

[Biblical Hebrew Poetry](#) and [Word Play](#)

Reconstructing the Original Oral, Aural and Visual Experience

By David Steinberg

David.Steinberg@houseofdavid.ca

Home page <http://www.houseofdavid.ca/>

[Return to Table of Contents](#)

VI Reconstruction of Pre-Exilic Biblical Hebrew ([EBHP](#))

1. [Aims in Reconstructing EBHP](#)

[Box 9 - Can Biblical Texts be Linguistically Dated?](#)

2. [Changes in the Pronunciation Tradition of Biblical Hebrew Between EBHP and that Recorded in the Tiberian Masoretic Tradition](#) (early 10th century CE)

[Box 10 - Justification of Proposals for EBHP](#)

3. [Guidelines I Have Used in Reconstructing EBHP](#)

[Table 10 - Mono-syllabic Prepositions and Conjunctions Usually Linked to the Following Word in the MT by a maqqeph/makef \(ךקמ\)](#)

[Table 11 - Vowels of EBHP](#)

4. [Examples of the EBHP Vocalization of Biblical Hebrew Texts](#)

a. [Archaic or Archaizing Poetic Texts](#)

- i) [Blessing of Jacob \(Genesis 49:1-27\)](#)
- ii) [Song of the Sea \(Exodus 15:1b-18\)](#)
- iii) [The Oracles of Balaam \(poetic portions of Numbers 23:7-24:24\)](#)
- iv) [Ha'azinu \(Deuteronomy 32:1-43\)](#)
- v) [Blessing of Moses \(Deuteronomy 33\)](#)
- vi) [Song of Deborah \(Judges 5\)](#)

b. [Various Short Poems](#): Genesis 2:23; Genesis 3:14-19; Genesis 4:6-7; Genesis 4:23b-24; Genesis 8:22; Genesis 9:6; Genesis 9:25-27; Genesis 12:2-3; Genesis 14:19-20; Genesis 16:10-12; Genesis 24:60; Genesis 25:23; Genesis

27:28-29; Genesis 27:39-40; Genesis 35:10-12; Genesis 48:15-16; Genesis 48:20; Exodus 32:18; Numbers 6:24-26; Numbers 10:35-36; Numbers 12:6b-8a; Numbers 21:14, 15, 17-18; Numbers 21:27-30; Joshua 10:12-13 (poetic portion); Judges 9:8-15; Judges 14:14, 18; Judges 15:16 (poetic portion); Judges 16:23-24 (poetic portion); 1 Samuel 15:22b-23; 1 Samuel 18:7 (poetic portion); 2 Samuel 3:33-34 (poetic portions); 2 Samuel 20:1 (poetic portion); 1 Kings 8:12-13; 1 Kings 12:16 (poetic portion); 2 Kings 19:21b-28; 2 Kings 19:31; 2 Kings 19:32b-34.

c. [Psalmic Poetry](#)

- i) [II Samuel Chapt. 22 \(Second version Psalm 18\)](#) -
- ii) [Psalm 23](#)
- iii) [Psalm 114](#)
- iv) [Psalm 121](#)
- v) [Psalm 122](#)
- vi) [Psalm 130](#)

d. [Lamentations](#)

- i) [Lament of David](#) (II Samuel 1:19-27)
- ii) [Lamentations](#) 3:1-15 ("*Qinah* meter")

e. [Poetry of Song of Songs](#) - Song 2:1-17

f. [Poetry of Job](#) - Job 3:3-10

g. [Prophetic Poetry](#)

- i) [Jer. 1: 11-12; Jer. 1: 18-19; Jer. 19:14-15; Zeph. 3:1-2; Deut 15:1,4](#)
- ii) [Amos 3:3-6; 3:8; 5:5-7; 5:10-12; 5:16b-17; 6:12; 8:7-10; 9:5-6; 9:13](#)

h. [Prose Texts](#)

- i) [Genesis 2:18-24](#)
- ii) [Genesis 4:1-3; Genesis 13:4-14; Joshua 7:1-3](#)
- iii) [Siloam Inscription](#)

VI Reconstruction of EBHP

1. Introduction

It goes without saying that the pronunciation of pre-exilic [Biblical Hebrew](#) (c. 1000-600 BCE) varied with "...socio-economic class, professional standing, degree and type of education, religious affiliation, ethnic origin, generation, and even sex."¹ We should aim at recovering, as closely as possible, the pronunciation that a scribe in Jerusalem 700-600 BCE would have used in reading poetry to upper class Judeans or members of the

king's court ([\[EBHP\]](#)). For poems of northern origin this might have included some features of northern pronunciation which would share some of the phonetic features of [Phoenician](#) and [Aramaic](#) such as the contraction of diphthongs. The clearest example of such a poem is the [Song of Deborah](#).

Scribes trained in [Jerusalem 700-600 BCE](#) were likely the authors of the bulk of surviving [JEH](#) e.g. [Siloam Inscription](#), [Lachish ostraca](#), [Arad ostraca](#) etc. The same circles were likely the composers and/or transmitters of most of the pre-exilic biblical texts. JEH documents have been preserved in their original language and orthography and, [within limits](#), can serve as a guide to pronunciation. Except for archaisms used in poetry, the pre-exilic biblical texts would very likely have conformed to the norms of JEH.

I aim to do the following listed in rough order of importance:

(1) Distinguish the [consonantal and vowel phonemes and indicate their likely pronunciation](#). This will require, among other things, differentiating between:

- long ([geminated](#))² and short consonants;
- different [qualities of vowels](#) with emphasis on qualitative differences that are [phonemic](#); and,
- between [diphthongs](#), [long vowels](#) ([phonological or phonetic](#))³, short vowels and the absence of vowels.

(2) Establish the number of syllables and their [boundaries](#) and [syllable length](#); and,

(3) Establish the syllable carrying the word [stress](#) ([primary](#) or [secondary](#)).

This will require an understanding of:

i) Pronunciation – the main differences between:

- the probable [phonology](#) and [use of vowel letters](#) of Biblical Hebrew at time of writing;
- the pronunciation tradition embodied in the [Tiberian vocalization](#); and,
- Hebrew as it is [pronounced in modern Israel](#).

ii) Script and Orthography:

- the appearance of the text in different historical periods and the latitude this provided for mistakenly replacing one letter by another; and,
- the development of orthography and its impact on the range of meanings and pronunciations that could be attributed to the original consonantal skeleton.

Box 9

Can Biblical Texts be Linguistically Dated?⁴

After almost three centuries of modern study of the Hebrew Bible, it is clear that internal analysis of the text cannot convincingly disclose the periods of composition of the components that were finally redacted into the text that has come down to us. For this reason, the dating of textual units on objective linguistic grounds, if it can be shown to be feasible, would prove invaluable to the study of the Hebrew Bible and Israelite/Jewish history.

For decades, Biblical Hebrew texts have been roughly divided into three chronological strata based on linguistic criteria – Archaic Biblical Hebrew (c. late second to early first millennia BCE), Classical or Early Biblical Hebrew (c. ninth to early sixth century BCE), and Late Biblical Hebrew (c. after the sixth century BCE). The most important research supporting this structure was done by Avi Hurvitz⁵.

In the last decade this structure has been attacked by a number of scholars who maintain that the dating of Biblical Hebrew texts on the basis of language is effectively impossible. The most important books making this case are - *Linguistic Dating of Biblical Texts* by Ian Young, Robert Rezetko and Martin Ehrensverd and *Dating Archaic Biblical Hebrew Poetry: A Critique of the Linguistic Arguments* by Robyn C. Vern.

In my view, the essays in *Diachrony in Biblical Hebrew* (*Diachrony in Biblical Hebrew* (ed. Miller-Naudé and Zevit) successfully answer the arguments of Young et al showing that it is indeed probable that the observable linguistic differences between Classical and Late Biblical Hebrew are due to their date of composition. On the other hand, despite a hyper-critical review by Pat-El and Wilson-Wright (*Features of Archaic Biblical Hebrew and the Linguistic Dating Debate*), it is quite possible that the conclusion of Vern (quoted below) will be sustained -

No archaic linguistic feature, either singly or in combination across the range of forms, provides evidence relevant for dating the archaic poetry of the Hebrew Bible.... The presence of archaisms in the Archaic Biblical Hebrew corpus indicates a poetic style which uses linguistic forms from another period, a common feature of poetry in many cultures.

The ABH poetic corpus is typologically more representative of first millennium sources than second millennium sources. This does not imply that an individual poem cannot be of late second millennium provenance. Up until perhaps 15 years ago it was routinely stated that Biblical Hebrew could be roughly divide into three chronological levels – Archaic Poetic (late second to early first millennium BCE), Classical/Early (10th – 6th c BCE) and Late (after 6th c BCE) .

It is now clear that much additional work must be done before the usefulness of language analysis in dating biblical passages can be reassessed. This is well described in the last paragraphs of [Zevit 2004](#).

2. Changes in the Pronunciation Tradition of Biblical Hebrew Between EBHP and that Recorded in the Tiberian Masoretic Tradition (early 10th century CE)

Box 10

Justification of Proposals for Early Biblical Hebrew Pronunciation

A written language has no sounds. It does not speak, in a conventional sense, but communicates non-verbally. Language is abstracted into a series of signs that themselves relate information. In writing, language becomes a series of signs.

When a language exists only in written form, the audible sounds that the language contains are not readily apparent. Without the testimony of a native speaker, it may be difficult to match the written sign with specific phones. Discovering the sounds native to a written language, then, is indirect. The internal sound patterns of the language, [external transcriptions in other languages and scripts, and notices about speech behaviour recorded by contemporary witnesses can compensate for the lack of direct phonetic data](#). From these sources, the phonetic base of a written language may be recovered ⁶.

If we assume that the [Tiberian Masoretes simply encoded a traditional pronunciation](#), it is reasonable to insist that any proposals regarding the grammar and pronunciation of [EBHP](#) and [JEH](#) must be supported by a reconstruction of how the form could have developed into the attested TH given [our understanding of the linguistic changes that took place between EBHP/JEH and TH](#). (Of course, the same requirement separately exists for [BH_{Qum}](#), [BH_{Pal}](#), and [BH_{Gk-Lat}](#))⁷.

[Tiberian Masoretic Text \(MT\)](#) has in general satisfactorily preserved the consonantal system of pre-exilic Hebrew. However, it is clear that the vocalization of the MT differs systemically in many ways from the pronunciation of [EBHP](#) of over a millennium earlier. These systemic differences, [many of which were influenced by Aramaic](#), can often be identified through comparative grammar. Among the most important changes, mainly phonetic, which can be detected in Hebrew after 600 BCE, are the following. As you will note, some of these changes had already begun to take place before the exile⁸.

a) The process whereby the place of stress [replaced vowel and consonant length as phonemic](#) went to completion⁹. The Tiberian vocalization system ([/TH/](#)+) marked:

- all the phonemes in their reading tradition;
- such allophones (eg. פ = פּ [f] and [gemination](#)) as were required for “correct” reading of the biblical text according to the Tiberian reading tradition.

The Tiberian system did not explicitly mark vowel length - see [Were there Long and Short Vowels in Tiberian Hebrew \(TH\)?](#)

b) Disappearance of intervocalic /h/.

- This had been well advanced in the pre-exilic period¹⁰. E.g.

*/lahas'su:s/ > /las'su:s/ לסוס <lsws> “for the horse”¹¹;

*/yahas'mi:d/ or */yəhas'mi:d/ > [/yaš'mi:d/](#) ישמיד <yšmys> “he will destroy”.

- In a few cases it is unknown when the intervocalic /h/ disappeared. The most important case is that of the [third person masculine pronominal suffix](#).

- In the post-exilic period this went further – e.g. /lahaš'mi:d/ ([/EBHP/](#)); /ləhas'mid/ ([/TH/](#)); /laš'mi:d/ לשמיד <lhšmyd> ([/MH/](#)) “to destroy”¹²

c) Elision of syllable- or [word-final glottal stop \(/ʔ/\[ʔ\]\)](#) and /y/ – usually with a lengthening of the preceding vowel

d) <שׁ> /ś/ [ʃ] > <שׁ, ס> /s/ [s] this commenced before the finalization of the consonantal text of the Hebrew Bible as is shown by a number of cases where original שׁ ś is written ס s. E.g. כּפּוּק = שׁפּוּק = “to be sufficient etc.”.

e) [The insertion](#) of a [short vowel into non word-final](#) diphthongs

e.g. בית */bayt/ (/EBHP/) → בַּיִת /'bayit/ (/TH/); מוֹת /'mawt/ (/EBHP/) → /'māwɛt/ [ˈmɔːwɛθ] (TH) מוֹתָ.¹³

f) [Segolation](#)¹⁴

g) [Philippi's law](#)

h) [Law of attenuation](#)

i) [Spirantization of the bgdkpt Consonants](#)

j) Neutralization of velar and pharyngeal phonemes (/ħ/>/h/, /ǰ/>/ç/)¹⁵. This resulted in the elimination of the phonemic distinction between some words. (See [Lexicon of Unmarked Consonantal Phonemes in Biblical Hebrew /ǰ/\[ç\]](#) AND [Lexicon of Unmarked Consonantal Phonemes in Biblical Hebrew /ħ/\[x\]](#))

E.g.s.

- עַד = “as far as” - */cad/ (/EBHP/) > /cad/ (/TH/)
- עַד = “permanently, forever” - */ǰad/ (/EBHP/+) > /'cad/ (/TH/)
- חַלַּשׁ <ħlš>. Two distinct roots are found in EBHP which merge when /ħ/>/h/
 - √ħlš "to be weak"
 - *√ħlš "to defeat"

k) [Pretonic vowel lengthening](#)

l) [Reduction](#) of certain vowels to *shewa* (*/yid'rušū/ (/EBHP/+) → /yidrə'šu/ (/TH/+) *[yiðrə'fuː] (TH)) יִדְרְשׁוּ “they sought etc.”) or, in the environment of a laryngeal consonant, to another ultra-short vowel (e.g. */yim'caṭuː/ → Tiberian /yimcä'tu/ (/TH/+) יִמְעָטוּ)

m) Weakening of the [pharyngeal and laryngeal](#) consonants¹⁶ which resulted in:

- The loss of the ability of these consonants to [geminate](#)¹⁷ which in turn often caused a lengthening of the preceding vowel¹⁸. E.g. בָּרַךְ = “he was blessed” */bur'rak/ (/EBHP/) → /bo'rak/ (/TH/+) *[boː'reːx] (TH)).
- Vowel changes before gutturals ([laryngeals](#)) E.g.s.

- שמע “hearer, hears” (ms. *qal* [a.p.](#)) */šō'me:c/ ([\(EBHP/+\)](#)) → /šō'məa^c/¹⁹ *[jo:'mɛ:e^c] (TH). Cf. to the parallel forms in a root identical except that it does not have a guttural - שמע = “hearer, hears” (ms. *qal* *ap.*) */šō'me:r/ ([\(EBHP/+\)](#)) → /šomɛr/ *[jo:'mɛ:r] (TH).
- שמעת “hearer, hears” (fs. *qal* *ap.*) */šō'ma^{ct}/ ([\(EBHP/+\)](#)) → /šō'ma.a^{ct}/ *[jo:'mɛ:.e^cθ] (TH). Cf. to the parallel forms in a root identical except that it does not have a guttural - שמר “guard, guarding” (ms. *qal* *ap.*) */šō'mart/ ([\(EBHP/+\)](#)) → /šō'mɛrɛt/ *[jo:'mɛ:rɛθ] (TH).
- At times these changes eliminate important distinctions maintained in pre-exilic Hebrew - e.g. TH *qal* and *hiphil* [PC](#) 3ms. is הָלַךְ while the EBHP would have been - *qal* */yi^clêl/ ; *hiphil* */ya^clêl/.

3. Guidelines I Have Used in Reconstructing the EBHP Vocalization of the First Temple Period Hebrew

(1) Syllables

a. Syllabic Structure ²⁰

Every syllable in [EBHP](#) had one of the following patterns²¹ which are similar to some varieties of spoken Arabic²²:

- CV = consonant – short vowel e.g. */lɑ/ "to, for" [TH](#) /lə/ לָ
- CVV = consonant – long vowel e.g. /šō/, the first syllable of TH שוֹמֵר (* /šō'me:r/ ([\(EBHP/+\)](#));
- CVC = consonant – short vowel – consonant e.g. /yim/ in יִמְצֹטוּ pre-exilic */yim^caṭū/ > /yim^căṭu/ [yimʕăṭu:] (TH);
- CVVC = consonant – long vowel OR [diphthong](#) – consonant e.g. ([\(EBHP/+\)](#)) /sūs/ "horse"; */bayt/ "house"
- CVCC = consonant – short vowel – consonant – consonant e.g. */malk/ ([\(EBHP/\)](#)) > /mɛ:'lɛk/ [mɛ:'lɛx] (TH). (In TH these mostly developed later into [segolates](#) (see <http://www.houseofdauid.ca/problem5.pdf>) though some final consonantal clusters remain e.g. וְיָבֹרֵךְ).

From the point of view of syllable length these can be divided into 3 quantities;

- Short Syllables - i.e. CV = consonant – short vowel;
- Medium Length Syllables - i.e. CVV = consonant – long vowel OR diphthong; *or* CVC = consonant – short vowel – consonant;
- Long Syllables - i.e. CVVC = consonant – long vowel – consonant; *or* CVCC = consonant – short vowel – consonant – consonant .

[Words Significantly Different in Pronunciation in EBHP](#)

[Numerals in Pre-Exilic Hebrew](#)

c. Background to [Syllabic Stress](#) - (See excursus [Evolution of Pronunciation and Stress Patterns](#))

d. Marking of [Syllabic Stress](#)

- I will assume that primary word stress in BH was limited to: (a) verbs and, (b) nouns (substantives, adjectives, numbers, and pronouns²³) in the absolute case. In the transcriptions, the syllable carrying primary word stress are generally in bold with the IPA symbol ' preceding the primary stressed syllable;
- All other words (nouns in the construct case and particles²⁴ - adverbs (including negatives), prepositions, conjunctions etc.)²⁵ other than monosyllabic prepositions and conjunctions (see below) are assumed to carry a secondary stress which I indicate by the IPA symbol , preceding the syllable carrying the secondary stress;
- Mono-syllabic prepositions and conjunctions, almost always connected to the following word in the MT by a *maqeph/makef* (מקף) clearly stand midway between inseparable prepositions, which are never stressed, and ordinary nouns in the construct (See *Gesenius Hebrew Grammar* 16.1) which carry secondary stress. I have assumed that the following, except when they have become independent forms by being combined with prefixes (other than *wa-*), carry no stress. In the transcriptions I have replaced the *makef* by a hyphen.

Table 10

Mono-syllabic Prepositions and Conjunctions Usually Linked to the Following Word in the MT by a *maqqeph/makef* (מקף)

<u>TH</u>	<u>/EBHP/</u> ²⁶ <u>[EBHP]</u> ²⁷	Meaning
לְ	/il/ [ʔɛl-]	to
לֹ	/al/ [ʔɛl-]	don't
מִ	/im/ [ʔɪm-]	if
תְּ	/at/ or /it/ ²⁸ either possibly pronounced [ʔɛt-]	(sign of direct object of verb)
כֹּ	/kul(l)/ [kull-]	all of
מִן	/min/ [mɪn-]	from
עַד	/ad/ [ʔɛd-]	up to
עַל	/al/ [ʔɛl-]	upon
פְּ	/pan/ or /pin/ either possibly pronounced [pɛn-]	lest

(2) *Phones and Phonemes* (see excursus [Phonemic Structure of Pre-Exilic, Tiberian and Israeli Hebrew Contrasted](#); box [Phones and Phonemes](#))

It must be always remembered that:

- phonemic reconstructions, in our case /EBHP/, show the functional structure of the language's sound system while phonetic reconstructions, in our case [EBHP], attempt to represent how it may have sounded;
- the reconstruction of [EBHP] must be largely based on Tiberian pointing, which is mainly phonemic²⁹, the consonantal (PMT) text, which is phonemic and comparative Semitic linguistics. This necessitates the reconstruction of /EBHP/ which then serves as the base for the reconstruction of [EBHP];
- phonemic reconstructions will always be more certain than phonetic reconstructions. In our case [EBHP] represents one, out of many, possible reconstructions of how /EBHP/ may have sounded. The most important guide in delineating the range of phonetic variation associated with the vowel phonemes are their ranges of values in modern varieties of Arabic (see [Aramaic and Arabic as Guides to Reconstructing EBHP](#)).

a. Consonants

i. [Table - Consonantal Phonemes in Biblical, Tiberian Masoretic and Israeli Hebrew](#)

ii. [Box - Consonantal Polyphony in Biblical Hebrew](#)³⁰

These are marked as follows in the *Transposed into Tiberian Graphemes* columns. I.e.

- ח = ḥ [ħ] ; 'ח= ḥ (other transcriptions x, kh , k) [x]
- ע = ʿ [ʕ]; 'ע = ǵ [ɣ]
- שׁ = š [ʃ] ; שׂ = ś [ʃ]

iii. Behaviour of Gutturals and Resh

It is probable that in [pre-exilic times the phonemes represented by ה, ח, ע, ר](#) and א behaved similarly to the other consonants (see [Linguistic Changes Affecting the Pronunciation of Biblical Hebrew 2000 B.C.E. - 850 C.E. According to Various Scholars](#)). The impact of this late change must be removed in order to reconstruct EBHP. Prominent examples are:

- In TH the letters אהחער do not [geminate](#), and in compensation, often lengthen the preceding vowel. In EBHP and LBHP these phonemes undoubtedly geminated in the same way as all other consonantal phonemes³¹.
- ע, ח, and consonantal ה when they end a word, are generally preceded by a helping vowel usually the [furtive pataḥ](#) as is the case in some spoken Arabic dialects. Such helping vowels may have facultatively occurred in EBHP but, if so, they were not phonemic. Regarding א see [Tequ](#).
- In TH the *qal* PC of *II-* and *III-guttural* verbs generally have the vowel *a* following their second root consonant probably due to the late changes in ght pronunciation of gutturals. We should assume that the EBHP and LBHP carried an *u* in this position.

iv. [Spirantization of the bgdkpt Consonants](#)³²

b. Vowels

i. I have followed the vocalization that I laid out in:

- [Table - History of Stress and Pronunciation of the Hebrew Pronoun](#)

- [Table - Stressed Noun Suffixes in Biblical Hebrew](#)
- [Table - Locative ך](#)
- [History of Stress and Pronunciation of the Hebrew Verb](#)
- [Biblical Hebrew Numbers](#)

ii. ['Segolates'](#)

iii. The dual is formed upon the singular stem. For feminine nouns with the dual suffix was added to the feminine form preserving the original *t* e.g. שָׁנַיִם 'two years'³³.

iv. [Vowel Quality](#)³⁴

v. [Vowel Length](#) etc.

- It is a rule of thumb that languages which distinguish words by vowel length (English, Classical Arabic) do not distinguish words by the location of the stressed syllable within the word and the reverse is also true i.e. that languages which distinguish words by the location of the stressed syllable within the word (Tiberian³⁵ and Israeli Hebrew) do not distinguish words by vowel length³⁶. In Biblical Hebrew syllable stress and vowel length were both phonemic but neither carried much of a phonemic load.
- Vowel length was certainly a prominent feature of the Hebrew language at least until late antiquity. Nb. [Word-final Vowels of intermediate or uncertain length](#). In most cases I [have replaced the murmured-vowel](#)³⁷ ("šəwa mobile" = ə) with a short vowel (dotted below) of the quality of the original vowel (/a/, /u/ /i/) that probably occupied that position in pre-exilic Hebrew. Thus, in EBHP, לָבַבְּ [are represented as](#) /bɑ/ [bɛ], /kɑ/ [kɛ] and /lɑ/ [lɛ] respectively³⁸. Similarly conjunctive *waw* is represented as /wɑ/ [wɛ]³⁹.
- The use of vowel letters provides a partial guide to the presence of many of the long vowels with the exception of long *a*. In Canaanite, including proto-Hebrew, [in most positions long a had shifted to long o by the 14th century BCE](#). Thus the [cases in which ā was frequent in pre-exilic Hebrew](#) were the result of morpho-phonetic changes post-14th century BCE:
 - the third person perfect masculine singular of the *III-H* verbs - e.g.

*/ra'šâ/ (EBHP/+) < */ra'šaya/ (PH) "he wanted etc."⁴⁰.

- the third person feminine singular of the *Qal*/suffix conjugation - e.g.

**/ya'laḏâ/* (EBHP/+) < **/ya'laḏat/* (PH) "she gave birth"⁴¹.

- the feminine singular noun/adjective suffix - e.g.

**/yal'dâ/* (EBHP/+) < **/yal'datu/* (PH) "girl".

- the second person masculine singular pronoun -

**/'at.ta(:)/* (EBHP) < **/'an.tã/* (PH)

- a number of suffixes might have been *anceps*.

- Long proto-Semitic vowels remained long in Biblical Hebrew⁴². Contracted diphthongs are also long. In other cases, it is not always clear when some of the originally short vowels were lengthened.

[Heterogeneous Diphthong Contraction](#) See also the table [EBHP Heterogeneous Diphthongs and their Development in LBHP, TH and Israeli Pronunciation of BH](#)

vi. [Word-Final Short Vowels](#)

vii. Vowels of Reconstructed [\[EBHP\]](#)

Table 11 - EBHP Vowels			
<i>*[EBHP/+] Vowel Phonemes</i>	<i>*[EBHP] Used in Transcriptions and Sound Files</i>	<i>Transposition into Adapted Tiberian Graphemes⁴³</i>	<i>Comments</i>
<i>ī, î /i:/</i>	<i>[i:]</i>	<i>בִּי</i>	Word-final stressed, Non-word-final
<i>/i/ or /i:/</i>	<i>[iː]</i>		Word-final unstressed
<i>/i/</i>	<i>[ɛ]</i>	<i>בִּי</i>	In a syllable: (a) not carrying primary word stress (marked with ' '); (b) not being word-final ending in a geminated consonant; and, (c) the vowel corresponding to TH /e/ or /ɛ/.
	<i>[ɪ]</i>	<i>בִּי</i>	In all other cases .
<i>ē, ê, e /e:/</i>	<i>[e:]</i>	<i>בֵּי, בֶּה, בִּי</i>	In all cases.
<i>ā?, â, a /a:/</i>	<i>[é:]</i>	<i>בֵּה</i>	Word-final stressed
	<i>[a:]</i>	<i>בִּי</i>	Non-word-final

Table 11 - EBHP Vowels

* <u>EBHP</u> / <u>+</u> Vowel Phonemes	* <u>EBHP</u> Used in Transcriptions and Sound Files	Transposition into Adapted Tiberian Graphemes ⁴³	Comments
/a/ or /a:/	[eː]	בָּ, אָה	Word-final unstressed
/a/	[a]	ב	Where it corresponds to TH /ε/
	[ɛ]	בֵּי	First element of the <u>diphthong /ay/ [ɛy]</u> ⁴⁴ corresponding to TH /e/ [ɛː] or /ε/ [ɛː].
	[ɔ]	בִּי	First element of the <u>diphthong /aw/ [ɔw]</u> corresponding to TH /o/ [oː]
	[e]	ב	In all other cases.
ō, ô, ɔː /o:/	[oː]	בוּ, בִּי	Word-final stressed, Non-word-final
/o/ or /o:/	[ɔ]	בו	Word-final unstressed
/u:/	[uː]	בִּי	Word-final stressed, Non-word-final
/u/ or /u:/	[u]	בו	Word-final unstressed
/u/	[ɔ]	בִּי	In a syllable: (a) not carrying primary word stress (marked with '); (b) not being word- final ending in a geminated consonant; and, (c) the vowel corresponding to TH /o/ or /ɔ/.
	[u]	בֵּי	In all other cases.
<i>non-phonemic</i>	[e] or [∅] (i.e. silent)	בֵּי	[e] when it follows initial consonant of a syllable. eg. <i>qa/ms. imp.</i>

- Vowel length - [see this link](#)
- Vowel quality - see [What quality were the Short Vowels in \[EBHP\]?](#)
- Since the בגדכפ letters were always hard (see [Spirantization of the bgdkpt Consonants](#)) during this period, I use the *dagesh* exclusively to indicate gemination.
- Word-final א = /ʔ/ [ʔ]; and, ה = /h/ [h] (equivalent to MT ה).
- In diphthongs בִּי בִּי, בִּי בִּי, בִּי בִּי, בִּי בִּי, ⁴⁵בִּי בִּי, בִּי בִּי, בִּי בִּי, the final the ו and י have a consonantal value.

(3) Short and Long Forms of Prepositions etc.⁴⁶

אל-אלי, עלי-על, עדי-עד, אזי-אז and הנה-הן. The Albright-Cross school assumes that since the long and short forms of these word pairs probably would not have been distinguished in the hypothetical earliest Hebrew orthography of the north, we can freely substitute long and short forms based on Cross' idea of early Hebrew metrical norms. We should note that the long and short forms would, almost certainly, be distinguished in [JEH](#) were we to have epigraphic remains of the kind of poetry that uses archaic forms (i.e. אלי, עלי, עדי, אזי) in the Bible. In my view, the use of both long and short forms in the same poem (e.g. הן Num. 23:9; הנה Num. 23:20) suggests that the [PMT](#) must be respected in this matter.

(4) Pre-exilic Jerusalem and Samaritan Dialects

[As discussed elsewhere](#), it is probable that the pre-exilic Hebrew literary dialects of Jerusalem and Samaria differed in that in the Samaritan dialect, as in Ugaritic and Phoenician, the diphthong *ay* had contracted to \hat{e} and *aw* may have contracted to \hat{o} in all positions, accented and unaccented, medial and final, except when another *-y* or *-w* followed whereas in Jerusalem Hebrew these diphthongs did not contract before the orthography had stabilized (see [Heterogeneous Diphthong Contraction](#)).

(5) Proper Nouns

Unless I have a specific reason to do otherwise, I usually follow [Richter 1996](#) with the [usual modifications](#).

(6) Script and Textual Emendations

I have included textually emendation only where the [MT](#) is incomprehensible or very clearly corrupted⁴⁷. All such cases have been noted in endnotes.

When considering emendations I have borne in mind that all pre-exilic writings which became part of the Hebrew Biblical, or were used in its preparation, were originally written in the [Paleo-Hebrew alphabet](#) with the sort of spelling found in [JEH](#) of the First Temple period.⁴⁸ In the post-exilic period, Paleo-Hebrew scriptural texts were transliterated into the [Aramaic/Square Hebrew script](#) and its [present \(PMT\) orthography](#) i.e. with the addition of many internal [vowel](#)

[letters](#). A very few texts⁴⁹, may have been originally written first in the [purely consonantal Phoenician style](#) before being transcribed into the orthography of JEH. For each of these stages, the text must be seen in the relevant alphabet and orthography to understand likely confusion of letters and the range of meanings possible. N.b. as the use of vowel letters increased, the range of possible vocalizations and meanings of the text was reduced.

To show the variation of appearance of the texts written in the various forms of script I have chosen the following:

1) Pre-[EBHP](#) (1000-700 BCE)

For this period⁵⁰ which probably saw the recording of the earliest Biblical literature, I have used the script of the [Moabite Mesha Stele](#) (9th century BCE). Note the following:

- Ada Yardeni⁵¹ classifies the script of the Mesha Stele as “Hebrew Script” already beginning to slightly to diverge from contemporary Phoenician Script.
- Encyclopedia Judaica states, “As strange as it may seem, the earliest clear Hebrew features can be discerned in the scripts of the ninth-century Moabite inscriptions, namely the stele of Mesha (the Moabite Stone) ...”. The Mesha script is not much different from the contemporary script used in the Tel Dan stele. Both the Mesha and [Tel Dan](#) scripts have fonts available on the Internet.

2) [EBHP](#) (700-586 BCE)

a) Formal Book Hand - we do not have any examples of the formal hand likely to have been used for highly respected texts. As a proxy, I have used the script of the [Siloam Inscription](#) (late 8th century BCE).

b) Judean Official Epistolary Script of early 6th century. The Arad and Lachish letters are examples of this script and the related orthography ([JEH](#) style spelling) of the last decades of the kingdom of Judah. To represent this form of writing I have used the script of the Lachish inscriptions (c. 600 BCE)⁵².

3) [Post-Exilic](#) (586 BCE-70 CE). This was the period of progressive conversion from the Paleo-Hebrew to the Aramaic/Square Hebrew script.

- As representative of the late Paleo-Hebrew tradition I have used the 11QpaleoLev script (second c. BCE)⁵³;
- Representative of the Aramaic/Square Hebrew scripts:
 - for the early post-exilic script, I have used:
 - Persian Empire Imperial Aramaic script (6th-4th c. BCE)⁵⁴; and,
 - [Egyptian Aramaic script](#) of the fifth century BCE.
 - for the later Jewish book hands I have used the [Habakkuk Peshet](#) script (150-100 BCE).

4. Examples of Reconstructed EBHP Vocalization of Biblical Hebrew Texts

a. [Archaic or Archaizing Biblical Hebrew](#) (ABH) Poetic Texts

i) Blessing of Jacob (Genesis 49:1-27)

Table 1 - [Reconstructed Late First Temple Orthography and Vocalization \(EBHP\) with Sound Files and Transposition into Tiberian Graphemes](#)

Table 2 - [Reconstructed Pre-Exilic Orthographies](#)

Table 3 - [Proto-Masoretic Orthography](#)

ii) Song of the Sea (Exodus 15:1b-18)

Table 1 - [Reconstructed Late First Temple Orthography and Vocalization \(EBHP\) with Sound Files and Transposition into Tiberian Graphemes](#)

Table 2 - [Reconstructed Pre-Exilic Orthographies](#)

Table 3 - [Proto-Masoretic Orthography](#)

iii) The Oracles of Balaam (poetic portions of [Numbers 23](#) - [Numbers 24](#))

Table 1 - [Reconstructed Late First Temple Orthography and Vocalization \(EBHP\) with Sound files and Transposition into Tiberian Graphemes](#)

Table 2 - [Reconstructed Pre-Exilic Orthographies](#)

Table 3 - [Proto-Masoretic Orthography](#)

iv) *Ha'azinu* (Deuteronomy 32:1-43)

Table 1 - [Reconstructed Late First Temple Orthography and Vocalization \(EBHP\) with Sound Files](#)

Table 2 - [Reconstructed Late Pre-Exilic Orthographies](#)

Table 3 - [Proto-Masoretic Orthography](#)

v) Blessing of Moses (Deuteronomy 33)

Table 1 - [Reconstructed Late First Temple Orthography and Vocalization \(EBHP\) with Sound files and Transposition into Tiberian Graphemes](#)

Table 2 - [Reconstructed Pre-Exilic Orthographies](#)

Table 3 - [Proto-Masoretic Orthography](#)

vi) Song of Deborah (Judges 5)

Table 1 - [Reconstructed Late First Temple Orthography and Vocalization \(EBHP\) with Sound Files and Transposition into Tiberian Graphemes](#)

Table 2 - [Reconstructed Pre-Exilic Orthographies](#)

Table 3 - [Proto-Masoretic Orthography](#)

Table 4 - [Metrics](#)

b. Various Short Poems: Genesis 2:23; Genesis 3:14-19; Genesis 4:6-7; Genesis 4:23b-24; Genesis 8:22; Genesis 9:6; Genesis 9:25-27; Genesis 12:2-3; Genesis 14:19-20; Genesis 16:10-12; Genesis 24:60; Genesis 25:23; Genesis 27:28-29; Genesis 27:39-40; Genesis 35:10-12; Genesis 48:15-16; Genesis 48:20; Exodus 32:18; Numbers 6:24-26; Numbers 10:35-36; Numbers 12:6b-8a; Numbers 21:14,15,17-18; Numbers 21:27-30; Joshua 10:12-13 (poetic portion); Judges 9:8-15; Judges 14:14, 18; Judges 15:16 (poetic portion); Judges 16:23-24 (poetic portion); 1 Samuel 15:22b-23; 1 Samuel 18:7 (poetic portion); 2 Samuel 3:33-34 (poetic portions); 2 Samuel 20:1 (poetic portion); 1 Kings 8:12-13; 1 Kings 12:16 (poetic portion); 2 Kings 19:21b-28; 2 Kings 19:31; 2 Kings 19:32b-34.

Table 1 - [Reconstructed Late First Temple Orthography and Vocalization \(EBHP\) with Sound files and Transposition into Tiberian Graphemes](#)

Table 2 - [Reconstructed Pre-Exilic Orthographies](#)

Table 3 - [Proto-Masoretic Orthography](#)

c. Psalmic Poetry

i) II Samuel Chapt. 22 (Second version Psalm 18) -

Table 1 - [Reconstructed Late First Temple Orthography and Vocalization \(EBHP\) with SoundFiles](#)

Table 1a - [Masoretic Text of II Samuel Chapt. 22 and Psalm 18 in Parallel Columns](#)

Table 1b - [Psalm 18 vss. 26b-48 in Reconstructed Preexilic, Secunda and Tiberian Hebrew](#)

ii) Psalm 23 - [Reconstructed Late First Temple Orthography and Vocalization \(EBHP\) with Sound Files](#)

iii) Psalm 114 - [Reconstructed Late First Temple Orthography and Vocalization \(EBHP\) with Sound Files](#)

iv) Psalm 121 - [Reconstructed Late First Temple Orthography and Vocalization \(EBHP\) with Sound Files](#)

v) Psalm 122 - [Reconstructed Late First Temple Orthography and Vocalization \(EBHP\) with Sound Files](#)

vi) Psalm 130 - [Reconstructed Late First Temple Orthography and Vocalization \(EBHP\) with Sound Files](#)

d. Lamentations

i) Lament of David (II Samuel 1:19-27) - [Reconstructed Late First Temple Orthography and Vocalization \(EBHP\) with Sound Files](#)

ii) Lamentations 3:1-15 ("Qinah meter") - [Reconstructed Late First Temple Orthography and Vocalization \(EBHP\) with Sound Files](#)

e. Poetry of Song of Songs - Song 2:1-17 (as generally in the Song, mainly in "Qinah meter") - [Reconstructed LBHP Vocalization with Sound Files](#)

f. Poetry of Job - Job 3:3-10 - [Reconstructed LBHP Vocalization with Sound Files](#)

g. Prophetic Poetry

i) Jer. 1: 11-12; Jer. 1: 18-19; Jer. 19:14-15; Zeph. 3:1-2; Deut 15:1,4

- [Reconstructed First Temple Vocalization and Transposition into Tiberian Graphemes Based on Harris](#)
- [Reconstructed Late First Temple Orthography and Vocalization \(EBHP\) with Sound Files and Transposition into Tiberian Graphemes by David Steinberg](#)

ii) Amos 3:3-6; 3:8; 5:5-7; 5:10-12; 5:16b-17; 6:12; 8:7-10; 9:5-6; 9:13

- [Reconstructed First Temple Vocalization and Transposition into Tiberian Graphemes Based on Stuart](#)
- [Reconstructed Late First Temple Orthography and Vocalization \(EBHP\) with Sound Files and Transposition into Tiberian Graphemes by David Steinberg](#)

h. Prose Texts

i) Genesis 2:18-24

- [Reconstructed First Temple Vocalization and Transposition into Tiberian Graphemes Based on Beyer](#)
- [Reconstructed Late First Temple Orthography and Vocalization \(EBHP\) with Sound Files and Transposition into Tiberian Graphemes by David Steinberg](#)

ii) [Vocalization of: Genesis 4:1-3; Genesis 13:4-14; Joshua 7:1-3 - Reconstructed First Temple Vocalization \(EBHP\) with Sound Files and Transposition into Tiberian Graphemes](#)

iii) Siloam Inscription

- [Text of the Siloam Inscription](#)
- [Vocalization of the Siloam Inscription Based on Beyer](#)
- [Vocalization of the Siloam Inscription by David Steinberg with Sound Files](#)

¹ [Mitchel 1993](#) p. 10.

² . N.b. a convenient way to learn to hear and articulate vowel length is to listen carefully to: (a) recordings of a couple of spoken Arabic dialects; or, (b) [recordings of Akkadian poetry](#).

³ Quoted from [Joüon-Muraoka 1991](#) p. 38.

“ In addition to phonetic length, i.e. length which can be measured by some mechanical device, one can also speak of phonological length. For instance, one can regard ם of the adjective כָּבֵד as long, since it is not subject to the vowel deletion rule as in, say, the m.pl. כְּבִדִּים, whereas the vowel notated by the same sign would be phonologically short in the verb כָּבַד, as is evident from, say, the Qal pf. 3pl. כָּבְדוּ.

Analogously, if *pataḥ* is to be regarded as phonologically short, paradigmatic analogy requires that *šeré* and *ḥolem* are to be so considered יִלְבַּשׁ as against יִשְׁמַר and יִתֵּן; שָׁעַר as against קָטַן and כָּבַד; שָׁעַר as against קָדַשׁ and סָפַר....

Whilst this is not a historical grammar, it can be helpful to have some understanding of how the Tiberian Hebrew vowel system relates to its hypothetical Proto-Hebrew or Proto-Semitic. Thus the variation

between the absolute form דָּם and its construct form דָּמִם can be said to reflect a pre-Tiberian pre-stress lengthening of an earlier short /a/. Again, the holem in טֹב and אֱלֹהִים can be traced back to an earlier long /ā/ (as preserved in Arm. ܬܘܒ, and Arm. ܐܠܗܐ or Arb. /'ilāh/. It is for this reason that we shall have occasion below to speak about short or long vowels in hypothetical "primitive" or "original" forms. One can also observe that a long vowel causes an original /t/ to drop out: **sirār* > צָרוּר *bag*, on the other hand, **cinab* > עֲנַב *grapes*. Likewise **ruhāb* > רְחוּב *square...* but **šufar* > שׁוֹרֵץ *horrible...*

[T]he transition from quantitative to qualitative distinction in the Hebrew vowels appears to have taken place relatively late. Transcription of Hebrew in the Septuagint and the second column of Origen's Hexapla as well as explicit statements by St Jerome (4th cent.) all point to quantitative distinction.”

⁴ See general discussion in [Kofoed 2005](#) chapt. 3.

⁵ The following are quotes from Avi Hurvitz who has argued that it is possible to date pre-exilic texts on the basis of language type -

On several occasions we have attempted to demonstrate the significance of a certain type of linguistic analysis, for discussing biblical texts whose date of composition is questionable. The main advantage of this analysis lies in the fact, that, being an autonomous and independent criterion, one may use it without subscribing to any particular theory prevailing in biblical Higher Criticism. Most of the complicated and unresolved problems of Higher Criticism — literary, historical and theological — simply have no bearing upon its procedures. This analysis seeks to identify linguistic elements, the very existence and the unusual concentration of which may reveal the late origin of chronologically problematic texts. It is the distinct corpus of unquestionably late compositions written in post-exilic times — as manifested by the historical episodes and persons mentioned therein — which provides us with reliable data for determining just exactly what late Biblical Hebrew (= LBH) is. Examples are the book of Esther ... or Ezra... The late linguistic elements in such compositions are unmistakably discernible

Quoted from THE DATE OF THE PROSE-TALE OF JOB LINGUISTICALLY RECONSIDERED by AVI HURVITZ, HARVARD THEOLOGICAL REVIEW 67 (1974), 17-34.

A. External Controls for the Classical Phase of BH

The number of Hebrew inscriptions dated to the First Temple period is indeed relatively small; yet these epigraphical remains, few as they may be, are by no means negligible. These texts provide us with a were quick to emphasize the striking unity and close affinities between the epigraphical material on the one hand and classical BH [Biblical Hebrew] on the other ... confirmed and substantiated the conclusion that both of these linguistic corpora are to be taken as manifestations of the same ancient "classical Hebrew".

To sum up, our evidence indicates that the closest parallels to the Hebrew inscriptional materials dating from pre-exilic times are to be found specifically in that linguistic layer which

is commonly categorized as "Classical BH" and widely assigned to the First Temple period. Furthermore, in many cases the isoglosses shared by the epigraphical and biblical sources are altogether missing from the linguistic layer known as "Late BH", which flourished in the Second Temple Period. We have, therefore, to conclude that "Classical BH" is a well-defined linguistic stratum, indicative of a (typologically) distinctive phase within biblical literature and a (chronologically) datable time-span within biblical history-.... In other words, the linguistic viability of "Classical BH" may safely be established through external controls provided by the non-biblical sources at our disposal.

B. External controls for the post-classical phase of BH

... Unlike the relatively small number of available epigraphical Hebrew sources dated to the First Temple period, the extra-biblical sources related to the Second Temple phase of BH i.e., to LBH are rich and highly diversified. Most prominent among these are the Dead Sea Scrolls ..., whose language is commonly referred to as "Qumran Hebrew"..., the fragments of Ben-Sira ..., the letters of Bar-Kokhba...; and, of course, Mishnaic Hebrew This rich repertoire of post-biblical Hebrew sources is further supplemented by a wealth of texts and documents written in the Persian period in "Imperial" (or "Official") Aramaic ... and slightly later, in Hellenistic-Roman times, in dialects belonging to "Middle" Aramaic (Qumran Aramaic ...; Palmyrene inscriptions ...".

It is this vast collection of sources Hebrew and Aramaic, literary and epigraphical, Jewish and non-Jewish which faithfully reflects the linguistic milieu of "post-classical Hebrew" in general; it is this linguistic environment which largely shaped the profile of LBH in particular. Our diachronic enterprise, which seeks to trace and identify imprints of LBH within the OT, is thus securely established upon-and extensively sustained by-the combined evidence of both biblical and non-biblical data; the non-biblical sources providing us ... with the required "external control"....

The distinctive post-classical biblical books provide us with plenty of such linguistic neologisms-in all the divisions of language (grammar, vocabulary, syntax) which have counterparts in contemporary extra-biblical sources.

Quoted from THE HISTORICAL QUEST FOR "ANCIENT ISRAEL" AND THE LINGUISTIC EVIDENCE OF THE HEBREW BIBLE: SOME METHODOLOGICAL OBSERVATIONS by AVI HURVITZ, *Vertus Testamentum*, vol. 47, fasc. 3 (July 1997), pp. 301-315

⁶ Quoted from [Garr 1991](#) §0.

⁷ Quoted from [Huehnergard 1992](#) pp. 215 -

We have ... several traditions of Hebrew vocalization; from the standpoint of historical linguistics, these ought, a priori, to be considered equally valid dialects, parallel descendants of a proto-Biblical Hebrew that exhibit divergent developments. [n. 25 - See eg. Janssens, *Hebrew Historical Linguistics*, 11;

Lambdin, "Philippi's Law," 136-137.] The methodology of historical reconstruction requires that the reflexes of a form posited for the parent language be accounted for by regular processes in each of the descendant dialects.

⁸ See [Sáenz-Badillos](#) 1993 pp. 69-70; [Bergsträsser](#) 1918-29, I, 11ff., 163ff.; [Harris 1941](#); [Beyer 1969](#), 37f.

⁹ One may note the very interesting parallels to present day Egyptian Arabic -

"The oldest stage of the Egyptian Arabic, which is no more Old Arabic, must have been a linguistic system where every word ended in a long vowel or in a consonant. Thus no word ended in a short vowel. [Birkeland 1952](#) pp 12-13

"In Stage IV ... every word ended in one or two consonants or a short vowel. Long final vowels did not exist. Within the word every long unstressed vowel and every long vowel before two consonants was shortened." [Birkeland 1952](#) p 28

"... (early Arabic) quantity of vowels must have been of the greatest importance to a man who wished to be understood... (however, in modern Egyptian Arabic) nobody can be well understood in Egypt today without the accent used by the natives. As a matter of fact all long, unaccented vowels are shortened.... Reading the literary language of newspapers etc.... (Egyptians) often shorten unaccented long vowels, because the accent they are accustomed to is very marked. Also in reading the Koran they use a marked accent. But in that case it is reckoned as bad pronunciation if they shorten unaccented long vowels." [Birkeland 1952](#) p 32

"Briefly the question is whether quantity is dependent on accent or accent on quantity. The only method of solving this problem consists in an examination of the cases where oppositions of short and long vowels are possible and of the cases where they are impossible. Where such oppositions are impossible vowel quantity is, of course, irrelevant. Thus in unstressed syllables only short vowels occur. In this position, therefore, vowel quantity is irrelevant. Only in stressed syllables both long and short vowels are possible. But stressed final vowels are out of question, too, because they are always long.... Similarly a stressed vowel before two consonants is always short.... Further: An opposition between long and short vowel in a final syllable is impossible... The result, therefore, is that only one position is left where an opposition between long and short vowel is possible. This position is an accented, open, non-final syllable...." [Birkeland 1952](#) p. 36.

"In any case it cannot be doubted that two systems are struggling against one another in the present dialect, one system claiming dependence of quantity on accent and relevance of accent only, another quantity system claiming dependence of accent on quantity and relevance of quantity only. The dialectal tendency has conquered the territory to so great an extent that quantity is independent on accent only in stressed, open, non-final syllables.

Even in the syllables last mentioned the phonetic opposition of long and short vowels does not ... seem to be utilized semantically. ...

The insignificant role of vowel quantity is on the whole, as we know, revealed in the fact that long vowels are shortened as soon as they lose the accent. Take, e. g., the frequent word 'aal "he said". In fluent speech it almost always sounds 'äl. Even if long vowels do not lose the accent, but appear before two consonants, they are shortened." [Birkeland 1952](#) p 28

"Now we summarize: In the Egyptian Arabic dialect of to-day the opposition between long and short vowels does not seem to have any grammatical or semantic function. Even in stressed non-final, open syllables, the only position in which both long and short vowels may occur, the opposition between them does not appear to have any actual function, originally short vowels being occasionally lengthened and originally long vowels being occasionally shortened in this position. The accent, however, has a most important functional value. Diachronically this value has its basis in the marked accent which produced the numerous reductions and elisions of vowels in Stage IV. But the accent did not become relevant before Stage V. Then the elision of the suffix -h after long vowels created forms with an unstressed final vowel, so that the stress now signifies the meaning of the lost suffix.

"It is, as we know, beyond doubt that in stressed, open non-final syllables we have to distinguish phonetically, between long and short vowel, at least in the speech of the educated classes, especially in Cairo." [Birkeland 1952](#) pp. 43-44.

¹⁰ [Gogel](#) pp. 47, 140.

¹¹ See [Joüon-Muraoka](#) p. 75.

¹² There are a few cases of this form in Biblical Hebrew – see [Joüon-Muraoka](#) p. 161. See also [Segal](#) 1927 p. 68.

¹³ See [Beyer 1969](#), 38f.; Rabin "Ivrit" *EBVI*, 51-73, 1971a. [Harris](#), [Bergstärsser](#), [Birkeland](#), [Manuel](#).

¹⁴ See [Muraoka 1976](#) and [Garr 1989](#)

¹⁵ See [Wevers 1970](#), [Steiner 2006](#) and [Blau 1982](#), which show that at the time of the Greek translation of the Pentateuch (around the third century BCE), the difference between these two groups of phonemes was still felt.

¹⁶ See [Blau 2010](#) §3.3.3.

¹⁷ See [Blau 2010](#) §3.3.3.1.

¹⁸ See [Harris 1941](#), 145; [Blau 1976](#), 31f.

¹⁹ My Arabic teacher a [Melkite Greek Catholic](#) from the [Beqaa valley](#) in Lebanon, pronounces "house" as ['ba.yit] and "street" as [ša.ri.a^c] which exactly parallels Tiberian pronunciation norms.

²⁰ [Lipinski 1997](#) §24.4 - 24.6

24.2. Assuming that every syllable begins with a consonant, one can distinguish three types of syllables in Semitic: 1. an open syllable consisting of a consonant or a consonant cluster followed by a vowel, short (Cv, CCv) or long (Cv:, CCv:); 2. a closed syllable consisting of a consonant or a consonant cluster followed by a vowel, short or long, which is followed in its turn by a

consonant (CvC, CCvC, Cv:C, CCv:C); 3. a doubly closed syllable consisting of a consonant followed by a vowel, which is followed either by a long or geminated consonant or by a two-consonant cluster, the first member of which is often a liquid (CvCC)....

24.3. Quantitatively, a syllable may be short, long or ultra-long: 1. a syllable is short when it ends in a short vowel (Cv, e.g. *bî*, "in"); 2. a syllable is long when it ends either in a long vowel or in a consonant following a short vowel (Cv:, e.g. *la:*, "not"; CvC, e.g. *min*, "from"); 3. a syllable is ultra-long, when it ends either in a consonant following a long vowel, or in a geminated or long consonant, or in a two-consonant cluster (Cv:C e.g. *qa:m*, "he stood up"; CvCC, e.g. *ʿamm*, "paternal uncle"; *kalb*, "dog").

24.4. The vowels are always short in a closed unstressed syllable and long vowels show a tendency to become short when their syllable closes

24.5. Also long or geminated consonants show a tendency to become short, especially at the end of a syllable This shortening is a general feature in Hebrew at the end of a word (e.g. *ʿam* < *ʿamm*, "people", with a plural *ʿammi:m*), while modern Ethiopian dialects can avoid it by splitting the long or geminated consonant by means of an anaptyctic vowel (e.g. *qurər* < *qurr*, "basket" in Gurage). In Arabic, this shortening appears, e.g., in *fa-qaṭ* < **fa-qaṭṭ*, "only", and in verbs with a second long or geminated radical (e.g. *zaltu* or *ziltu* < **zall-tu*, "I became"), unless the long consonant is split by an anaptyctic vowel (e.g. *zallitu*).

2.1.6. Short vowels tend to become long in open and in stressed syllables.... this is the case in certain forms of West Semitic verbs with last radical ʾ when the latter loses its consonantal value, e.g. Hebrew *qa:raʾ* > *qa:ra:* "he called": Arabic *nabba:* < *nabbaʾ(a)* "he announced"

24.7. There are also some cases of consonant doubling after a short open syllable ... e.g. in the Hebrew plural *gəmalli:m* < **gəmalī:m* "camels".... This results in a change of the nature of the syllable in question which becomes closed and long....

24.8. There is a wide tendency in classical Semitic languages to eliminate two-consonant clusters at the beginning or at the end of a word by adding a supplementary vowel either between the two consonants or at the beginning, respectively at the end of the word. Beside the anaptyctic vowels of *qurər* and *zallitu* (§ 24.5), one can refer to the Hebrew verbal form *nifʿal*, "was made", differing from the corresponding Arabic form *ʾinfʿala*, by the place of the supplementary vowel i which is added in Arabic at the beginning of the word, while it is inserted in Hebrew between the prefix *n-* and the first radical of the verb. In both cases, the addition of the vowel results in a new syllable *ʾinʿafa:ala* or *nifʿal*. A vowel can also be added at the end of a word, e.g.... The Assyro-Babylonian imperative *duhub*, "speak!", has an anaptyctic vowel u splitting the geminated consonant. In all these cases, the addition of a vowel results in the appearance of a new syllable."

²¹ [Joüon-Muraoka](#) p. 91 does not fully agree with this –

Alef is the weakest of the gutturals. In the period of the history of Hebrew we are concerned with, it is very often no longer pronounced; sometimes it is not even written....

Alef is actually pronounced in a syllable that is closed in one way or other, namely: 1) in a properly closed syllable, e.g. םשׂאֵל /ye'-šam/ *he will make himself guilty*

Alef, when it is a word-medial or final radical, is pronounced when followed by a vowel: e.g. אֵסֵב = [kissê] *chair*, but אֵסֵב [kis'i] *my chair*, and אֵשׂאֵל [šâ'al] *he asked*. Morphophonemically it makes some sense to analyse a form such as אֵשׂאֵל *he found* as /mâšâ'el/, resulting in a neat picture of the paradigm vis-à-vis, say, אֵשׂאֵל /maš'u/ *they found*.

Everywhere else Alef is not pronounced. Silent Alef occurs either after the vowel of a syllable which it once closed, e.g. אֵשׂאֵל from /*maša'el/ (Alef *quiescens*), or before the vowel of a syllable of which it was once the first constituent, [In this case the א has become a mere prop for a vowel, like the Arabic Alif without hamza. It would be rather strange if, in the stage of the language when Alef was no longer pronounced at the end of a word, where it is easy to pronounce, it should have been pronounced at the beginning of a word or a syllable where it is more difficult to pronounce. But many authors give to Alef at the beginning of a word or a syllable a consonantal value, even at the latest stage of the language.] e.g. אֵמַר from /*'amar/, now pronounced /âmar/, as if the vowel were the first sound of the sequence.

²² See e.g. *An Introduction to Egyptian Colloquial Arabic* by T. F. Mitchell, OUP, London-NY-Toronto, 1956 pp. 110-112.

²³ An exception is the relative pronoun אֵשׂאֵל (with or without prefixes) (cf. [Blau 2010](#) §4.2.6) which I assume to always be EBHP /'a.šar/ [ʔe.ʃer]. Similarly, its rare poetic equivalent אֵשׂאֵל /zu:/ is assumed to always carry a secondary stress.

²⁴ See [Joüon-Muraoka](#) §132, 133; [Blau 2010](#) §4.2.3.3.2, 4.4.4.7, 4.6; [van der Merwe et al.](#) chapt. 6.

²⁵ Eg.

²⁶ See [Phones and Phonemes](#) - http://www.houseofdauid.ca/anc_heb_6.htm#phone_phonym..

²⁷ Note, in reconstructed [EBHP] transliterations and sound files -

1. there is no spirantization of the *bgdkpt* consonants -

http://www.houseofdauid.ca/anc_heb_tegu.htm#bgdpt ;

2. vowel qualities are outlined here - http://www.houseofdauid.ca/anc_heb_6.htm#ebhp_vow_qual ;

3. I use the most probable form. Where no one form stands out as most probable, I select the one closest to the MT vocalization.

4. when multiple forms are possible, the form used is underlined.

²⁸ Note Modern Standard and Classical Arabic *mašr* "Egypt" (Hebrew *mišraym*) is pronounced *mišr* in spoken Egyptian Arabic.

²⁹ From [Sáenz-Badillos 1993](#) (p. 111)

The resulting (Tiberian pointing) system is quite comprehensive, faithfully reproducing the phonological structure of the language while also providing sufficient phonetic information to read it correctly.

³⁰ For frequency counts of polyphonic consonants see [Blau 1982](#)

³¹ See [Khan 1987](#) p. 34. In Phoenician the assimilation of /n/ to a following laryngeal or pharyngeal often occurs. See also [Joüon-Muraoka](#) § 20a. In Arabic the gutturals geminate.

³² For rules see [Joüon-Muraoka](#) § 19.

³³ See [Blau 1972](#) p. 207 and Stuart, in [Studies in Early Hebrew Meter](#) p. 26.

³⁴ The character of a vowel sound determined by the size and shape of the oral cavity and the amount of resonance with which the sound is produced.

³⁵ Of course there were longer and shorter vowels in Tiberian Hebrew (see *Vowel Length and Syllable Structure in the Tiberian Tradition of Biblical Hebrew* by G Khan, *JSS* xxxii I 1987) however their length was no longer phonemic.

³⁶ "It is a useful rule of thumb in phonological analysis (Jakobson & Halle, 1956: 24 f.) that vowel quantity and stress should not be assigned a distinctive function in the same language or in the same stage of a language. Our investigation confirms the rule's viability with regard to three separable stages of ancient Hebrew, a reconstructed initial stage (= PH) and the stages represented respectively by the Consonantal Text of the Old Testament without (= BH) and with TH) the vocalization signs. Only in the first does vowel quantity play a significant role, the position of the stress being fixed and dependent upon it. In the two later stages, on the other hand, it is stress that is distinctive, resulting in quality replacing quantity as the analysable feature of vowels and in fact determining the quality of particular vowels in particular environments." [Gibson 1965](#)

³⁷ Of great importance in defining the syllabic structure of Tiberian Hebrew is distinguishing between when the *šwa* (.) is actualized as zero, i.e. the absence of any vowel (*šwa quiescens*) and when it is a murmured half-vowel *e* or (*šwa mobile*). Though the opposition between *e* and zero may be phonemic, its functional load is light. The traditional explanation of when a *šwa* is a *šwa quiescens* and when it is a *šwa mobile* is very complex. It seems to me highly unlikely, given the Masoretes goal of setting a reading standard for the Hebrew Bible, that they would have developed such an unusable system. One is forced to the conclusion that It may be that Hoffman (p. 56) is right –

In the end, then, we find no support for two different kinds of shewa in Tiberian Masoretic Hebrew, in spite of very widespread claims to the contrary.... "Vowel reduction," the process by which unstressed vowels become less pronounced than stressed vowels, is very common throughout the languages of the world.... However, the exact conditions under which vowel reduction takes place, as well as the degree of reduction, vary not only from language to language, but within a language depending on the register of speech.

So it looks like a shewa was used to indicate both the complete lack of a vowel and a reduced vowel, but we do not know the extent to which vowels reduced in Tiberian Masoretic Hebrew. As a guess, we can assume that the shewa was pronounced whenever it had to be, and only then. But it remains a guess.

However, this results in an insoluble dilemma since we do not know in what phonetic contexts the Masoretes, given their speech habits etc. would have felt the need for a half-vowel.

³⁸ See "Notes on the Use of the Definite Article in the Poetry of Job" by Nahum M. Sarna in *Texts, Temples and Traditions: A Tribute to Menahem Haran* ed. M. V. Foc et. Al., Eisenbraus, 1996 p. 284 and [Joüon-Muraoka](#) § 103b.

³⁹ See [Joüon-Muraoka](#) § 104.

⁴⁰ [Manuel 1995](#) p. 52.

⁴¹ [Manuel 1995](#) p. 51.

⁴² See [Kutscher 1982](#) p. 22 ff.

⁴³ The purpose of this transposition of reconstructed [EBHP] into adapted Tiberian graphemes is to give the Hebrew reader an approximation of the reconstruction in familiar pointed characters.

⁴⁴ As I find [ɛy] quite difficult to pronounce, I often end up with its most frequent equivalent in TH [e:] which is the same as [ɛy] in terms of syllable length.

⁴⁵ [Anderson 1999](#) p. 21 "... the adding of a (silent!) *yod* to -āw, "his" on plural noun stems, apparently a purely scribal marker with no phonetic value." [Sarfatti 1982](#) p. 65 -

Third m.s. suffix added to plural endings, -w: *ʾnšw* "his men" (Lachish 3:18); *ʾw* "unto him" (Yavneh-Yam 13). According to Gordis ... there are 158 words in the Bible in which the 3 m.s. pronominal suffix appears in the *ketib* with the defective spelling -w, while the *Qere* is -yw... The purpose of the *Qere* is not to correct the text (i.e. *yādāw* instead of *yādō*), but to point out the vocalization tradition followed by the Masoretes (read *yādāw!*).... Since the historical development of this suffix is **-ayhu* > **-āhu* > **-āu* (e.g. **-yādayhu* > **-yādāhu* > **-yādāu*), the defective spelling (= MT) is phonetic, while the *plene* spelling (= MT) retains the etymological *yod*.

⁴⁶ See [Blau 2010](#) §4.6.4.

⁴⁷ Stuart, in [Studies in Early Hebrew Meter](#) p. 26 writes "Several "Canaanite" particles (*lu, la, limma, -mi, etc.*) are proper to early Hebrew poetry." Although this might be true, I would only propose such a reading if traditional Hebrew grammar cannot make sense of the text. N.b. Barr's discussion of the "enclitic mem" p. 31 ff.

It is worth bearing in mind the points made in the following quoted from a review of *Text-Restoration Methods in Contemporary U.S.A. Biblical Scholarship* by Donald Watson Goodwin; reviewer Ronald A. Veenker (*Journal of the American Academy of Religion*, Vol. 39, No. 2. (Jun., 1971), pp. 207-208) –

With regard to the orthographic theories of the so-called Albright "school," Cross and Freedman have stated that "orthographic patterns followed rigid laws, and like phonetic patterns can be classified historically" (p. 27). Goodwin objects to that assumption which implies a uniform and consistent scribal

tradition throughout the area within which the Phoenician alphabet spread. He says that the evidence is much too scant to support the assumption that orthographic practice was determined by "rigid laws," embodied in "principles" of consonantal spelling and vowel representation which were uniformly employed by all scribes.

The greater part of the book (92 pp.) is given to the analysis of "archaic forms" which are thought to aid in the dating of Hebrew poetry. The school attempts to explain away the occurrence of certain classical forms (e.g., the relative *'asher*, the definite article) in poetic passages. When certain archaic grammatical forms (e.g., enclitic *mem*, vocative *lamed*, archaic pronouns and suffixes) do not appear, it is assumed that the scribes did not recognize these as authentic features and altered the text; consequently, the school restores them. Goodwin charges that the above techniques, as well as the assignment of archaic meanings to nouns and verbs, are motivated by a desire to find, whenever possible, an historical context for the poetry in the second millennium B.C.

Goodwin, analyzing the school's metrical theories, goes into considerable detail to synthesize their "observations" on meter into eight "rules for scansion." These he finds unorthodox and inconsistent as a comprehensive theory. In addition to providing "no precise differentiation between meter and style" (p. 157), he charges that they are guilty of misplaced concreteness when they attempt to alter the Masoretic Text by means of such speculative and uncertain tools.

Summarizing, Goodwin criticizes the school for being "too facile in formulating its own theories, too ready to accept uncritically the theories of predecessors, and too prone to suggest alterations in the text without having thoroughly examined the evidence which is offered in support" (p. 155).

⁴⁸ See *A Grammar of Epigraphic Hebrew* by S.L. [Gogel](#), Atlanta/Georgia 1999

⁴⁹ The most likely candidate is Exodus 14 see *Linguistic Evidence in Dating Early Hebrew Poetry* by David R. Robertson, SBL Dissertation Series 3, 1972. ISBN 0-88414-012-1

⁵⁰ The earliest known "Hebrew" script, if it is indeed Hebrew, is that of the [Gezer Calendar](#) (10th century BCE) which, if it is indeed Hebrew, would be the earliest known Hebrew inscription. This script is very similar to contemporary Phoenician inscriptions. The main differences between this script of c. 1000 BCE and that c. 850 BCE are confined to the letters נ ו.

⁵¹ [Yardeni 2003](#) p. 17.

⁵² Sources <http://web.infoave.net/~jwest/lachish.ZIP>; <http://www.historian.net/downloads/Lachish.ZIP>

⁵³ See *The Paleo-Hebrew Leviticus Scroll* by David Noel Freedman, K. A. Mathews, ASOR, 1985.

⁵⁴ *Archaica Aramaic-450*