite literacy are too broad and sweeping to be considered accurate constructs of the epigraphic evidence, including the Tel Zayit Abecedary.

To be sure, it is readily apparent that the Tel Zayit Abecedary should be considered an important component of discussions about writing and literacy in the southern Levant for some time to come. Moreover, this abecedary serves as further evidence demonstrating that there was indeed *some* literacy in this region during this chronological horizon. However, the Tel Zayit Abecedary certainly cannot be used as an epigraphic basis for assuming the “early and ongoing presence of readers and writers at many levels of Israelite society.” That is, on the basis of a single abecedary, it is not methodologically tenable to attempt to draw conclusions about the rough percentage of people who were literate (that is, *pace* Hess and his “numerous writers and readers”), nor can conclusions be drawn about the non-elite social status of writers and readers at Zayit (that is, *pace* Hess and his “not merely a few elites” and his “wide variety of people from all walks of life”). Hess might retort that it is the cumulative evidence that suggests that nonelites were literate as well. However, I believe, based on the epigraphic evidence, that this conclusion is also much too sanguine (Rollston 2006).

The Obvious Dearth of Linguistic Data in Abecedaries

Much is known about the lexemes and morphemes in Iron Age Northwest Semitic.⁴ However, because the inscription from Tel Zayit is an abecedary, it has no lexemes or morphemes. There is a substantial body of literature focusing on affixes (prefixes, suffixes, infixes) and syntagms in

3. There are some severe tensions (that is, inconsistencies) within Hess’s cited article. Thus, immediately after writing the statement cited here, he also writes, “the question of how widespread literacy was cannot be answered on the basis of the present evidence” (Hess 2002: 95). With justification, one could refer to such statements as “Hess against himself.”

4. See, for example, Hoftijzer and Jongeling 1995 (Iron Age Epigraphic Northwest Semitic); Koehler and Baumgartner 1994–2000 (Biblical Hebrew); compare with del Olmo Lete and Sanmartín 2004 (Ugaritic) for Late Bronze Age cognate data.

	*PS	Phoenician	Hebrew	Aramaic
1.	ʾ	ʾ	ʾ	ʾ
2.	b	b	b	b
3.	g	g	g	g
4.	d	d	d	d
5.	h	h	h	h
6.	w	w (y)	w (y)	w (y)
7.	ḏ	z	z	z/d
8.	z	z	z	z
9.	ḥ	ḥ	ḥ	ḥ
10.	ḥ	ḥ	ḥ	ḥ
11.	ṭ	ṭ	ṭ	ṭ
12.	y	y	y	y
13.	k	k	k	k
14.	l	l	l	l
15.	m	m	m	m
16.	n	n	n	n
17.	s	s	s	s
18.	ʿ	ʿ	ʿ	ʿ
19.	ḡ	ʿ	ʿ	ʿ
20.	p	p	p	p
21.	ṣ	ṣ	ṣ	ṣ
22.	z	ṣ	ṣ	ṣ/ṭ
23.	ḏ	ṣ	ṣ	q/ṣ
24.	q	q	q	q
25.	r	r	r	r
26.	š	š	š	š
27.	š	š	š	š
28.	ṭ	š	š	š/t
29.	t	t	t	t

Fig. 1. Semitic consonants.

Iron Age Northwest Semitic.⁵ However, because the Tel Zayit inscription is an abecetary, it contains no affixes and no syntagms. Much is also known about the orthography of Iron Age Northwest Semitic inscriptions

5. Friedrich and Röllig 1999 (Phoenician); Segert 1976 (Phoenician); Degen 1969 (Aramaic); Segert 1975 (Aramaic); Joüon 1993 (Biblical Hebrew); Waltke and O'Connor 1990 (Biblical Hebrew); Gogel 1998 (Epigraphic Hebrew); compare with Segert 1984 (Ugaritic); Tropper 2000 (Ugaritic) for Late Bronze Age cognate data.

(Cross and Freedman 1952; 1975; Zevit 1980; Garr 1985; Rollston 2006). However, because the Tel Zayit inscription is an abecedary, it provides no orthographic data. Of course, because the Tel Zayit inscription is an abecedary, nothing can be deduced about aspects of morphology, such as the means of pluralizing (for example, nouns, adjectives, verbs), or about the means of determining forms (for example, prepositive article or postpositive article). In sum, although there is much paleographic data in an abecedary, there is a distinct dearth of linguistic data.

Someone might argue, however, that the Tel Zayit Abecedary does provide some phonological data. After all, there are a total of 22 letters in this abecedary, and this fact demonstrates that various consonantal mergers had occurred. Obviously, the Tel Zayit Abecedary does employ the 22-letter alphabet, which is the norm in linear alphabetic Northwest Semitic of the Iron Age (Garr 1985; Z. S. Harris 1939). However, because these letters are employed in an abecedary rather than a “verbal” text (that is, a text with words), nothing can be deduced about phonological isoglosses.

That is, (1) for example, within Canaanite, Proto-Semitic $\dot{d} > \dot{s}$; thus $\dot{s}^{\prime}n$ is the Canaanite form of a word for ‘sheep’ (compare with Phoenician $\dot{s}^{\prime}n$; Hebrew $\dot{s}^{\prime}n$; Moabite $\dot{s}^{\prime}n$; Ammonite $\dot{s}^{\prime}n$ [Heshbon A1: 2]; and note also Ugaritic $\dot{s}in$).⁶ The $\dot{s}ade$ of this word is not etymological, however. Rather, the Proto-Semitic root is $\dot{d}^{\prime}n$ (compare with Old South Arabic and Classical Arabic $\dot{d}^{\prime}n$). Within Old Aramaic, Proto-Semitic $\dot{d} > q$ (for example, Old Aramaic $\dot{r}q$ ‘earth’ for an original Proto-Semitic $\dot{r}d$). Within later Aramaic, $\dot{d} > \dot{c}$ (for example, Palmyrene, Nabatean, and Jewish Aramaic \dot{r}^{\prime}). Imperial Aramaic preserves both $\dot{r}q$ and \dot{r}^{\prime} .⁷ Note the word $\dot{s}n$ (‘sheep’) in Jewish Aramaic, with $\dot{a}yin$ a reflex of the original \dot{d} but with the metathesis of the nun and $\dot{a}lep$. Based on the Tel Zayit Abecedary, however, nothing can be deduced regarding this phonological isogloss (that is, there is nothing in the abecedary itself that would allow modern linguists to make determinations regarding the dialect of the writer of the Tel Zayit Abecedary).

(2) The phonological evidence for etymological \dot{t} can also be considered useful for the classification of a Northwest Semitic text. Within Iron Age Canaanite, Proto-Semitic $\dot{t} > \dot{s}$; thus $\dot{s}ub$ is the Canaanite form of a

6. The fact that the Canaanite gloss in El Amarna 263.12 is written $\dot{s}unu$, that is, without $\dot{a}lep$, is a reflection of the general limitations of using Mesopotamian cuneiform to write certain Northwest Semitic graphemes and phonemes (for the Amarna Letters, see Moran 1992; Rainey 1996).

7. Note that the MT of Jer 10:11 contains Aramaic and preserves both spellings, a deft piece of literary artistry also reflective of the fact that this period was one of phonological transition for \dot{d} .



word for ‘return’ (compare with Hebrew *šwb*; Moabite *šwb*). The *šin* of this word is not etymological, however. Rather, the Proto-Semitic root is *ṭwb* (compare with Ugaritic *ṭwb*, Old South Arabic *ṭwb*, Classical Arabic *ṭwb*). Within Old Aramaic, Proto-Semitic *ṭ* > *š* (for example, Old Aramaic *šwb*; Old Aramaic *yšb*), but within later Aramaic *ṭ* > *t* (Biblical Aramaic *twb*, *yṭb*).⁸ Within Ammonite, the seal of Šub’il (J 1195 = Aufrecht 1989: #41) contains a theophoric *’il* and (arguably) the verbal root *šwb*.⁹ Based on the Tel Zayit Abecedary, however, nothing can be deduced regarding this phonological isogloss.

(3) The phonological evidence for etymological *d* is also useful to Northwest Semitic linguists attempting to discern isoglosses. Within Iron Age Canaanite, Proto-Semitic *d* > *z*; thus *ʿzr* is the Canaanite form of a word for ‘help’ (for example, Hebrew *ʿzr*, Phoenician *ʿzr*). The *zayin* of this word is not etymological. Rather, the Proto-Semitic root is *ʿdr* (compare with Ugaritic *ʿdr*, Old South Arabic *ʿdr* and Classical Arabic *ʿdr*). Within Old Aramaic, Proto-Semitic *d* > *z* (for example, Old Aramaic *zqn* ‘old’ from an original Proto-Semitic *dqn*), but within later Aramaic *d* > *d* (for example, *dhb* ‘gold’ from an original Proto-Semitic *dhb*, and Palmyrene *ʿdr* from an original Proto-Semitic *ʿdr*). The ‘Amman Statue Inscription (J 1656 = Aufrecht 1989: #43) contains the personal name *yṛḥʿzr*, thus arguably patterning with Canaanite and also with Old Aramaic but not with later Aramaic.

In sum, when working with texts that contain Northwest Semitic lexemes and morphemes, we can make determinations about phonological isoglosses; however, *in an abecedary there are no lexemes and morphemes* (etc.); therefore, there is no secure basis for discussion of phonological isoglosses. To be sure, we can state that the Tel Zayit Abecedary is alphabetic Iron Age Northwest Semitic with 22 consonants, but to be able to make this statement is of truly modest usefulness. That is, the data that are the desiderata for making determinations about the linguistic classification of

8. Notice that the Old Aramaic Tell Fakhariyeh Statue Inscription uses *samek* to represent *ṭ* (Abou-Assaf, Bordreuil, and Millard 1982; Kaufman 1982: 146–47). Kaufman astutely notes that, in a technical sense, this issue is orthographic rather than phonological. That is, the interdental *ṭ* was still pronounced and the scribe of Fakhariyeh chose the grapheme *samek* to represent the phoneme *ṭ*. However, within Old Aramaic, the normal custom was for the scribes to use the grapheme *š* to represent *ṭ*. See also Garr 1985: 28–29.

9. I use the term “arguably” because it would be possible to suggest that the root is actually *yšb*, but because the *šin* of this root comes from an original *ṭ* my point is not affected, regardless of whether one views the Ammonite personal name as employing the root *yšb* or the root *ṭwb*. For discussion of imperative forms in personal names, see O’Connor 1990: 155–56.



an Iron Age Northwest Semitic language (or dialect) are simply not present in an abecedary. We need lexemes and morphemes for this task, and we simply do not have them.¹⁰ In short, for an inscription to be used as a putative component of an argument for widespread non-elite literacy, it would need to provide a great deal of data (linguistic, historical, social), but the Tel Zayit inscription is an abecedary and thus lacks these data. For this reason, I am very disinclined to see it used as a component of discussions about the extent or nature of literacy.

*Assumptions about Alphabetic Writing
and the Pace of Learning*

The writing systems developed and employed in ancient Mesopotamia and Egypt were complex, nonalphabetic systems with large inventories of signs. Scholars have argued that, for even the most assiduous students, developing substantial facility in these writing systems required years of arduous training.¹¹ Conversely, it has normally been argued that the mastery of linear alphabetic Northwest Semitic was facile, requiring just days or weeks of training. Regarding the Old Hebrew alphabet, for example, Albright stated that, “since the forms of the letters are very simple, the 22-letter alphabet could be learned in a day or two by a bright student and in a week or two by the dullest.” He proceeded to affirm that he did “not doubt for a moment that there were many urchins in various parts of Palestine who could read and write as early as the time of the Judges” (Albright 1960: 123).

Jamieson-Drake has opined that the Old Hebrew alphabet was “simple enough that functional knowledge of it could be passed on from one person to another in a comparatively short time” and that “schools would

10. Obviously, my working assumption is that the writer of the Tel Zayit Abecedary spoke a Canaanite language, but the point is that we cannot establish this point securely on the basis of an abecedary.

11. I concur that mastering an alphabetic writing system is not as difficult as mastering Mesopotamian cuneiform or Egyptian hieroglyphics, but to suggest that it is facile to become proficient in one's *first* alphabetic writing system is not tenable. For discussion and bibliography on “schools” in ancient Egypt, see especially Brunner 1991; Janssen and Janssen 1990; McDowell 1999; 2000. For Mesopotamia, see especially Vanstiphout 1979; Tinney 1998; 1999; Veldhuis 2003; George 2005 (see also the bibliography in Rollston 2001). Certainly the consensus of research is that learning the writing systems for hieroglyphs and cuneiform was an arduous venture for the ancients. Also of import, though, are some recent studies that have actually argued that there are numerous variables, so “attempts to describe writing systems along a simple continuum of difficulty are inadequate” (Lee, Uttal, and Chen 1995).



EISENBRAUNS

Offprint from:
Ron Tappy and P. Kyle McCarter (eds.),
*Literate Culture and Tenth-Century Canaan:
The Tel Zayit Abecedary in Context*

hardly have been necessary” (Jamieson-Drake 1991: 154, 156). Weeks states, “[that] the Phoenician alphabet [was] adopted and then adapted in Israel is neither complicated nor arcane, and it is not necessary to suppose that lengthy schooling and a course in reading literature was necessary for a good grasp of the essentials” (Weeks 1994: 151; cf. Crenshaw 1998: 107). Writers who posit high levels of literacy across the socio-economic spectrum for the Iron Age Levant normally assume (sometimes stated, sometimes not) that the linear alphabet was so easy that high rates of literacy can be assumed.

However, I argue that assumptions about the simplicity of the linear-alphabetic Northwest Semitic writing system and the rapidity of the pace at which proficiency could have been achieved are much too sanguine (Rollston 2006: 48–49). Note that, rather than positing rapid proficiency in alphabetic writing, recent empirical studies of modern languages have delineated developmental phases (“stages”) in the process of word-reading and word-spelling (Henderson 1985; Ehri 1997; 1998; Seymour 1997; Richgels 2002; Beech 2005).¹² Furthermore, it has been argued on the basis of these empirical studies that for children to become proficient in a modern writing system (that is, their first writing system) a few years are normally required, not a few days or weeks (Henderson 1985; Ehri 2002). Of course, it is readily apparent that emergent writing (“bare-bones literacy”) is often attested within “initial” periods of instruction, but proficiency (for example, capacity to produce “documents” with minimal orthographic errors and with the letters reflecting accurate morphology and stance as well as standard relative size) requires substantial time.¹³

12. Ehri summarizes these stages in broad terms as follows: (1) prealphabetic, (2) partial alphabetic, (3) full alphabetic, (4) consolidated alphabetic. The first stage applies to “prereaders who operate with nonalphabetic information because they know little about the alphabetic system.” The second stage applies to “novice beginners who operate with rudimentary knowledge of some letter-sound relations.” The third level applies to students who “possess more complete knowledge involving grapheme-phoneme units and how these units form words.” The fourth level “applies to more advanced students who have knowledge of letter patterns as well as grapheme-phoneme units” (Ehri 1997: 240, 253–56).

13. Reading and writing are cognate, but different, skills. Note that writing requires not only the ability to recognize letters but also the capacity to produce them. In addition, it requires the capacity to spell words in the conventional manner (for example, without morphological metathesis and with the correct consonants and vowels in the conventional lexical positions). In essence, although there is a strong correlative structure between spelling and reading, there is also a general asymmetry between them (cf. Bosman and van Orden 1997; Ehri 1997).



EISENBRAUNS

Offprint from:
Ron Tappy and P. Kyle McCarter (eds.),
*Literate Culture and Tenth-Century Canaan:
The Tel Zayit Abecedar in Context*

Naturally, some alphabetic writing systems are more difficult to master. For example, modern languages with a deep orthography (for example, English, Danish) arguably require more time for the achievement of proficiency than languages with a shallow(er) orthography (for example, German, Finnish).¹⁴ However, the fact remains that, regardless of the orthography, any suggestion that proficiency in one's *first* alphabetic writing system (ancient or modern) can be achieved in a few days or weeks must be considered most problematic.¹⁵ Thus any argument about widespread

14. "Deep orthography" and "shallow orthography" are technical terms used in the descriptions of alphabetic systems (Seymour 2005; Gough, Juel, and Griffith 1992). A "deep orthography" is a system in which there is not a "simple correspondence" between letters and sounds, and complexities and irregularities are quite common. Along these lines, Ehri has stated,

according to our theory, graphemes that do not follow the conventional system in symbolizing phonemes should be harder to store in representations than graphemes conforming to the system. Also, phonemes having many graphemic options should be a bigger burden on memory than phonemes having only a couple of options. In addition, graphemes that have no correlates in sound, for example, doubled letters and silent letters, should elude memory. Likewise, spelling patterns that recur in few other words [and] are not built out of conventional graphemes and phonemes should cause problems. (Ehri 1997: 248; see also Treiman 1993)

Because German orthography is a shallow(er) orthography, proficiency can be more rapidly achieved. Indeed, Wimmer and Landerl have suggested that eight or nine months are often sufficient for basic proficiency, but they also candidly affirm that certain aspects of German orthography (for example, consonantal clusters) can present continuing difficulties (Wimmer and Landerl 1997: 89–91 and *passim*). Because French has a deep orthography, with many written markers that are not reflected in pronunciation, proficiency in the French writing system normally requires years (Totereau, Thevenin, and Fayol 1997).

Note that proponents of the "Script Dependent Hypothesis" affirm that some children may have substantial difficulties learning a writing system with a deep orthography but minimal difficulties learning a writing system with a shallow orthography. Proponents of the "Central Processing Hypothesis" affirm that children having difficulties with the learning of a writing system with a deep orthography will also normally have similar problems learning a writing system for a shallow orthography. Recently, some have suggested that the Central Processing Hypothesis and Script Dependent Hypothesis may be complementary (Geva 1995).

15. Of course, because of the dominance of consonants in the Hebrew writing system, some might suggest that becoming proficient in the ancient Hebrew (or Phoenician, or Aramaic) writing system was accomplished with particular ease and at a rapid pace. Of import is the fact that some studies of proficiency in the modern Hebrew writing system (as one's first writing system) have been produced and are, for this essay, among the most relevant of all the studies of the development of proficiency in modern writing systems. Levin (personal correspondence) has



EISENBRAUNS

Offprint from:
Ron Tappy and P. Kyle McCarter (eds.),
Literate Culture and Tenth-Century Canaan:
The Tel Zayit Abecedary in Context

literacy that is based on the “ease of learning one’s first alphabet” must be considered problematic.

Alphabets and Literacy: Observations and Animadversions

Some scholars might still believe that high rates of literacy are a necessary corollary of alphabetic writing, and higher rates of literacy must be posited as existing for alphabetic societies in antiquity (including the Iron Age Levant). However, the data do not support the contention that a high rate of literacy is a necessary corollary of a society with an alphabetic writing system. (1) For example, Greek is an alphabetic script (derived from the Phoenician script), but there is no decisive evidence that literacy of the populace in ancient Greece was the norm. (2) Moreover, Latin is an alphabetic script as well, but there is no decisive evidence that literacy was

summarized the progression of facility in the modern Hebrew writing system as follows: (1) Israeli children begin writing words phonetically at around five years of age. (2) Training in the basic features of orthography, including Masoretic pointing, continues for most children through the age of eight. (3) Most spelling errors disappear by around the age of ten, but some (for example, the usage of *yod* and *waw* as *matres lectionis*) persist into adulthood even among literate adults (see also Share and Levin 1999; Levin, Share, and Shatil 1996; Ravid 1995). In short, multiple years are normally necessary for proficiency. Of course, there are certain aspects of modern Hebrew phonology and orthography that differ from ancient Hebrew (see Berent and Frost 1997), but I do not believe that this factor would result in grossly disproportionate differences in the time required for proficiency.

Some might suggest that adult Olim can learn to reproduce the script in a matter of hours and that this is demonstrative of the fact that the linear alphabetic script is so simple that almost no instruction is needed (in antiquity or in the modern period). The problem with this analogy is that adult Olim already have the cognitive building blocks and the manual dexterity in place, established previously, when they learned their first writing system. For this reason, any comparison between modern adult Olim and ancient Israelites learning their *first* writing system is fundamentally flawed.

With regard to Arabic, Assaad Skaff and Helen Sader (personal correspondence) have noted that the short vowels and the long vowels are learned at the same time, along with the consonants. This training begins in earnest during the first grade (although parents often begin instruction in the home at an earlier age). During the succeeding years, proficiency begins to develop, and by the ninth grade (“brevet” according to French nomenclature) students are very capable of writing Arabic with substantial proficiency. Thus the learning of Arabic parallels, in many respects, the pace of learning modern Hebrew in Israel. In short, becoming proficient in writing and reading one’s first language in a linear alphabetic script (such as would be the case with children learning to write their native language) is not a process that can be considered simple.



EISENBRAUNS

Offprint from:
Ron Tappy and P. Kyle McCarter (eds.),
*Literate Culture and Tenth-Century Canaan:
The Tel Zayit Abecedar in Context*

the norm for the populace in ancient Italy. Rather, the evidence suggests that the vast majority of the population was not literate.¹⁶ (3) Similar statements can be made for the European world of the Middle Ages. (4) Furthermore, some societies or regions with complex nonalphabetic writing systems have very high literacy rates, but some with alphabetic writing systems have low literacy rates. Obviously, this is the case for China and Japan. I am not suggesting that there is no relationship between the complexity of a writing system and literacy rates. Rather, I am suggesting that there were multiple variables and that the nature of the writing system is simply one of these variables – and not even the most determinative variable.¹⁷ Ultimately, writing systems and literacy rates are related but independent variables. Thus the supposition that widespread literacy across socioeconomic boundaries is a necessary correlative of the use of the alphabet should be considered dubious.

Abecedaries: Aegis and Function

It is not possible to determine the precise aegis (palace or temple, etc.) for the Tel Zayit Abecedary or the non-aegis (some sort of quasi-independent scribal guild) for this inscription. Recently, there has been substantive discussion about factors of this sort for epigraphs from Iron I and Iron II (Sanders 2004; R. Byrne 2007; van der Toorn 2007). Nevertheless, we must concede that for the Tel Zayit Abecedary the *Sitz im Leben* of its production is not known. After all, the Tel Zayit Abecedary was found in a secondary or tertiary context, not a primary context (Tappy et al. 2006: 6). Furthermore, there were no accompanying inscriptions found in the same locus. Finding an inscription in a primary context often permits some discussion about aegis and reason for production.

Furthermore, associated epigraphs often provide data that are complementary (for interpretive purposes). However, with the Tel Zayit Abecedary, these sorts of data are not available; therefore, the discernment of its original *raison d'être* is especially difficult. Someone might suggest that all abecedaries must have functioned in instructional contexts, thus requiring that there was a school at Tel Zayit. Remember, however, that Lemaire (1981) has been subjected to severe criticism for his proposal that the presence of an abecedary at an archaeological site is demonstrative of the

16. W. V. Harris has suggested that literacy rates in Attica were probably about 5–10 percent, and rates in Italy were probably below 15 percent (see Harris 1989: 22, 114, 267). Within this volume (*passim*), Harris has cogently criticized scholars who have proposed high(er) rates of literacy for the populace. See especially his analyses of E. A. Havelock 1982 and A. M. Guillemin 1937.

17. On some of the determinative variables, see W. V. Harris 1989: 12–24.



EISENBRAUNS

Offprint from:
Ron Tappy and P. Kyle McCarter (eds.),
*Literate Culture and Tenth-Century Canaan:
The Tel Zayit Abecedary in Context*

presence of an ancient school at a site (for example, Haran 1988; Crenshaw 1985: 605–7; 1998: 100–108; Weeks 1994: 132–56; see also Puech 1988). Striking is the fact that even within the *editio princeps* of the Tel Zayit Abecedar, possible mantic functions are apparently foregrounded to some extent (Tappy et al. 2006: 42). My own position is that one can hardly suggest that none of the extant abecedaries is to be associated with curricular activities (Rollston 2006: 67). However, based on the current extant epigraphic data, it is difficult to say more than this about the nature and function of abecedaries.

Nevertheless, I hasten to add that this ambiguity must not be construed as suggesting that the Tel Zayit Abecedar is unimportant. On the contrary, I believe that it is an important piece of the literacy puzzle. That is, from this inscription we can affirm that someone at Zayit was writing. (In other words, I do not think it probable that this stone was brought to the site after it was inscribed.) Arguably, the inscription was Judean (based on Tappy's arguments about Tel Zayit's being a Judean site in this period of its history). Furthermore, the inscriber of the Tel Zayit Abecedar was probably not the only literate person at Zayit in this chronological horizon. Moreover, this inscription is demonstrably early — in my opinion, late 10th century or very early 9th century B.C.E. — so it joins a rare and elite group of inscriptions from the southern Levant. Moreover, because it was found in a secure archaeological context (that is, not purchased from the market and not a surface find), it will continue to factor in discussions in important ways. Of course, it would have been more helpful if it had been found in a primary context, but it was not. In sum, the Tel Zayit Abecedar is indeed an important piece of the puzzle. Nevertheless, there are not enough pieces of this puzzle to understand in a precise fashion just how the Tel Zayit inscription figures into the entirety. Caution, therefore, must be the epigrapher's *modus operandi*.

The Iron Age Phoenician Script: General Introduction

To date, there has been substantial discussion about the script series to which the Tel Zayit Abecedar belongs. Before focusing on the script series of the Tel Zayit Abecedar, I must refer to some of the history of the development of the Iron Age national scripts. (1) Within the field of Iron Age Northwest Semitic paleography, the consensus has long been that the Iron Age Phoenician script descended from the early alphabetic script of the Middle Bronze and Late Bronze Ages (see Darnell 2005). (2) During the Iron Age, the Phoenician script continued to be used. Indeed, for some time it was the international prestige script of the Levant. The Phoe-



EISENBRAUNS

Offprint from:
Ron Tappy and P. Kyle McCarter (eds.),
*Literate Culture and Tenth-Century Canaan:
The Tel Zayit Abecedar in Context*

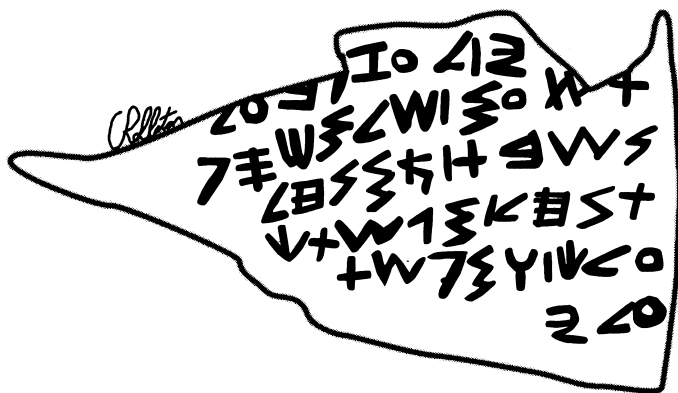


Fig. 2. Bronze 'Azarba'el inscription. (Drawing by Christopher Rollston)

nician script is attested not only in Phoenicia but also in various (other) regions of the ancient Near East and Mediterranean (because, for example, of Phoenician colonization in certain regions and general cultural influence in other regions). This script has been the subject of substantive analyses (Peckham 1968; McCarter 1975). (3) Nevertheless, during the Iron Age certain daughter scripts developed from the Phoenician *Mutterschrift* (and became independent national scripts). Among the most important are the Old Hebrew script and the Aramaic script. These script series have also been the subject of substantive analyses.¹⁸ (4) For the Phoenician, Old Hebrew, and Aramaic scripts, there are distinguishing diagnostic features; Northwest Semitic paleographers have often focused on elucidating them (Naveh 1987: 89–100; Rollston 2006: 58–61; forthcoming b).

The Phoenician Mutterschrift in the Homeland

There are a number of Phoenician inscriptions from the Phoenician homeland itself that provide substantial data about the Phoenician script of the late 11th, 10th, and early 9th centuries. Among the most important of the early Phoenician inscriptions is the Bronze 'Azarba'el Inscription

18. Naveh 1970 (Aramaic); Cross 1961; 1962a; 1962b (Old Hebrew); Naveh 1987 (Phoenician, Old Hebrew, Aramaic, etc.); Rollston 1999; 2003; 2006 (Old Hebrew).



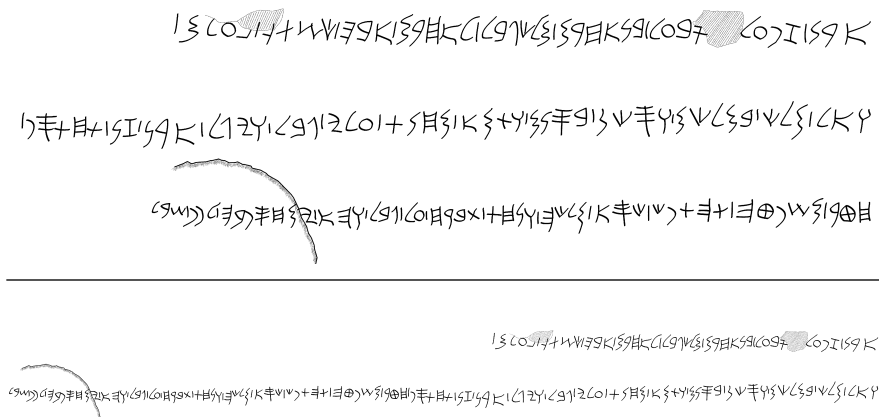


Fig. 3. Drawing of 'Aḥiram inscription by Marilyn Lundberg. Above: line-by-line transcription (Line 1 = Side 1; Lines 2–3 = Side 2). Below: transcription with Side in a single line (Line 1 = Side 1; Line 2 + Side 2). Used by permission.

(often referred to as the Bronze Spatula Inscription). This prestige object was discovered during controlled excavations at Byblos (ancient Gebal). Six lines of Phoenician text (often considered enigmatic) are etched into the metal. The script reflects archaic features, such as the trident *kap*, the *mem* with a strong vertical stance (and without the lengthening of the fifth stroke), truncated vertical shaft of *samek*, and the box-shaped *het*. Some have argued that this inscription reflects the terminal horizon of the 11th century, but a date in the (early) 10th century is also tenable.

There are several 10th-century “Royal Phoenician inscriptions” from Byblos. Among the most impressive is the 'Aḥiram Sarcophagus Inscription, an inscription that was commissioned by 'Aḥiram's son 'Ittobaʿl. The majority of this inscription is written on the lid of the sarcophagus (the length of it), but the initial component of the inscription is written on the end of the sarcophagus itself (that is, not on the lid). Most of the letters were chiseled with care and substantial precision, although there is a diminution of letter size that is visible (and quantifiable) in the terminal portions of the inscription. The Phoenician script of the 'Aḥiram Sarcophagus is distinguishable from the script of the 'Azarbaʿl Inscription; that is, some typological developments are present. Among the most important developments are the distinct lengthening of the vertical shaft of *samek*, the lengthening of the fifth stroke of *mem*, and the lengthening of the verticals of *het*.



EISENBRAUNS

Offprint from:
Ron Tappy and P. Kyle McCarter (eds.),
*Literate Culture and Tenth-Century Canaan:
The Tel Zayit Abecedary in Context*

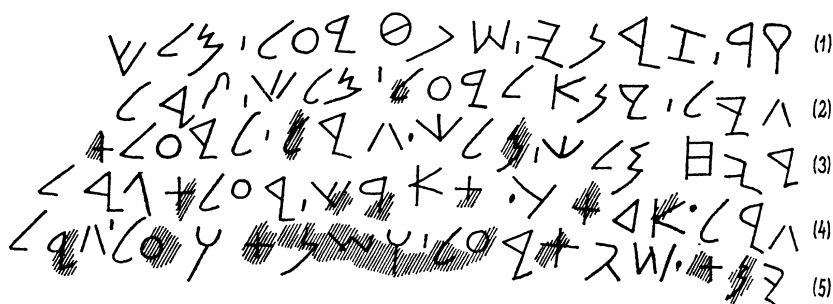


Fig. 4. *Shipitbaʿl inscription.*

Hailing also from Byblos during the same basic horizon are the *Yeḥimilk* Inscription, the *ʿAbibaʿl* Inscription and the *ʿElibaʿl* Inscription. *Yeḥimilk* is a monumental inscription, chiseled into a stone tablet. The *ʿAbibaʿl* Inscription is inscribed on a statue of Pharaoh Sheshonk I (reigned ca. 945–924 B.C.E.) and thus figures among the most interesting and important of the early Byblian lapidary inscriptions. Similarly, the inscription of *ʿElibaʿl* was written on a bust of Pharaoh Osorkon I (reigned ca. 924–889 B.C.E.). Also of consequence is the fact that within this inscription *ʿElibaʿl* provides his father’s name: *Yeḥi[milk]*. I argue that the inscriptions of *Yeḥimilk*, *ʿAbibaʿl*, and *ʿElibaʿl* reflect the same basic script typology as the typology of the *Aḥiram Sarcophagus* Inscription. To be sure, some modest typological differences have been discussed, but the most important facts are that these Phoenician inscriptions all reflect the same basic script morphology and all are royal (“King of Byblos” being the most dominant referential feature of these monumental inscriptions).

The inscription of *Shipitbaʿl* is often classed as the final of the great Old Byblian (Phoenician) inscriptions of this horizon (see also the *ʿAbdaʿ* Sherd Graffito from this horizon). One aspect of the *Shipitbaʿl* Inscription that has garnered much discussion is the presence of a three-generation genealogy: *Shipitbaʿl*, king of Byblos; son of *ʿElibaʿl*, king of Byblos; son of *Yeḥimilk*, king of Byblos. Significantly, the script of the *Shipitbaʿl* Inscription contains features that reflect typological development (that is, when compared with the script of *Aḥiram*, *Yeḥimilk*, *ʿAbibaʿl*, and *ʿElibaʿl*). For example, the fifth stroke of *mem* is beginning to elongate more, and some incipient rotation of the fledgling “head” has begun; similar trends are apparent in *nun*. The main point, however, is that during this horizon the Phoenician script reflects a standardized script and attention to accepted

ancient morphology and ductus. Moreover, some modest development is also attested in the latest of the Old Byblian inscriptions, a predictable and important aspect of this cohesive corpus.

Based on the convergence of paleographic data, prosopographic data, and the synchronisms (with the Egyptian kings), the following is often posited: (1) Yehimilk was the father of ʾElibaʿl, and ʾElibaʿl was the father of Shipiṭbaʿl. (2) Because the script of the ʾAḥiram Sarcophagus is typologically earlier than the script of Shipiṭbaʿl, some argue that the reigns of the Byblian kings ʾAḥiram and his son ʾIttobaʿl were earlier than the reigns of Yehimilk, ʾElibaʿl, and Shipiṭbaʿl. (3) Because the inscription of ʾAbibaʿl is engraved into a statue of Sheshonk I (reigned ca. 945–924 B.C.E.) and because the inscription of ʾElibaʿl is engraved into a bust of Osorkon I (reigned ca. 924–889 B.C.E.), some argue that the reign of ʾAbibaʿl preceded ʾElibaʿl's. Note that some epigraphers posit that ʾAbibaʿl and ʾElibaʿl were brothers. Of course, this hypothesis results in the placement of the reigns of ʾAḥiram and ʾIttobaʿl at the beginning of the sequence. The final sequence is arranged as follows: ʾAḥiram, ʾIttobaʿl, Yehimilk, ʾAbibaʿl, ʾElibaʿl, Shipiṭbaʿl.¹⁹

Nevertheless, the precise regnal sequence is not a fundamental point for this essay. Rather, the fundamental points are: (1) These Phoenician inscriptions from Byblos reflect substantial script continuity with discernible typological development: the ʿAzarbaʿl Inscription is the most archaic script, the script of the ʾAḥiram Sarcophagus, Yehimilk, ʾAbibaʿl, and ʾElibaʿl is more typologically advanced than that of ʿAzarbaʿl, and the script of Shipiṭbaʿl is the most developed typologically. (2) The fact that two of these inscriptions are engraved on stones with the names of Sheshonk I and Osorkon I functions as an important control, useful as a historical peg for discussions of absolute dates. That is, the data converge to demonstrate beyond a reasonable doubt that these royal Phoenician inscriptions hail from Byblos during the 10th and early 9th centuries. At this point, I should also emphasize that recent attempts to lower the chronology of these Byblian inscriptions to the mid-9th and mid-8th centuries are, for numerous reasons, untenable.²⁰

19. See also the discussion in Donner and Röllig 1979: 2.2–10.

20. Sass has proposed a dramatic lowering of these dates (see Sass 2005). However, his proposal is plagued with serious paleographic and historical problems; therefore, his attempt to compress the dates is not at all tenable. I shall turn to these problems in a subsequent publication.



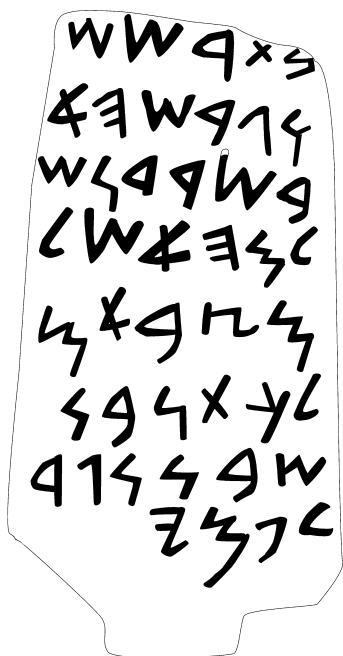


Fig. 5. Nora Stone. (Drawing by Christopher Rollston)

The Iron Age Phoenician Script: International Usage

Because of Phoenician colonization and seafaring, the Phoenician script (and often language) began to be employed in numerous regions (not only in regions such as Byblos, Tyre, and Sidon). For example, from Cyprus comes the Honeyman Inscription, a monumental Phoenician inscription from the 9th century. The Nora Inscription was found on the Mediterranean island of Sardinia and can be dated with substantial certitude to the (late) 9th century. The Kition Bowl was found at Kition (Cyprus) and reflects a fine Phoenician cursive of the mid-8th century. Moreover, the Seville Statuette (Spain) dates to the second half of the 8th century and employs the Phoenician script. Additionally, the Malta Stele, from the late 8th century, reflects a fine Phoenician script. One of the most important of the Phoenician inscriptions from the (late) 8th century is the Karatepe Inscription (Asia Minor). Within this inscription, the Anatolian (Neo-Hittite) regent Azitawadda also commissioned a Phoenician inscription (8th century) to parallel his (native) Hittite hieroglyphic rendition. This inscription (from the site of Karatepe) is the longest of the Phoenician inscriptions (see McCarter 1975; Peckham 1968). The point is that



EISENBRAUNS

Offprint from:
Ron Tappy and P. Kyle McCarter (eds.),
*Literate Culture and Tenth-Century Canaan:
The Tel Zayit Abecedary in Context*

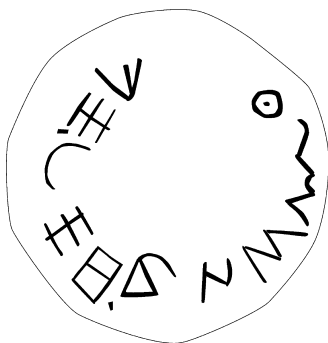


Fig. 6. Kefar Veradim inscribed bowl.
(Drawing by Christopher Rollston)

the Phoenician script became a dominant Northwest Semitic script tradition during the 10th, 9th, and 8th centuries. Moreover, lapidary and cursive inscriptions are attested from regions near to and far from the Phoenician homeland.

Nevertheless, these are not the sole cases of the transregional use of the Phoenician script. For example, the late-9th-century Kilamuwa Inscription is written in the Phoenician language (rather than the local dialect) and (arguably) the Phoenician script – that is, the prestige script and language of this chronological horizon. Also of import is the fact that for a time texts written in the Aramaic language continued to use the Phoenician script. For example, the Tell Fakhariyeh Statue Bilingual Inscription (9th century) employs the Phoenician script for the Aramaic text. The Hadad and Panamuwa Inscriptions from Sam'al (all 8th century) are written in an Aramaic dialect but employ the Phoenician script. Moreover, the Bar-Rakib Inscription is written in the standard Old Aramaic dialect, but the script continues to be the Phoenician script (see Naveh 1987: 79–80).²¹ Of course, a distinctive Aramaic script did develop (beginning in the 9th century, fully developed in the 8th century B.C.E.), but it is significant that the Phoenician script (considered a “classical prestige script”) had been used for many inscriptions written in the Aramaic language (so Naveh 1970; 1987). That is, the Phoenician script (and even language, at times) was an international, transregional script.

Among the most important inscriptions is the inscribed bronze bowl from Kefar Veradim, a prestige item of very high quality from a tomb in the Galilee (see Alexandre 2006). The script of this inscription is stun-

21. Note that there are some differences between Naveh and Cross on the development of the Aramaic script. For more on these differences, see below.



EISENBRAUNS

Offprint from:
Ron Tappy and P. Kyle McCarter (eds.),
*Literate Culture and Tenth-Century Canaan:
The Tel Zayit Abecedar in Context*

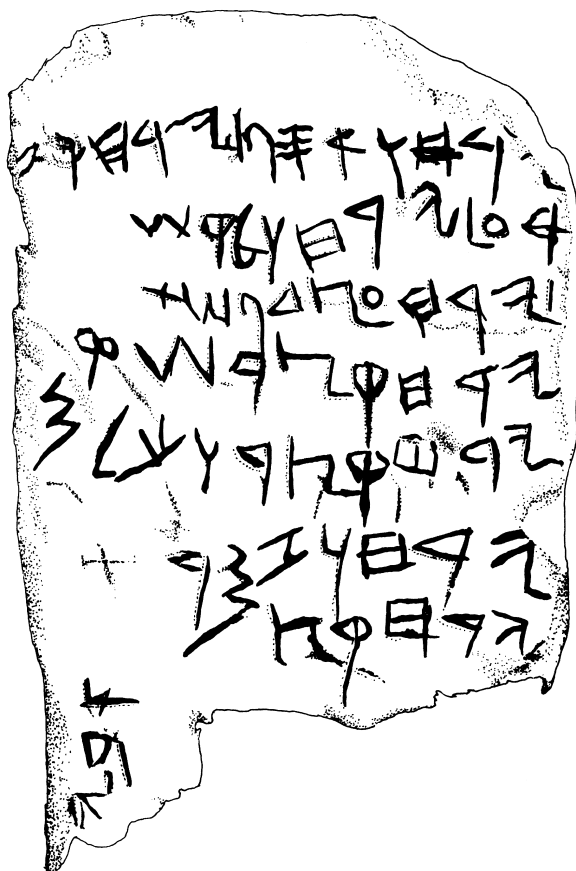


Fig. 7. Drawing of the Gezer Calendar.

ning, reflecting the consummate work of a fine engraver. Also significant is the fact that its script reflects the same basic script morphology as the ‘Azarba’l Inscription. For example, *kap* is trident-shaped, *samek* has a “truncated” vertical shaft, and the *het* is box-shaped. There can be no question about the fact that this inscription is written in the Phoenician script. In fact, it is a superb Phoenician script, and of fundamental importance is the fact that it was discovered in Israel. That is, the Phoenician script is attested in Israel, and this fact cannot be contested.



EISENBRAUNS

Offprint from:
Ron Tappy and P. Kyle McCarter (eds.),
*Literate Culture and Tenth-Century Canaan:
The Tel Zayit Abecedary in Context*

During Macalister's excavations in 1908, a small limestone "tablet" was discovered in debris from his "Fourth Semitic" period – a period that Albright associated with Iron I (see Macalister 1908; Albright 1943). Because the contents of the inscription revolve around seasonal agricultural activities (for example, sowing, harvesting, and processing of flax and barley), the tablet is often considered to be some sort of an agricultural "calendar." Naveh has argued that "the script of the Gezer Calendar, thought to be the earliest Hebrew inscription known to date, resembles the writing of the tenth-century B.C. Phoenician inscriptions from Byblos." He then goes on to state that "at this stage no specifically Hebrew characters can be distinguished, and the Hebrew followed the scribal tradition current in Canaan" (Naveh 1987: 65).

I have collated various Phoenician inscriptions from Lebanon, and I concur with Naveh's assessment. That is, I do not think the script of the Gezer Calendar exhibits diagnostic features (for example, letter morphology, stance, pronounced curvature) that would suggest it should be classified as the Old Hebrew script. I consider the script of the Gezer Calendar to be Phoenician. Regarding this script, I note that certain basic features (for example, the *waw*) are typologically later than the Old Byblian inscriptions and also typologically later than the script of the Tel Zayit Abecedar. However, certain features of the script of the Gezer Calendar are typologically earlier. For example, the *mem* of the Gezer Calendar is typologically earlier than the *mem* of the Tel Zayit inscription; but note that it is quite similar to the *mem* of the Shipiṭbaʿl Inscription, among the latest of the Old Byblian inscriptions.

Also note that Cross considers the Gezer Calendar to be written in the Hebrew language (Cross and Freedman 1952: 46–47). Regarding the script of the Gezer Calendar, Cross has written, "so similar are Phoenician and Hebrew in the tenth century that it has been difficult for epigraphists to establish whether the Gezer Calendar was written in a Hebrew or in a Phoenician script." Cross continues by stating, "I believe that the first rudimentary innovations that will mark the emergent Hebrew script can be perceived in the Gezer Calendar, but they are faint at best." He then affirms that "these rudimentary features include the elongation of the vertical strokes or legs of such letters as *'alep*, *waw*, *kap*, *mem*, and *reš*." To be sure, the differences between Naveh and Cross are modest. Moreover, Cross even concedes that the features which distinguish the fledgling Old Hebrew script from the Phoenician *Mutterschrift* are "faint at best" (Cross 1980; 2003: 226).

Reference should be made to some early inscriptions that have been found in Israel, for example, the inscriptions found at Hazor Stratum IX and Stratum VIII. Although they are fragmentary, I suggest it is readily ap-



EISENBRAUNS

Offprint from:
Ron Tappy and P. Kyle McCarter (eds.),
*Literate Culture and Tenth-Century Canaan:
The Tel Zayit Abecedar in Context*

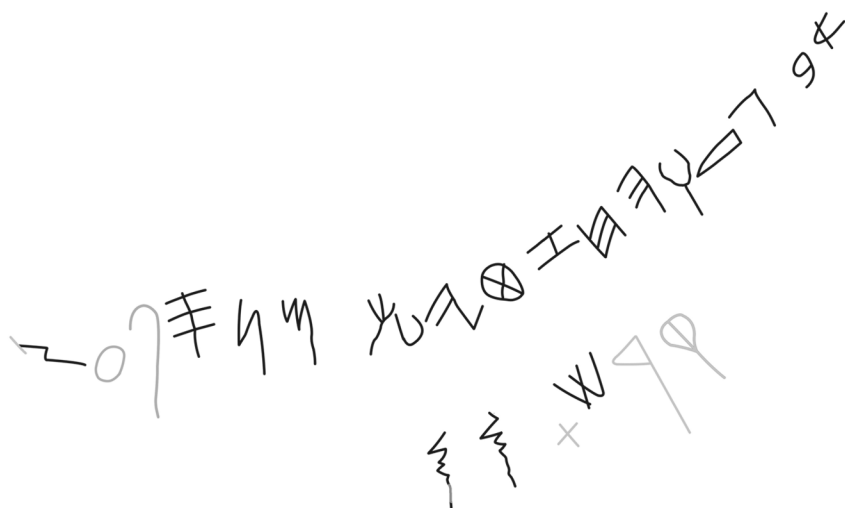


Fig. 8. Drawing of the Tel Zayit abecedary by P. Kyle McCarter Jr.

parent that none of these inscriptions reflects paleographic features that are demonstrative of the Old Hebrew script. In other words, they contain nothing that is diagnostic of Old Hebrew. Similar statements can be made about the (fragmentary) inscriptions from Khirbet Roš Zayit, Beth-shemesh, and Tel Batash (Tinnah).²² Of course, some of the Arad ostraca are affirmed to have come from horizons antecedent to the 9th century (Aharoni 1981). Some of these ostraca are indeed early; however, the inscriptions from these early strata are faded, abraded, and fragmentary and thus are precarious bases for definitive statements about the script. The main point is that there are inscriptions written in the Phoenician script that are attested at various geographical sites.

The Script Series of the Tel Zayit Abecedary

The Tel Zayit Abecedary hails from an archaeological context that Tappy considers to be the 10th century (Tappy et al. 2006: 5–25). The inscription was carved into a stone. Although the second half is quite

22. For these inscriptions, see Yadin et al. 1960: 70–75 and plates; Yadin et al. 1961: esp. 346–47; Gal 1990; Bunimovitz and Lederman 1997; Kelm and Mazar 1995: 111; Mazar 2003.



EISENBRAUNS

Offprint from:
Ron Tappy and P. Kyle McCarter (eds.),
*Literate Culture and Tenth-Century Canaan:
The Tel Zayit Abecedary in Context*

abraded, it is certain that this abecedary is complete. The script reflects typological developments not attested in the Kefar Veradim Bowl Inscription, 'Azarba'ḏ Inscription, or 'Aḥiram, Yehimilk, 'Abiba'ḏ, and 'Eliba'ḏ Inscriptions.

For example, *kap* is not trident-shaped but, rather, has begun to develop a leg. (Note that even Shipiṭba'ḏ retains the trident-shaped *kap*.) Moreover, the fifth stroke of *mem* and the third stroke of *nun* have begun to elongate. In addition, the entire letter has begun to rotate. These sorts of typological features reflect the fact that the Tel Zayit Abecedary is typologically later than the Old Byblian inscriptions and the Kefar Veradim Bowl Inscription.

To be sure, there are a modest number of features of the Tel Zayit Abecedary that are typologically earlier. Among the most significant of these is the *waw*. Of course, preservations of typologically older forms are to be anticipated at times in inscriptions. Based on the paleographic data, I argue that this inscription can be dated to the late 10th century or the very early 9th century (that is, I date it slightly later than Tappy wishes to date the archaeological context). Based on the paleographic data, I believe that the Tel Zayit Abecedary constitutes a nice example of the use of the Phoenician script in Iron Age Israel. Moreover, based on the convergence of paleographic data, I argue that the Tel Zayit Abecedary and the Gezer Calendar hail from the same basic chronological horizon.²³

Regarding the script series, McCarter has argued in the editio princeps of the Tel Zayit Abecedary that its script is not Phoenician but a distinct South Canaanite script derived from the Phoenician script.²⁴ Moreover, this South Canaanite script is affirmed to be a transitional script that "in the tenth century . . . [it] already exhibits characteristics that anticipate the distinctive features of the mature Hebrew national script" (Tappy et al.

23. Of course, it is imperative to note that certain aspects of the Gezer Calendar are often argued to be indicative of the hand of a fledgling student. This position may be tenable, but the fact remains that the letter forms reflect important typological features. Similar statements can be made about the Tel Zayit Abecedary.

24. There is another factor that must be mentioned as well: the Tel Zayit Abecedary preserves a single example of each letter (and some of these are not well preserved!). Moreover, for the Phoenician series of the 10th and 9th centuries, we have modest numbers of inscriptions. Thus I urge caution in attempting to argue that this inscription differs from the Phoenician series in this or that fashion. Furthermore, I shall argue that there are no non-Phoenician script features in the Tel Zayit Abecedary. That is, I respectfully differ with Kyle McCarter, my beloved *Doktorvater*, mentor, and friend. My hope is that, in some fashion, the fact that I do differ is viewed as a tribute to the scholar from whom I have learned most and best.



EISENBRAUNS

Offprint from:
Ron Tappy and P. Kyle McCarter (eds.),
*Literate Culture and Tenth-Century Canaan:
The Tel Zayit Abecedary in Context*

2006: 26, 28). This development is considered to be “a major watershed in the evolution of alphabetic writing in southern Canaan at the outset of Iron Age IIA, and the principal result of this phenomenon emerged as the mature Hebrew national script of the first millennium” (Tappy et al. 2006: 42 and *passim*). Thus within the *editio princeps*, it is affirmed that the script of the Tel Zayit Abecedary is not that of the Phoenician script series, but rather is basically a nascent Old Hebrew script. Moreover, it is also argued that similar statements can be made about the (fragmentary) inscriptions from sites such as Beth-shemesh, Tel ‘Amal, Tel Batash, and Tel Rehov (Tappy et al. 2006: 28).

Note, however, that the Beth-shemesh Inscription consists of only three discernible letters (*hnn*), the inscription from ‘Amal consists of only four letters (*lnmš*), the inscription from Batash consists of only four letters (*nhnn*), and the inscription from Rehov consists of three preserved letters (*lnh*). Obviously, these data are brief and the inscriptions are fragmentary and often abraded as well. Moreover, I posit that there are no features in these inscriptions that must be considered non-Phoenician. I also believe that the same can be said of the brief and fragmentary inscriptions from Roš Zayit, Tell el Fara‘ (South), and ‘Eshtemoa‘.

McCarter’s position regarding the script of the Tel Zayit Abecedary is important and nuanced. Nonetheless, I must respectfully disagree. That is, I argue that the script of the Tel Zayit Abecedary fits nicely within the Phoenician script series. A major component of McCarter’s argument that this is not the Phoenician script is the contention that elongation is not a feature of the Phoenician script. To be precise, it is affirmed that “the elongation of *‘alep*, *he*, *waw*, *kap*, *mem*, *nun*, and *reš*” argues against considering it to be Phoenician and is evidence for the fact that it is a transitional script that anticipates the distinctive “features of the mature Hebrew national script.” Furthermore, it is argued that this resistance of elongation is “underscored by the persistence into the ninth century of a preference for compact, well-proportioned characters of the kind seen, for example, in maritime Phoenician inscriptions such as the so-called Honeyman inscriptions from Cyprus and the *taršiš* inscription from Nora in Sardinia” (Tappy et al. 2006: 30).

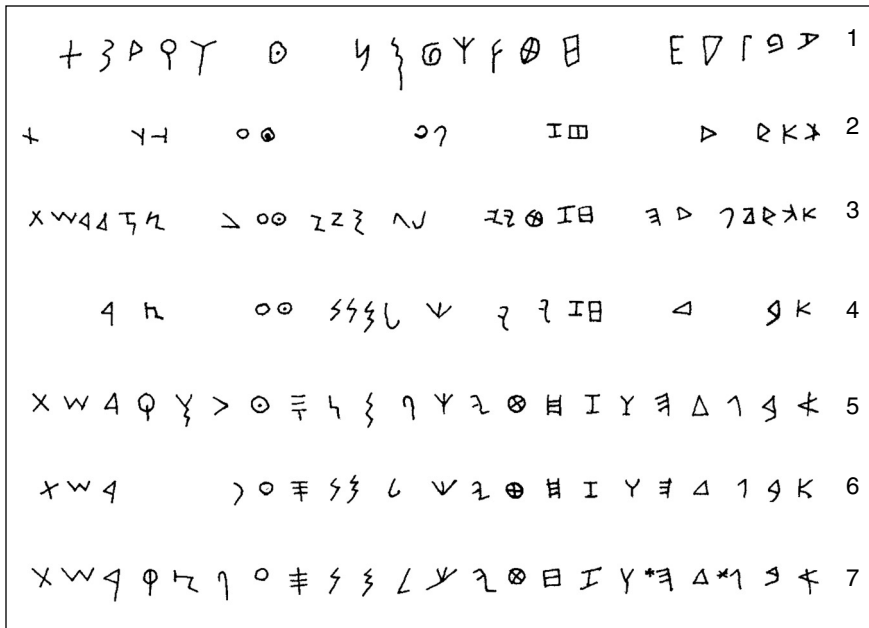
However, I do not consider elongation to be a distinctive marker of a particular script series. My reason for this view is as follows: *the Phoenician, Aramaic, and Old Hebrew script series all reflect elongation*.

For example, (1) note that the relative length of the vertical stroke of the *‘alep* in the Tell Fakhariyeh Inscription is as long as in the *‘alep* of Tel Zayit (and all agree that the script of the Tell Fakhariyeh is Phoenician and early). Moreover, there is more elongation in the *‘alep* of the Bir-Hadad Inscription than there is in the Tel Zayit Abecedary.



EISENBRAUNS

Offprint from:
Ron Tappy and P. Kyle McCarter (eds.),
*Literate Culture and Tenth-Century Canaan:
The Tel Zayit Abecedary in Context*



Early Phoenician Scripts

Line 1. From the 'Izbet Šarṭah Ostrakon of ca. 1100 B.C.E.

Line 2. From the 'El-Hadr Arrowheads of the early 11th century B.C.E.

Line 3. From inscribed arrowheads of the mid-11th century B.C.E.

Line 4. From inscribed arrowheads of the late 11th century B.C.E.

Line 5. From the Tell Fakhariyeh Inscription.

Line 6. From the 'Aḥiram Inscription of ca. 1000–975 B.C.E.

Line 7. From the Gezer Calendar of the 10th century B.C.E.

Fig. 9. Cross's chart of Early Phoenician scripts. From F. M. Cross, Leaves from an Epigrapher's Notebook: Collected Papers in Hebrew and West Semitic Palaeography and Epigraphy (HSS 51; Winona Lake, IN: Eisenbrauns, 2003) fig. 4.2, p. 55. Used by permission.

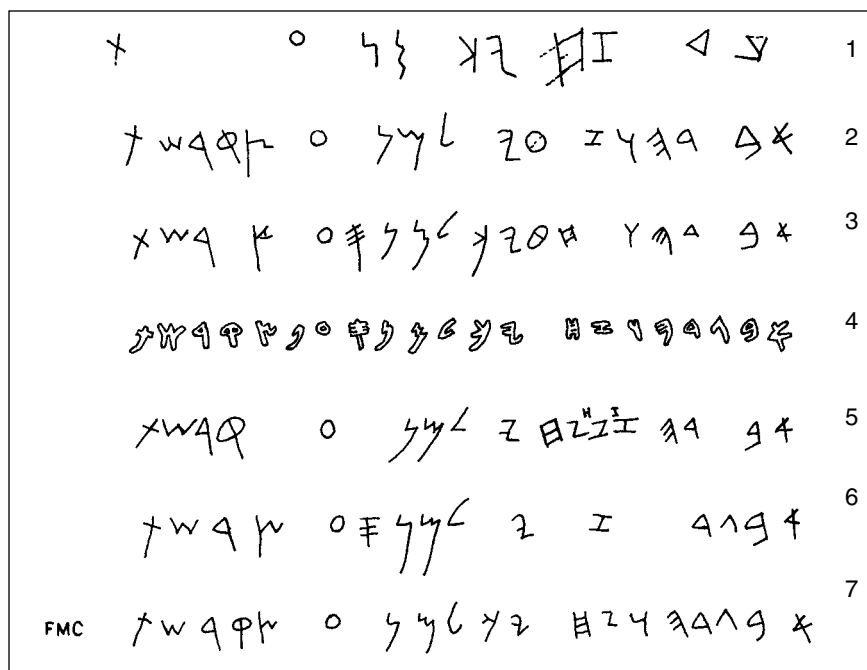
(2) Regarding the *he*, similar statements can be made. Note that the vertical stroke of *he* in the Tell Fakhariyeh Inscription reflects elongation, even though this Phoenician script is early. Note too that in the Bir-Hadad Inscription, the *he* is also elongated. The same is true for the Kilamuwa Inscription and also for the 'Amman Citadel Inscription.

(3) The *waw* of the Tell Fakhariyeh Inscription reflects elongation as well. Moreover, the same is true of the *waw* of the Bir-Hadad Inscription



EISENBRAUNS

Offprint from:
Ron Tappy and P. Kyle McCarter (eds.),
*Literate Culture and Tenth-Century Canaan:
The Tel Zayit Abecedary in Context*



Early Aramaic Scripts

Line 1. From the Gozan Pedestal Inscription of ca. 900 B.C.E.

Line 2. From the Ben Hadad Inscription of ca. 850 B.C.E.

Line 3. From the 'Amman Citadel Inscription of the mid-9th century B.C.E.

Line 4. From the Kilamuwa Inscription of ca. 825 B.C.E.

Line 5. From the Haza'el Inscriptions (H = Horse Ornament; I = Ivory) of ca. 825 B.C.E.

Line 6. From the Luristan Bronze Jug of ca. 800 B.C.E.

Line 7. From the Zakkur Inscription of ca. 800–775 B.C.E.

Fig. 10. Cross's chart of Early Phoenician scripts. From F. M. Cross, *Leaves from an Epigrapher's Notebook: Collected Papers in Hebrew and West Semitic Palaeography and Epigraphy* (HSS 51; Winona Lake, IN: Eisenbrauns, 2003) fig. 4.3, p. 59. Used by permission.

and the 'Amman Citadel Inscription. (4) It is again critical to note that in the Tell Fakhariyeh Inscription, the *kāp* reflects some elongation (that is, it is no longer just the trident). Within the 'Amman Citadel Inscription, there is substantial elongation of the *kāp*. Furthermore, and of fundamental importance, note that there is some significant elongation in the

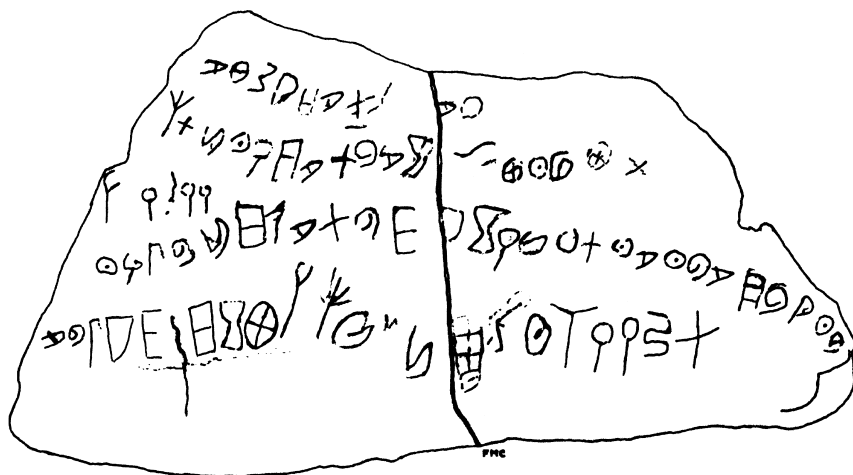


Fig. 11. 'Izbet Šarṭah Ostracon. Drawing by F. M. Cross, *Leaves from an Epigrapher's Notebook: Collected Papers in Hebrew and West Semitic Palaeography and Epigraphy* (HSS 51; Winona Lake, IN: Eisenbrauns, 2003) fig. 32.6, p. 221. Used by permission.

Phoenician ostracon from 'Izbet Šarṭah, normally dated to the 11th century B.C.E.! (5) Notice also the pronounced elongation present in the Phoenician script of subsequent centuries, as revealed in the 8th-century Kition Bowl. Again, then, it would be difficult to suggest that elongation is a distinctive feature of Old Hebrew, nascent Old Hebrew, or transitional South Canaanite scripts.

(6) Regarding the *mem* and *nun*, note that there is some elongation that occurs in the 'Aḥiram Sarcophagus Inscription. Furthermore, there is also substantial elongation of both of these letters in the Bir-Hadad Inscription, Kilamuwa Inscription, and Shipiṭba'1 Inscription. Obviously, these data militate very strongly against suggesting that elongation of these letters in the Tel Zayit Abecedary should be considered a non-Phoenician, nascent Old Hebrew feature. (7) Furthermore, regarding the *reš*, the same observations can be made. Elongation of this letter is pronounced, for example, in the Bir-Hadad Inscription and the 'Amman Citadel Inscription.

Someone might counter by suggesting that some of this elongation is attested in the Aramaic series and thus is not relevant in a discussion of the Phoenician series. (1) I note, however, that Naveh (differing with Cross) has argued that the Aramaic national script "begins roughly in the mid-eighth century B.C." (Naveh 1970 *passim*; 1987: 80). Thus Naveh



EISENBRAUNS

Offprint from:
Ron Tappy and P. Kyle McCarter (eds.),
*Literate Culture and Tenth-Century Canaan:
The Tel Zayit Abecedary in Context*

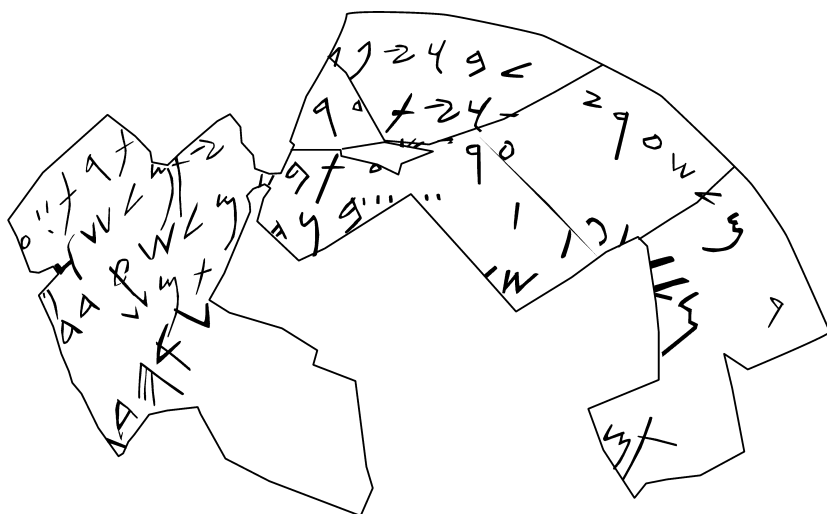


Fig. 12. Kition Bowl. (Drawing by Christopher Rollston)

would ostensibly argue that inscriptions such as the Gozan Pedestal Inscription, the Bir-Hadad Inscription, the Haza'el Inscriptions, the 'Amman Citadel Inscription, and the Kilamuwa Inscription were written in the Phoenician script. (2) Moreover, and of critical importance, even if one concurs with Cross (against Naveh) on his assignment of certain 10th- and 9th-century inscriptions to the Aramaic series, the fact remains that elongation is present even in some of the inscriptions that all paleographers agree are written in the Phoenician script. (3) Some might retort that it is unacceptable to use the script of the Tell Fakhariyeh Inscription in this discussion. However, I would counter that it would be imprudent to ignore or “factor out” the data from Tell Fakhariyeh. After all, Cross has argued that it represents the Phoenician script, and although the text dates to the 9th century B.C.E., he has stated that the script “falls in the typological sequence among inscriptions of the end of the eleventh or the beginning of the tenth century B.C.E.” That is, he considers the script to be Phoenician and considers it to be reflective of the late 11th or early 10th century B.C.E. (Cross 1995: 408; cf. also Naveh 1987: 101–13).²⁵ Thus, regardless

25. Note that Cross does not think Fakhariyeh shows much tendency “to lengthen final downstrokes” (Cross 1995: 407). Nonetheless, I note that even his drawings reveal some significant lengthening of some of the downstrokes in this inscription.



EISENBRAUNS

Offprint from:
Ron Tappy and P. Kyle McCarter (eds.),
*Literate Culture and Tenth-Century Canaan:
The Tel Zayit Abecedary in Context*

of its actual date of composition, Cross and Naveh have agreed that its script is Phoenician, and they have agreed that the script is typologically the Phoenician script of the 10th century B.C.E. Hence it is directly relevant to a comparative assessment of the Tel Zayit Abecedary.

Regarding the script series of the Tel Zayit inscription, I should like to make several further observations. (1) McCarter has stated that the head of *bet* in the Tel Zayit Abecedary is “rounded and larger than the usually triangular *bet* of the contemporary Phoenician parent script as represented by the Byblian series” (Tappy et al. 2006: 32). That is, he considers the morphology of the head of the Zayit *bet* to be different from the 10th-century Byblian series. However, during my collations of the 10th-century Byblian Phoenician inscriptions, it became clear to me that the rounded *bet* with a large head is nicely attested in the Phoenician series. Note, for example, the forms of *bet* that are present in the Ḥīram Sarcophagus, with the first and third *bet* of this inscription having large heads that are as rounded as the *bet* of the Tel Zayit Abecedary. In other words, forms very similar to the Tel Zayit inscription’s are found in the Byblian series of the 10th century! Note also the *bet* that is present in the Phoenician Honeyman Inscription: it is large as well. (2) Moreover, McCarter has argued that the angular form of *yod* in the Tel Zayit Abecedary is reflective of the Old Hebrew series (Tappy et al. 2006: 35). There is no doubt about the fact that the Old Hebrew *yod* is often quite angular (Rollston 1999: 76–84), but this characteristic cannot be said to be absent from the early Phoenician series. Note, for example, some of the angularity of *yod* in the Ḥīram Sarcophagus. Again, for the 10th century or early 9th century, angularity is not a distinctive marker (or nonmarker) of a particular script series. (3) McCarter has stated that the *qop* of the Tel Zayit inscription “is large and similar in form to the distinctive *qop* of the Gezer Calendar, with its symmetrical, two-chambered design that anticipates the subsequent history of the form. The tenth-century Phoenician prototype typically had an overall head bisected by a vertical stem, as seen in line 5 of the Yehimilk inscription” (Tappy et al. 2006: 39). Because McCarter refers to Yehimilk, I deduce that he is referring to the Phoenician forms attested at Byblos.

However, (a) note that there is no clear *qop* in the Bronze Spatula, the Ḥīram Sarcophagus, the Ḥībaʿl Inscription, or the ʿElībaʿl Inscription. Thus there is a distinct dearth of data for *qop*, and I would be very reluctant to speak of a typical or prototypical form. That is, there is simply not enough data to speak of a precise Byblian Phoenician prototype. (b) Moreover, it is critical to note in this connection that the *qop* of the Yehimilk Inscription differs substantially from the *qop* of the Shipībaʿl. Thus the two major exemplars of the 10th-century Byblian series are substantially different!



EISENBRAUNS

Offprint from:
Ron Tappy and P. Kyle McCarter (eds.),
*Literate Culture and Tenth-Century Canaan:
The Tel Zayit Abecedary in Context*

(c) Significantly, some of the forms attested in inscriptions such as the Kilamuwa and Zakkur have heads that are symmetrical and two chambered. (Note that the head of *qop* in multiple scripts was made with two semicircular strokes forming a head and a vertical stroke that often intersected the head.) (d) The cumulative evidence is quite compelling, in my opinion: I do not believe that there is anything particularly non-Phoenician about the *qop* of the Tel Zayit Abecedary.

In sum, I must differ with the proposal that the Tel Zayit Abecedary is not written in the Phoenician script. Rather, I posit that it is, in fact, written in the Phoenician script. Ultimately, (1) the suggestion that elongation is a marker of a non-Phoenician script is not, in my opinion, sustainable. Rather, elongation is something that is well attested in the 10th and 9th centuries. Of course, the fact that elongation is the norm for all three major script series (Phoenician, Aramaic, and Old Hebrew) from the 9th century through the 6th century must also be factored in as evidence demonstrating that elongation is not a feature that can be considered unique to Phoenician, Hebrew, or Aramaic. (2) Furthermore, the suggestion that certain letters of the Tel Zayit Abecedary (such as *bet*, *yod*, or *qop*) do not fit the Phoenician script series of the same horizon is problematic. Actually, these letters fit the Phoenician script series very nicely.

Naveh has argued that the first distinctive features of Hebrew writing can be discerned in the 9th century (Naveh 1987: 65). I continue to consider this position the most convincing. Though I would very much like to see evidence for the development of the Old Hebrew script in the 10th century, we do not have it. Rather, the evidence suggests that during the 10th century the ancient Israelites continued to use the prestige Phoenician script, just as did much of the rest of the Levant. Thus, based on the cumulative epigraphic evidence, I consider the Tel Zayit Abecedary to be written in a good Phoenician script of the late 10th or very early 9th century B.C.E.

Bibliography

- Abou-Assaf, A.; Bordreuil, P.; and Millard, A. R.
 1982 *La Statue de Tell Fekherye: Son inscription bilingue assyro-araméenne*. Études Assyriologiques. Paris: Éditions Recherche sur les civilisations.
- Aharoni, Y.
 1981 *Arad Inscriptions*. Jerusalem: Israel Exploration Society.
- Albright, W. F.
 1943 The Gezer Calendar. *BASOR* 92: 16–26.
 1960 Discussion. Pp. 94–123 in *City Invincible: A Symposium on Urbanization and Cultural Development in the Ancient Near East*, ed. C. H. Kraeling and Robert M. Adams. Chicago: University of Chicago Press.



EISENBRAUNS

Offprint from:
 Ron Tappy and P. Kyle McCarter (eds.),
*Literate Culture and Tenth-Century Canaan:
 The Tel Zayit Abecedary in Context*

- Alexandre, Y.
 2006 A Canaanite–Early Phoenician Inscribed Bronze Bowl in an Iron Age IIA–B Burial Cave at Kefar Veradim, Northern Israel. *Maarav* 13: 7–41.
- Aufrecht, W. E.
 1989 *A Corpus of Ammonite Inscriptions*. Ancient Near Eastern Texts and Studies 4. Lewiston, NY: Edwin Mellen.
- Beech, J. R.
 2005 Ehri's Model of Phases of Learning to Read: A Brief Critique. *Journal of Research in Reading* 28: 50–59.
- Berent, I., and Frost, R.
 1997 The Inhibition of Polygraphic Consonants in Spelling Hebrew: Evidence for Recurrent Assembly of Spelling and Phonology in Visual Word Recognition. Pp. 195–219 in *Learning to Spell: Research, Theory, and Practice across Languages*, ed. C. A. Perfetti, L. Rieben, and M. Fayol. Mahway, NJ: Erlbaum.
- Bosman, A. M. T., and van Orden, G. C.
 1997 Why Spelling Is More Difficult Than Reading. Pp. 173–94 in *Learning to Spell: Research, Theory, and Practice across Languages*, ed. C. A. Perfetti, L. Rieben, and M. Fayol. Mahway, NJ: Erlbaum.
- Brunner, H.
 1991 *Altägyptische Erziehung*. Wiesbaden: Harrassowitz.
- Bunimovitz, S., and Lederman, Z.
 1997 Culture Conflict on Judah's Frontier. *BAR* 23/1: 42–49, 75–77.
- Byrne, B.
 2005 Theories of Learning to Read. Pp. 104–19 in *The Science of Reading: A Handbook*, ed. M. J. Snowling and C. Hulme. Oxford: Blackwell.
- Byrne, R.
 2007 The Refuge of Scribalism in Iron I Palestine. *BASOR* 345: 1–31.
- Carr, D. M.
 2005 *Writing on the Tablet of the Heart: Origins of Scripture and Literature*. Oxford: Oxford University Press.
- Crenshaw, J. L.
 1985 Education in Ancient Israel. *JBL* 104: 601–15.
 1998 *Education in Ancient Israel: Across the Deadening Silence*. New York: Doubleday.
- Cross, F. M.
 1961 Epigraphic Notes on Hebrew Documents of the Eighth–Sixth Centuries B.C.: I. A New Reading of a Place Name in the Samaria Ostraca. *BASOR* 163: 12–14. [Repr. Cross 2003: 114–15]
 1962a Epigraphic Notes on Hebrew Documents of the Eighth–Sixth Centuries B.C.: II. The Murabba'at Papyrus and the Letter Found near Yabneh-Yam. *BASOR* 165: 34–46. [Repr. Cross 2003: 116–24]
 1962b Epigraphic Notes on Hebrew Documents of the Eighth–Sixth Centuries B.C.: III. The Inscribed Jar Handles from Gibeon. *BASOR* 168: 18–23. [Repr. Cross 2003: 125–28]



EISENBRAUNS

Offprint from:
 Ron Tappy and P. Kyle McCarter (eds.),
*Literate Culture and Tenth-Century Canaan:
 The Tel Zayit Abecedar in Context*

- 1980 Newly-Discovered Inscriptions in Old Canaanite and Early Phoenician Scripts. *BASOR* 238: 1–20. [Repr. Cross 2003: 213–30]
 - 1995 Palaeography and the Date of the Tell Fahariyeh Bilingual Inscription. Pp. 393–409 in *Solving Riddles and Untying Knots: Biblical, Epigraphic, and Semitic Studies in Honor of Jonas C. Greenfield*, ed. Z. Zevit, S. Gitin, and M. Sokoloff. Winona Lake, IN: Eisenbrauns. [Repr. Cross 2003: 51–60]
 - 2003 *Leaves from an Epigrapher's Notebook: Collected Papers in Hebrew and West Semitic Palaeography and Epigraphy*. HSS 51. Winona Lake, IN: Eisenbrauns.
- Cross, F. M., and Freedman, D. N.
- 1952 *Early Hebrew Orthography: A Study of the Epigraphic Evidence*. AOS 36. New Haven, CT: American Oriental Society.
 - 1975 *Studies in Ancient Yahwistic Poetry*. SBLDS 21. Missoula, MT: Society of Biblical Literature.
- Darnell, J. C.
- 2005 *Part II of Part I: Results of the 2001 Kerak Plateau Early Bronze Age Survey; Part II: Two Early Alphabetic Inscriptions from the Wadi el-Hôl*, ed. M. Chesson and J. C. Darnell et al. AASOR 59. Boston: American Schools of Oriental Research.
- Degen, R.
- 1969 *Altaramäische Grammatik der Inschriften des 10–8 Jh v. Chr.* Wiesbaden: Harrassowitz.
- Donner, H., and Röllig, W.
- 1979 *Kanaanäische und aramäische Inschriften*. 3 vols. 4th ed. Wiesbaden: Harrassowitz.
- Ehri, L.
- 1997 Learning to Read and Learning to Spell Are One and the Same, Almost. Pp. 237–69 in *Learning to Spell: Research, Theory, and Practice across Languages*, ed. C. A. Perfetti, L. Rieben, and M. Fayol. Mahwah, NJ: Erlbaum.
 - 1998 Grapheme-Phoneme Knowledge is Essential for Learning to Read Words in English. Pp. 3–40 in *Word Recognition in Beginning Literacy*, ed. J. L. Metsala and L. C. Ehri. Mahwah, NJ: Erlbaum.
 - 2002 Phases of Acquisition in Learning to Read Words and Implications for Teaching. *British Journal of Educational Psychology: Monograph Series* 1: 7–28.
- Friedrich, J., and Röllig, W.
- 1999 *Phönizisch-punische Grammatik*. 3rd ed. Rome: Pontifical Biblical Institute.
- Frost, R.
- 2005 Orthographic Systems and Skilled Word Recognition Process in Reading. Pp. 272–95 in *The Science of Reading: A Handbook*, ed. M. J. Snowling and C. Hulme. Oxford: Blackwell.
- Gal, Z.
- 1990 Khirbet Roš Zayit – Biblical Cabul: A Historical-Geographical Case. *BA* 53: 88–97.



EISENBRAUNS

Offprint from:
Ron Tappy and P. Kyle McCarter (eds.),
*Literate Culture and Tenth-Century Canaan:
The Tel Zayit Abecedary in Context*

- Garr, R.
1985 *Dialect Geography of Syria-Palestine, 1000–586 B.C.E.* Philadelphia: University of Pennsylvania Press. [Repr. Winona Lake, IN: Eisenbrauns, 2004.]
- George, A.
2005 In Search of the é.dub.ba.a: The Ancient Mesopotamian School in Literature and Reality. Pp. 127–37 in *An Experienced Scribe Who Neglects Nothing: Ancient Near Eastern Studies in Honor of Jacob Klein*, ed. Y. Sefati et al. Bethesda, MD: CDL.
- Geva, E.
1995 Orthographic and Cognitive Processing in Learning to Read English and Hebrew. Pp. 277–91 in *Scripts and Literacy: Reading and Learning to Read Alphabets, Syllabaries and Characters*, ed. I. Taylor and D. R. Olson. Boston: Kluwer.
- Gogel, S. L.
1998 *A Grammar of Epigraphic Hebrew*. SBLRBS 23. Atlanta: Scholars Press.
- Gough, P. B.; Juel, C.; and Griffith, P. L.
1992 Reading, Spelling and the Orthographic Cipher. Pp. 35–48 in *Reading Acquisition*, ed. P. B. Gough, L. C. Ehri, and R. Treiman. Hillsdale, NJ: Erlbaum.
- Guilleman, A. M.
1937 Le public et la vie littéraire à Rome. *Revue des Études Latines* 15: 102–21.
- Haran, M.
1988 On the Diffusion of Literacy and Schools in Ancient Israel. Pp. 81–95 in *Congress Volume: Jerusalem 1986*, ed. J. A. Emerton. VTSup 40. Leiden: Brill.
- Harris, W. V.
1989 *Ancient Literacy*. Cambridge: Harvard University Press.
- Harris, Z. S.
1939 *Development of the Canaanite Dialects: An Investigation in Linguistic History*. AOS 16. New Haven, CT: American Oriental Society.
- Havelock, E. A.
1982 *The Literate Revolution in Greece and Its Cultural Consequences*. Princeton: Princeton University Press.
- Henderson, E.
1985 *Teaching: Spelling*. Boston: Houghton Mifflin.
- Hess, R. S.
2002 Literacy in Iron Age Israel. Pp. 82–102 in *Windows into Old Testament History: Evidence, Argument, and the Crisis of 'Biblical Israel'*, ed. V. P. Long, D. W. Baker, and G. J. Wenham. Grand Rapids: Eerdmans.
2006 Writing about Writing: Abecedaries and Evidence for Literacy in Ancient Israel. *VT* 56: 342–46.
- Hoftijzer, J., and Jongeling, K.
1995 *Dictionary of the North-West Semitic Inscriptions*. Leiden: Brill.
- Jamieson-Drake, D. W.
1991 *Scribes and Schools in Monarchic Judah: A Socio-Archaeological Approach*. JSOTSup 109. Sheffield: Sheffield Academic Press.



EISENBRAUNS

Offprint from:
Ron Tappy and P. Kyle McCarter (eds.),
*Literate Culture and Tenth-Century Canaan:
The Tel Zayit Abecedarium in Context*

- Janssen, R., and Janssen, J. J.
1990 *Growing Up in Ancient Egypt*. London: Rubicon.
- Jouön, P.
1993 *A Grammar of Biblical Hebrew: Parts 1–3*. Rev. and ed. T. Muraoka. SubBi 14/1. Rome: Pontifical Biblical Institute.
- Kaufman, S. A.
1982 Reflections on the Assyrian-Aramaic Bilingual from Tell Fakhariyeh. *Maarav* 3: 137–75.
- Kelm, G. L., and Mazar, A.
1995 *Timnah: A Biblical City in the Sorek Valley*. Winona Lake, IN: Eisenbrauns.
- Koehler, L., and Baumgartner, W.
1994–2000 *The Hebrew and Aramaic Lexicon of the Old Testament*. 5 vols. Leiden: Brill.
- Lee, S. Y.; Uttal, D. H.; and Chen, C.
1995 Writing Systems and Acquisition of Reading in American, Chinese, and Japanese First Graders. Pp. 247–63 in *Scripts and Literacy: Reading and Learning to Read Alphabets, Syllabaries and Characters*, ed. I. Taylor and D. R. Olson. Dordrecht: Kluwer Academic.
- Lemaire, A.
1981 *Les écoles et la formation de la bible dans l'ancien israël*. OBO 39. Göttingen: Vandenhoeck & Ruprecht.
- Levin, I.; Share, D. L.; and Shatil, E.
1996 A Qualitative-Quantitative Study of Preschool Writing: Its Development and Contribution to School Literacy. Pp. 271–93 in *The Science of Writing*, ed. M. Levy and S. Ransdell. Hillsdale, NJ: Erlbaum.
- Macalister, R. A. S.
1908 Communication. *PEFQS* 40: 271.
- Mazar, A.
2003 Three 10th–9th Century B.C.E. Inscriptions from Tël Rehôv. Pp. 171–84 in *Saxa Loquentur: Studien zur Archäologie Palästinas/Israels: Festschrift für Volkmar Fritz zum 65. Geburtstag*, ed. C. G. Hertog, U. Hübner, and S. Münster. Münster: Ugarit-Verlag.
- McCarter, P. K., Jr.
1975 *The Antiquity of the Greek Alphabet*. HSM 9. Missoula, MT: Scholars Press.
- McDowell, A. G.
1999 *Village Life in Ancient Egypt: Laundry Lists and Love Songs*. Oxford: Oxford University Press.
2000 Teachers and Students at Deir el-Medina. Pp. 217–33 in *Deir el-Medina in the Third Millennium AD: A Tribute to Jac J. Janssen*, ed. R. J. Demarée and A. Egberts. Leiden: Nederlands Instituut voor het Nabije Oosten.
- Moran, W. L.
1992 *The Amarna Letters*. Baltimore: Johns Hopkins University Press.
- Naveh, J.
1970 *The Development of the Aramaic Script*. Jerusalem: Israel Academy of Sciences and Humanities.
1987 *Early History of the Alphabet*. 2nd ed. Jerusalem: Magnes.



EISENBRAUNS

Offprint from:
Ron Tappy and P. Kyle McCarter (eds.),
*Literate Culture and Tenth-Century Canaan:
The Tel Zayit Abecedary in Context*

- Niditch, S.
1996 *Oral World and Written Word*. Library of Ancient Israel. Louisville: Westminster John Knox.
- O'Connor, M.
1990 The Ammonite Onomasticon: Syntactic and Morphological Considerations. Pp. 153–68 in *Studies in Near Eastern Culture and History in Memory of Ernest T. Abdel-Massih*, ed. J. A. Bellamy. Michigan Series on the Middle East 2. Ann Arbor: Center for Near Eastern and North African Studies, University of Michigan.
- Olmo Lete, G. del, and Sanmartín, J.
2004 *A Dictionary of the Ugaritic Language in the Alphabetic Tradition*. 2nd ed. Leiden: Brill.
- Peckham, B.
1968 *The Development of the Late Phoenician Scripts*. HSS 20. Cambridge: Harvard University Press.
- Puech, E.
1988 Les écoles dans l'Israël préexilique: Données épigraphiques. Pp. 189–203 in *Congress Volume: Jerusalem 1986*, ed. J. A. Emerton. VTSup 40. Leiden: Brill.
- Rainey, A.
1996 *Canaanite in the Amarna Tablets: A Linguistic Analysis of the Mixed Dialect Used by the Scribes from Canaan*. 4 vols. Leiden: Brill.
- Ravid, D.
1995 *Language Change in Child and Adult Hebrew: A Psycholinguistic Perspective*. New York: Oxford University Press.
- Richgels, D. J.
2002 Invented Spelling, Phonemic Awareness, and Reading and Writing Instruction. Pp. 142–55 in *Handbook of Early Literacy Research*, ed. S. B. Neuman and D. K. Dickinson. New York: Guilford.
- Rollston, C. A.
1999 *The Script of Hebrew Ostraca of the Iron Age: 8th–6th Centuries B.C.E.* Ph.D. Dissertation. Johns Hopkins University.
2001 Ben Sira 38:24–39:11 and the *Egyptian Satire of the Trades*: A Reconsideration. *JBL* 120: 131–39.
2003 Non-Provenanced Epigraphs I: Pillaged Antiquities, Northwest Semitic Forgeries, and Protocols for Laboratory Tests. *Maarav* 10: 135–93.
2006 Scribal Education in Ancient Israel: The Old Hebrew Epigraphic Evidence. *BASOR* 344: 47–74.
Forthcoming a *Writing and Literacy in the World of Ancient Israel*. Leiden: Brill.
Forthcoming b Northwest Semitic Cursive Scripts of Iron II. In *An Eye for Form: Epigraphic Essays in Honor of Frank Moore Cross*, ed. J. Hackett and W. Aufrecht. Winona Lake, IN: Eisenbrauns.
- Sanders, S.
2004 What Was the Alphabet For? The Rise of Written Vernaculars and the Making of Israelite National Literature. *Maarav* 11: 25–56.



EISENBRAUNS

Offprint from:
Ron Tappy and P. Kyle McCarter (eds.),
*Literate Culture and Tenth-Century Canaan:
The Tel Zayit Abecedar in Context*

- Sass, B.
 - 2005 *The Alphabet at the Turn of the Millennium: The West Semitic Alphabet ca. 1150–850 B.C.E.* Tel Aviv Occasional Publications 4. Tel Aviv: Yass Publications in Archaeology.
- Schniedewind, W. M.
 - 2004 *How the Bible Became a Book.* Cambridge: Cambridge University Press.
- Segert, S.
 - 1975 *Altaramäische Grammatik.* Leipzig: Verlag Enzyklopädie.
 - 1976 *A Grammar of Phoenician and Punic.* Munich: Beck.
 - 1984 *A Basic Grammar of the Ugaritic Language.* Berkeley: University of California Press.
- Seymour, P. H. K.
 - 1997 Foundations of Orthographic Development. Pp. 319–37 in *Learning to Spell: Research, Theory, and Practice across Languages*, ed. C. A. Perfetti, L. Rieben, and M. Fayol. Mahwah, NJ: Erlbaum.
 - 2005 Early Reading Development in European Orthographies. Pp. 296–315 in *The Science of Reading: A Handbook*, ed. M. J. Snowling and C. Hulme. Oxford: Blackwell.
- Share, D. L., and Levin, I.
 - 1999 Learning to Read and Write in Hebrew. Pp. 89–111 in *Learning to Read and Write: A Cross-Linguistic Perspective*, ed. M. Harris and G. Hatano. Cambridge: Cambridge University Press.
- Tappy, R. E.; McCarter, P. K.; Lundberg, M.; and Zuckerman, B.
 - 2006 An Abecedary of the Mid-Tenth Century from the Judaean Shephelah. *BASOR* 344: 5–46.
- Tinney, S.
 - 1998 Texts, Tablets, and Teaching: Scribal Education at Nippur and Ur. *Expedition* 40/2: 40–50.
 - 1999 On the Curricular Setting of Sumerian Literature. *Iraq* 61: 159–72.
- Toorn, K. van der
 - 2007 *Scribal Culture and the Making of the Hebrew Bible.* Cambridge: Harvard University Press.
- Totureau, C.; Thevenin, M.; and Fayol, M.
 - 1997 Pp. 97–114 in *Learning to Spell: Research, Theory, and Practice across Languages*, ed. C. A. Perfetti, L. Rieben, and M. Fayol. Mahwah, NJ: Erlbaum.
- Treiman, R.
 - 1993 *Beginning to Spell: A Study of First-Grade Children.* New York: Oxford University Press.
- Treiman, R., and Kessler, B.
 - 2005 Writing Systems and Spelling Development. Pp. 121–34 in *The Science of Reading: A Handbook*, ed. M. J. Snowling and C. Hulme. Oxford: Blackwell.
- Tropper, J.
 - 2000 *Ugaritische Grammatik.* AOAT 273. Münster: Ugarit-Verlag.



EISENBRAUNS

Offprint from:
Ron Tappy and P. Kyle McCarter (eds.),
*Literate Culture and Tenth-Century Canaan:
The Tel Zayit Abecedary in Context*

- Vanstiphout, H. L. J.
 1979 How Did They Learn Sumerian? *JCS* 31: 118–26.
- Veldhuis, N.
 2003 Mesopotamian Canons. Pp. 9–28 in *Homer, the Bible and Beyond: Literary and Religious Canons in the Ancient World*, ed. M. Finkelberg and G. G. Stroumsa. Leiden: Brill.
- Waltke, B., and O'Connor, M.
 1990 *An Introduction to Biblical Hebrew Syntax*. Winona Lake, IN: Eisenbrauns.
- Weeks, S.
 1994 *Early Israelite Wisdom*. Oxford: Clarendon.
- Wimmer, H., and Landerl, K.
 1997 How Learning to Spell German Differs from Learning to Spell English. Pp. 81–96 in *Learning to Spell: Research, Theory, and Practice across Languages*, ed. C. A. Perfetti, L. Rieben, and M. Fayol. Mahwah, NJ: Erlbaum.
- Yadin, Y.; Aharoni, Y.; Amiran, R.; Dothan, T.; Dunayevsky, I.; and Perrot, J.
 1960 *Hazor II: An Account of the Second Season of Excavations, 1956*. Jerusalem: Magnes.
- Yadin, Y.; Aharoni, Y.; Amiran, R.; Ben-Tor, A.; Dothan, M.; Dothan, T.; Dunayevsky, I.; Geva, S.; and Stern, E.
 1961 *Hazor III–IX: An Account of the Third and Fourth Seasons of Excavations, 1957–1958*. Jerusalem: Magnes.
- Young, I.
 1998a Israelite Literacy: Interpreting the Evidence, Part 1. *VT* 48: 239–53.
 1998b Israelite Literacy: Interpreting the Evidence, Part 2. *VT* 48: 408–22.
 2005 Israelite Literacy and Inscriptions: A Response to Richard Hess. *VT* 54: 565–67.
- Zevit, Z.
 1980 *Matres Lectionis in Ancient Hebrew Epigraphs*. ASOR Monographs 2. Cambridge, MA: American Schools of Oriental Research.



EISENBRAUNS

Offprint from:
 Ron Tappy and P. Kyle McCarter (eds.),
*Literate Culture and Tenth-Century Canaan:
 The Tel Zayit Abecedar in Context*