

[Biblical Hebrew Poetry](#) and [Word Play](#)  
Reconstructing the Original Oral<sup>1</sup>, Aural<sup>2</sup> and Visual Experience  
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Nb. [Words Significantly Different in Pronunciation in EBHP](#)

## תִּיקוֹ *Tequ* - Questions that Cannot be Resolved at Present<sup>3</sup>

*N.b. This section deals with issues likely to remain unresolved unless new evidence is unearthed. Some of the issues could be resolved by the discovery more inscriptions similar to the [Siloam Inscription](#), the [Lachish ostraca](#) or the [Arad ostraca](#). More progress, regarding vocalization, could be made if more Israelite or Judean names turn up in cuneiform texts. Many other questions, especially concerning vocalization, could only be solved by the improbable find of eg. a transcription, into [Babylonian or Assyrian cuneiform](#), of a night of Hebrew poetry reading at the pre-exilic Jerusalem court<sup>4</sup>.*

*Wherever possible, I link back, from relevant elements in the transcription, to the discussion in this section.*

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

- 1. there is no [spirantization of the bgdkpt consonants](#);*
- 2. [vowel qualities are outlined here](#);*
- 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.*

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I. [Aim](#) - recovering, as closely as possible, the pronunciation ([EBHP](#)) 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.

## II. *Approaches and Issues*

1. Issues Arising from the Full or Partial Loss of Word-Final Short Vowels in the Late Second or Early First Millennium BCE.<sup>5</sup> (transition [BHA phase 2](#) - [BHA phase 3](#))

*a. Did Word-Final Short Vowels Exist in EBHP and Were All Word-Final Vowels Marked by Vowel Letters?*

*1. Areas of Agreement*

In second millennium [BCE Northwest Semitic languages](#), as in the later [Classical Arabic](#), words frequently ended in short vowels. By the early first millennium BCE Hebrew<sup>6</sup>, Phoenician and Aramaic lost their noun and adjective case endings, at least some of the short final vowels of the [suffix conjugation](#) (*SC*), as well as the mood endings of the [prefix conjugation](#) (*PC*) except for the cohortative.

Four categories of final short non-radical vowels are of concern: case endings of the noun/adjective; *PC* mood endings; suffixes of the *SC*; and, various forms of personal pronouns.

*i. Case endings of the noun/adjective* - It is clear from the [feminine noun/adjective ending <h> \(\\*â/ < \\*at/\)](#) that, in EBHP, the case endings must have been lost at least in feminine singular nouns<sup>7</sup>. Although we have no real evidence that the other case ending related short vowels had been dropped<sup>8</sup>, this is likely to have been the case and we should proceed on that basis.

*ii. PC mood endings* - Although the [indicative had lost its final short vowel \(/u/\)](#), the cohortative had maintained its final vowel (/a(:)/). Working on the basis of the [anceps assumption](#), Blau offers two explanations for the maintenance of the final vowel of the cohortative in "Marginalia Semitica III"<sup>9</sup>

Since short final vowels as a rule disappeared in Hebrew, we would have expected the same to happen in *'aqla* as well, rather than to be lengthened and preserved. In all the other cases of survival of final short vowels in Biblical Hebrew special conditions prevailed.... *'aqlā*<sup>10</sup> is quite often followed by *ṣ* 'pray'.... I am tentatively suggesting that it was due to the frequency of this construction, in which *'aqlā* coalesced with *nā* and, therefore, *\*a* occurred in word middle, that *\*a* > *ā* was preserved....

(W)e have attempted to explain the subsistence of *ā* by the coalescence of *'aqlā* with *nā*. Yet the frequent occurrence of *'aqlā* with *nā* may also reflect the separation of one word into two: the energetic *\*'aqlana* was decomposed into two words, which, however, continued to be one stress unit. Since the first part of the new compound was identified with *'aqlā* because of their formal

and functional similarity, the final *a* of *'aqlā* was preserved through the influence of *'aqlā-nā*, in which this *a* was in word middle. According to this thesis, ... Hebrew *'aqlā* arose through plurilinear development: in the main it continues *yqtlā*, yet its final vowel is due to *yqtlāna*.

iii. As regards the SC, forms such as <klh> (כֹּלֵהּ /kā'lā/ \* [kɔ:'lɔ:] (TH) ← \*/ka:'lā/ < \*/ka'lā/<sup>11</sup> (/EBHP/+) ← \*/ka'lāya/ (PH)) indicate that the final short /a/ of the third person masculine had been dropped by the time of EBHP. As regards the other persons of the *SC* (see below)

iv. Personal pronouns (see below)

## II. Four Alternative Scenarios Regarding Unstressed Word-Final Vowels in the transition from BHA phase 2 to BHA phase 3

### IIa. The *Anceps* Assumption<sup>12</sup>

This assumes that in PH (BHA phase 2) most of the unstressed inflectional forms could end with either a long or short vowel (written here *ā*, *ī*, *ū*). With the loss of the short final vowels, the forms ending in long vowels remained whereas those ending in short vowels became consonant-final. This would explain a number of doublets occurring in TH, e.g. ("to you (ms.)") -

⌚ לְ/לֵ'kā/ \* [lɛ'xɔ:] (< \*/lɛ'ka:/ \* [lɛ'xɛ:] contextual) and

⌚ לְ/lāk/ \* [lɛ:x] (< \*/la:k/ \* [la:x] pausal).

### Examples of the "*Anceps*" Approach<sup>13</sup>

	<u>BHA phase 2</u> <i>Prior to Loss of Word-Final Short Vowels</i>	<u>BHA phase 3</u> <i>After Loss of Word-Final Short Vowels</i> <u>(First Temple Period)</u>
<i>I (cs.)</i> <i>Suffix Conjugation</i>	*/qa'taltī/	**/qa'talti:/ (alternative */qa'talt/ eliminated for clarity of expression) <sup>14</sup>
<i>you (fs.)</i>	*/qa'taltī/	**/qa'talt/ (alternative */qa'talti:/ appears occasionally in consonantal text and may

	<u><a href="#">BHA phase 2</a></u> <i>Prior to Loss of Word-Final Short Vowels</i>	<u><a href="#">BHA phase 3</a></u> <i>After Loss of Word-Final Short Vowels</i> <u><a href="#">(First Temple Period)</a></u>
<i>Suffix Conjugation</i>		be northern dialect. Jerusalem dialect rejected this form which would have been <u><a href="#">identical to first person.</a></u> )
<i>you (ms.)</i> <i>Suffix Conjugation</i>	*/qa'ṭaltā/	*/qa'ṭalta:/ (alternative */qa'ṭalt/ was rejected as it would have been <u><a href="#">identical to feminine</a></u> )
<i>CONTRAST</i>	*/qa'ṭaltī:/ */qa'ṭaltī:/ */qa'ṭaltā/ (2 <u><a href="#">distinct</a></u> forms)	*/qa'ṭalti:/ */qa'ṭalt:/ */qa'ṭalta:/ (3 distinct forms)
<i>You independent nominative pronoun (m.s.)</i>	*/ʾattā/	*/ʾatta:/ (alternative */ʾat(t)/ was rejected as it would have been <u><a href="#">identical to feminine</a></u> )
<i>You independent nominative pronoun (f.s.)</i>	*/ʾattī/	*/ʾat(t)/ (alternative */ʾatti:/ was rejected perhaps both because the final vowel did not add to clarity and to bring it into line with <u><a href="#">2 f.s. of suffix conjugation.</a></u> )
<i>CONTRAST</i>	*/ʾattā:/ */ʾattī/ (2 distinct forms)	*/ʾatta:/ */ʾat(t)/ (2 distinct forms)
<i>Your (m.s.) "horse (m.s.)</i>	*/sū'sukā/ <sup>15</sup> (nom.) */sū'sakā/ (acc.) */sū'sikā/ (gen.)	*/sū'saka:/ (alternative */sū'sa:k/ or */sū'se:k/ was rejected perhaps because it was less distinct from <u><a href="#">the feminine.</a></u> )
<i>Your (f.s.) "horse (m.s.)</i>	*/sū'su <u>kī</u> / (nom.) */sū'sakī/ (acc.) */sū'sikī/ (gen.)	*/sū'se:k/ (alternative */sū'siki:/ was rejected perhaps because the 2fs. SC, and 2fs. independant pronoun now ended with consonant while the 2ms. SC, and 2ms.

	<u><a href="#">BHA phase 2</a></u> <i>Prior to Loss of Word-Final Short Vowels</i>	<u><a href="#">BHA phase 3</a></u> <i>After Loss of Word-Final Short Vowels</i> <u><a href="#">(First Temple Period)</a></u>
		independant pronoun now ended in /a(:)/.)
<i>CONTRAST</i>	<i>*/sū'sukā:/:*/sū'sukī/ etc. (2 distinct forms for each case)</i>	<i>*/sū'saka:/:*/sū'se:k/ (2 distinct forms)</i>

Note:

i) The anceps assumption explains why some word-final vowels, which otherwise seem to have been short in PH, appear later as apparently long vowels e.g. the 2ms of the *SC*.

2) Early in [BHA phase 3](#), when the nature of PH anceps vowels was still well remembered, poets might have chosen to use the long or short voweled forms, of suffixes consisting of a consonant followed by an *anceps vowel*/or the consonant-final form derived from the short voweled form, to suit the context or metrical requirements - e.g.

#### Examples of EBHP Poetic Alternatives Provided by PH *Anceps* Vowels

	<u><a href="#">BHA phase 2</a></u> <i>long-voweled form</i>	<u><a href="#">BHA phase 2</a></u> <i>short-voweled form</i>	<u><a href="#">BHA phase 3</a></u> <i>vowelless form derived from phase two short- voweled form</i>
<i>Independant pronoun "you" f.s.</i>	<i>*/'atti:/</i>	<i>*/'atti/</i>	<i>*/'att/</i>



	<u><a href="#">BHA phase 2</a></u> <i>long-voweled form</i>	<u><a href="#">BHA phase 2</a></u> <i>short-voweled form</i>	<u><a href="#">BHA phase 3</a></u> <i>vowelless form derived from phase two short- voweled form</i>
<i>Independant pronoun "he"</i>	*/'hu'a:/	*/'hu'a/	*/'hu'/? */'hu:/?
<i>Pronominal suffix "your" ms. with s. noun</i>	*/'úka:/ (nom.) */áka:/ (acc.) */íka:/ (gen.)	*/'úka/ (nom.) */áka/ (acc.) */íka/ (gen.)	*/'a:k/
<i>You (ms.) Suffix Conjugation</i>	*/'qa'talta:/	*/'qa'talta/	*/'qa'talt/
<i>You/they (f.p.) Prefix Conjugation</i>	*/'taq'tulna:/	*/'taq'tulna/	*/'tiq'tuln/

## IIb. The Modified Anceps Option

This assumes that the distinction between unstressed word-final long and short vowels in [BHA phase 2](#) (and indeed in [BHA phase 3](#)) was small. This is based on two observable facts:

- i. that [short word-terminal vowels, as in spoken Arabic today, are generally shortened versions of the equivalent long vowels in quality](#)<sup>16</sup>; and,
- ii. that stressed word-final short vowels tend to lengthen and unstressed word-final long vowels tend to shorten. It is instructive to consider that all of the unstressed word-final long vowels [have been reduced to short vowels](#) in all modern Arabic dialects. Thus the 2ms [SC](#), if it was /ta:/ might be pronounced [təː], not very different from /ta/ [tə].

## IIc. Lengthening of Unstressed Word-final Vowels

When the language ceased to allow short final vowels the vowels of those inflections felt by speakers to be crucial for communication were lengthened. At a later stage of the language, if short word-final vowels became once again acceptable, the newly lengthened word-final unstressed vowels, could have shortened. An example might be - *\*/qaṭalta:/ > \*/qaṭalta/*. Either EBHP *\*/qaṭalta:/* or *\*/qaṭalta/*, given the known linguistic evolution of the language, would yield [TH](#) *קָטַלְתָּ* *qāṭaltā/* *\*[qɑːˈtɛːltɑː]*. A flaw in this argument is that the first person ([cs.](#) and [cp.](#)) and third person ([fs.](#) and [cp.](#)) of the [SC](#) did not shorten.

#### IId. Protection of Unstressed Word-final Vowels by Addition of a (later dropped) Final Consonant

This pictures Hebrew, in the transition from [BHA phase 2](#) to [BHA phase 3](#), following an evolutionary path similar to that followed by [colloquial Arabic](#) dialects in their formative periods.

In Classical Arabic pausal forms<sup>17</sup> developed and later displaced contextual forms becoming the basis for modern Arabic dialects. As explained by [Birkeland 1952](#)

The classical Arabic language, the *ʿArabiya*, shows a marked difference between forms in context and pause.... The pausal form of a word is the form it shows when it is spoken alone, in opposition to the form it shows when one or more words follow immediately.... Common to the pausal forms<sup>18</sup> of the *ʿArabiya* was that all of them ended in a *long* syllable, i.e. the final sound was a *long vowel* or a *consonant*. No *short* final vowel appeared in the *ʿArabiya* in pause. Those final *short* vowels which occurred in context, were either dropped, or a consonant, mostly *-h*, was added to them in pause. Examples: *qatala* became *qatal*; *qi* (imperative of *waqā*) became *qih*; *qatalū* was preserved.... when two different forms of a word existed and the (modern spoken Egyptian Arabic) dialect has only one form, one has to ask which of the two forms is the one still surviving. The answer is not dubious; it is always the pausal form which survives. (Regarding)... the short final vowels of the suffixes *-ka* and *-ki*... (I)t is not probable that ... the final vowels were long.... (modern spoken Egyptian Arabic) *a'būka* must be derived from *a'būkah* and *a'būki* from *a'būkih*. Also the final vowels of the independent personal pronouns *'inta*, *'inti*, *'ihna*, *'humma* must be assumed to originate from forms with short final vowels.

As in the Arabic, in this scenario the word-final short vowels, felt by speakers to be crucial for communication, were protected by adding a final consonant, usually [h]. An example from Arabic - Classical Arabic contextual 2fs. /qatalti/ became pausal /qataltih/. Spoken Arabic, which generalized the use of pausal forms, eventually dropped the final [h] recreating the original form /qatalti/ which remains the current form. A similar evolutionary path, including the dropping of the final consonant<sup>19</sup>, would have happened in Hebrew in the transition from [\*BHA phase 2\*](#) to [\*BHA phase 3\*](#).

Ile. There was no general loss of short final vowels<sup>20</sup>

There was an axial linguistic change in which a number of features, felt to be redundant by speakers, were eliminated - singular and plural case inflections, the final short vowels on plural and dual noun suffixes, mood endings and the final short vowel on a few forms of the perfect. Note the following perceptive comment of Ginzberg<sup>21</sup> -

A grammatical peculiarity common in ancient Canaanite ... to the verb and the noun but later eliminated entirely from the former and largely from the latter is the dual number. In Hebrew even the adjective no longer has it, and the substantive retains it only either with dual force - but only in the absolute state - in expressions of quantity or without dual force in names of normally paired objects. This process and the elimination of the category of case are obviously major features of the morphological evolution of Canaanite. For the loss of the cases is not *merely* incidental to the loss of final short vowels, inasmuch as the vowels of the plural and dual endings were neither short nor, in the absolute state, final. As the reviewer has shown ..., the Gezer calendar inscription retains both the use of the dual (with dual meaning) in the construct state and the category of case.... The elimination of case distinctions and of the use of the dual in the construct state is no doubt somehow connected with still another important morphological change, which Hebrew (and perhaps other Canaanite languages) shares with Aramaic; namely, the substitution of -ay (>Heb. -ē), originally the construct *dual* ending, for -ī (corresponding to absol. -īm, and for -ū corresponding to the old nominative absol. -ūm - cf. Ugaritic and Arabic) as the ending of the construct masculine plural. In Hebrew, which unlike Aramaic has a large number of masculine substantives which form their plurals in -ōt (<-āṭ), even a number of these have construct plurals in -ē (<-ay) (sometimes by the side of construct plurals in -ōṭ; e. g., *hēkāl*, *mōsād*, *miškān*.

Under this scenario, all unstressed word-final short vowels, felt by speakers to be important, were maintained probably in their original short form. N.b. the following suffixes had unstressed long final vowels before this transition took place -

*Original Short Final Vowels that Probably Lengthened*

*Before Loss of Word-Final Short Vowels<sup>22</sup>*

	* <u>/PH/</u> (c. 1200 BCE)	<u>EBHP</u> */ <u>EBHP</u> /* */ <u>EBHP</u> (c. 850-550 BCE)	<u>TH</u> / <u>TH</u> /* */ <u>TH</u> (c. 850 CE)
<i>Verbs</i>	*qa'talti/	*/qa'talti:/ *[qə'telti:]	קטלתי = /qā'talti/ *[qə:'tə:lti:]
	*qa'talnu/	*/qa'talnu:/ *[qə'telnu:]	קטלנו = /qā'talnu/ *[qə:'tə:lnu:]

III. Alternative Views on: Whether Word-Final Short Vowels Existed in EBHP/JEH, and Whether All Word-Final Vowels were Marked by Vowel Letters

All of these, except the last (III f), are explicitly or implicitly based on Scenarios IIa or IIb.

IIIa. Traditional View<sup>23</sup> - All Word-Final Vowels in EBHP/JEH Were Long and, With a Few Standard Exceptions (listed below), All Were Marked by Vowel Letters.

N.b. all of the following would have been unstressed in BHA phase 3.

- the pronominal suffix 2<sub>ms</sub>. □ (/kâ/ (TH/\*) \*['ə:kə:] (TH) ← \*/áka(:)/ (EBHP));
- the pronominal suffix 3<sub>fp</sub>. on mp. noun יָ (/éħâ/ (TH/\*) \*['é:hə:] (TH) ← \*/áyha(:)/ (EBHP));
- the SC 2<sub>ms</sub>. suffix יָ (/tâ/ (TH/\*) \*['tə:] (TH) ← \*/ta(:)/ (EBHP)); and,
- the 2nd/3rd fp. suffix of the prefix conjugation /nâ/ (TH/\*) \*['nə:] (TH) ← \*/na(:)/ (EBHP)).

IIIa1. All final vowels were long. These word-final vowels were represented by vowel letters except where the final vowel would be clear to the native speaker by context. Such cases might vary from scribe to scribe.

IIIb. [Bange's](#) view that in Hebrew and Aramaic of the period only stressed word-final vowels were marked by vowel letters.<sup>24</sup>

IIIc. Cook view that [JEH](#) observed the spelling conventions of contemporary Aramaic. He concluded that<sup>25</sup>

All the available evidence suggests that final unstressed long vowels in Old and Imperial Aramaic could be, and often were, written defectively. This is particularly true of final *-Cā*; only in the Middle Aramaic period do we have full epigraphic evidence for the existence of these vowels.

N.b. [Jackson 1989](#) (p. 100) states that not all word-final long vowels were represented by vowel letters in the Moabite Mesha Inscription

IIId. Beyer's<sup>26</sup> view that:

- all independent pronouns and pronominal suffixes ended in unstressed long vowels
- all persons of the *SC* ended in unstressed long vowels except 3ms. which ended in a consonant;
- all persons of the *PC* ended in unstressed long vowels except 1cs., 2 ms., 3ms. and 3fs. all of which ended in a consonant;
- unstressed word-final vowels were only graphically represented where necessary to avoid misunderstandings.

Thus Beyer postulates that, for example, that the consonantal biblical text <swsk> should be read \*[su:'saka:] if the suffix <k> = "you" refers to a male and \*[su:'saki:] if the suffix <k> = "you" refers to a female.

*Comments on Beyer's Views*

Note that under Beyer's approach we have to explain how the 2 ms. pronominal suffix <k> (Beyer would vocalize \*[ka:]) became TH /kâ/ TH \*[kɔ:] while the 2 fs. pronominal suffix <k> (Beyer would vocalize \*[ki:]) became TH /ək/ TH \*[ɛ:x]. One way to square this circle would be to assume that the pronunciation standing behind the PMT, and the vocalization tradition that developed into TH were rooted in different Hebrew dialects or different dialect mixtures<sup>27</sup>. (For further information and references see [box - The Independent Pronouns in EBHP and Colloquial Arabic Dialects](#)). On the whole this option seems to have little to recommend it. The idea that in the consonantal text forms such as <hm> and <hmh> 'your' mp. were both current as spellings of ['hima:] does not seem likely unless we can correlate the spelling with different layers of the text.

IIle. Andersen's View<sup>28</sup> - All Word-Final Vowels in EH Were Long and Were Almost Always Marked by Vowel Letters

All word-final vowels were long and represented by vowel letters and hence JEH and IEH words that end in consonants in the inscriptions were also pronounced as consonant final. Andersen wrote<sup>29</sup> -

Use of the spellings found in early Hebrew inscriptions as evidence of the way words were pronounced can proceed on a sound empirical basis only if one assumes that they wrote it the way they said it --- or at least tried to. It is true that conservatism in spelling can perpetuate an *historical* spelling after a consonant has become silent. The consistent use of *hē'* to spell word-terminal long vowels other than [ū] and [ī] came into vogue in the earliest stages of the adaptation of the Phoenician alphabet to Aramaic, even though *hē'* as marker of the f. sg. suffix -ā was never a consonant. But whereas *waw* and *yod* came increasingly into use to spell word-medial long [ū] and [ī] respectively, *hē'* was never used to spell any word-medial vowel. This skews the system. In any case, whatever the thinking behind this restriction not all vowel letters used in Aramaic and Hebrew inscriptions originated in historical spellings; phonetic considerations operated from the earliest stages of the use of consonant letters to represent certain vowels. It earliest can still be maintained as a rule that all word-terminal vowels were represented by *waw*, *yod* or *hē'* never *alef* and that word-medial ū and (rarely other long vowels, notably monophthongized diphthongs) were *sometimes* and increasingly represented by *waw* or *yod*. Occasional scribal lapses are only to be expected, but they are so few that they make no difference to the large picture.

...The spelling practices described above mean that if there was no word-terminal vowel letter in the written word, there was no word-terminal vowel in the uttered word. It is accordingly, bad method that brings chaos into the system to project medieval Masoretic pronunciations back onto ancient Hebrew words and then to claim that the spelling of some words without vowel letters shows that the rules were not strictly followed. Inferences of this kind are most commonly made with words that end in -ā in Masoretic Hebrew, but which turn up without the expected terminal *hē* in the inscriptions. A blatant example of this kind of anachronism is the equating of the adverb *ʿt* "now" with biblical *ʿth* *ʿattâ* (consistently [x 433] - *ʿt* is attested twice in the Hebrew Bible and attracts *qere* [Ezek 23:43; Ps 74.6]) and then claiming that this shows that the spelling of the final vowel was "variable". Yet the scribes at Lachish and Arad did not vary the spelling of this word; they spelled it consistently *עת* rather than *עתה*. Since we can no longer hear anyone at Arad or Lachish reading their mail, we cannot say dogmatically that they did not enunciate *ʿt* as *ʿattâ*. But why exempt this one word habitually from the treatment of final long -â that was routinely spelled with *hē* in those days? It is simpler to infer that they wrote it the way they said it, and that there was no final vowel on their *ʿt*. While the only way to find out for certain how they actually said this word would be to wait until the resurrection and use an Israelite from pre-Exilic times as an informant as we do with speakers of contemporary languages, at the very least the attested spelling is most naturally interpreted as a representation of *ʿat(t)*. The fact that there are several such word pairs in Hebrew lends plausibility, if not certainty, to that conclusion.

... There is a phenomenon in the Masoretic writing practice in which the vocalization does not match the consonantal orthography, namely the result of the punctuators' decision to supply *qāmeṣ* to some 3rd sg. f. pronoun suffixes, spelled with consonantal *hē* but with no vowel letter and taken to be -hā contrary to the otherwise universal practice of marking all word-terminal vowels (all of which were long) by an appropriate vowel letter which would have been *hē* in this instance. The same was done to some forms of the 2nd sg. m. suffixes -tā and -kā, and pl. f. -nā, even though they might not have the requisite vowel letter *hē* which was used for these suffixes in a small fraction of their occurrences in the received text of the Hebrew Bible (see Table 1). Just how to interpret this evidence is a complicated and much disputed question, which in the context of our present concern takes the form of asking how Hebrew speakers in biblical times pronounced these suffixes. We think it is possible that both forms existed side by side in the classical language, but whether in free fluctuation or as "high style" and "low style" forms we have no way of knowing. The consonantal orthography has first claim, so we take *dbrk*, "thy word", as reflecting something like \**dabarak* rather than Masoretic *dēbārēkā*, *dbryh*, "her words", as \**dabarayh*, not *dabāreyhā*.

### *Comments on Andersen's Views*

The paper ([Andersen 1999](#)), in which Andersen presents his views is learned and rich with supporting detail. That being said, I do not find his main points convincing. Note the following:

1) It is widely held that the final vowel of the first person perfect [ti:] lengthened very early in the history of the Hebrew language and that this was the only form of this suffix to enter into what I have called [BHA phase 3](#). Evidently unwilling to let go of this view and to follow his principle "... that if there was [no word-terminal vowel letter in the written word](#), there was no word-terminal vowel in the uttered word", Andersen wrote -

The verb suffix -tī "I" is always spelled -ty in Masoretic Hebrew when word-terminal. There is no evidence that the vowel of this morpheme was ever lost. [It would be perverse](#) to extend the kind of analysis appropriate for <sup>ct</sup> - <sup>ct</sup>th to the three known instances in ancient Hebrew inscriptions in which the suffix "I" is spelled simply -t not the expected -ty (also attested .... Without becoming overly doctrinaire with the hypothesis that "they wrote it the way they said it".... (scribes sometimes make mistakes), the analogous loss of the vowel from -tī "thou [2nd f: sg.]" does give a mild reason to suspect that this vowel might have been lost sometimes from the suffix -tī "I" in these words. There are three reasonable explanations for these deviations from common practice, with *defective* spelling of a final long vowel, exceptions to the rule that all final vowels were represented by the appropriate vowel letter: (1) scribal carelessness; (2) rare loss of the vowel ending in speech, correctly shown in the writing; (3) the continuing influence of Phoenician orthoepy. In places where Israelite and Phoenician cultures met it would not be surprising if spelling practices were mixed....

I should point out that his implicitly disparaging statement "... [the three known instances](#) in ancient Hebrew inscriptions in which the suffix "I" is spelled simply -t not the expected -ty ..." should be understood in the context of the tiny corpus of inscriptions available. According to [Gogel 1998](#) (p. 77) "There are six, possibly seven ... examples of perfects with suffix -ty, and three with ending -t." This compares with 2ms. "There are five certain examples of perfects with suffix -t (two others ... are probable) and five with ending -th."

2) Regarding whether JEH <<sup>ct</sup>t> is equivalent to TH ה ת /<sup>ct</sup>at'tā/ \*[<sup>ct</sup>et'to:] (pausal <sup>ct</sup> /<sup>ct</sup>āttā/ \*[<sup>ct</sup>o:ttō:]). To start with, it is generally recognized that the TH pausal form of this word reflects the stress pattern in in [BHA phase 3](#)<sup>30</sup>. Given our understanding of the



historical development of Hebrew, it is likely that the PMT form <ṯh> would correspond to /EBHP/ \*/ṯitta(:)/ while the related noun would correspond to /EBHP/ \*/ṯit(t)/.

JEH <ṯ> appears in letters etc. after the formal salutation and seems to carry the meaning "here is the issue" or the like. It functions much like in the Bible which is a sort of spoken notice of a following quote. In terms of the two Biblical Hebrew words ( and ), the choice is either:

a. JEH <ṯ> corresponds in pronunciation to /EBHP/ \*/ṯitta(:)/ lacking a final vowel letter because:

- it is one of a small group of common words or inflections (\*/-ka(:)/, \*/-ta(:)/, \*/-na(:)/) written by convention without the vowel letter; or
- the word-final vowel was long but current scribal practice left the option of omitting unstressed final long vowels; or
- the word-final vowel was short and current scribal practice did not use vowel letters for word-final short vowels.

b. JEH <ṯ> corresponds in pronunciation to /EBHP/ \*/ṯit(t)/

### III.f. Word-final Unstressed Short Vowels Did Exist in EBHP/EH and Were Generally Not Marked by Vowel Letters

It is likely that all stressed word-final vowels were long (originally long, lengthened due to contraction and assimilation or stress-lengthened) while unstressed word-final vowels could have been either short or long. However, it is important to note that stressed word-final short vowels would tend to lengthen and unstressed word-final long vowels would tend to shorten. It is most instructive to consider that all of the unstressed word-final long vowels have been reduced to short vowels in all modern Arabic dialects. Thus the 2ms SC, if it was /ta:/ might be pronounced [təː], not very different from /ta/ [tə].

We could see this as having developed in two ways either as per *Scenario Ilc* or *Ild* (above). The following table illustrates this approach -

*Original Short Final Vowels that may have Persisted into EBHP*

	<a href="#">PH</a> (c. 1200 BCE)	<a href="#">JEH</a> <sup>31</sup> (c. 800-586 BCE)	<a href="#">EBHP</a> */ <a href="#">EBHP</a> / + <sup>32</sup> */ <a href="#">EBHP</a> / <sup>33</sup> (c. 850-550 BCE)	<a href="#">TH</a> <a href="#">/TH/</a> * <a href="#">[TH]</a> (c. 850 CE)	<i>Comments and Conclusions</i>
<i>Independent Personal Pronouns</i>	/hu'a/	<h>	<a href="#">/hû/</a> , /hu'/ or /hu'a(:)/	הוּא /hu/ ['hu:]	<i>The Epigraphic Hebrew</i> הוּא "he" = 'hû', 'hû or 'hu' <a href="#">a</a> see p. 153 <a href="#">n. 179</a> in <a href="#">Gogel</a> .
	/hi'a/	Not found	<a href="#">/hî/</a> , /hi'/ or /hi:'a(:)/	הִיא /hi/ ['hi:]	
	/'atta(:)/	<'t> <sup>34</sup>	/'atta(:)/ ['ʔette']	אֲתָא /'at'tā/ [ʔet'to:]	contextual
				אֲתָא /'āttā/ [ʔo:tto:]	Pausal
<i>Pronominal suffixes and pronouns</i>  <i>Cf.- The Independent Pronouns in BH and <a href="#">Colloquial Arabic Dialects</a></i>	/sū'suka(:)/ (nominative)	<k>	/sū'saka(:)/ [su:'seke']	סוּסְךָ /susə'kā/ <a href="#">[su:sə'ko:]</a>	your (ms) stallion
	/sū'saka(:)/ (accusative)				
	/sū'sika(:)/ (genitive)				
	/su:'sāka(:)/ <a href="#">(du. nominative)</a>	<k> <kh> (one example)	/sū'sayka(:)/ <a href="#">[su:'sɛyke']</a> or [su:'sɛyke']	סוּסֶיךָ /su'sɛkâ/ [su:'sɛ:ko:]	your (ms) stallions
	/su:'sayka(:)/ (du. oblique)				
	<a href="#">/šiwwi'yahu/</a>	<hw>	<a href="#">/šiw'wa:hu(:)/</a> <a href="#">[šiw'wa:hu']</a>	צִוְּהוּ /šiw'wāhu/ [ši:wwo:hu:]	"he commanded him"
	/sū'suhu/	h	/sū'sahu/? >	יֵלֵךְ e.g.	See this footnote <sup>35</sup>

	<u>PH</u> (c. 1200 BCE)	<u>JEH</u> <sup>31</sup> (c. 800-586 BCE)	<u>EBHP</u> */EBHP/* <sup>32</sup> */EBHP/* <sup>33</sup> (c. 850-550 BCE)	<u>TH</u> <u>/TH/*</u> * <u>[TH]</u> (c. 850 CE)	<i>Comments and Conclusions</i>
	(ms. nominative) /sū'sahu/ (ms. accusative) /sū'sihu/ (ms. genitive)		/sū'sô/? [su: <u>so:</u> ]	(normal <u>TH</u> or ה' eg. ה'?) /o:/	
	/sū'suha/ (nominative) /sū'saha/ (accusative) /sū'siha/ (genitive)		/sū'sâ/ [su: ' <u>sa:</u> ]	סוּחַ ה' /su'sâh/ [su:'sɔ:h]	'her horse'
	/su: 'sâha/ ( <u>du.</u> nominative) /su: 'sayha/ (du. oblique)		/sū'sayha(:)/ [su: 'sɛyhe·] or [su: 'sɛyhe·]	סוּחַ ה' /su'sɛhɔ/ [su: 'sɛ:hɔ:]	'her horses'
<i>Verbs</i>	/qa'talti(:)/	<ty> (6 or 7 examples) <t> (3 examples)	/qa'talt(:)/ [qe'telti·]	קָטַלְתִּי /qâ'talti/ [qɔ:'ta:lti:]	EH holds open the possibility that the EBHP might have been /qa'talti(:)/ or with an unvoveled suffix, as in <a href="#">colloquial Arabic, i.e.</a> /qa'talt/
	/qa'talta(:)/	<t> (5-7 examples) <th> (5 examples)	/qa'talta(:)/ [qe'telte·]	קָטַלְתָּ /qâ'taltâ/ [qɔ:'tɛ:ltɔ:]	EH holds open the possibility that the EBHP might have been /qa'talta(:)/ or with an unvoveled suffix, as in colloquial Arabic, and later Aramaic /qa'talt/
	/taq'tulna(:)/		/taq'tulna/ ( <u>EBHP?</u> ) > /tiq' tulna/ ( <u>EBHP?</u> ) or /tiq'tulne:/	תִּקְטְלוּנָה /tiq'tolnâ/ [tiq'to:lnɔ:]	

	<a href="#">PH</a> (c. 1200 BCE)	<a href="#">JEH</a> <sup>31</sup> (c. 800-586 BCE)	<a href="#">EBHP</a> */ <a href="#">EBHP</a> /* <sup>32</sup> */ <a href="#">EBHP</a> /* <sup>33</sup> (c. 850-550 BCE)	<a href="#">TH</a> <a href="#">/TH/</a> * <a href="#">[TH]</a> (c. 850 CE)	<i>Comments and Conclusions</i>
			[ʔiqʔʊlneʔ]		
	/ʔaqʔula/		/ʔaqʔula/ (/EBHP?/) > /ʔiqʔula(:)/ (/EBHP?/) [ʔiqʔuleʔ] or [ʔeqʔuleʔ]	אֶקְטָלָה <a href="#">/ʔeqʔə'lā/</a> [ʔeqʔə'lo:]	cohortative
	/naqʔula/		/naqʔula/ (/EBHP?/) > /niqʔ ʔula/ (/EBHP?/) or /niqʔʔula:/ [niqʔʔuleʔ]	נִקְטָלָה <a href="#">/niqʔlā/</a> [niqʔə'lo:]	cohortative
	/quʔula/		<a href="#">/quʔula/</a> (probably in archaic poetry) > /qəʔʔula/ [qūʔuleʔ]	קִטְּלָה (Masc. sing. Imperative with Paragogic heh) <a href="#">/qəʔlā/</a> [qəʔə'lo:]	
	/quʔulna(:)/		/qəʔʔulna/ [qūʔʔulneʔ]	קִטְּלֵנָה /qəʔʔolnā/ [qəʔʔo:lno:]	Fp. Imperative
<i>Miscellaneous</i>	/ʔliya/		/ʔli:/ (possibly /ʔ liya/ in archaic or archaizing poetry)	לִי /ʔli/ [ʔli:]	See this footnote <sup>36</sup> .
	/ʔmiya/	<my>	/ʔmi:/ (possibly /ʔ miya/ in archaic or archaizing poetry)	מִי /ʔmi/ [ʔmi:]	
		<et>	<a href="#">/ʔitta/</a>	עִתָּה <a href="#">/ʔattā/</a> [ʔetʔto:]	See this footnote <sup>37</sup> .

## *Discussion*

The orthography of the MT is usually said to indicate long [final vowels by vowel letters](#). However, this assumes that Biblical Hebrew did not have any final short vowels and that certain final long vowels were in certain situations not indicated by vowel letters.

However, in candid moments, scholars admit, sometimes indirectly, that it may be that some of the vowel letters stand for final short vowels. This is clearly the position of [Richter](#) and [Stuart](#). [Beyer 1969](#) seems to accept that all final vowels were long and that unstressed word-final vowels were only graphically represented in order to avoid misunderstandings. Thus Beyer postulates that the 2 fs. pronominal suffix <k> should be read \*[ki:] (n.b. unstressed) and the 2 mp. pronominal suffix <km> should be read \*['kima:].

[Manuel](#) (p. 56) wrote -

"... /a/ in final position lengthened to /ā/. Affected forms generally use {h} to mark the final vowel. There is no certainty that {h} is actually marking a lengthened as opposed to a short vowel<sup>38</sup>, but the fact that all other uses of vowel letters in BH, including final {h}, mark long vowels ({w} = /ū/ō/, {y} = /ī/ē/, and [final] {h} = /ē/ō/) makes it unlikely that the practice would apply to /a/ unless the vowel had undergone a quantitative change. Examples include the fs nominal and III-y SC forms listed above (see *Apocope*). The change may also have included the interrogative pronoun, the unstressed deictic ending /at/, where the final /t/ apocopated as it did on the fs noun, and the unstressed adverbial ending /ah/, whose final consonantal /h/ quiesced at some point (Gordon 1965 §§6.33; 11.1-2; Garr 1985:60, 117; Williams 1976 §61; cf. Pardee 1978:313)...."

[Muraoka 1998](#) discusses the vowels and vowel letters of Egyptian Aramaic (pp. 28-36) which is linguistically and orthographically closely related to Biblical Hebrew. Two quotes -

The length of word-final vowels, especially those of inflectional morphemes, is ... uncertain. (p. 36).

... Beyer (1994:88) ... holds that unstressed word-final vowels were only graphically represented in order to avoid misunderstandings. Cook (1990) agrees with Beyer that final unstressed long vowels, especially /a:/, were often not graphically represented in OA and IA. (p. 27).

On the other hand, it has become increasingly obvious that final vowels were sometimes systematically not written i.e. the written word would end in a consonant whereas the spoken word would follow the final written consonant with a vowel. Epigraphic Hebrew was open to two major influences. On one side the Phoenicians who made almost no use of vowel letters and on the other side the Arameans who did. It is generally assumed that the pre-exilic scribal tradition in Israel and Judah followed the Aramean model.

- It seems to me that the final alternative, that word-final short unstressed vowels did exist in EBHP, is most probably correct.

*Decision Regarding Form Used in [EBHP] Transliterations and Sound Files - See [Word-final Vowels of intermediate or uncertain length](#)*

*b. Is it Likely that [Case Endings](#)<sup>39</sup> were Pronounced in EBHP Vocalization of [Archaic or Archaizing Biblical Poetry](#)?*

In [Studies in Ancient Yahwistic Poetry](#) (Cross and Freedman 1975) the authors wrote (p. 27)–

“The most striking feature of the morphology of the noun is the frequent preservation of old case endings. The survival of case endings is due in almost every case to clear-cut metrical requirements”

In *Canaanite Myth and Hebrew Epic* (1973) Cross (p. 127 n. 51) implies that he accepts that the Song of the Sea states–

“... the genitive of the first person singular is *-iya* (and as) in early Canaanite and Phoenician, written with consonantal *yod*.”

I agree that the survival of the case endings is not impossible but is it probable? A possible parallel is the continued use of, partly unwritten, case endings etc. in modern literary Arabic ([MSA](#)) over a thousand years after they disappeared from use in common speech. The archaic grammar of MSA is preserved due to the prestige of the Quran and hence of its language. The following is of interest, and perhaps even of relevance to the linguistic situation in Late Bronze Age Canaan

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The role and place of final vowel (representing case or inflectional) endings in sentence reading known in traditional Arabic grammar terminology as *'raab*, requires an active prior knowledge of syntax. Arabs consider *'raab* a technicality only necessary in reading poetry and in the most formal reading situations. [Most Arabs follow the common practice of not pronouncing word endings](#) marking the part of speech and its function at the end of a sentence (such as the use of the one single unmarked form *kitaab* for "book" instead of the six inflectionally marked forms of *kitaabun*, *kitaaban*, *kitaabin* and *kitaabu*, *kitaaba* and *kitaabi*. The exercise of guessing the correct *'raab* has become a central activity in an average classroom which requires scanning the context and conjuring the appropriate grammatical rule.<sup>40</sup>

One should note that the continuing knowledge of, and attempts to continue the use of, the complex grammar of Classical Arabic is due to the reverence that form of language has as the language of the Quraan. Though the similarity of biblical poetry to that of Ugarit suggests that both were in the same general literary tradition, there is not the slightest hint that any body of archaic literature was studied or even maintained, orally or in written form, in ancient Israel let alone one possessing the authority to impose its linguistic norms on Israelite poetry.

It is clear that the orthography of pre-exilic biblical poetry was systematically "modernized" in the post-exilic period. This extent of this modernization cannot be determined. It may or may not have been generally limited to a few recurring features. e.g. the insertion of internal vowel letters and the replacement of ׀ by ׀ as the third person singular pronominal suffix on nouns. Perhaps it is not generally realized that the suggestion that case endings and older forms of grammar were native to these poems requires the acceptance that the consonantal text of the archaic poems was far more drastically "modernized" in the post-exilic period.

*Discussion*<sup>41</sup> – In Epigraphic Hebrew the standard suffix for the feminine singular of the noun/adjective is <h> = \*/á:(h)/. This ending replaced the earlier \*<t> = \*/át/<sup>42</sup> < \*/átu/. This could not have occurred before the loss of the case ending. Even if, [as postulated above](#), short final vowels not required for clarity, had disappeared from ordinary speech, as reflected in the consonantal orthography, it is possible that they may have been preserved, to some extent, in poetic language in order to increase the number of syllables or for other aesthetic reasons.

[Vern 2008](#) (chapt. 11) examines in great detail the case for the survival of case ending remnants in [ABH poetry](#) and finds that the balance of the evidence is that no such survivals can be found. This validates [Stuart's](#) position (p. 26) that "Case endings were almost never preserved in Hebrew."

*Decision Regarding Form Used in [EBHP] Transliterations and Sound Files - Case endings were not preserved in BH.*

*c. Were Word and Syllable final Glottal Stops Pronounced in EBHP?*

Word-final glottal stops (/ʔ/ [ʔ]) were produced by the loss of final short vowels in the noun (including adjective) and verb eg. /qa'ra'a/ > /qa'raʔ/

It is clear that some stressed, syllable-final glottal stops were elided with lengthening of the preceding vowel in [BHA phase 2](#). An example is \*/ra'su/ > \*/râšu/ > /rôš/ "head".

[In the MT](#), glottal stops (ʔ when pronounced = /ʔ/ [ʔ]) often disappeared, generally compensated for by a lengthening of the preceding vowel<sup>43</sup>; as a rule, they are, however, preserved in spelling. For the details see this footnote<sup>44</sup>.

The question is whether, generally, syllable and word-final glottal stops were:

- i. pronounced in EBHP (as per [Sáenz-Badillos](#) §3.5) resulting in final syllables of the patterns CVVʔ (3 [morae](#)) or CVʔ (2 morae); or,
- ii. elided with lengthening of the preceding vowel resulting in final syllables of the pattern CVV (CVVʔ > CVV; CVʔ > CVV. Each 2 morae); or,



iii. simply quiesced with no lengthening of the preceding vowel (as per [Manuel 1995](#) pp. 42-43)<sup>45</sup> resulting in final syllables of the patterns CVV (CVV? > CVV - 2 morae) or CV (CV? > CV- 1 mora).

In spoken Arabic dialects<sup>46</sup>, many of Classical Arabic's glottal stops have disappeared -

Classical Arabic /ʔ/ is lost except initially. Depending on the exact phonetic environment, this either caused reduction of two vowels into a single long vowel or diphthong (when between two vowels), insertion of a homorganic glide /j/ or /w/ (when between two vowels, the first of which was short or long /i/ or /u/ and the second not the same), lengthening of a preceding short vowel (between a short vowel and a following non-vowel), or simple deletion (elsewhere). This resulted initially in a large number of complicated morphophonemic variations in verb paradigms.

However, the shift /q/ > /ʔ/ has given rise to new word-final phonemic glottal stops have arisen following both long and short vowels. Examples, from Jerusalem Arabic<sup>47</sup> include: /'wara/ 'behind': /'waraʔ/ 'paper'; /'mara/ 'woman': /'maraʔ/ 'he passed'; /'xala/ 'he created': /'xalaʔ/ 'he overthrew'; /'fii/ 'in' : /'fiiʔ/ wake up! The glottal stops resulting from the shift /q/ > /ʔ/ are very stable in, e.g. Egyptian Arabic. In fact there are some interesting developments e.g. the negative particle \*/laʔ/ (proto-Semitic) > /la:/ (Classical Arabic) > /laʔ/ (Egyptian and Palestinian Arabic.). In British English [t-glottalization](#) is resulting in many syllables, and words, regularly ending in glottal stops such as <what> [wɒʔ]. It is thus clear that it is not at all difficult to maintain word and syllable final glottal stops.

The occurrence in Epigraphic Hebrew of the forms <qrʔty> "I read"<sup>48</sup> and <qrʔ> "read!"<sup>49</sup>, though they could be historic spellings, seem to indicate that the glottal stop was still pronounced.

Anderson wrote<sup>50</sup>

... use of the term *matres lectionis* is anachronistic, and gets medieval Masoretic spelling policies mixed up with the ancient use of consonants - three only, *waw*, *yod*, and *hēʔ*, not [alef](#) - as vowel letters. We are not aware of a single specimen of the ancient use of *alef* distinctively as a vowel letter (in Epigraphic Hebrew).... (T)here is no way for those who identify any *alef* as a *mater lectionis* to know that a reader of that text would not make the sound of the [glottal stop](#) at that point; and it is just as impossible for those who think that *alef* was not used as a vowel letter in the early days to demonstrate that it represented only a consonantal sound. It seems to be a

stand-off. But the balance is not equal. There can be no doubt that the [Phoenician alphabet](#) originally made no provision for writing any vowel sound, and it is equally certain that the letter *alef* represented a consonant sound that was part of the ancestral Semitic phoneme repertoire.... (N)ot all vowel letters used in Aramaic and Hebrew inscriptions originated in historic spellings; phonetic considerations operated from the earliest stages of the use of consonant letters to represent certain vowels. It can still be maintained as a rule that *all* word-terminal vowels were represented by *waw*, *yod*, and *hē*, never *alef*, and that word-medial *ū* and *ī* (rarely other long vowels, notably monophthongized diphthongs) were *sometimes* and increasingly represented by *waw* or *yod*. Occasional scribal lapses are only to be expected, but they are so few that they make no difference to the large picture.

In general I believe that Anderson is correct that word-final [alef](#) was not normally used as a vowel letter in pre-exilic Hebrew orthography. However, there was one common word in which it is so used i.e. אֵל /lô/ "not etc." Probably the reason for this exception was that לה, the expected spelling, was used for "to him" and "to her" thus borrowing the Aramaic spelling לא led to less ambiguity.

As noted above, from the point of view of [syllable length](#) (and [moraic](#) structure), and hence rhythm, there is no difference between [CVC](#) eg. קרא ("he called/read") = \*/qa'ra'/ and [CVV](#) e.g. קרא = \*/qa'ra:/

See also

- [Simplification of diphthongs](#)
- [Interrogative Pronoun מה](#)
- [Trade-off Between Vowel and Consonant Length](#)

*Decision Regarding Form Used in [EBHP] Transliterations and Sound Files* - Except in the case of אֵל, I assume that word-final א indicates a glottal stop that was pronounced in EBHP i.e. [PMT](#) <qṛ>; TH /qâ'râ/ \*[qɑ:'rɑ:] was the reflex of [EBHP](#) \*/qa'ra'/ or [PMT](#) <n'>; TH /nâ/<sup>51</sup> \*[nɑ:] was the reflex of [EBHP](#) \*/na'/.

*d. Forms CVCCV > CVCC*<sup>52</sup>

With the loss of case endings, and perhaps earlier in pausal forms, in the early first millennium BCE nouns were created ending in clusters of two consonants. These were mainly of two types:

d1. ["Segolates"](#) (m.s.)<sup>53</sup> final clusters of two different consonants e.g. \*/yaldu/ > \*/yald/ "child". These developed into the "segolates" ([for comparisons with Aramaic see below](#)). This is the category I am discussing in this section.

d2. [geminated](#) final consonants e.g. \*/ħišṣu/ > \*/ħišṣ/ "arrow". I discuss these forms in the [following section](#).

In the proto-segolates one of the three primitive Semitic vowels /a/, /i/, /u/ appear between the first and second root consonant. Their evolution was:

/a/ vowel - \*/yaldu/ (/PH/) > \*/yald/<sup>54</sup> (/EBHP/) \*[yɛld] or \*[yɛləd] ([EBHP]) > \*/yalɛd/ > \*/yɛlɛd/ (/TH/+);  
\*[yɛ:lɛð] ([TH]) "child"

/i/ vowel - \*/sipru/ (/PH/) > \*/sipr/ (/EBHP/) \*[sɪpr] or \*[sɪpər] ([EBHP]) > \*/sɛpɛr/ (/TH/+) \*[sɛ:fɛr] ([TH])  
"book"

/u/ vowel - \*/qudšu/ (/PH/) > \*/qudš/ (/EBHP/) \*[kʰɔdʃ] or \*[kʰɔdɔʃ] or \*[kʰɔdɔʃ] ([EBHP]) > \*/qudɛš/ >  
/qɔdɛš/ (/TH/+) \*[kʰɔ:ðɛʃ] (TH) "holyness"

It is, however, unclear how the EBHP forms were pronounced. There are basically two choices i.e. with or without (non-phonemic) [anaptyctic vowels](#) i.e.:

\*[kʰɔdʃ] or \*[kʰɔdɔʃ] / \*[kʰɔdɔʃ].

The first evidence of segolation in Hebrew is found in Hebrew names transliterated into Greek script in the [Septuagint](#)<sup>55</sup>. However, the Seconda, in contradiction to the earlier LXX and the later MT generally shows no evidence of [segolation](#)<sup>56</sup> (see below) while the later still latin transliterations of Jerome clearly show segolation. Two outstanding Israeli scholars have published different interpretations of the evidence -

i) [Kutscher 1982](#) (§250)

...(I)n the Septuagint the segolates always have an anaptyctic vowel e.g. *Moloch* (= מֹלֶךְ) but in the [Hexapla](#) the second vowel never appears, and the first one keeps its original quality, e.g. *abd* = אֲבָדִי. How are we to account for this strange fact? After all, once these anaptyctic vowels have arisen it is very unlikely that they should have been dropped. Should we assume the, that with regard to this phenomenon these transliterations reflect another dialect of Hebrew that at least in this respect was more archaic than the Hebrew of the Masoretes and that of the Septuagint? This solution seems preferable to the assumption of fluctuations between the Septuagint, the Hexapla, Jerome ... and the Masoretes.<sup>57</sup>

ii) [Blau 1978](#) (pp. 102-103) argues -

"[Epenthesis](#) is already attested in the [Septuagint](#), whereas it is likely that [tendency to oxytone shift](#) is later (v. §6). It stands to reason that, for pure phonetic causes, epenthesis arose in a part of the segolates immediately with the elision of final short vowels. Accordingly, I would rather assume that the different behaviour of Hebrew (mainly forms like *mēlek*) and Aramaic (mainly forms like *šalēm*) segolates is due to the different [morphophonemic](#) status of the segolates. In both Hebrew and Aramaic, after the final short vowels had been omitted, epenthesis took place and [phonetically](#) the formerly monosyllabic segolates had become bisyllabic. This is the reason for Hebrew segolates in the Septuagint being transcribed as bisyllabic. Yet Hebrew segolates were morphophonemically monosyllabic. This is the reason for their transcription by [Origines](#) as monosyllabic and the alternation of monosyllabic and bisyllabic forms in [Jerome](#)'s transcriptions. Therefore, as a rule, segolate nouns in Hebrew were not affected by the tendency to [oxytone](#) stress, although they phonetically exhibited stressed short penult in open syllable, which, at this time, contravened Hebrew syllable structure...: morphophonematically they were monosyllabic and stressed on their only syllable<sup>58</sup>. It is even dubious whether segolates ever became in Hebrew bisyllabic; Jerome's transcription, at any rate, suggest that they remained morphophonemically monosyllabic. In Aramaic, on the other hand, the epenthetic vowel became morphophonemically counted, making these nouns also morphophonemically bisyllabic. Therefore, they were influenced by the general tendency to oxytone stress, according to which ... short open penult lost its stress in words with closed ultima."

Of these two opinions I find Kutscher's the most persuasive. However, either opinion regarding the Greek evidence is compatible with segolation being a post-exilic development. However, in [Blau 2010](#) (§4.4.6.4) he writes -

Now, it could be claimed that Origen reflects a dialect different from that of the Septuagint. This explanation, however, seems unnecessarily complicated. Instead, it seems much more likely that the opening of the cluster was an early phonetic phenomenon that occurred in stress [stage iii](#)

simultaneously with the omission of final short vowels; however, the syllable formed by the anaptyctic vowel did not count phonemically, and so these nouns remained phonemically monosyllabic. The Septuagint reflects a phonetic transcription of the segolates, whereas Origen provides a phonemic transcription.

I do not find Blau's argument for dating segolization on the [BHA phase 2/BHA phase 3](#) boundary persuasive as:

- a) In some Arabic dialects, and indeed in English, the pattern *CVCC* has shown long-term stability. In English we have hundreds of words of that sort e.g. salt, milk, sort.
- b) In Eastern Arabic dialects we find the coexistence of, for example ['sɪfɾ] and ['sɪfɪr] "zero"<sup>59</sup>. In ancient Hebrew, the forms in common use might have varied between those with and without short, or very short, unstressed epenthetic vowels as is the case, for example, of the Arabic dialect of the sheep nomads of Mesopotamia and north-east Arabia who pronounce the word for "heart" (Classical Arabic /qalb/) as either [galb] or [galub]) and the word for "time" (Classical Arabic /waqt/) as either [wagd] or [wakit] (cf. [yaled](#) above)<sup>60</sup>. The following is illustrative<sup>61</sup> -

In one area of central Baghdad ... the LA (Literary Arabic = MSA) form *ṣidq* 'truth' was found to have five variants in the area surveyed: (1) *ṣigid*, (2) *ṣidig*, (3) *ṣidug*, (4) *ṣidiq*, and (5) *ṣidq*. Variant (1), with metathesis, was produced by a few illiterate, elderly people. Variant (2), without metathesis, was produced by both illiterate and semiliterate people who were not all elderly. Variants (3) and (4) were the more frequently occurring variants, (3) being the Muslim realization of the form, and (4) with LA /q/, originally the non-Muslim variant, but now realized by some Muslims who are modifying their speech in the direction of LA.... Variant (5) was produced by a number of educated men and women.

[See the Greek evidence regarding \\*qut/noun forms.](#)

*Decision Regarding Form Used in [EBHP] Transliterations and Sound Files* - The "segolates" as *e.g.* מלך "king" נער "youth" -

[/EBHP/](#) \*/'malk/; [\[EBHP\]](#) \*['mɛlk] or occasionally \*['mɛlək] (where the MT epenthetic vowel is *səgōl*).

[/EBHP/](#) \*/'naʿr/ ; [\[EBHP\]](#) \*['nɛʁr] or occasionally \*['nɛʁʁ]<sup>62</sup> (where the MT epenthetic vowel is *patah*).

## *d2 Were Word-Final Geminated Consonants Maintained in EBHP?*<sup>63</sup>

The phenomenon of consonant [gemination](#) in EBHP was probably similar to its, somewhat variable reality in [Colloquial Arabic](#) which is described by [Mitchel 1993](#) (pp.90-91) as follows (emphasis indicated by bold is my own..DS) -

The gemination, ... doubling or the use of incremental consonant-length, like the lengthening of vowels, is, strictly speaking, a device of *morphology* contributing systematically to differences of word-form and word-class. This is not to say that the feature does not occur, albeit rarely, with purely *phonological* relevance....

Morphological doubling, or doubling for short, mostly concerns the intervocalic second radical of a triradical root (e.g. E(gyptian) A(rabic) [ʕállim](#) 'he taught, trained'), far less often a pre-pausal third or fourth radical (e.g. E(gyptian) A(rabic) [ʔihmárr](#) 'he/it turned red, blushed'.... These cases of gemination should be distinguished from the very frequent *morphophonological* case of a phonetically long consonant which usually, though not exclusively, arises from assimilation.

An example of sequence without assimilation involves the suffixation of the morpheme {-t} of the 1st person s. and 2nd person s. and pl. in the past tense of verbs whose final radical is /t/, e.g. [sakátt](#) 'I/you (s.m.) was/were silent', [sakátti/u](#) 'you (s.f.)/you (pl.) were silent'. East of Egypt, for instance in the Levant, an anaptyctic vowel, obligatorily precluded from association with morphological doubling, may occur before the final inflectional consonant of e.g. [sakátt](#), i.e. [sakátit](#), and the duration of the 'hold' of final -tt in the first version, as well as the audibility of its release, is also subject to regional variation; it is typically longer, for example, in Jordanian and Palestinian than in, say, coastal Syrian Arabic, or even Damascene. Some account should be taken, moreover, of subregional and individual variation, and it has to be remembered that the isolated word is its own context and that behaviour elsewhere may not be in parallel. Thus, at word-junctions in informal speech, anaptyxis is as regularly associated with Palestinian as with Syrian speech, e.g. P(alestinian) A(rabic) S(yrian) A(rabic) [sakátit léefʔ](#) 'Why were you silent?', though this is not so for the word-isolate. That sequence of like consonants is not to be equated with morphological doubling, in spite of potential similarity of phonetic form, is shown not only by the possibilities of final

anaptyxis in the first case but also by such medial contrasts of consonant length as occur in Levantine baśátni 'you (s.m.) sent me' in opposition to baśátni 'he sent me'.

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23.1, [Gemination](#) or consonantal length can be justified etymologically or grammatically. but it occurs also when a long vowel plus a single consonant is replaced by a short vowel plus a doubled consonant, as in Hebrew *gəmalli:m*, "camels", "dromedaries", plural of *\*gamal* (§24.7). Some Semitic languages and dialects are non-geminating in part or in general (§23.5). A compensatory lengthening of the contiguous vowel may then correspond to the gemination, as in Neo-Aramaic *da.ba.sa:*, "bee", instead of *dabba:sa:*. Gemination is phonemic in the Semitic languages in which gemination or lengthening of consonants is a regular feature, as it appears, e.g., from Arabic *kabara*, "to become great", and *kabbara*, "to make great"....

It has been suggested that there may have been a phonetic difference in Semitic between long consonants and double or geminated consonants. In fact, there is a category of "continuant" consonants that can be held continuously, with variable tension but without changing quality, and a second category of so-called "kinetic" or "interrupted" sounds that cannot be so held. The first group comprises the nasal, lateral, fricative, and rolled phonemes, while the second one includes the plosives and the affricates (e.g. [ʈʂ]). The gemination of the phonemes of the second group does not imply length, properly speaking, but increased [tension](#) which is perceivable in the case of a voiceless plosive, while a voiced one is reckoned less tense since a considerable part of the air it uses is consumed by voicing alone. Therefore, really geminated voiced plosives have to be pronounced either by doubly stopping the chamber of the mouth and sucking in the breath, or by changing the quality. as /bb/ > [ m b ] or [ b b ], /d d/ > [ n d ] or [ d d ], / gg / > [ n g ] or [ g g ],. The first articulation is encountered, e.g., among native Tūrōyo speakers and among speakers of Western Neo-Aramaic who even insert an anaptyctic vowel between the geminated consonants: ameləl < amell, "he said to them" .... Concrete examples of the second pronunciation in ancient Semitic languages are probably provided by such transcriptions as Σεppōpα for Šippōrā, Ἀκxώ for ʿAkkō, Ματθαθίς for Mattityā, which amply illustrate the changing quality of geminated plosives. In other circumstances or forms of speech, and especially in the articulation of "continuants", the so-called "doubling" of a consonant does not consist phonetically in its double articulation, but either in its lengthening or in its amplification. This may vary from a slight "tightening" or lengthening in time to much more than double. We keep nevertheless using the traditional terminology and the current notation of consonantal length or tension by transcribing the long or tense consonant twice, e.g. bb. This notation is interchangeable with the symbol /b:/ employed in the international phonetic system and with the capital letter B adopted by some authors.

23.2. Gemination is sometimes hardly audible, particularly at the end of a word (§24.5), where it is not recorded

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either in Amharic or in Hebrew, e.g. ʿm, "people", instead of ʿmm. However, it becomes evident when the final consonant is followed by a vowel, e.g. Hebrew ʿmmī, "my people". Gemination is at times missing also in the middle of a word, as shown by the Masoretic notation mēbaqəšīm (Ex. 4:19; 10:11), "seeking", instead of the expected \*mēbaqqəšīm. Besides, there is no regular marking of long consonants in cuneiform script and there is no such notation at all in Semitic alphabetic scripts, except in some rare cases (§23.3), until the introduction of special diacritics in Hebrew and in Arabic (§23.4)....

23.4. In the Hebrew vocalization systems, the symbol called dageš -- a dot placed in the letter -- is used to mark the gemination of a consonant, but it is in reality an ambiguous sign, since it can also indicate the lack of gemination and the plosive pronunciation of the consonants b, g, d, k, p, t. This was probably the original function of the dageš used with the plosives, since these phonemes cannot be lengthened, properly speaking, but only amplified by other means, as a pronunciation with greater pressure. Only Arabic šadda ... indicates in an unambiguous way that the consonant is long or geminated, e.g. ʿmmu, "paternal uncle".

23.5. In principle, all the consonants can be geminated, but ʾ and h are not geminated in Ethiopian languages and the Masoretic punctuation of Hebrew and of Biblical Aramaic in principle excludes the gemination of the pharyngals (ħ, ʕ) of the laryngals (ʾ, h), and of r. In Neo-Aramaic, the doubling of consonants has largely been eliminated and replaced by the lengthening of the preceding vowel, e.g. yāma < yammā, "sea"....

Quoted from [Lipinski 1997](#) §23.1 - 24.6

"A geminated consonant (in TH)... was pronounced with greater pressure than its ungeminated counterpart."

Quoted from [Khan 1997](#) p. 90.

A stop, plosive, or occlusive is a [consonant](#) sound produced by stopping the airflow in the [vocal tract](#). The terms *plosive* and *stop* are usually used interchangeably, but they are not perfect synonyms. Plosives are [oral](#) stops with a [pulmonic egressive airstream mechanism](#). The term is also used to describe [oral](#) (non-nasal) stops.... In the articulation of the stop, three phases can be distinguished:

- Catch: The airway closes so that no air can escape through the mouth (hence the name *stop*). With nasal stops, the air escapes through the nose.
- Hold or occlusion: The airway stays closed, causing a pressure difference to build up (hence the name *occlusive*).
- Release or burst: The closure is opened. In the case of plosives, the released airflow produces a sudden impulse causing an audible sound (hence the name plosive).

... Lengthened fricatives, nasals, laterals, approximants, and trills are simply prolonged. In lengthened stops, the



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"hold" is prolonged. Long consonants are usually around one and a half or two times as long as short consonants, depending on the language. ... In a geminate or long stop, the occlusion lasts longer than in normal stops. In languages where stops are only distinguished by length (e.g. Arabic...), the long stops may last up to three times as long as the short stops. Italian is well known for its geminate stop, as the double t in the name Vittoria takes just as long to say as the *ct* does in English Victoria.

Quoted from [Wikipedia](#)

Variations in the length of both consonants and vowels produce variations in meaning.... The difference between the short and long sounds is that the long sounds take a relatively longer time to be completely produced than the short ones. In the case of a stop, the explosion occurs after a longer withholding; in the case of a [vowel](#), [lateral](#), or [fricative](#), it is continued longer; in the case of a [flap](#), the flaps are repeated (hence the [trills](#)); and in the case of a [nasal](#), the vibration of the [vocal cords](#) and the flow of breath through the nasal passage last longer. Length applies to consonants and vowels separately, it does not apply to syllables or words as a whole.

Quoted from *An English-Colloquial Arabic Dictionary* by Raja T. Nasr, Librairie du Liban, Beirut (1972), p. xvi.

It should be noted that the phonemic load of consonant and vowel length, and even place of stress, tended to be reduced over the history of [Ancient Hebrew](#) being replaced by vowel and consonant quality. For example:

- גמל <gml> "he weaned": "camel"  
/EBHP/ \* /ga'mal:/ \* /ga'ma:l/  
TH /gā'mal/ \*[go:'me:l]: /gā'māl/ \*[go:'mo:l]
- וישמר <wyšmr> 'he guarded': וישמר <wyšmr> 'and he will guard'  
/EBHP/ \* /way'yišmur:/ \* /wayiš'mur/  
[/TH/](#) \* /wayyiš'mor:/ /wəyiš'mor/
- <hbdyl> (hiph. inf. constr.) : <hbdl> (hiph. inf. abs.)

/EBHP/ \*/hab'di:l/:\*/hab'dil/

/TH/ \*/hab'dil/:/hab'del/

### *Long (Geminated) Consonants and their Symbols*

Continuant consonants – e.g. /mm/ (IPA /m:/).

a) When not word-final, a geminated continuant lasts at least twice as long as a short continuant and bridges two syllables - i.e. forming the coda of the first syllable and the onset of the following syllable as does the *mm* in English "immobile". E.g. מִלִּמְדָּה  
\*/lim'mid/ (/EBHP/) [lim'mid] ([EBHP]).

b) When word-final, a geminated continuant lasts at least twice as long as a short continuant. E.g. חִשָּׁשׁ \*/'hiʃʃ/ (/EBHP/) ['ħisʕsʕ] ([EBHP]).

Stop consonants – e.g. /dd/ (IPA /d:/).

a) When not word-final the consonant is pronounced twice, the first time as the coda of the first syllable and second time as the onset of the following syllable as does the *nn* in English "unnamed". E.g. דִּבְבִּיר /EBHP/ \*/dib'bir/ ([EBHP]).

b) When word-final the sound is pronounced as a long stop e.g. כַּפֵּךְ probably /'kapp/ (/EBHP/) ['kəpp] ([EBHP])..

Words ending in doubled consonants as a result of the loss of case endings can be pronounced in five basic ways<sup>64</sup>:

*Scenario i* - Final geminated continuants could be pronounced long with the stops pronounced as long stops. I would guess that this is the position of Sáenz-Badillos 1993 (p. 70);

*Scenario ii* - Where the final geminated consonant is a continuant it could be pronounced long while the stops could be modified to allow prolonged pronunciation.

There is [evidence of this happening, at a later period](#), within words but no evidence that it took place in EBHP.

*Scenario iii* - Where the final geminated consonant is a continuant it could be pronounced long while the stops could be pronounced short but with increased muscular tension in the articulating organs and possible alteration in nature and degree of voicing as compared to the non-geminated pronunciation of the same consonants.

[There is evidence that this sometimes happens in Colloquial Arabic](#), but no evidence as to whether it took place in EBHP.

*Scenario iv* - Where the final geminated consonant is a continuant it could be pronounced long while the stops could be pronounced short. [There is evidence that this sometimes happens in Colloquial Arabic](#), but no evidence that it took place in EBHP.

*Scenario v* - The final geminated consonantal cluster could be broken up by the insertion of a, non-phonemic, [anaptyctic vowel](#)<sup>65</sup> as in the [Palestinian/Syrian pronunciation of the Arabic above](#). I.e. \*/**ḥiṣṣ**/ could be pronounced in one of the following ways - \*/**ḥiṣʿəsʿ**], \*/**ḥiṣʿisʿ**], \*/**ḥiṣʿsʿə**]<sup>66</sup>, \*/**ḥiṣʿsʿi**]. There is no evidence to support this scenario for EBHP. In the case of \*/**ḥiṣʿəsʿ**] or \*/**ḥiṣʿisʿ**], if they had occurred in EBHP we would have expected them to develop into TH segolates. I.e. the certain development - \*/**sipru**/ > \*/**sipr**/ > /**səpər**/ \*/**səʿfər**] would be paralleled by \*/**ḥiṣṣu**/ > \*/**ḥiṣṣ**/ >> \*/**ḥəʿṣəṣ**/ which it is not.

*Scenario vi* - The final geminated consonant may be reduced to a simple consonant with [a compensating lengthening of the preceding vowel](#). Under this scenario the development to Tiberian Hebrew would have been

\*/**ḥiṣṣu**/ > \*/**ḥiṣṣ**/ > \*/**ḥeːṣ**/ (/EBHP/) > /**ḥeṣ**/ [ʿ**ḥeːsʿ**]

*Scenario vii* - The final geminated consonant may be reduced to a simple consonant<sup>67</sup> as happens in most Arabic dialects. This could have taken place at any time after the loss of the final short vowels<sup>68</sup>. Under this scenario, supported by Harris<sup>69</sup>, the development to Tiberian Hebrew would have been -

\*/**ḥiṣṣu**/ > \*/**ḥiṣṣ**/ > \*/**ḥiṣ**/ (/EBHP/) > /**ḥeṣ**/ [ʿ**ḥeːsʿ**]

N.b. the close similarities to original *qil* forms such as /'ilu/ > /'e:l/ (/EBHP)

This may or may not result in a reduction of [syllable length](#) in the consciousness of speakers. Note the observation "... that (in Damascus Arabic) final (and pre-consonantal) geminates are phonemic, but not always phonetically realized."<sup>70</sup>

### *Discussion*

A number of major scholars consider that the reduction of final geminated consonants was post-exilic -

- [Sáenz-Badillos](#) (p. 70)
- [Bergstärsser](#)
- [Harris](#)
- [Birkeland](#)

Of the scenarios outlined above, I consider scenarios [\(i\)](#), [\(iii\)](#) and [\(vii\)](#) to be the most probable. In reality, it is not improbable that educated speakers, in formal situations would pronounce final geminates as in scenarios [\(i\)](#) or [\(iii\)](#) long after their being reduced to simple consonants (scenario [\(vii\)](#)) in ordinary speech. This situation has parallels in varieties of spoken Arabic today -

... E(gyptian) A(rabic) and the eastern vernaculars tend to march in step, in that final doubling is usually subject to reduction of length. Thus, as far as e.g. S(yrian) A(rabic) is concerned, the expression -C<sub>x</sub>(C<sub>x</sub>)C/#, in which the second element of doubling is 'removed' before a consonant or pause, covers all cases. Nevertheless, many Syrians distinguish durationally between doubled and single final consonants, especially when these are continuant; such speakers may well pronounce e.g. -mm of muhímm 'important' longer than is the practice among Egyptians, and may distinguish similarly between lam 'not' and lamm 'he gathered', though the contrast is not a very meaningful one and is likely to be restricted to the limited context of word citation. Doubling is, of course, a morphological requirement in all cases, and length 'reappears' when the consonant is no longer pre-pausal, e.g. E(gyptian) A(rabic) xaaS(S) 'special (s.m.)'/'xaaSa `special (s.f.)', l(raqi) A(rabic) faj(j) 'he split'/fájja 'he split it (m.)', daz(z) `he sent/dázza 'he sent him'/dáz(z)ni 'he sent me'/dázzilha 'he sent to her', etc. Notice, too, that, whatever the length of the final trilled or lateral consonant in e.g. ʔamár(r) 'more bitter' and ʔamál(l) 'more boring', both are oxytones as to accentuation and thus opposed to paroxytonic ʔámar 'he ordered' and ʔámal 'hope'. Accentuation again serves to indicate the morphological parallelism between consonant doubling and vowel lengthening, with ʔámar/ʔámar(r) parallel to 'wara 'behind'/wa'raa(h) `behind him'. A medial Iraqi example of this parallelism is provided by the variant forms guulíla and gullíla 'tell (s.f.) (to) him!', yguulúulha and ygullúulha

'they tell her'. Doubling is clearly quite another matter from the assimilated gemination considered subsequently. At the same time it should be said again that further research and experimentation is needed to determine in what circumstances, and by what other phonetic means than duration, final single and doubled consonants are distinguished. The firmness of dento-alveolar contact clearly differs between e.g. E(gyptian) A(rabic) ṣad(d) 'he counted' and ṣaad 'he returned', ʔiswád(d) 'he/it turned black' and ʔáswad 'blacker', mustaʔíd(d) 'ready (s.m.)' and muʔtámíd 'dependent or muʔííd 'useful (s.m.)', tistadíl(l) 'she inquires and báddil 'he changed', muhím(m) 'important (s.m.)' and ʔadiim 'old, ancient (s.m.)', and the nature and degree of voicing as well as muscular tension in the articulating organs, almost certainly differ between members of such contrasts. In K(uwaiti) A(rabic), too, -gg of dagg 'he knocked' is more tensely articulated than -g of ḥádag 'he fished', and one should not take for granted that relevant word-junctions are phonetically identical, as is often implied, between, say, min táani 'from another one' and sín(n) táani 'another tooth'. In Cy(renaican bedouin Arabic), contrast is maintained as to final length between e.g. af'raas 'mares' and both mu'gaSS 'shears, scissors' and am'gaSS 'pairs of shears/scissors', with some reduction in the last case.

The importance of stylistic differences is incontrovertible. The shortening of doubled consonants pre-consonantly and prepausally is a mark of informal style and may be eschewed where appropriate in educated speech. The length of -mm in muhímm is maintained in formal speech, and certainly in the related formal lexical item haamm 'important, which illustrates the rare syllable pattern CVVCC and has, of course, been acquired by the speaker in the process of familiarization with written Arabic. The difference between muhímm and haamm, which conforms to the CA/MSA participial pattern of the doubled verb and not to the typically vernacular CaaC<sub>x</sub>iC<sub>x</sub>, offers to educated speakers one among innumerable lexico-stylistic choices.<sup>71</sup>

... in the same way as many Aden speakers will observe a difference of final consonant length between, say, ʕad 'he counted' and xadd 'cheek', and a difference of length in respect of the final nasal in fam(m) 'mouth' is regularly observable between Benghazi and Jebel speakers in Cyrenaica, so there are speakers of Egyptian Arabic - among them educated ones - for whom the final plosive release differs as between xad 'he took' and xadd 'cheek'<sup>72</sup>

*Measured Consonant Length (in milliseconds)*

[MSA](#) as used in Iraq<sup>73</sup>

<i>Consonant Class</i>	<i>Initial</i>	<i>Medial</i>	<i>Medial <a href="#">Geminated</a></i>	<i>Final</i>	<i>Final <a href="#">Geminated</a></i>
<i>1. <a href="#">Stops</a></i>					
<a href="#">Voiced</a>	130-150	50-60	300-350	180-200	250-300
<a href="#">Voiceless</a>		100-130	300-350	200	325-350
<i>2. <a href="#">Continuants</a></i>					
<a href="#">Nasals</a>	70-100	70-90	275-330	110-140	280-320
<a href="#">Fricatives</a>	100-180	110-200	280-375	90-200	250-350

*Decision Regarding Form Used in [EBHP] Transliterations and Sound Files - <kl> "all of-" /,kull/; [kull]*<sup>74</sup>

*2. Aramaic and Arabic as Guides to Reconstructing EBHP*

[CBH](#) (original pronunciation termed [EBHP](#)) was a literary dialect of extinct ancient language which was spoken, or at least written and understood, by people having a range of native dialects over a period of half a millennium. The contemporary epigraphic remains from the period of its living use ([EH](#)) are miniscule compared to the vast written records of [Akkadian](#) (vocalized), Sumerian and even [Ugaritic](#). The writing system used, being largely consonantal, gives only the rarest hints of the quality and quantity of the language's vowels. The fullest vocalization systems, which have been imposed on a consonantal text having some vowel letters, date from the

early Middle Ages and were developed by scholars whose native language was Aramaic and whose phonology and general linguistic instincts were profoundly Aramaic. Traditional Jewish and Samaritan pronunciations have been passed down by groups whose linguistic instincts and phonology were formed by their spoken language (see [Ashkenazi](#), [Sephardi](#), [Mizrahi](#), [Yemenite](#), [Tiberian](#), [Samaritan](#) Hebrew). However, after abandoning Hebrew as their spoken tongue, these groups spoke, sequentially, a series of other languages. The Samaritans spoke and wrote Aramaic and then [Arabic](#). The Middle Eastern Jews spoke Aramaic and sometimes Greek followed by Arabic and Persian (Iran and some other areas). The Eastern European Jews mainly spoke sequentially Aramaic and sometimes Greek or Latin, Romance, Old French, German dialects and Yiddish. Of course, languages themselves were themselves constantly evolving. Transcriptions into other languages of EBHP's period - Akkadian, Egyptian - are rare and often difficult to evaluate. Transcriptions, mainly of proper names, into Greek date from 300 to 1000 years after the period of EBHP. Of course, as a dead language there are no native informants who can be interviewed and recorded to verify their pronunciation(s).

Under these circumstances the knowledge gleaned from the [MT](#) must be supplemented by knowledge of general linguistics, comparative Semitics and the living [Semitic languages](#). Two Semitic languages are of the greatest importance:

#### a) Aramaic

Aramaic is the best known Semitic language closely related to Hebrew. [As described elsewhere in detail](#):

Starting in the early sixth century B.C.E. all Hebrew speakers would have been exposed to Aramaic. Indeed, from early in the 6<sup>th</sup> century B.C.E. until the extinction of Hebrew as a spoken language in the 2<sup>nd</sup> century C.E. Hebrew was under continuous pressure from Aramaic; a language as closely related to Hebrew as Spanish is to Italian. Aramaic was the language of their non-Jewish neighbors (except for some Hellenized Syrians), the normal spoken language of the Jews of

Babylonia, the Galilee and of many Jews in Judea. Aramaic was a language spoken in Jerusalem from the late 6<sup>th</sup> century B.C.E. and may have been its majority tongue. Many Hebrew speaking Jews in Judea would have had various levels of competence in Aramaic as a second language. Since at least the second century C.E. the transmitters of the reading/pronunciation traditions for both Biblical and Mishnaic Hebrew were speakers of Aramaic. By the time of the [Masoretes](#), Hebrew had not been a spoken language for 700 years and the tradition(s) of Hebrew pronunciation had been subject to overwhelming Aramaic linguistic pressure for over a millennium and a half. The linguistic pressure from Aramaic not only increased the impetus for change but determined its nature.

Finally, the scattered [Neo-Aramaic](#) dialects provide information on the pronunciation of a Semitic language by groups whose ancestors have spoken Aramaic for 1000-2000+ years.

b) Arabic

## Box

### Arabic and Hebrew Parallels in Diachronic Development

"In his essay "Note sur une difficulté générale de la grammaire comparée", Antoine Meillet, the eminent French linguist, noted that languages which belong to the same group (or dialects of the same language) tend to develop along the same lines, even when there is no contact between them.<sup>75</sup> The subject we propose to deal with may serve to observe the applicability of Meillet's conclusion to the field of Semitics - to be more precise, to a segment of the field: Arabic and Hebrew. The fact that the developments we are concerned with - from [Classical Arabic](#) into [Arabic Dialects](#) and from Proto-Biblical Hebrew into Biblical Hebrew are not parallel in time, constitute no difficulty. As is well known, processes that lead to change in language are not necessarily restricted to any one period; they may be bound in occurrence and duration to same defined periods in the lifetime of a certain language, but this in no way precludes their emergence at any period."<sup>76</sup>

*Quoted from [Morag 1989](#) p. 94.*

As well as parallel development, one has to take mutual contact between dialects into account. Here we are presented with one of the decisive problems of the formation of the Semitic languages. Some Semitists still try to explain the emergence of the several Semitic languages and dialects by the exclusive application of the family-tree theory: they regard the dividing process that affects a homogeneous language as the only impelling power from which new idioms originate.... (T)he family-tree theory does not account for the interrelation of the *Semitic* languages .... (T)he characteristics of the Canaanite dialects did not emerge in a ProtoCanaanite prehistoric



## Arabic and Hebrew Parallels in Diachronic Development

period, but arose, in historical times, presumably from Northwest Semitic, through mutual contact in accordance with the wave theory, and through parallel development. So the term 'Canaanite' applies to the result of the linguistic development, but not to the development itself.

This presentation of the development of the Canaanite dialects becomes all the more probable in the light of its exact parallel by the formation of the modern Arabic dialects. These idioms, though differentiated along geographical and/or social lines ... reveal distinctly homogeneous character. Owing to their common features, one may even speak, *mutatis mutandis*, of an Arabic koine, but one has to remember that this term, once more, applies only to the result of linguistic development, and not to the development itself. The koine is not the forerunner of the linguistic process, with the dialects splitting off from a more or less uniform speech (viz., the koine), but itself emerged only as the consequence of linguistic development.... Accordingly, the common features of the Arabic dialects, especially of the sedentary vernaculars, are not accounted for by their common origin alone (as in the family-tree theory). Some of the features are due to parallel developments, the general 'drift'. To this category belong, e.g., features such as the loss of the glottal stop, the reduction of the inflexional categories, producing a more analytical type in general, the increase of the symmetry in grammar ... the restriction of the dual, the disappearance of *verba tertiae waw*, the *nisba -i*, the merger of *dad / za*, and further, for example, the use of reflexive verbal forms instead of the internal passive. In many of these features (such as the emergence of a more analytical type in general, including, for example, the restriction of the dual; and further, the disappearance of *verba tertiae waw*, and the *nisba -i*), the Arabic dialects tally with Hebrew and/or Aramaic as against Classical Arabic, thus repeating the development by which these Old Semitic languages were transformed many hundreds of years before. The fact that the Arabic sedentary dialects were affected by the same changes as other Semitic languages in prehistoric periods, points plainly to the existence of a general tendency that transformed different languages independently.

Quoted from [Blau 1965](#) pp. 41-42

Classical Arabic is a key resource in understanding the structure and phonology of early Canaanite ([Stress Period 1](#)) and the phonology of EBHP. [Modern Arabic dialects](#) are of the greatest importance in reconstructing the relationship between short vowel phonemes and their ranges of pronunciation and in ["hearing" patterns](#) of short and long vowels which have been preserved in Arabic but lost in the modern pronunciations of Hebrew.

## Box<sup>77</sup>

### The Independent Pronouns in EBHP and [Colloquial Arabic Dialects](#)

In its system of pronouns, Hebrew discloses, for a number of persons, two allomorphs - one terminating in a vowel, the other with a consonant or, possibly, short unstressed vowel.

<i>Person</i>	<i>Independent Pronouns in EBHP (<sup>77</sup>EBHP/)</i>	
	Allomorph Ending with a <a href="#">Consonant</a> or Short Vowel	<a href="#">Allomorph</a> Ending with a Long Vowel
2 <a href="#">ms.</a>	את /ʔat(t)/ or /ʔatta/ <sup>78</sup>	אתה /ʔatta:/ <sup>79</sup>
2 <a href="#">fs.</a>	את /ʔat(t)/ or /ʔatti/	אתי /ʔatti:/ <sup>80</sup>
3 <a href="#">ms.</a>	הוא /ʔhū/ or /ʔhuʔ/ or /ʔhuʔa/	הואה /ʔhuʔa:/ <sup>81</sup>
3 <a href="#">fs.</a>	היא /ʔhî/ or /ʔhiʔ/ or /ʔhiʔa/	היאה /ʔhiʔa:/ <sup>82</sup>
2 <a href="#">mp.</a>	אתם /ʔatʔim/ or /ʔatʔima/	אתמה /ʔatʔima:/ <sup>83</sup>
2 <a href="#">fp.</a>	אתן /ʔatʔin(n)/ or /ʔatʔinna/	אתנה /ʔatʔinna:/ <sup>84</sup>
3 <a href="#">mp.</a>	הם /ʔhim(m)/ or /ʔhimma/	המה /ʔhimma:/
3 <a href="#">fp.</a>	הן /ʔhin(n)/ or /ʔhinna/ <sup>85</sup>	הנה /ʔhinna:/

A somewhat similar picture obtains in the pronominal systems of Arabic dialects. To exemplify the lines of resemblance, we shall here present the pronominal systems of some dialects in the Syro-Israeli area.

## The Independent Pronouns in EBHP and [Colloquial Arabic Dialects](#)

<i>Person</i>	<i>Urban Dialects</i>		<i>Rural Dialects</i>	
	Damascus	Bišmizzīn (Lebanon)	Hōrān	Bīr Zēt
1 <a href="#">cs.</a>	ʾana	ʾana	ani	ana
2 <a href="#">ms.</a>	ʾente	ʾinti, ʾint	ənte, ənt	inte, int
2 <a href="#">fs.</a>	ʾenti	ʾinti	ənti	inti
3 <a href="#">ms.</a>	hūwe	huwwi, hū	hū, hūwa	hū
3 <a href="#">fs.</a>	hiye	hiyyi, hī	hī, hīye	hī
1 <a href="#">cp.</a>	nəḥna	niḥna	əḥne, əḥna	iḥna
2 <a href="#">mp.</a>	ʾəntu	ʾintu	əntu	intu
2 <a href="#">fp.</a>			əntenn	intin
3 <a href="#">mp.</a>	hənnə	hinni, hin	huMM, huMMa	him
3 <a href="#">fp.</a>			henn, henne	hin

The following points are worthwhile noting;

(a) the preservation, from a historical point of view, of the final vowel in the 2nd pers. masc. sing.: Hebrew *ʾatta*, Arabic dialects *inte* (and variants).

(b) in the Hebrew forms for the 3rd pers. mast. and fem. sing. and plur. which have a vowel termination - *huʾa*, *hiʾa*, *hemma*, *henna* - the final vowel *ā* possibly goes back to ancient *-at*. Cf, *hmt* in ancient Phoenician (Byblian) and *hwt*, *hyt*, *hmt* in Ugaritic (in the genitive-accusative case) as well as the genitive-accusative pronominal morphemes *šūātu/i*, *šāti/u* (third pers. masc. sing.), *šuiāti*, *šāti* (fem. sing.), *šunūti* (mast. plur.) and *šināti* (fem. plur.) in

## The Independent Pronouns in EBHP and [Colloquial Arabic Dialects](#)

Akkadian.

As to the longer forms in Arabic dialects (*hūwe*, *huwwi*, etc, for the masc. and *hīye*, *hiyyi* for the fem.), there seems to be no evidence to indicate such a historical development. What would seem plausible is either the assumption that the longer forms have preserved the final vowel of Classical Arabic (*huwa*, *hiya*), or, that they developed a new final vowel. But here we touch upon a rather intricate question, the existence of a final vowel in a number pronominal forms (cf. above table) in many Arabic dialects.

### *3. Diglossia<sup>86</sup> and Dialect in PExH: What do we mean by Judahite and Israelian Hebrew? - Clarification from Colloquial Arabic*

For an outline of the issues involved and the evidence available [follow this link](#). Key points are:

- i. The range of dialects, and nature of dialect development, in Iron Age Palestine was probably [similar to that of Levantine Arabic](#) c. 1920 - i.e. before the recent mass urbanization and the introduction of mass communications and schooling.
- ii. Though we probably can linguistically distinguish pre-Exilic from post-exilic Hebrew in many cases<sup>87</sup> we cannot do more than guess at the influence of dialect in the biblical text. Some key reasons for this are:
  - a) We have too little knowledge of the spoken dialects of any part of the region;
  - b) We have too little knowledge of the linguistic implications of literary forms ([gattung](#)) in pre-exilic Jerusalem.

The following is quoted from the important study "The Elijah-Elisha Narratives: A Test Case for the Northern Dialect of Hebrew" ([Schniedewind-Sivan 1997](#)) -

The Elijah-Elisha narratives contain a disproportionate number of linguistic anomalies which have usually been accounted for by tracing these narratives to an early collection of prophetic stories written in Northern Hebrew. Using the criteria developed by Avi Hurvitz and Gary Rendsburg, this study critiques previous studies of Northern Hebrew and provides a comprehensive analysis of the linguistic anomalies of 1 Kings 17-2 Kings 8. It is argued, first of all, that the linguistic

anomalies of these narratives reflect literary stylizing by the biblical authors. In most cases, there is simply not enough evidence to point specifically to Northern Hebrew. The heaviest concentration of linguistic anomalies are in the folktales of 1 Kings 17 and 2 Kings 4-6, reflecting most likely the genre of these stories. A higher concentration of Aramaisms appears in 1 Kings 20 and 2 Kings 6, that is, chapters that deal with the Aramaeans. Additionally, there is a heavy concentration of linguistic anomalies in direct speech. Some text critical evidence indicates that Northern Hebrew features may have been lost in the course of the transmission of the biblical text. The overall evidence suggests that the literary dialect of Jerusalem and Samaria were remarkably similar. The main differences between Judaeen and Northern Hebrew were in the spoken language.<sup>88</sup>

As aptly put by Schniedewind and Sivan<sup>89</sup>

Although Rendsburg made some advances, his pan-Northern Hebrew approach is unconvincing. In general, he exaggerates the evidence for Northern Hebrew. Moreover, he relies too heavily on random lexical items. More emphasis should be placed on morphological items when describing Hebrew dialects, even though the evidence is rather limited. A more balanced assessment of the issue is that of Chaim Rabin: "The geographical separation of Judah and its non-participation in the political events affecting the North must also have led to a certain amount of linguistic separation. How large this gap was, we cannot properly gauge.... Our ignorance of the vernacular background prevents us from deciding whether any individual case represents the colloquial, the local northern writing style, slang, fashion, or the exuberant inventions of a great writer."<sup>90</sup> For example, we have noted the concentration of Aramaisms in 1 Kings 20 and 2 Kings 6, chapters that deal with conflicts with the Aramaeans. There also seems to be a higher concentration of linguistic anomalies in the folktales of 1 Kings 17 and 2 Kings 4-6. These may be understood either as resulting from the northern origin of these narratives or arising partially from the genre of these narratives. In addition, there seems to be an unusual number of linguistic peculiarities that are in direct speech as opposed to narrative prose.<sup>105</sup> This may reflect a situation of diglossia (vernacular as opposed to literary register); it certainly reflects a measure of literary stylizing.

Decision - We have no way of knowing whether the gap between the ordinary speech of the ruling circles and the written form CBH was substantial enough to qualify as 'diglossia'<sup>91</sup>. However, it is very likely that the post-exilic spoken Hebrew of Jerusalem (my [PMH](#)) was almost as far removed from the CBH/PCBH being written at the time as is MSA from the colloquial Arabic dialects. This would indeed be a classic diglossia.

#### *4. Aramaic as a Litmus Test to Separate Pre- and Post-Exilic Changes in Biblical Hebrew*

N.b. Moscati has conveniently outlined the changes that occurred in Hebrew<sup>92</sup> and Aramaic<sup>93</sup>.

My interest is in recreating, as closely as possible, the pronunciation of [EBHP](#) ([EBHP]). Given the huge and ramified [Aramaic influence](#) on Hebrew in the post-exilic period, and its virtual absence in the pre-exilic period my approach is to assume that generally BH forms that did not conform to Palestinian Aramaic pronunciation rules were modified, in the post-exilic period, to conform to those rules. While forms similar to Aramaic that appear in Tiberian Hebrew may or may not be post-exilic in origin. On the other hand, changes from a form shared with Aramaic to a form unique to Hebrew were unlikely to take place in the post-exilic period. A number of examples follow.

However, there are clearly some exceptions to this general assumption, such as -

- (1) [Pretonic Vowel Lengthening](#);
- (2) the late post-exilic stress shift whereby originally penultimately stressed words having stressed short vowels in open syllables [shifted their stress to the final syllable](#).

#### *Specific issues -*

a) [Tonic Lengthening of Originally Short Vowels in Closed Stressed Syllables](#) in Nouns in the Absolute Case. As Blau put it<sup>94</sup> -

As for the dropping of the final short vowels, it took place apparently in three stages. At first, nouns in *status constructus* dropped their final short vowels ..., then verbs<sup>95</sup> and at last nouns (including participles) in *status absolutus*.<sup>96</sup> Owing to the elision of short final vowels in the *status absolutus*, short vowels in the preceding open syllable which now had become closed, were compensatorily lengthened (viz. *a* to *a:*, *i* to *e:*, and *u* to *o:*; as *'dagu* > <sup>97</sup>דג "fish" [Cf. [Harris 1939](#) pp. 60-62] (as against *'qallu* > קל "light", because it was originally closed); *ya'sinu* > <sup>98</sup>ישן "sleeping"; *ya'guru* > <sup>99</sup>יגור "being afraid"). This compensatory lengthening did not take place during the dropping of the

final short vowels from the *status constructus* and verbs, and since during its operation these word classes already exhibited closed final syllables, they were not lengthened at all (therefore: שָׁמַר, דָּגָה "he kept", with final short vowels, viz. *pataḥ*. Since the *šere* and *holem* in יָשָׁן<sup>100</sup> "he slept" and יָגוֹר<sup>101</sup> "he was afraid" correspond to *pataḥ*, they have to be considered short as well, whereas the same words when serving as participles contain long *šere* and *holem*, similarly נִשְׁמַר *qtl*/as against the participle מְבַדֵּל, נִשְׁמַר *qtl*/y*qtl* against the participle מְבַדֵּל).

Other major scholars more or less agree with this dating -

- [Bergsträsser c. 900 - c. 600 B.C.E](#)
- [Harris c. 2000 - c. 900 B.C.E.](#)
- [Birkeland c. 2000 - c. 900 B.C.E.](#)

*Discussion* - Aramaic dialects did not exhibit tonic lengthening [a] to [a:] and, in the active participles of the *peal* (*qāṭil/qāṭeḥ*) and *paal* the second vowel remained short. This makes it probable that Hebrew tonic lengthening, occurred as outlined by Blau.

*Decision Regarding Form Used in [EBHP] Transliterations and Sound Files* - In EBHP, owing to the elision of short final vowels in nouns in the absolute state, short vowels in the preceding open syllable which now had become closed, were compensatorily lengthened. The term "nouns" includes participles and infinitives. E.g.

\*ga'dulu/ (PH) "big [ms.](#)" > \*ga'do:l/ \*[ge'do:l] (EBHP) → /gā'dol/ (/TH/+) \*[gɔ:'ðo:l] ([TH]); BUT,

\*gadu'latu/ (PH) "big [fs.](#)" > \*gadu'lâ/ \*[gedo'le:] (EBHP) → /gədo'lâ/ (/TH/+) \*[gəðo:'lɔ:] ([TH])

\*ka'bidu/ > (PH) "heavy [ms.](#)" > \*ka'be:d/ \*[ke'be:d] (EBHP) → /kā'bəd/ (/TH/+) \*[kɔ:'vɛ:ð] ([TH]); BUT,

\*kabi'datu/ (PH) "heavy [fs.](#)" > \*kabi'dâ/ \*[kebe'de:] (EBHP) → /kəbe'dâ/ (/TH/+) \*[kəvɛ:'ðɔ:] ([TH]).

b.) [Segolates](#) (m.p.) - example mp. absolute form of <šalm> = "effigy" in both Hebrew and Aramaic (The other segolates are analogous).

i) *Aramaic Form* - לְמִינֵי שָׁלִים /šal'mīn/ \*[šalə'mi:n]

ii) *Historical Development of the Aramaic Form* - \*/šala'mīna/ → /šal'mīn/

iii) *Tiberian Hebrew Form* - שְׁלָמִים /šəlä'mim/ \*[s'ələ:'mi:m]

iv) *Historical Development of the Tiberian Hebrew Form* -

\*/šala'mīma/ >> \*/šala'mīm/<sup>102</sup> (/EBHP/+) > \*/šəla:'mīm/ > /šəlä'mim/ (/TH/+)

v) *Discussion* - The TH form must be a development of the BH form. For the lengthening /a/ > /a:/ see [Tonic Lengthening of Originally Short Vowels in Closed Stressed Syllables in Nouns in the Absolute Case](#).

*Decision Regarding Form Used in [EBHP] Transliterations and Sound Files* - The mp. of segolate nouns takes the form \*/šala'mīm/ \*[s'ələ:'mi:m]

c.1) Noun having primitive long vowel followed by primitive short vowel example Hebrew <wlm> Aramaic <lm> = "eternity or world"

i) *Aramaic Form* - ܠܡ ܥܠܡ /cā'lam/

ii) *Historical Development of the Aramaic Form* - \*/cālamu/ → \*/cā'lam/ > /cā'lam/

iii) *Tiberian Hebrew Form* - ܠܡ ܥܠܡ /cō'lām/ \*[ʕo:'la:m]

iv) *Historical Development of the Tiberian Hebrew Form*

\*/cālamu/ > \*/cōlamu/ → \*/cō'la:m/ (/EBHP/+) > /cō'lām/ (/TH/+)

v) *Discussion* - The MT Hebrew form must be a development of the BH form. For the lengthening of the *a* see [Tonic Lengthening of Short Vowels in Closed Stressed Syllables in Nouns in the Absolute Case](#)

*Decision Regarding Form Used in [EBHP] Transliterations and Sound Files* - In [EBHP](#) the m.p. of these nouns takes the form \*/cō'la:m/ \*[ʕo:'la:m]



c.2) Noun primitive long vowel followed by primitive short vowel – eg. *pl.* absolute form of Hebrew <wlm> Aramaic <lm> = "eternity or world" example masc.

i) *Aramaic Form* - מִן לְמִינָא \*['ɬo:lə'mi:n]

ii) *Historical Development of the Aramaic Form* - \*/āla'mīna/ → \*/āl'mīn/ > /ɔl'min/

iii) *Tiberian Hebrew Form* - מִן לְמִימָא \*['ɬo:lɔ:'mi:m]

iv) *Historical Development of the Tiberian Hebrew Form*

\*/āla'mīma/ > \*/ōla'mīma/ > \*/ōla'mīm/ (/EBHP/+) > \*/ōla:'mīm/ → /olā'mim/ (/TH/+).

v) *Discussion* - The MT Hebrew form must be a development of the BH form. See also [pretonic vowel lengthening](#).

*Decision Regarding Form Used in [EBHP] Transliterations and Sound Files* - In [EBHP](#) the mp. of these nouns takes the form \*/ōla'mīm/ \*['ɬo:lə'mi:m].

d) Second person masculine singular suffix on singular noun <bdk> "your (ms.) servant (m.)

i) *Aramaic Form* - בְּדָכְךָ \*['ɬav'dɔ:x]

ii) *Historical Development of the Aramaic Form* - \*/ab'daka/ > \*/ab'da:k/ > /ab'dāk/

iii) *Tiberian Hebrew Forms*

בְּדָכְךָ \*['ɬevdɔ'xɔ:]; בְּדָכְךָ (pausal) /ab'dɛkâ/ \*['ɬev'dɛ:xɔ:]

iv) *Historical Development of the Tiberian Hebrew Form* -

*Contextual* - \*/ab'daka(:)/ (/EBHP/) \*['ɬeb'dɛkɛ'] ([EBHP]) > \*/ab'd<sup>ka</sup>/ > /ab'd<sup>kâ</sup>/ (/TH/+)

*Pausal* - \*/ab'daka(:)/ (/EBHP/) → \*/ab'de:ka:/ → /ab'dɛkâ/ (/TH/+)

v) *Discussion* - [Epigraphic Hebrew](#) with singular noun suffix always <k> but with plural noun either <yk> or <ykh>. <sup>103</sup> Perhaps with singular noun it might have been pronounced \*[ɛk], \*[kɛ] or \*[kɛ'] while with plural noun it would have been either \*[kɛ] or \*[kɛ']. It seems most probable that the suffix was generally unstressed \*[ka] in EBHP <sup>104</sup>.

In [MH](#)<sup>105</sup> the form was עֲבֹדָה <sup>עֲבֹדָה</sup> (<sup>עֲבֹדָה</sup> < \*/<sup>עֲבֹדָה</sup>ab'da:k/) i.e. identical to the Aramaic and clearly a result of Aramaic influence<sup>106</sup>.

*Decision Regarding Form Used in [EBHP] Transliterations and Sound Files -*  
\*/áka(:)/; \*[éke]

e) [Second person feminine singular suffix on singular noun](#) <bdk> "your (fs.) servant (ms.)"<sup>107</sup>

i) Aramaic Form - כִּי עֲבֹדָה <sup>כִּי עֲבֹדָה</sup> [Biblical Aramaic](#) (BA)<sup>108</sup>; Qumran Aramaic בְּנַפְשִׁי, בְּטִלְכִּי, לְחֶמֶךְ  
<sup>109</sup>; עֲבֹדָה <sup>עֲבֹדָה</sup> [Galilean Aramaic](#) (GA)<sup>110</sup>

ii) *Historical Development of the Aramaic Form* - \*/<sup>עֲבֹדָה</sup>ab'dik/ > /<sup>עֲבֹדָה</sup>ab'dik/ \*/<sup>עֲבֹדָה</sup>av'di:x]

iii) *Tiberian Hebrew Form* - עֲבֹדָה <sup>עֲבֹדָה</sup> \*/<sup>עֲבֹדָה</sup>ev'de:x].

iv) *Historical Development of the Tiberian Hebrew Form* - \*/<sup>עֲבֹדָה</sup>ab'dik/ → \*/<sup>עֲבֹדָה</sup>ab'de:k/ (/EBHP/) →  
/ab'de:k/ (/TH/).

v) *Discussion* - MH form was עֲבֹדָה <sup>עֲבֹדָה</sup>. identical to the Aramaic due to Aramaic influence.

Since in the early post-exilic period Aramaic still had the suffix /ki(:)/ it is unlikely that the final vowel was lost in the early post-exilic period. Therefore, we should assume that the shift \*/iki(:)/ → /é:k/ was pre-exilic.

*Decision Regarding Form Used in [EBHP] Transliterations and Sound Files*  
/é:k/ \*[e:k]

f) [Second person feminine singular nominative independent pronoun](#)

i) *Aramaic Form* - אַתְּ אַתְּ

ii) *Historical Development of the Aramaic Form* - \*/<sup>אַתְּ</sup>anti/ or \*/<sup>אַתְּ</sup>anti/ > /<sup>אַתְּ</sup>atti(:)/ and [/at\(t\)/](#)

iii) *Tiberian Hebrew Form* - אַתְּ<sup>111</sup>, אַתְּ<sup>112</sup>

iv) *Historical Development of the Tiberian Hebrew Form*

\*<sup>ʾ</sup>anti/ or \*<sup>ʾ</sup>ant<sup>i</sup>/ (PH) > \*<sup>ʾ</sup>at(t)/ (EBHP)

v) *Discussion* - Since in the early post-exilic period Aramaic still had the form <ty> we can safely assume that *t* would have been preserved in the Hebrew biblical reading tradition if it still existed in early post-exilic times.

*Decision Regarding Form Used in [EBHP] Transliterations and Sound Files - The EBHP form was \*<sup>ʾ</sup>at(t)/, \*<sup>ʾ</sup>ett or \*<sup>ʾ</sup>et*

g) Third Person Feminine Singular Pronominal Suffix on Singular Noun

i) *Aramaic Form* - /-ah/

ii) *Historical Development of the Aramaic Form* - \*/-áh/ > /-áh/

iii) *Tiberian Hebrew Form* - /-óh/ \*[-ó:h]

iv) *Historical Development of the Tiberian Hebrew Form*

\*/-áh/ (PH) > \*/-â/ (EBHP) > \*/-âh/ (PTH) > /-óh/ \*[-ó:h]. This seems to be the position embraced by Blau<sup>113</sup> and Hendel-Lambdin-Huehnergard.

v) *Discussion* - instances, such as Cairo Arabic, where the 3ms. pronominal suffix attached to nouns varies between *uh* and *u*,<sup>114</sup> clearly demonstrates that in EBHP \*/-áh/ \*[-áh] and \*/-â/ \*[-é:] could well have coexisted over extensive periods. If this were the case, post-exilic Aramaic influence would probably have assured the eventual dominance of the form ending in /h/.

*Decision Regarding Form Used in [EBHP] Transliterations and Sound Files*

\*/-â/ \*[-é:] for the EBHP form. This follows the views of most major scholars.

## h) Third Person Masculine Plural Pronominal Suffix on Singular Noun

i) *Aramaic Form* - /-'ho:n/

ii) *Tiberian Hebrew Form* - /-ǝm/ \*[-ǝ:m]

iii) *Historical Development of the Tiberian Hebrew Form*

\*/'hima/ (PH) → \*/-á:m/ (EBHP) > /-ǝm/ \*[-ǝ:m] (TH)

iv) *Discussion* - The form <m> "their" occurs in one JEH inscription.<sup>115</sup> This makes it clear that the shift \*/'hima/ → \*/-á:m/ was pre-exilic. An additional support for this conclusion is that if \*/'him/ \*['hɪm] / \*['hɛm] had been the early post-exilic form, Aramaic influence would probably have assured the eventual dominance of the longer form.

Note - most spoken Arabic dialects use forms such as *hum/hon/hin* for this inflection<sup>116</sup>. However, some Lebanese dialects use *ǝm*.<sup>117</sup>

### *Decision Regarding Form Used in [EBHP] Transliterations and Sound Files*

\*/-á:m/ \*[- á:m].

i) Characteristic Vowel of the *hithpael*

*Hithpael in Aramaic and Biblical Hebrew*

	<i>Aramaic</i>	Tiberian Hebrew <u>/TH+ / * [TH]</u>	<u>BH<sub>Bab</sub></u> <sup>118</sup>	EBHP * <u>/EBHP / * [EBHP]</u> (c. 850-550 BCE)
<u>SC</u>	hitqattal/’etqattal	/hitqat’tel/ [hiθqet’tɛ:l]	hitqattā/εl	/hitqat’til/ [hɪtqet’tɪl] / <u>[hitqet’tɛl]</u> OR /hitqat’tal/ [hɪtqet’tɛl]
<u>PC</u>	yitqattal	/yitqat’tel/ [yiθqat’tɛ:l]	yitqattā/εl	/yitqat’til/ [yɪtqet’tɪl] / <u>[yɪtqet’tɛl]</u> OR /yitqat’tal/ [yɪtqet’tɛl]
<u>a.p.</u> <u>abs.</u> state	mitqattal	/mitqat’tel/ [miθqet’tɛ:l]	mitqattēl	/mitqat’tɛ:l/ <sup>119</sup> [mitqet’tɛ:l]
a.p. <u>constr.</u> state	mitqattal	/mitqat’tel/ [miθqet’tɛ:l]	mitqattēl	/mitqet’til/ [mitqet’tɪl] or <u>[mitqet’tɛl]</u>
<u>inf.</u> <u>constr.</u> <u>abs.</u> state	hitqattālā / ’etqattālā	/hitqat’tel/ [hiθqet’tɛ:l]	hitqattā/εl	/hitqat’tɛ:l/ [hɪtqet’tɛ:l]
inf. constr. constr. state		/hitqat’tel/ [hiθqet’tɛ:l]		/hitqat’til/ [hɪtqet’tɪl] or <u>[hɪtqet’tɛl]</u>
<u>imp.</u> ms.	’itqattal	/hitqat’tel/ [hiθqet’tɛ:l]	hitqattā/εl	/hitqat’til/ [hɪtqet’tɪl] / <u>[hɪtqet’tɛl]</u>

N.b.Babylonian pointing uses a single sign for both [a] and [ɛ].

As shown above, the Babylonian tradition indicates that the vowel following the second root consonant of the *hithpael* is [a/ɛ] except for the participle where it is [ɛ]. In contrast, in the Tiberian tradition the vowel following the second root consonant of the *hithpael* is

typically /ə/ throughout. However, in both traditions the vowel is [ɔ] in pause. In Aramaic it is /a/ throughout.

[Blau](#) considers that the Babylonian tradition is more original. He attributes the shift /a/ (EBHP) > /ə/ (TH) to the influence of the *piel*<sup>120</sup>. [Hendel-Lambdin-Huehnergard](#) (p. 40) considers that [i] was the characteristic vowel throughout in [PH](#).

#### Discussion

[EBHP] \*/hitqat'tal/ etc. [could have been pronounced](#) as \*[hitqet'tel] or \*[hitqet'tel] whereas \*/hitqat'til/ etc. [could have been pronounced](#) as \*[hitqet'til] or \*[hitqet'tel] or \*[hitqet'tel].

The [ɔ] of the pausal form of both traditions argues for an underlying EBHP form having /a/ as the vowel following the second root consonant except in the participle.

The influence of Aramaic would have encouraged a post-exilic shift /hitqat'til/ > /hitqat'tal/ but would have resisted a shift in the opposite direction.

There is no way at present to decide between these alternatives.

#### *Decision Regarding Form Used in [EBHP] Transliterations and Sound Files*

As shown in the [table above](#) except where the MT has a pausal having qamaṣ following the second root consonant which I assume reflects EBHP forms having /a/ [e] in the same position.

#### j) Ending of Suffix Conjugation 3fs of III-y Verbs

i) *Aramaic Form* - בָּנַת (√bny Biblical Aramaic [Rosenthal 1968](#) p. 66), חֲמַת (√bny Palestinian Jewish Aramaic [Sokoloff 1990](#) p. 205), חֲזַת (√hzy Palestinian Jewish Aramaic [Stevenson 1924](#) p. 68), שְׁתִּיאַת (√šty Palestinian Jewish Aramaic [Stevenson 1924](#) p. 68)

ii) *Historical Development of the Aramaic Form* - \*/banayat/ ([PNWS](#)) → \*/bna:t/ > /bənoʔt/

iii) *Tiberian Hebrew Form* - גָּלְתָּה, נָגְלְתָּה etc.

iv) *Historical Development of the Tiberian Hebrew Form* -

\*/ba'nayat/ (PH) → \*/ba'na:t/ > \*/ba'nata:/ (EBHP) > \*/ba:nə'ta:/ (PTH) > /כְּנֹעַת/ \*[כְּנֹעַת:] (TH)

v) *Discussion* - The [Siloam Inscription](#) (line 3), written in Jerusalem c. 700 BCE, has the form הִית which should probably be vocalized \*/ha'ya:t/. [MH](#) (sometimes?) uses a form similar to the Aramaic - e.g. <sup>121</sup>הִית i.e. it reflects the form that is deduced to underlie the [TH](#) form<sup>122</sup>.

There are three alternatives:

- a) The EBHP form was eg. \*/ha'ya:t/ with \*/ha'ya:t/ > \*/ha'yata:/ being a post-exilic development;
- b) The EBHP form had developed into eg. \*/ha'yata:/ in the pre-exilic period while [the rustic dialects, underlying MH](#), and the form used by the builders of the Siloam tunnel, had retained the older form \*/ha'ya:t/; or,
- c) The EBHP form had developed into eg. \*/ha'yata:/ in the pre-exilic period reverting to the older form /ha'ya:t/ under the influence of Aramaic in post-exilic times.

The post-exilic influence of Aramaic would seem to eliminate alternative (a). Alternative (c) would probably have left traces in the reading tradition which are not there and would not explain the use of הִית in the Siloam inscription.

*Decision Regarding Form Used in [EBHP] Transliterations and Sound Files -*  
[Alternative \(b\)](#).

#### k) Stress Patterns of the Imperatives

i) *Biblical Aramaic Form* - כְּתֹב, כְּתִבִּי, כְּתֹבוּ, כְּתִבּוּ

ii) *Historical Development of the Aramaic Form* - כְּתֹב (\*/[kutub/](#) → /[kə'tub/](#)); כְּתִבִּי (\*/[ku'tub/](#) → /[kə'tubi/](#)); כְּתֹבוּ (\*/[ku'tub/](#) → /[kə'tubū/](#)).

iii) *Tiberian Hebrew Form* - כְּתֹב (pausal כְּתֹבָה), כְּתִבִּי (pausal כְּתִבִּי), כְּתֹבוּ (pausal כְּתִבוּ)

iv) *Historical Development of the Tiberian Hebrew Form* - See [History of Stress and Pronunciation of the Hebrew Participles, Imperatives and Infinitives](#)

v) *Discussion* - The stress patterns of the [TH](#) contextual imperatives, as indicated by the pausal forms, seems to have originated from that reflected in Biblical Aramaic and later

Palestinian Jewish Aramaic and there is evidence that the stress patterns of the imperatives of Mishnaic Hebrew were similar to those of Aramaic. It is likely that the TH pausal imperative stress pattern reflects EBHP and that spoken Hebrew later reverted to the Aramic pattern under Aramiac influence

*Decision Regarding Form Used in [EBHP] Transliterations and Sound Files - See [History of Stress and Pronunciation of the Hebrew Participles, Imperatives and Infinitives](#)*

m) *Philippi's Law*<sup>123</sup> - /l/ in a closed stressed syllable changes to /a/. The date of *Philippi's Law* and its extent are much debated.<sup>124</sup> It is not clear whether the effect of *Philippi's Law* is found in the Hebrew underlying the Secunda<sup>125</sup>. Scholars who deduced that *Philippi's Law* started to affect Hebrew at an early stage include:

- [Bergsträsser c. 2000 - c. 900 B.C.E](#)
- [Harris c. 2000 - c. 900 B.C.E.](#)

The Greek transliterations indicate that the Hebrew underlying the Secunda was read *qittiltā* and *hiqtiltā* in place of MT *qittalta* and *hiqtaltā* respectively<sup>126</sup>. This should probably be understood as reversions of *Philippi's Law* under Aramaic influence.

Blake ([Blake 1951](#) p. 83) concluded his analysis of Philippi's Law and what he termed the so-called (law of) "attenuation" -

In view of the evidence here adduced it seems most likely that both the phonetic laws discussed were features of North Semitic (Northwest Semitic), but not of parent-Semitic, the case for the dissimilation of unaccented a being somewhat stronger than that for "Philippi's law."

l1) [Suffix Conjugation](#) *peal* (Aramaic)/*qa*l (Hebrew) with [primitive characteristic vowel-i](#)



i) *Aramaic Forms* - 1cs. - יִתְּקַפְּ /təqəpit/ \*təqəpit/; 2ms. - תְּקַפְּ /təqəptā/ (← \*/taqipta:/) or תְּקַפְּ /təqəpt/; 2fs. - תְּקַפְּ /təqəpt/; 3fs. - תְּקַפְּ /təqəpat/; 1cp. - תְּקַפְּנָא /təqəpnā/ (← \*/taqipna:/); 2mp. - תְּקַפְּנוּ /təqəptun/; 3mp. - תְּקַפְּוּ /təqipu/.

ii) *Historical Development of the Aramaic Forms* - \*/taqipat/ → /təqəpat/ etc.

iii) *Tiberian Hebrew Forms* - 1cs. - יִבְדֹּתִי /kā'bəḏti/ \*kə'vəḏti/; 2ms. - בְּדֹתְךָ /kā'bəḏtā/; 2fs. - בְּדֹתִי /kā'bəḏt/; 3fs. - בְּדֹתֶיהָ /kā'bəḏdā/; 1cp. - בְּדֹתֵנוּ /kā'bəḏnu/; 2mp. - בְּדֹתֵיכֶם /kā'bəḏtəm/; 3mp. - בְּדֹתֵיהֶם /kā'bəḏu/.

iv) *Historical Development of the Tiberian Hebrew Forms* (example using 3fs.)

\*/kəbədā/ > \*/ka'bədā/ (EBHP) > /ka:bədā/ > /kā'bədā/ \*kə'vəḏti/ (TH)

v) *Discussion* - These TH forms of the *qa:tə:/* (primitive *\*qatīl*) have assimilated to the predominant *qa:tal* (primitive *\*qatal*) pattern. However, Aramaic verbs of the *qtə:/* (primitive *\*qatīl*) pattern remained in use. Therefore, this shift should be seen as pre-exilic.

*Decision Regarding Form Used in [EBHP] Transliterations and Sound Files* - the EBHP equivalents of SC forms such as /kā'bəḏti/ would have been \*/ka'bəḏti:/ \*kə'vəḏti/ and similarly for the other forms [listed above](#).

## 12) [Suffix Conjugation](#) *peal* (Aramaic)/*qal* (Hebrew) of root *MWT*

i) *Aramaic Forms* - *peal* 1cp. <mytnn><sup>128</sup> = [mi:tnan] etc.

ii) *Tiberian Hebrew Forms* - 1cp. - מִתְּנוּ /'matnu/ \*['me:tnu:] etc..

iii) *Historical Development of the Tiberian Hebrew Forms* -

\*/'me:tnu:/ > \*/'matnu:/ \*['metnu:] (EBHP) > /'matnu/ (/TH/).

iv) *Discussion* - Because of the persistence of the earlier form in Aramaic this shift should be seen as pre-exilic.

*Decision Regarding Form Used in [EBHP] Transliterations and Sound Files - see Discussion*

13) [Suffix Conjugation](#) *pa'el* (Aramaic)/*pi'el* (Hebrew)

i) *Aramaic Forms* - 2ms. -  $\text{פָּטַלְתָּ}$  /paṭ'telt/; 1cs. -  $\text{פָּטַלְתִּנָּא}$  /paṭ'telnā/; 2mp. -  $\text{פָּטַלְתִּנּוּ}$  /paṭ'tel'tun/ etc.

ii) *Historical Development of the Aramaic Form* - /qaṭ'teltā/ → /qaṭ'telt/ <sup>129</sup>

iii) *Tiberian Hebrew Forms* - 2ms. -  $\text{פָּטַלְתָּ}$  /piṭ'taltā/ \*[qit'teltɔ:]; 1cp. -  $\text{פָּטַלְתִּנּוּ}$  /piṭ'talnu/; 2mp. -  $\text{פָּטַלְתִּמּוּ}$  /piṭ'tal'tɛm/ etc.

iv) *Historical Development of the Tiberian Hebrew Form* (example using 2ms. -  
\*/qaṭ'taltā/ → \*/qit'tilta(:)/ > \*/qit'talta(:)/ (EBHP) > \*/qit'talta:/ > \*/qit'ta:ltā:/ > /qit'taltā/ \*[qit'teltɔ:] (TH).

v) *Discussion* - The shift of the second vowel /i/ > /a/ eg. \*/qit'tilti(:)/ > /qit'talti(:)/ in post-exilic environment is unlikely as Aramaic shows no such shift. Therefore, this shift should be seen as pre-exilic.

*Decision Regarding Form Used in [EBHP] Transliterations and Sound Files - see Discussion*

14) [Suffix Conjugation](#) *'aph<sup>el</sup>* (Aramaic)/ *hi<sup>ph</sup>il* (Hebrew)

i) *Aramaic Forms* - 2ms. -  $\text{הִפְתָּלְתָּ}$  /həq'telt/; 1cp. -  $\text{הִפְתָּלְתִּנּוּ}$  /həq'telnɔ:/; 2mp. -  $\text{הִפְתָּלְתִּנּוּ}$  /həq'tel'tun/ etc.

ii) *Historical Development of the Aramaic Form* - \*/'haqṭaltunu/ > \*/haqṭal'tunu/ >> /'əq'tel'tun/

iii) *Tiberian Hebrew Forms* - 2ms. -  $\text{הִפְתָּלְתָּ}$  /hiq'taltā/ [hiq'te:ltɔ:]; 1cp. -  $\text{הִפְתָּלְתִּנּוּ}$  /hiq'talnu/; 2mp. -  $\text{הִפְתָּלְתִּמּוּ}$  /hiq'tal'tɛm/ etc.

iv) *Historical Development of the Tiberian Hebrew Form* (example using 2mp.) -

\*/'haqṭaltumu/ > \*/'haqṭal'tumu/ > \*/hiqṭil'tima/ > \*/hiqṭal'tim/ (EBHP) > /hiqṭal'tɛm/ [hiqṭel'tɛ:m] (TH)

v) *Discussion* - The shift of the second vowel /i/ > /a/ eg. \*/hiqṭil'tim/ > \*/hiqṭal'tim/ is unlikely in post-exilic environment as Aramaic shows no such shift. Therefore, this shift should be seen as pre-exilic.

*Decision Regarding Form Used in [EBHP] Transliterations and Sound Files* - see Discussion

#### l5) [Suffix Conjugation](#) *Quality of First Vowel pa<sup>c</sup>el* (Aramaic)/ *p<sup>c</sup>el* (Hebrew)

i) *Aramaic Form* - 3ms. - לָּטַח qatṭel/ or לָּטַח qatṭil/ etc.

ii) *Historical Development of the Aramaic Form* - \*/qatṭala/ > /qatṭil/ etc.

iii) *Tiberian Hebrew Forms* - 3ms. - לָּטַח qitṭel/ \*/qitṭe:l/ etc.

iv) *Historical Development of the Tiberian Hebrew Form* (example using 3ms. -

\*/qattala/ > \*/qatṭala/ > \*/qatṭal/ > \*/qatṭil/ > \*/qitṭil/ (/EBHP/) > /qitṭel/ \*/qitṭe:l/ (TH)

v) *Discussion* - The shift of the first vowel \*/a/ > /i/ eg. \*/qatṭil/ > \*/qitṭil/ unlikely in post-exilic environment as Aramaic shows no such shift. Therefore, this shift should be seen as pre-exilic.

*Decision Regarding Form Used in [EBHP] Transliterations and Sound Files* - see Discussion

#### l6) [Suffix Conjugation](#) (2 f.s.)

i) *Aramaic Forms* - יָבַח בָּתָּא\* (BA), כתבת (GA)

ii) *Historical Development of the Aramaic Form* - \*/ka'tabti/ > /k'tabti/ > /k'tabt/ = [kə'tabt] (GA)

iii) *Tiberian Hebrew Forms* - יָבַח בָּתָּא occasionally יָבַח בָּתָּא<sup>130</sup>

iv) *Historical Development of the Tiberian Hebrew Form* -

\*/ka'tabt/ > \*/ka'tabt/ (/EBHP/) > \*/ka'tabt/ > /kə:'ta:bt/ \*/[kə:'θe:vt] (TH)

v) *Discussion* -

Same issue and [considerations](#) as for /'att/ above.

1. Early post-exilic pronunciation was \*[ka'θa:vt];
2. Pre-exilic pronunciation was \*[ke'təbt] or \*[ke'təbti]

*Decision Regarding Form Used in [EBHP] Transliterations and Sound Files* - I will use \*[qe'təlt] etc..

m) Law of Attenuation ( *\*Qatqat* > *Qitqat* - \*/a/ in a closed, but unstressed syllable changes to /i/) <sup>131</sup>

Blake ([Blake 1951](#) p. 77) gives the following description followed by a detailed list of the the situations in which it occurs -

The change from unaccented *a* to *i* takes place in a number of cases when a closed syllable containing the unaccented *a* is followed by another closed syllable also containing an *a* with either primary or secondary accent; in other words, it seems to be a process of dissimilation that takes place in types which may be represented by *qatqát* or *qatqàt*, changing them to *qitqát* or *qitqàt*.

He goes on to say P. p. 79) -

In a number of cases forms with both *i* and *a* occur; where *i* according to this law of dissimilation is the proper vowel, *a* is due to analogy with forms where *a* is the proper vowel, e.g.,

zal<sup>c</sup>āpāh and zil<sup>c</sup>āpôt

ᵛialdê (Hos. 1:2) and ᵛiildê (Isa. 57:4)

kabśāh and kibśāh

šéba<sup>c</sup> (<šab<sup>c</sup>) and šib<sup>c</sup>āh

These pairs possibly led to a feeling that unaccented *i* and *a* were generally inter- changeable so that some forms which had original *i* in the first syllable occasionally appear also with *a*, e.g., bikkurdh (obviously a type *qittū*) has bakkurot (Jer. 24:2); Cebrdh (< cibraḥ) has cabrot (Ps. 7:7; Job 40:11, a variant reading of cebrot).

Finally, Blake concluded his analysis (p. 83) of Philippi's Law and what he termed the so-called (law of) "attenuation" -

In view of the evidence here adduced it seems most likely that both the phonetic laws discussed were features of North Semitic (Northwest Semitic), but not of parent-Semitic, the case for the dissimilation of unaccented a being somewhat stronger than that for "Philippi's law."

In some cases, his "law" is shared with Aramaic so it is sometimes difficult to decide whether a given shift is pre-exilic or post-exilic under Aramaic influence.

m1) Aramaic and Hebrew \*/yaq'tul/ > \*/yiq'tul/<sup>132</sup>

i) *Aramaic Form* - /yiq'tul/ (BA) > /yeq'tol/ ([GA](#))

ii) *Historical Development of the Aramaic Form* -

\*/'yaq'tulu/ ([PNWS](#)) > \*/yaq'tulu/ > \*/yaq'tul/ > /yiq'tul/

iii) *Tiberian Hebrew Form* - /yiq'tol/ \*[yiq'to:l]

iv) *Historical Development of the Tiberian Hebrew Form* -

\*/'yaq'tulu/ ([PNWS](#)) > \*/yaq'tulu/ ([PH](#)) > [\\*/yaq'tul/ \(/EBHP\)? > \\*/yiq'tul/ \(/EBHP\)?](#) → /yiq'tol/ \*[yiq'to:l] (TH)

Nb. [Since](#) \*/yaq'tul/ could have been pronounced \*[ye/εq'tu/ɔl] and \*/yiq'tul/ could have been pronounced \*[yɪ/εq'tu/ɔl] phonetically the process might have been

\*[yeq'tul] > \*[yeq'tul] > \*[yɪq'tɔl].

v) *Discussion* - Manuel,<sup>133</sup> discussing BH, correctly states

"At some point in the development of Hebrew, preformative *a>>/i* in non-/a/-theme verbs (by analogy to -/a/-theme verbs); but ... BH orthography gives no indication whether or not such a shift took place in this period."

[Harris 1941](#) and [Beyer 1969](#) consider the change to be post-exilic. [Richter](#) and others consider it pre-exilic.

This shift could have been pre-exilic occurring simply due to the development and placement of the stress accent<sup>134</sup> or post-exilic under Aramaic influence.

The prefix vowel, in [TH](#), of the *qa/PC* of verbal roots beginning in  $\text{n}$  and  $\text{y}$  is *a*, and of verbal roots beginning in  $\text{x}$  and  $\text{n}$  is  $\varepsilon$ . We can postulate two alternative lines of development:

- 1) if *\*yaq'tul* was the general [/EBHP/](#) form we could assume that verbal roots beginning in  $\text{n}$  and  $\text{y}$  resisted the post-exilic shift *\*yaq'tul* > *\*yiq'tul* thus representing a genuine survival of the older form. The TH vowel  $\varepsilon$ , in the verbal roots beginning in  $\text{x}$  and  $\text{n}$ , could have arisen as an allophonic form of either the earlier *\*a* or the later *i*; or,
- 2) That the shift *\*yaq'tul* > *\*yiq'tul* had occurred prior to the mid-eighth century BCE i.e. the general [/EBHP/](#) form was *\*yiq'tul*. In that case the most likely explanation would be that the TH *a*, characteristic of the verbal roots beginning in  $\text{n}$  and  $\text{y}$  represent a late post-exilic reversion *\*yiq'tul* > *yaq'tul* caused by weakening of the gutturals, probably under Greek influence<sup>135</sup>. The TH vowel  $\varepsilon$ , in the verbal roots beginning in  $\text{x}$  and  $\text{n}$ , could have arisen as an allophonic form of either the earlier the EBHP *\*i* or the post-exilic reverted *a*.

*Decision Regarding Form Used in [EBHP] Transliterations and Sound Files -*

[Alternative \(2\)](#) is most probably correct. Thus I will give *\*/yiq'tul/*; [\\*\[yiq'tul\]](#) forms in my EBHP transcriptions regardless of the nature of the first root letter.

m2) בִּלְתִּי בִּלְעָדִי יִבְלִי

Blake wrote (Blake 1951 p. 78) -

The *i* of the negative *biltî* is probably analogical to the *i* of the negative preposition *bik'ădê*, a combination of negative *bal* and preposition *ad*, whose *i* is probably developed from a form *\*bak'ad* (cf. Syr. *beḵâd*) which does not happen to occur in Hebrew.

All of these seem cognate to the negative particle בֹּל derived from the root בלה. It is probable that the first vowel was [a] at the beginning of [BHA phase 3](#). The shift \*a > /i/ could have been either pre- or post-exilic.

*Decision Regarding Form Used in [EBHP] Transliterations and Sound Files* - I will use [\\*\[be.li:\]](#), [\\*\[bɪlˢe.dey\]](#) and [\\*\[bɪl.ti:\]](#) in my EBHP transcriptions.

### m3) The First Vowel of the Personal Name <yśr'> "Israel"

Assuming that [\\*/yaq'tul/ > \\*/yiq'tul/](#) then we can assume that the shift [\\*/yaśra\(:\)'e:l/](#) ([/EBHP/](#))? > [/yiśra:'e:l/](#) ([/EBHP/](#))? at the same time. TH [/yiśrā'el/](#) [\\*\[yɪrɔ:'ʔe:l\]](#)

*Decision Regarding Form Used in [EBHP] Transliterations and Sound Files* - I will use [\\*/yiśra:'e:l/](#) [\\*\[yɪrɔ:'ʔe:l\]](#) in my EBHP transcriptions and sound files.

### m4) *\*maqtal* (Aramaic)/*\*miqta:l* (abs.); *miqta:l* (constr.) (BH)

i) *Aramaic Form* - מִשְׁכָּן /maš'kan/

ii) *Historical Development of the Aramaic Form* - [\\*/maš'kanu/ > /maš'kan/](#)

iii) *Tiberian Hebrew Forms* - מִשְׁכָּן /miš'kân/ [\\*\[miš'ko:n\]](#) ([abs.](#)); מִשְׁכָּן /miš'kan/ [\\*\[miš,ke:n\]](#) ([constr.](#))

iv) *Historical Development of the Tiberian Hebrew Form* -

[\\*/maš'kanu/](#)<sup>136</sup> ([PH](#)) > [\\*/maš'ka:n/](#) > [\\*/miš'ka:n/](#) [\\*\[mɪf'ka:n\]](#) ([EBHP](#)) > [\\*/miš'kâ:n/](#) > [/miš'kân/](#) ([abs.](#))  
(/TH/)

[\\*/maš,kan/](#) ([PH](#)) > [\\*/miš,kan/](#) [\\*\[mɪf,ken\]](#) ([EBHP](#)) > [\\*/miš,ka:n/](#) > [/miš,kan/](#) ([constr.](#)) (/TH/)

### v) *Discussion*

There are many other examples of this word form e.g.

מִשְׁכָּן (TH abs.) - מִשְׁכָּן (Aramaic).

Blake ([Blake 1951](#) p. 77) wrote -

Nouns of the type *maqta*/in the construct would normally yield a type *miqta*/, and this may be the origin of many forms with preformative *mi*, e.g., *miḡdāl*, Babylon. *magdāl*, Syr. *magd<sup>l</sup>lâ*; *mizbēaḥ*, Syr. *madbe<sup>h</sup>hâ*, but the existence of the preformative *mi*, *me* in the other languages makes the derivation of all preformatives *mi*/ from *ma* in Hebrew doubtful; some probably represent parent Semitic *mi*.

A commonly held view is represented by the following statement from [Wikipedia](#) -

[law of attenuation](#). It is common in the Tiberian tradition, e.g. \*/jabʕat/ > Tiberian *שבעה* /ʃiv'ʕa/ 'seven', but exceptions are frequent.<sup>[63]</sup> It is less common in the Babylonian vocalization, e.g. /jabʕa/ 'seven', and differences in Greek and Latin transcriptions demonstrate that it began quite late.<sup>[63]</sup> Attenuation generally did not occur before /i~e/, e.g. Tiberian *מפתח* /maf'teaḥ/ 'key' versus *מפתח* /mif'taḥ/ 'opening (construct)', and often was blocked before a geminate, e.g. *מתנה* 'gift'.<sup>[63]</sup> Attenuation is rarely present in Samaritan Hebrew, e.g. *מקדש* /maqdaʃ/.

It is unlikely that a shift \*/maš'ka:n/ > \*/miš'ka:n/ could occur at a time when Hebrew was assimilating so many Aramaic features.

The probable answer is that the shift \*/maš'ka:n/ > \*/miš'ka:n/ occurred in the pre-exilic period (EBHP) and that this shift was reversed in the precursors of the non-Tiberian traditions in the post-exilic period under the influence of Aramaic. This reversal is reflected in the non-Tiberian traditions of reading BH. On the other hand, the conservative (and probably scholarly) precursor to the Tiberian tradition would seem to have preserved the late pre-exilic pronunciation.

*Decision Regarding Form Used in [EBHP] Transliterations and Sound Files* - EBHP forms are \*/miq'ṭa:l/ \*[miq'ṭa:l] (abs.) and /miq.ṭal/ \*[miq.ṭel] ([constr.](#))

#### m5) The First Vowel of the Personal Name <mrym>

i) *Aramaic Form* - As with the [Samaritan Hebrew](#) pronunciation *Mariam*, the Septuagint *Μαριαμ* and the Arabic /mara:m/ the first vowel would have been /a/

ii) *Historical Development of the Aramaic Form* - unsure

iii) *Tiberian Hebrew Form* - מִירְיָם /mir'yâm/ \*[mir'yo:m]



iv) *Historical Development of the Tiberian Hebrew Form* - \*/mar'ya:m/ > \*/mir'ya:m/ ([\[EBHP\]](#)) →  
/mir'yā:m/ (/TH/)

v) *Discussion* - As with [\\*maqtal/\\*miqta:l \(above\)](#), it is unlikely that a shift /mar'ya:m/ > /mir'ya:m/ could occur at a time when Hebrew was assimilating so many Aramaic features. Septuagint and Samaritan pronunciations simply demonstrate the impact of Aramaic on the popular pronunciation of Hebrew in the post-exilic period.

*Decision Regarding Form Used in [EBHP] Transliterations and Sound Files* - EBHP form is \*/mir'ya:m/ [mir'ya:m].

m6) \*/mas'sīm/ > /mis'sīm/ "taxes"

i) *Aramaic Form* - מִסִּימָא <sup>137</sup>מִסִּימָא, אֶסְמָא ([Samaritan Hebrew](#) *mos, massem*)

ii) *Historical Development of the Aramaic Form* - \*/mas'sīna/ > \*/mas'sīn/ > /mis'sīn/

iii) *Tiberian Hebrew Form* - מִסִּימָא /'mas/ \*['me:s] (sing.) מִסִּימָא /mis'sim/ \*[mis'si:m] (pl.)

iv) *Historical Development of the Tiberian Hebrew Form* - \*/mas'sīma/ > \*/mas'sīm/ ([\[EBHP\]](#)) > /mis'sīm/

v) *Discussion* - Shift in Hebrew follows that in Aramaic and is probably post-exilic<sup>138</sup>

*Decision Regarding Form Used in [EBHP] Transliterations and Sound Files* - EBHP form is \*/mas'sīm/ [mes'si:m].

m7) Numerals Seven and Seventy

i) Aramaic Form - 3ms.

שִׁבְעָה עָזְרָה, שִׁבְעָה עָזְרָה (BA)

שובעין; שובעה or שבעה; שובע or שבע ([GA](#))

שִׁבְעָה עָזְרָה, שִׁבְעָה עָזְרָה (Babylonian Aramaic)

ii) Historical Development of the Aramaic Form

iii) Tiberian Hebrew Forms - שָׁבַע *šəbaʿ*; שָׁבַע יְיָ *šəbaʿ ʾĕl*

iv) Historical Development of the Tiberian Hebrew Forms -

שָׁבַע - *\*[šabʿ]* or *\*[ʾabəʿ]* or *\*[ʾebəʿ]* (EBHP?) > *\*[šibaʿ]* or *\*[ʾibʿ]* or *\*[ʾibəʿ]* or *\*[ʾibəʿ]* (EBHP?) > *šəbaʿ* (*[TH/+]*) *\*[ʿ:veʿ]* (*[TH]*)

שָׁבַע *\*[šabʿā]* or *\*[ʾabʿā]* or *\*[ʾebʿā]* (EBHP?) > *\*[šibʿā]* or *\*[ʾibʿā]* or *\*[ʾibʿā]* (EBHP?) > *šibʿā* (*[ivʿā:]*) (TH) etc.

v) *Discussion* - As with *\*maqtaḥ/miqtaḥ* (above), the shift of the first vowel /a/ > /i/ eg. *šəbaʿ* > *šibʿā*<sup>139</sup> unlikely in post-exilic environment as Aramaic (generally) shows no such shift. Therefore, this shift should be seen as pre-exilic.

*Decision Regarding Form Used in [EBHP] Transliterations and Sound Files* - EBHP forms are *\*[šibʿā]*, *šibʿā* *\*[ʾibʿā]*, *[ʾibʿā:m]*.

4. *When We Know the Path of Development but not when the Changes Occurred*

There really is not a great deal of disagreement among experts regarding the developments through which the ancestral Hebrew language must have passed between, say, 2000 BCE and the time of the [Masoretes](#) (c. 850 CE). [What is in more dispute is when these changes took place.](#)

a) [Infinitive Construct](#) and Masculine Singular [Imperative of u-class Qal](#) *C<sub>1</sub>V<sub>x</sub>C<sub>2</sub>V<sub>x</sub>C<sub>3</sub>* > *C<sub>1</sub>C<sub>2</sub>V(V)<sub>x</sub>C<sub>3</sub>* or *C<sub>1</sub>V<sub>x</sub>C<sub>2</sub>C<sub>3</sub>*

It is clear that in Hebrew the structure and vocalization of the [imperative](#), infinitive construct and [PC](#) are closely related, possibly due to shared origin before the functions were distinguished.<sup>140</sup> The outline of their development is provided in [History of Stress and Pronunciation of the Hebrew Participles, Imperatives and Infinitives](#). See also the

table [Comparison of the Development \(PH to TH\) of Qal \(a-u class\) Jussive, Imperative, Infinitive Construct and Infinitive Absolute.](#)

*Decisions Regarding Form Used in [EBHP] Transliterations and Sound Files Regarding Qal Infinitive construct*

- in the absolute state, both \*/qu'to:l/ and \*/q'to:l/ are possible with the former more likely in [archaizing poetry](#).
  - \*/qu'to:l/ might have been pronounced \*[qu'to:l] or [\\*\[qo'to:l\]](#);
  - \*/q'to:l/ might have been pronounced \*[qə'to:l] or \*[qũ'to:l] or [\\*\[qǒ'to:l\]](#)<sup>141</sup>.
- in the construct state, both \*/qu'tul/ and \*/q'tul/ are possible with the former more likely in [archaizing poetry](#). .
  - \*/qu'tul/ might have been pronounced [\\*\[qu'tul\]](#) or \*[qu'tol] or [\\*\[qo'tol\]](#); and,
  - \*/q'tul/ might have been pronounced \*[qə'tul] or \*[qə'tol] or \*[qũ'tul] or [\\*\[qǒ'tol\]](#).

E.g. הָלַךְ מִלֹּקֶשׁ מִלְּמֶלֶךְ (MT)<sup>142</sup>; \*/lām,luk šalo:'mo:/ \*/[lēm,luk šelo:'mo:] or  
 \*/[lēm,løk šelo:'mo:] etc. (EBHP) literally 'of the ruling of Solomon'.
- in the construct state, \*/qu'tul/, \*/q'tul/ and \*/qu't'l/ are possible with the first more likely in [archaizing poetry](#). .
  - \*/qu'tul/ might have been pronounced [\\*\[qu'tul\]](#) or \*[qu'tol] or [\\*\[qo'tol\]](#); and,
  - \*/q'tul/ might have been pronounced \*[qə'tul] or \*[qə'tol] or \*[qũ'tul] or [\\*\[qǒ'tol\]](#); and,
  - \*/qu't'l-/ might have been pronounced \*[qu't'l-] or [\\*\[qot'l-\]](#).

E.g. הָלַךְ מִלֹּקֶשׁ מִלְּמֶלֶךְ (MT)<sup>143</sup>; \*/mul,'kô/ \*/[mʊl,'ko:] or [\\*\[møl,'ko:\]](#) (EBHP) literally 'his ruling'

b) Third person Feminine Singular of the SC<sup>143</sup>

i) *Aramaic Form* - [qat'lat](#)

ii) *Historical Development of the Aramaic Form* - /'qaṭalat/ → /qaṭ'lat/

iii) *Tiberian Hebrew Form* - /qāṭ'lā/ \*[qo:ṭə'lo:] (context) /qāṭ'lā/ (pause) \*[qo:ṭo:lo:]

iv) *Historical Development of the Tiberian Hebrew Form*

Either:

(a) /'qaṭalat/ (PH) → /qaṭ'alā/<sup>144</sup> (/EBHP/+) → /qāṭ'lā/ (context) /qāṭ'lā/ (pause); or,

(b) /'qaṭalat/ (PH) → /qaṭala(:)h/ (/EBHP/) → /qāṭ'lā/ (context) /qāṭ'lā/ (pause).

v) *Discussion*

Gibson claims that "The original *n* of the regular 3, sing. fem. was probably retained at this period."<sup>145</sup> He was referring to the period of the [Siloam Inscription](#) i.e. late 8th century BCE. Unfortunately Epigraphic Hebrew, which may eventually solve this question is of little help at present as <hyt> is the only 3fs. SC form attested in epigraphic Hebrew.<sup>146</sup> However we can narrow down the time of the shift to the mid- to late First Temple period based on:

- *Earliest Possible Time* - This change is probably inspired by the shift in the fs. noun ending /át/ > /á:/ which had to occur early in [Stress Period 3](#) - i.e. in the 11<sup>th</sup> or 10<sup>th</sup> centuries BCE.
- *Latest Possible Time* - Aramaic did not have this shift so it is pre-exilic - i.e. before the early 6th century BCE.

*Decision Regarding Form Used in [EBHP] Transliterations and Sound Files*

3fs. of the SC carries suffix [á:]

c) Third Person Masculine Singular Pronominal Suffix<sup>147</sup>

The (alternative) stages of development of these suffixes are reasonably clear but their timing is not. The developments were:

- [Suffixed to singular noun](#) (EH הָ ; MT יָ and occasionally הָ ) either -

(a)  $\acute{a}h\tilde{u} > -\acute{a}w > -\acute{o}$ .<sup>148</sup> OR,

(b)  $-h\tilde{u} > -\acute{u}h(u(\cdot)) > -\acute{o}$ .<sup>149</sup>

*Suffixed to masculine plural noun* -  $-\acute{á}yh\tilde{u} > -\acute{á}w$  (Epigraphic Hebrew  $\text{יָ} \text{רָ} \text{רָ}$  rarely  $\text{יָ} \text{רָ} \text{רָ}$ ; MT e.g.  $\text{יָ} \text{רָ} \text{רָ}$  rarely  $\text{יָ} \text{רָ} \text{רָ}$ <sup>50</sup>).

N.b. The Classical Arabic parallel suffixes *hu:*, *hi:* becomes in [colloquial Arabic](#), depending on dialect etc.<sup>151</sup> - *o*, *h*, *u*, *nu*, *uh*, *ah*, *ih*, *eh*, *huuh* and others.

Regarding [JEH Gogel](#) (pp. 156-160) writes -

*Third masculine singular suffix.* The third masculine singular suffix occurs on singular and plural/dual nouns:

a) *Singular nouns.*  $\text{ʾ}m\text{th}$ , "his maidservant," Silwan 2:2;  $w\text{ʾ}\text{š}r\text{th}$ , "and to his Asherah," Ajrud 14:2, 15:6; KEK 3:5;  $lbh$ , "his heart," A 40:4;  $hnqbh$ , "it's being tunneled through," Siloam 1, 3-4;  $\text{ʿ}bdh$ , "his servant," MHY 1:2, *et cetera*;  $r\text{ʿ}w$ , "his fellow," Siloam 1:2, 3, 4.

b) *Plural/dual nouns.*  $yr\text{h}w$ , "his two months,"  $w\text{ʾ}n\text{š}w$  "and his people," L 3:17-18;  $m\text{š}ryh$ <sup>152</sup>, "from his enemies," KEK 3:3....

The third masculine singular possessive suffix is attested in epigraphic Hebrew on singular nouns most commonly as *-h* ( $lbh$ , "his heart"), although the suffix occurs as *-w* on one noun ( $r\text{ʿ}w$ , "his fellow").

The suffix *-h* is also attested on an infinitive construct  $hnqbh$ , "its being tunneled through."<sup>153</sup>

On plural nouns, the third masculine singular suffix in epigraphic Hebrew is attested both as  $-w$ <sup>154</sup> as in  $w\text{ʾ}n\text{š}w$ , "and his people," Lachish 3:18, and as  $-yw$ , as in  $pnyw$ , "his face," KH 2:9;  $-yw$  is the standard orthography in biblical Hebrew (e.g.,  $\text{ʾ}n\text{š}yw$ ).<sup>155</sup>

The orthography  $-w$  is also attested on the dual noun  $yr\text{h}w$ , "his two months" and is restored on the feminine plural noun  $[c\text{š}mtw]$  "his bones."<sup>156</sup>

**Note** - In TH  $\text{לָ}$  and  $\text{לוֹ}$  (occasionally  $\text{לוֹ}$ ) were homophones though of different derivation and were still distinct in [EBHP](#), and often in TH, due to stress i.e. -

$\text{לָ}$  ( $*/lo:/$  ([\[TH\]](#))  $/lo/$  ([\[TH+\]](#))  $< */l\acute{o}/$  ([\[EBHP+\]](#))  $< */l\acute{a}/$  ([\[PNWS\]](#))

$\text{לוֹ}$  ( $*/'lo:/$  ([\[TH\]](#))  $/'lo/$  ([\[TH+\]](#))  $< */'l\acute{o}/$  ([\[EBHP/?\]](#))  $< */'lahu/$  ([\[EBHP/?\]](#))  $< */'lahu/$  ([\[PNWS\]](#))

## *Discussion*

- Outside of the 3ms. suffix there are no examples identifiable in the [EH](#) corpus of words expected to end in *o:*. Perhaps, one day an epigraph may be found containing e.g. the *qa/inf. abs.* of a *III-h* verb which would remedy this lack. In [JEH](#) both the 3fs. and 3ms. suffixes were written <h> except for a couple of ambiguous cases where <w> may have represented *o:* <sup>157</sup>.
- It is [highly probable that the 3fs. pronominal suffix was pronounced a:](#).
- Two reconstructions of the [evolution of the 3ms. pronominal suffix are outlined above](#). Since the 3ms. pronominal suffix on the plural noun, presumed to be pronounced *-á:w* is written <(y)w> in JEH, we can assume that the scribes would have spelled the 3ms. pronominal suffix on the singular noun <w> if it [had been pronounced aw](#). Thus, we may assume that the JEH=EBHP pronunciation, of the 3ms. pronominal suffix on the singular noun, cryptically indicated by JEH <h> was - *áhu*, *-ó:h* or *-ó:*.
- Pronominal suffixes ending in short or anceps vowels in [PH](#) tended to lose the final short vowel (e.g. 2fs. /-íki/ ([PH](#)) → /-ék/ [é:x] ([TH](#))) [unless its maintenance was required for clarity](#) in which case it was maintained as a long vowel (e.g. 2ms. /- áka(:)/ ([PH](#)) → /-ká/ [-xɔ:] ([TH](#))). It is probable that this development occurred at the [PH \(BHA phase 2\)](#) to [EBHP \(BHA phase 3\)](#) transition. Additionally, if the early post-exilic form had been - *áhu*, we may assume that the final *u* would have been lengthened as occurred in forms such as [TH](#) /-éhu/ [-é:hu:] and would have been reflected in the [MT](#). Thus the [EBHP](#) 3ms. suffix on the singular noun would not likely have still remained *-áhu* except, possibly, for use in poetic parallelism e.g. [Gen. 49:11](#) where the consonantal text reads -

אסרי לגפן עירה

ולשרקה בני אתנו

In this verse the 3ms. pronominal suffix ם is twice used in parallel to ה. In my view, it is probable that, in its present post-exilic form, the suffix ם = ó: and ה = áhu or ó:h throughout this poem.

- We can assume that the early post-exilic form was -ó:. This is because, If the early post-exilic form had been -áhu or -ó:h, we may assume that the influence of the Aramaic form -éh would have assured the maintenance of the consonantal h.
- The 3ms. suffix has potential similarities to the [3fs.](#) suffix. instances, such as Cairo Arabic, where the 3ms. pronominal suffix attached to nouns varies between uḥ and u.<sup>158</sup> This clearly demonstrates that in Biblical Hebrew -úh/-ó:h and -ó: could have coexisted over extensive periods. Perhaps. the former might have been used in careful, formal speech and the latter in hurried, informal conversation. [As noted above](#), the form -ó: would have become normative by the post exilic period otherwise the influence of Aramaic would have probably ensured that the -ó:h form would have become dominant.

#### *Decision Regarding Form Used in [EBHP] Transliterations and Sound Files*

*The third masculine singular pronominal suffix in [EBHP](#):*

- i) on singular nouns and verbs could have been /ô/ [ó:] or /ô:h/ [ó:h]. Following the view of most major scholars, I will use /ô/; [ó:] in the EBHP transcriptions where MT has ם and /áhu/ [áhu] where MT has ה;
- ii) on plural/dual nouns I will use /âw/; [á:w].

d) *Locative* ה<sup>159</sup> e.g. הַבְּיָתָה 'homeward'

In TH this is an unstressed word-final /â/. We know from Ugaritic that the form had a consonantal h. At some point a shift \*/-ah/ > \*/-a:/ took place. Probably this was post-exilic but we cannot be certain. I will use the form \*/-ah/ \*/[-ah] for EBHP transcriptions.

See [Table - Locative ה](#)

Nb. From the point of view of [syllable length](#) (and [moraic](#) structure), and hence rhythm, there is no difference between [CVC](#). CVC. CVC הביתה = /hab'bay.tah/ and [CVC](#). CVC. CVV הביתה = /hab'bay.ta:/

See also

- [Elision of word-final aleph with compensatory lengthening of the preceeding vowel.](#)
- [Trade-off Between Vowel and Consonant Length](#)
- [Interrogative Pronoun מה](#)

*e) Interrogative Pronoun מה* (also למה, למה)

Ugaritic the form had a consonantal *h*.<sup>160</sup> At some point a shift \*/mah/ > \*/ma:/ took place. Probably this was post-exilic but we cannot be certain. I will use the forms \*/'mah/ \*['mah], \*/la'mah/ \*[la'mah], \*/ka'mah/ \*[ka'mah] for EBHP transcriptions.

Nb. From the point of view of [syllable length](#) (and [moraic](#) structure), and hence rhythm, there is no difference between [CVC](#) מה = /mah/ and CVV מה = /ma:/

See also

- [Elision of word-final aleph with compensatory lengthening of the preceeding vowel.](#)
- [Locative ה](#)
- [Trade-off Between Vowel and Consonant Length](#)

*f) Long a (IPA /a:/) in EBHP*

*f1) Did the Proto-Northwest Semitic ā/â [a:] Persist into EBHP?*

In Canaanite, including [PH](#), in most positions, except, possibly, for the [ā/â](#) [a:] in verb forms such as /'qa:m/ ([/TH/](#) /'qām/ [/TH/](#) ['qɑ:m]), Proto-Northwest Semitic ā/â [a:] had shifted to ō/ô [o:]<sup>161</sup> by the 14th century BCE. There seem to be four views:

i) That this was a general sound shift - i.e. in all cases. This is the view of e.g. [Joüon-Muraoka 1991](#), [Sáenz-Badillos](#) and [Hendel-Lambdin-Huehnergard](#).



ii) That only stressed  $\bar{a}$  shifted to  $\bar{o}$ . This is the view of e.g. [Blau](#). The following is from [Blau 2010](#) (§1.14.4) -

...Generally, PS  $\bar{a}$  is reflected in Hebrew  $\bar{o}$ . PS *kātib* in contrast to Hebrew כָּתִיב 'one writing', PS *šim'āl* in contrast to Hebrew שְׁמָאל 'left hand'. In some cases, however, Heb  $\bar{a}$  corresponds to PS  $\bar{a}$ . Among these exceptions we shall mention *šim'ālīy* > שְׁמַאלִי 'left' (adjective), *ārim* יְרֵי אֲרָמִים 'towns', *gālūt* גָּלוּת 'exile'. It seems that this irregularity is due to the fact that the shift of  $\bar{a}$  to  $\bar{o}$  in Hebrew was not unconditioned but occurred only in stressed syllables. The stress system attested in the Bible does not account for the operation of this shift. Thus שׁוֹן 'tongue' and שְׁמָאל reflect, to be sure, stressed  $\bar{o} < \bar{a}$ , and the forms cited above, שְׁמַאלִי etc., show the preservation of unstressed  $\bar{a}$ . But כָּתִיב exhibits unstressed  $\bar{o} < \bar{a}$ . Thus we have to posit a stress system for early Biblical Hebrew in which the stressed vowel was the last long vowel in any word. Accordingly, we posit for \**kātib* a stress different from כָּתִיב, viz., that it was stressed on  $\bar{a}$ , this being the last (and only) long vowel, which accordingly shifted to  $\bar{o}$ . The forms שׁוֹן and שְׁמָאל reflect stressed  $\bar{o} < \bar{a}$  as well. In שְׁמַאלִי the  $\bar{a}$  was followed by another long vowel, which accordingly attracted the stress. Therefore, this unstressed  $\bar{a}$  has been preserved and did not shift to  $\bar{o}$ . It was adherence to the principle of regularity of sound shifts that enabled us to reconstruct the earliest stage of biblical stress possible.

iii) [Gibson](#) (p. 37) wrote -

"The basic vowel phonemes of PH (= *proto-Hebrew* prior to 1000 BCE), as of Classical Arabic, were /a/, /i/ and /u/, which could be either long or short.... There was probably in PH another phoneme which was realised as /a:/ in EBHP, but which must have been distinct from /a:/ at this stage, since it did not go to /o/ when it had the stress. It is reflected in TH /'qām/ 'standing', the /ā/ here, like the /e/ in TH /'met/ being unchangeable; it may ... be connected with a hypothetical Proto-Semitic phoneme, the /o/ < \*/awa/ of Cowan, 1960<sup>162</sup>."

iv) That this was a generalized shift with a few, so far, unexplained exceptions as stated in [Rendsburg 1997](#)<sup>163</sup> §5.6.1

"Typically, Proto-Semitic long vowels retain their basic pronunciation in all environments. Thus /ī/ is always [i] and /û/ is always [u]. The only area of fluctuation is with /â/. When Semitic cognates indicate /â/, the Hebrew reflex typically will be /ô/, though sometimes the /â/ is retained. Thus, for example, Arabic /lâ/ = Hebrew /ô/ 'no'<sup>164</sup>; Arabic *šalām* = Hebrew *šālôm* 'peace'; etc., but Arabic *ṭabbāḥ* = Hebrew *ṭabbāḥ*<sup>165</sup> 'cook'; etc."

The intractability of this question at present is reflected in Blau's statement, after rejecting Bergsträsser's approach<sup>166</sup> -

I am inclined to posit a threefold origin of this verbal class: biradical forms with short vowels, biradical forms with long vowels, and triradical forms. The medley of these forms, which were also affected by analogical leveling, makes their historical reconstruction almost impossible.

*Decision Regarding Form Used in [EBHP] Transliterations and Sound Files - I accept view (iv) for the purpose of my transcriptions.*

Two of the forms<sup>167</sup> that are problematic are:

As [Joüon-Muraoka 1991](#) (§80d,e) explains -

"The verbal adjective is קָם; it is used as a participle. In stative verbs, verbal adjectives \*mit, \*buš, which have become מִת and בָּשׁ (written with ו), have been created on the analogy of the verbal adjectives *qatil* and *qatul* respectively, by assuming the characteristic vowels /i/ and /u/. On the analogy of \*mit and \*buš there emerged in action verbs a form \*qam > קָם, corresponding to the adjective *qatal*, (e.g. חָכָם *wise*). This form has replaced the genuine Semitic participle preserved, for instance, in Arabic and Aramaic. The vowel ו is similar in nature to the vowels י and ו of the symmetrical forms; they are retained, however, in the pl. cst. קָמִי, מִתִּי.... Like the verbal adjective קָם, the perfect קָם is secondary. Here again the vowel ו cannot have been long in Proto-Hebrew. With a long ā one would expect קָם\*, a form which probably existed once, for it is contained in Nifal קָמִי. If the ו were long, one would have in the inflection, e.g. קָמִי\* with a linking vowel, as in Nifal and Hifil. Now one has קָמִי with a short vowel, as one has מִתִּי from מִת...."

[Manuel 1995](#) p. 56 -

Changes that had occurred by this period [800-500 B.C.E. i.e. prior to 800 B.C.E..]

... Proto-Semitic /a/ lengthens in three positions during the third stress period, although Biblical Hebrew orthography only shows the result of one such shift.

First, an additional change attended the [third stage](#) of case vowel apocope: compensatory lengthening of the previous short vowel in newly (or singly) closed syllables. In the case of [a] > [a:], the new vowel fills the gap left by the phonemic change of [Period I](#), when [a:] > [o:] (e.g., Adjective \*/ramu/ > \*/ram/ > /ra:m/ 'high'). Biblical Hebrew orthography does not show this shift, although relative chronology suggests that it had already occurred....

In [TH](#) the qal participle of קוּם takes the forms קוֹמֶה קָמָה, קוֹמֵה קָמָה, קוֹמֵה קָמָה, קוֹמֵה קָמָה which were historically derived from 'qa:m, qa:'ma:, qa:'mi:m, qa:'mo:t respectively. As regards the evolution of the word we have two choices:

a) the form /'qa:m/ developed after the [a:] > [o:] shift ceased to be operative or that it was somehow unaffected by this shift i.e. \*/qa:mu/ ([PH](#)) > /'qa:m/ ([EBHP](#)) → /'qām/ \*['qo:m] ([TH](#)). The fs, mp. and fp. forms would be expected to maintain the long *a* and the evidence of [TH](#) is that they did so e.g. fs \*/qa:'matu/ ([PH](#)) > \*/qa:'mā/ ([EBHP](#)+) → /qā'mā/ \*['qo:'mo:] ([TH](#)); OR,

b) \*/qamu/ ([PH](#)) > \*/'qam/ \*['qa:m] ([EBHP](#)) → /'qām/ \*['qo:m] ([TH](#)). If this were the case, we would expect that the vowel of the first syllable [would be short](#) in the [EBHP](#) fs., mp. and fp. forms. E.g. the fs. would be expected to develop \*/qa'matu/ ([PH](#)) > \*/qa'ma:/ ([EBHP](#)) → /qā'mā/ \*['qo:'mo:] ([TH](#))

*Decision Regarding Form Used in [EBHP] Transliterations and Sound Files* - I accept view [\(b\)](#).

ii.) The noun form Tiberian Hebrew ([TH](#)) /qaṭṭāl/, e.g. קַטְטָל "butcher, cook etc.", derived from ([PTH](#)+) \*/qaṭṭa:l/.

Here again we have two choices:

a) We can assume that the primitive form was \*qatṭalu<sup>168</sup> and that the evolution of the form was -

\*/qatṭalu/ > \*/qaṭṭalu/ ([PH](#)) > \*/qaṭṭa:l/ ([EBHP](#)) → /qaṭṭāl/ \*['qetṭo:l] ([TH](#)); OR,

b) We can assume that the primitive form was /qaṭṭālu/ i.e. identical to the Arabic form, and that the evolution of the form was -

\*/qaṭṭālu/ ([PH](#)) > \*/qaṭṭāl/ ([EBHP](#)+) → /qaṭṭāl/ \*['qetṭo:l] ([TH](#))

In the words of [Lipinski 1997](#) (§29.11)

"The vowel *ā* should normally have changed into *ō* in Hebrew, but this did not happen for some unknown reason."

[Blau 2010](#) (§4.4.6.11.29n) wrote -

These nouns, denoting intensified quality or occupation, originally have an unchangeable *qamaṣ* in their last syllable, which may shift to *pataḥ* in the singular construct.

*Decision Regarding Form Used in [EBHP] Transliterations and Sound Files - I accept view [\(a\)](#) i.e. the EBHP of the form was*

- [ms.](#) \*/qat'ta:l/ \*[qet'ta:l]
- [fs.](#) \*/qat'talt/ \*[qet'telt]
- [constr. ms.](#) \*/qat'tal/ \*[qet'tel]

*e2) Other Origins of [a:] in EBHP See*

[Third person Feminine Singular of the Qal Suffix Conjugation](#)

[Third Person Masculine Pronominal Suffix](#)

*g) \*qí'l > \*qêl > q'ê:l*

[A typical example \(TH בָּעָר \[bə'ə:r\]\) is discussed below.](#) The development was \*/bi'r/ > \*/bêr/ and then, long after the EBHP period, to /b'êr/ \*[bə'ə:r] by [hypercorrection](#)<sup>169</sup>. An analogous example is מָדַד < \*/môd/ < \*/mu'd/.

*Discussion*

English speakers might find difficult to pronounce. However its pronouncability is proven by such examples as (from [Morag 1989](#) (p.102) comparing pausal forms in TH and [colloquial Arabic](#) dialects in the following -

"... in Yarim (South-Yemen) pausal forms have a glottal stop inserted before the final consonant, a word like *kātib* "a writer" having its final syllable pronounced as [tiʔb].

There is no certainty, but it is very possible that, in the late pre-exilic period, forms such as \*/biʾr/ be used in formal reading while those such as \*/bêr/<sup>170</sup> would already have become dominant in the spoken language. Both forms are equal in terms of [syllable length](#).

### *Decision Regarding Form Used in [EBHP] Transliterations and Sound Files*

I give the older form i.e.

- \*/biʾr/ \*['bɪʔr] or \*['[bɪʔər](#)] in the absolute form and \*/bêr/ \*['bɛːr] in the pronominal and construct forms;
- \*/muʾd/ \*['mʊʔd] or \*['mʊʔʊd] in the absolute and \*/môd/ \*['moːd] in the pronominal and construct forms.

### h) יהי, גְּדִי, חֲלִי, פֵּרִי <sup>171</sup> *and the Like*

Egs.:

\*/kalyu/ > \*/kaly/ (/EBHP?/) > \*/kaliy/ (/EBHP?/) > \*/[kalî](#)/ (/EBHP?/) > (TH) יְהִי \*['kə'li:] (contextual) or יְהִי \*['kɛːli] (pausal) "tool" ([other examples](#))<sup>172</sup>

\*/hişyu/ > \*/hişy/ (/EBHP?/) > \*/hişiy/ (/EBHP?/) > \*/hişî/ (/EBHP?/) > (TH) יְחִי \*['ħə's'i:] (contextual) יְחִי \*['ħɛːs'i] (pausal) "half" ([other examples](#))

\*/hulyu/ > \*/huly/ (/EBHP?/) > \*/huliy/ (/EBHP?/) > \*/hulî/ (/EBHP?/) > (TH) יְחִי \*['ħo'li:] (contextual) יְחִי \*['ħoːli] (pausal) "illness" ([other examples](#))

[\\*/yihyay/](#) > \*/yihy/<sup>173</sup> (/EBHP?/) > \*/yihiy/ (/EBHP?/) > \*/yihî/ (/EBHP?/) > (TH) \*['yə'hi:]<sup>174</sup> "may he be" (see [Aramaic and Hebrew /yaq'tul/ > /yiq'tul/](#))

The case is similar for nouns such as [גְּדִי](#) ('kid'), [חֲלִי](#) ('illness') and [פֵּרִי](#) ('fruit') - see links.

On the phonetic ([\[EBHP\]](#)) level, using יָשָׁא as an illustration, \*'ḥiṣy/ could be pronounced as \*['xɪs'y] or \*['xɪs'ɪy] while \*['xɪs'ɪy] would not be very different from the pronunciations of \*'ḥiṣiy/ \*['xɪs'ɪy] or \*'ḥiṣî/ \*['xɪs'i:].

*Discussion* - There is really no way of knowing which of the forms marked above (/EBHP?/) most closely corresponds to 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.

#### *Decision Regarding Form Used in [EBHP] Transliterations and Sound Files*

On the assumption that the pronunciation in that context would be formal and very conservative I use the forms \*['xɪs'ɪy], \*['yḥi'y] etc..

#### *i) (Pro)pretonic Vowel Reduction*

In the words of Manuel<sup>175</sup> -

A short vowel in a pretonic or propretonic, open syllable may syncopate, but there is no evidence of such changes in BH, although patterns that reflect this shift in later Hebrew dialects do appear in BH. Examples include<sup>176</sup>:

*Qal* [SC](#) <hyt><sup>177</sup> √hyy > √hyh 'she was'. [n. Compare TH ḥâyêṭâ (← hayata [≈ strong 3fs [SC](#)] << hayat < hayayat). On the extension of the pronominal sufformative, see [Gesenius 1910](#) §75i.]

*Qal* [imp.](#) <šlh><sup>178</sup> √šlh 'send'. [n. Compare TH šəlah (← šalah)].

*Qal* [a.p.](#) <šmr><sup>179</sup> √šmr 'guard'. [n. Compare TH šōmərīm (< šōmirīm < šāmīrīm)].

Scholars differ regarding when this vowel reduction occurred -

Prior to EBHP period ([BHA phases 1/2](#)) - [Birkeland](#), [Gibson 1965](#)

During the EBHP period ([BHA phase 3](#)) - Manuel<sup>180</sup>, [Bergsträsser](#), [Harris](#)

After the EBHP period ([BHA phase 4](#)) - [Sáenz-Badillos](#)<sup>181</sup>

*Discussion* -

We can assume that generally this vowel reduction occurred in two stages. The following examples cover the three EBHP short vowel phonemes:

/madīnatu/ (PH) > [medi:'ne:] > [mēdi:'ne:] > [m(ə)di:'ne:] 'province'

/ḥi'mōru/ (PH) > [ħi'mo:r] > [ħī'mo:r] > [ħ(ə)'mo:r]<sup>182</sup> 'donkey'

/nu'ḥōštu/ (PH) > [nu'ħo:ft] > [nū'ō'ħo:ft] > [n(ə)'ħo:ft]<sup>183</sup> 'copper'

The various dialects of [Levantine Arabic](#) demonstrate that all stages of this process can coexist for many centuries.<sup>184</sup> Egs. -

[madīne] - [mdīne] 'city'

[ħimār] - [ħmār] 'donkey'

[nuħās] - [nħās] 'copper'

Most likely this change occurred during the EBHP period though the orthography does not allow us to determine when. It is highly probable that these short vowels remained unreduced in formal/literary language for a long time after that had become reduced in common speech.

In my transcriptions I use the conventions outlined under [restored vowels](#).

Decision Regarding Form Used in [EBHP] Transliterations and Sound Files - *I assume no (pro)ptonic vowel reduction in EBHP.*

#### *j) Pretonic Vowel Lengthening or Equivalent Consonant [Gemination](#)<sup>185</sup>*

Blau points that the oldest attestation of pretonic vowel lengthening is in the transcription of proper nouns in the Septuagint<sup>186</sup> and wrote "...Hebrew underwent pretonic lengthening; we have attributed this to strong Aramaic influence at the time of the Second Temple."<sup>187</sup>

The following is slightly adapted from [Malone 1990](#) (p. 260) -

Comparison of (many) ... biblical Hebrew and Biblical Aramaic cognates ... reveals a puzzling characteristic of Hebrew, the phenomenon conventionally known as *Pretonic Lengthening* .... Under a variety of circumstances, a vowel expected on other grounds to be short will rather appear lengthened in an immediately pretonic open syllable.... At times the pretonic position

of the lengthened vowel is disguised by later developments. For instance in כַּתְּבוּ the second syllable has shifted its stress to the final syllable and then itself undergone reduction; contrast the Aramaic cognate, which has undergone neither Pretonic Lengthening nor stress shift כְּתִיבוּ



Table  
Contrasts Between Hebrew and Aramaic

Item	Tiberian Hebrew	Aramaic
Noun form <i>miph'al</i>	מִזְבַּח /maz'bah/	מִדְבַּח
2 <sup>nd</sup> m. s. pronominal suffix to noun	ךְ	<i>ak &lt; ka</i>
Noun = peace ( <a href="#">PS</a> <i>*šalām</i> )	שָׁלוֹם	שָׁלָם
Noun = eternity (PS <i>*cālam</i> )	עוֹלָם	עָלָם
Noun = kings (PS <i>*malakīma</i> ) <sup>188</sup>	מַלְכִּים	מַלְכִּין
Qal/pe'al verb perfect	כָּתַבְתִּי	כְּתַבְתָּ – <i>BA</i> כְּתַבְתָּ – <i>PJA</i>
	כָּתַב	כְּתַב – <i>BA and PJA</i>
	כָּתְבָה	כְּתַבְתָּ – <i>BA</i> כְּתַבְתָּ – <i>PJA</i>
	כָּתְבוּ	כְּתַבּוּ – <i>BA and PJA</i>
Piel/pa'al verb perfect 3 <sup>rd</sup> m. s. (PS <i>*kattaba</i> )	כָּתַב	כְּתַב

The great scholar, Joshua Blau wrote<sup>189</sup>

One of the vexing questions of the Hebrew vowel system is the problem of the quantity of originally short vowels in pretonic short open syllables as (*\*maθal > mašāl*, *\*inab > \*ēnāb*<sup>190</sup>),... Now, after the discovery of the Bar-Kokhba letters, we do know that Hebrew

was a living language (true, in its Mishnaic form) until the first part of the second century A.D.; so the Septuagint reflects the prolongation of pretonic vowels in a living language. Nevertheless, this phenomenon *may* be due to Aramaic influence, since bilingual Jews, speaking Aramaic as their first language, might have assumed Aramaic phonetic habits and become unable to pronounce short vowels in open unstressed syllables.

*Discussion* - Occasionally the case has been made for pretonic vowel lengthening occurring in the pre-exilic period (see [Manuel](#)) prior to the reduction or elision of unstressed open-syllabic short vowels in both Hebrew and Aramaic (see [Malone 1990](#)). However, the consensus, which I accept, is that pretonic vowel lengthening was a post-exilic development occurring sometime before the third century BCE.

Nb. From the point of view of [syllable length](#) (and [moraic](#) structure), and hence rhythm, there is no difference between eg. קטן - קטנים ("small s. - pl.) -  
([TH]) \*[qɑ:'tʃɔ:n] (CVV.CVVC) - \*[qətʃ'en'ni:m] (CCVC.CVVC) and לבן - לבנים "white s. - pl.)  
- ([TH]) \*[lɔ:'vɔ:n] (CVV.CVVC) - \*[ləvɔ:'ni:m] (CCVV.CVVC)

See also

- [Elision of word-final aleph with compensatory lengthening of the preceeding vowel.](#)
- [Simplification of diphthongs](#)
- [Trade-off Between Vowel and Consonant Length](#)

### *Decision Regarding Form Used in [EBHP] Transliterations and Sound Files*

I assume no pretonic vowel lengthening or gemination in EBHP.

k) Homogeneous [Diphthong](#)<sup>191</sup> *Contraction*<sup>192</sup>. See also the table [Long Vowels in EBHP by Origin](#)

k.1 Accented [PS](#) short vowel followed by an unvoiced homogeneous consonant and another consonant (other than a pharyngeal or [r]) contracted with the first consonant to form the corresponding long vowel.<sup>193</sup> The following occurred in [BHA phase 2](#) -

1. [a'] > [â] - [example](#) *ra'sû > râšû > rôš* 'head'. For syllable final [a'] see [Were Word and Syllable final Glottal Stops Pronounced in EBHP?](#)
2. [uw] > [û] e.g. *huwšabtēm > hûšabtēm* הוּשַׁבְתֶּם בְּתוֹךְ 'you were made to dwell'.<sup>194</sup>
3. [iy] > [î] e.g. *yiybaš > yibaš* יֵבֶשׁ 'It will be dry'.<sup>195</sup> [For word-final see](#)
4. [iw] > [û] e.g. *yiwkal > yûkal* יוֹכַל 'he was able'.<sup>196</sup>
5. [uy] > [î] e.g. *wayyuyśam > way'yîśem* וַיִּשֶׁם 'he put'.
6. [iwy] > [ûy] > [iyy] > [î] e.g. *kiwy > kūy > kiyy > kî* בֹּרֵךְ 'burning'

#### k.2 Word-final [iy] > [î] in EBHP?<sup>197</sup>

The loss of final short vowels greatly increased words ending in [iy]. See [גְּדִי, יָהִי, פָּרִי, חָלִי and the Like](#)

#### l) Heterogeneous [Diphthong Contraction](#) [ay/ey] > ê [e:]; [aw] > ô [o:]<sup>198</sup>

##### *Heterogeneous Diphthongs in Biblical Hebrew = vowel+consonant*

The *ay* and *aw* are called descending diphthongs, since the more sonorous vowel (the peak) precedes the less sonorous element (and the air stream descends to it). These are the only important diphthongs in Biblical Hebrew. Ascending diphthongs like *wa*, *ya*, in which the more sonorous element follows the less sonorous one, are not noteworthy, because, with few exceptions, they behave as ordinary open syllables.

Quoted from [Blau 2010](#) §2.9.5.

The following quoted from [Joüon-Muraoka 1991](#) (§7d) referring, of course, to [TH](#), however, it was equally true for [EBHP](#) and [LBHP](#) -

When a ל and a י are not used as [mater lectionis](#), they are pronounced. This is true in the following cases where the preceding vowel is heterogeneous ( ב used as dummy letter for illustration): בּוֹי, בּוֹיִ, בּוֹיִבִּי, בּוֹיִבּוֹ, בּוֹיִבּוֹבִּי, בּוֹיִבּוֹבּוֹ. In these combinations

### *Heterogeneous Diphthongs in Biblical Hebrew = vowel+consonant*

the ַ and ֿ probably have a consonantal value, e.g. ַ = (b)ay and not (b)ai, ֿ = (b)aw and not (b)au. In the sequence ֿ suffix for the 3rd pers. m. sg. of a plural noun the ַ is quiescent, e.g. ֿ "his horses," pronounced *susaw*.

### *Balance of Probability re. Diphthong Reduction*<sup>99</sup>

In so far as it is true that the use of vowel letters was not at first the outcome of historical spelling, but a deliberate innovation of the scribes, the retention of otiose letters in historical spellings was following the analogy of already established practice. This shows that the monophthongization of ancestral *\*aw* and *\*ay* took place after consonantal spelling came into use. This conclusion modifies the long-held belief that it was the survival of historical spelling of words that contained a long vowel as the result of monophthongization of a diphthong that gave to *waw* and *yod* their new significance as vowel letters. But it is precisely because that development gave to these two letters two possible significations that when we come across a *waw* or *yod* at a place in a word where it is plausible to believe that there was originally *\*aw* or *\*ay* we don't know whether to read *aw* or *ô* (*ay* or *ê*). It is only when those vowel letters are not used in any particular instance that we can be sure that the diphthong has monophthongized and that the resultant long vowel is being spelled defectively, that is, not shown at all. That is more likely to occur in the early stages when scribal practice for Aramaic and Hebrew was still largely dominated by the purely consonantal spelling that remained in place for centuries in the writing of [Phoenician](#).

#### 1) General

The contraction of the diphthongs [ay/ey] > ê [e:] and [aw] > ô [o:] is very common in the Semitic languages. Thus, for example, these diphthongs, frequent in Classical Arabic, are contracted in most, but not all, spoken Arabic dialects. From the little evidence at our disposal, it seems that at least the contraction

[ay/ey] > ê [ɛ:] [occurred in all positions in Samaritan Hebrew](#) which was spoken just a few miles north of Jerusalem. It is quite possible that in Jerusalem Hebrew, the reduction of these diphthongs, when unstressed was precipitated by a [huge influx of Israelite refugees in the late eighth century BCE](#).

## 12) Heterogeneous Diphthongs in [JEH](#)

D. N. Freedman, after a lifetime of considering this issue, wrote of JEH<sup>200</sup> -

In the final position, ē and ō were also represented by *he*. While the case for these equations is reasonable, it has also been claimed that *waw* is used for ô and *yod* for ê. The argument is based entirely on the contention that the diphthongs *aw* and *ay* had been contracted with the retention of the original consonants as vowel letters, i.e., historical spelling. Ultimately, contraction occurred but at different times in different dialects of NW Semitic and there is no unequivocal evidence for it in the early period, apart from Phoenician....

Diphthongs were represented by the consonantal elements *waw* for w and *yod* for y. The only evidence for w = ô and y = ê is from much later vocalization of the diphthongs (chiefly MT) showing both contraction and historical spelling. Such data cannot be used for the early period, and such argumentation is circular and self-defeating.

Sarfatti<sup>201</sup> demonstrated on the basis of spelling of proper nouns that there are occasions in JEH in which *yod* does represent ê [ɛ:] and in which *waw* does represent ô [o:]. He reaches two conclusions regarding unstressed heterogeneous diphthongs in JEH/EBHP:

1. It is impossible on the basis of existing evidence to determine whether unstressed heterogeneous diphthongs had been reduced in the pre-exilic period. For example, take the case of בית 'house'. In the Arad inscriptions the construct form is written <byt>. This can be explained in any of 3 ways:

- a) the original diphthong was maintained i.e. [bayt];
- b) it was a historical spelling i.e. the shift [bayt] > [bɛ:t] had already taken place;
- c) it was not so much an historical spelling as a tendency to retain the spelling of a word in its declination.

2. In the orthography of the MT, the diphthong contraction [aw] > ô [o:] led to the use of *waw* to indicate [o:] even in cases where its origin was *ā* [a:] > ō [o:] as in the fp. noun suffix *-ōt* and the active participle of the *qal*. However, this type of analogy is much more restricted in the case of [e:]. Generally [e:] is represented by *yod* only where it results from the diphthong contraction [ay] > ê [e:] and only rarely when it originates from a stress-lengthened [i]. From this it is clear that the contraction of the (unstressed) diphthong [ay] > ê [e:] took place later than the contraction of the (unstressed) diphthong [aw] > ô [o:]. This sequence led to *waw* being used to indicate [o:] long before *yod* came into use to indicate [e:]. In fact the use of *yod* to indicate [e:] might have commenced only after the Babylonian Exile<sup>202</sup>.

Blau<sup>203</sup> also concluded -

First *aw* shifted to ô, while under the same conditions *ay* was still preserved. This state of affairs is reflected in the spelling of the Pentateuch, the oldest layer of the Bible.... In living languages one cannot always draw a sharp line between the preservation of diphthongs and monophthongization. Even in dialects that preserve diphthongs they may be monophthongized in quick and unclear speech, and a dialectologist may come up against serious difficulties in the attempt to distinguish diphthongs from long vowels. Prepositions, by nature, are pronounced less distinctly than nouns, especially prepositions whose task is to indicate relations which, in languages with case systems, are indicated by cases. This clearly applies to the preposition לְ, which partly denotes what is referred to in Indo-Germanic tongues by the dative. Therefore, for example, \**ʾilayhum* was apt to shift to לְיָהֶם more quickly than the *ay* in nouns was monophthongized. This is probably why some two-thirds of the occurrences of *ʾel* with pronominal suffixes in the Pentateuch are spelled without *yôd*, presumably because, at the time the orthography of the Pentateuch was fixed, \**ʾilay-* preceding pronominal suffixes had already shifted to \**ʾilê*, whereas *ay* in general was still preserved.

### 13) Phonetic Actualizations of Heterogeneous Diphthongs in EBHP/JEH

In reality EBHP/JEH, unstressed /ay/ may have been pronounced [ɛy], and /aw/ may have been pronounced [ɔw] or [ɔ̄w] so the shift to [e:] and [o:] respectively would have been hard to detect in ordinary speech.

### *Discussion on Points (i1,2,3)*

The orthography of the Pentateuch is clearly a later development than that in Epigraphic Hebrew and is reasonably dated to the 5th-4th centuries BCE by Freedman<sup>204</sup>. Therefore, accepting the implications of Blau's argument, my transcriptions assume that unstressed /ay/ had not contracted in formal Jerusalem Hebrew in the pre-exilic period while unstressed /aw/ probably had not yet shifted to ô [o:] in formal Jerusalem Hebrew prior to the Babylonian exile.

In the Secunda the situation of when the diphthongs \*ay and \*aw contract is generally similar to the patterns in TH.<sup>205</sup>

Nb. From the point of view of [syllable length](#) (and [moraic](#) structure), and hence rhythm, there is no difference between [CVCC](#) eg. בית ("house") = [bayt] and [CVC](#) e.g. בית = [bɛ:t]

See also

- [Elision of word-final aleph with compensatory lengthening of the preceding vowel.](#)
- [Trade-off Between Vowel and Consonant Length](#)

*Decision Regarding Form Used in [EBHP] Transliterations and Sound Files* - I assume that neither /ay/ nor /aw/ had contracted in formal Jerusalem Hebrew in the pre-exilic period and that their realizations were:

- /[áy](#)/ = [éy]

- /[ay](#)/ or /[ày](#)/ = [ɛy]<sup>206</sup> (see [What quality were the Short Vowels in \[EBHP\]?](#))

- /[áw](#)/ = [áw]

- /[aw](#)/ or /[àw](#)/ = [ɔw] (see [What quality were the Short Vowels in \[EBHP\]?](#))

### I4) Contradictory Treatment Within TH<sup>207</sup>

lin TH some nouns, in the absolute form, seem to derive from the unreduced diphthongs /ay/ or /aw/ while others of the same pattern seem to derive from the reduced diphthongs /e:/ or /ə:/ . Egs.

TH /ay/ vs. ê [e:]

- *unreduced* - /'bayit/ <sup>208</sup> (TH/\*) (← \*'bayt/ (EBHP)) = "house" (construct /bêt/ (TH/\*) ← \*'bayt/ (EBHP)).
- *reduced* - /'ḥeq/ (< \*'ḥêq/ (PTH/\*) < \*'ḥayq/ (EBHP)) <sup>209</sup> = "bosom" (construct same)
- TH /aw/ vs. ô [o:]
- *unreduced* - /'māwt/ ['mɔ:wɛt] (TH) (← \*'mawt/ (EBHP)) = "death" (construct /mot/ \*['mo:t] (TH)).
- *reduced* - /'šor/ ['šo:r] (TH) (← \*'θawr/ (PH)) <sup>210</sup> = "ox" (construct same)

*Decision Regarding Form Used in [EBHP] Transliterations and Sound Files re. Point (i4)*

One can postulate a number of reasons for the co-existence of words of analogous origin showing reduced and unreduced diphthongs in the absolute form. For example:

- The [Masoretes](#) had simply been confused by the [complex pattern of diphthong retention and reduction in their native Aramaic](#). Specifically, Aramaic, in post-exilic Palestine shows a complex pattern of diphthong retention, reduction and even restoration. [Aramaic influence](#) might have encouraged the reduction of these diphthongs in unstressed positions or it might have led to the restoration of previously reduced stressed diphthongs <sup>211</sup>. It is impossible to tell.
- In some cases a desire to differentiate between homonyms may have encouraged the acceptance of a northern (diphthong reduced) or partly "northernized" ([bɛyt], [ḥɛyl]; [mɔwt], [ʔɔwn]) pronunciation of one of a pair of words. Egs.
  - לָחַץ "strength, army" vs. חָוֶה "outer rampart"
  - אָוֶן "disaster" vs. אֵוֶן "generative power"
- The language was in the process of diphthong reduction which affected some words before others.



- Some words may have been imported from a northern dialect and continued to be pronounced in the northern fashion

*Decision Regarding Form Used in [EBHP] Transliterations and Sound Files*

- Words of the TH form הַיִּיל (/ˈhəyil/ (/TH/\*) < \*ˈhəyil/ ) in [EBHP] were \*ˈhəyil/ [ˈhəyil] in the absolute and \*/həyil/ \*[həyil] in the construct;
- Words of the TH form הֶלֶל (/ˈhəl/ (/TH/\*) < \*ˈhəyil/ ) in EBHP were pronounced \*[ˈhəyil] in the absolute and \*[həyil] in the construct;
- Words of the TH form אָוֶן (/ˈʔəwən/ (/TH/\*) < \*ˈʔawn/) in EBHP were \*ˈʔawn/ \*[ˈʔəwn] in the absolute and \*/ʔawn/ \*[ʔawn] in the construct;
- Words of the TH form אֶוֶן (/ˈʔon/ (/TH/\*) < \*ˈʔawn/ ) in EBHP were pronounced \*[ˈʔawn] in the absolute and \*[ʔawn] in the construct.

*m) Masculine Plural Construct Ending of the Noun*

In JEH, as in the consonantal text of the Hebrew Bible, the suffix *yod* was used for: (a) the pronominal suffixes for first person singular for singular nouns (e.g. <swsy> = /sū'sī/ = “my (male) horse”); (b) the pronominal suffixes for first person singular for plural nouns ( e.g. <swsy> = /sū'say/ = “my (male) horses”); and (c) for dual and masculine plural nouns in the construct state ( e.g. <swsy> = “male horses of-”)212. We may assume that where the noun is in the dual, the <y> stands for [ey], [ey] or, less probably, for ê [e:] since there is little evidence that <y> is used as a vowel letter indicating long /e:/ in JEH213. However, in the case of masculine plural nouns in the construct the <y> could stand for [i:], [ey], [ey] or, less probably, for ê [e:] all of which are equivalent in terms of syllable length. It remains a moot point whether the masculine construct plural was pronounced as [i:], [ey], [ey] or ê [e:] in pre-exilic Jerusalem. In the Tiberian tradition ê [e:] as the masculine construct plural represents a contraction of the original /ay/ of the dual and not a development of the original ī /i:/ of the masculine plural. Two scenarios present themselves:

- That in pre-exilic or earlier Hebrew, as the dual became vestigial in the language<sup>214</sup>, the dual form displaced the original masculine construct plural as it had displaced the masculine plural noun forms with pronominal suffix<sup>215</sup>. This was also the case in Aramaic<sup>216</sup>; or,
- That while the dual form had displaced the masculine plural noun forms with pronominal suffix by the pre-exilic period, *ê* only ousted *î*, as the suffix of the masculine construct plural, in the post-exilic period under the influence of Aramaic.

### *Decision Regarding Form Used in [EBHP] Transliterations and Sound Files*

See [\[EBHP\] vowel qualities](#)

#### *n) Stress in the Prefix Conjugation of the Strong Verb*

At least at the beginning of [BHA phase 3](#) the moods of the [PC](#) were distinguished by their place of stress (see [History of Stress and Pronunciation of the Hebrew Verb Prefix Conjugation](#)). At some point, very likely in the post-exilic period, the [PC<sub>pret\\_sim</sub>](#), [PC<sub>pretWC</sub>](#) and [PC<sub>jus</sub>](#) of the strong verb took on the stress patterns of the [PC<sub>imp</sub>](#).

Binyan	<i>Indicative</i> (= Imperfect <a href="#">PC<sub>imp</sub></a> )		<i>PC<sub>jus</sub></i>		<i>Preterite</i> ( <i>PC<sub>pret_sim</sub></i> / <i>PC<sub>pretWC</sub></i> )	
	<a href="#">EBHP</a> */EBHP/ *[EBHP]	<a href="#">TH</a> /TH/ *[TH]	EBHP */EBHP/ *[EBHP]	TH /TH/ *[TH]	EBHP */EBHP/ *[EBHP]	TH /TH/ *[TH]
<a href="#">Qal</a>	/yaq'tul/ > /yiq'tul/ [yiq'tul] or [yiq'tol]	/yiq'tol/ [yiq'to:l]	/yaqtul/ > /yiq'tul/ [yiq'tul] or [yiq'tol]	/yiq'tol/ *[yiq'to:l]	/way'yaqtul/ > /way'yiq'tul/ [wey'yiq'tul] or [wey'yiq'tol]	/wayyiq'tol/ *[weyyiq'to:l]
<i>Piel</i>	/yəqat'til/ [yəqet'til]	/yəqat'tel/ [yəqet'te:l]	/yəqattil/ [yəqettil] or [yəqette:l]	/yəqat'tel/ [yəqet'te:l]	/wayya'qattil/ [wey'ye'qettil] or	/wayqat'tel/ *[weyqet'te:l]

Binyan	<i>Indicative</i> (= Imperfect <a href="#">PC<sub>imp</sub></a> )		<i>PC<sub>jus</sub></i>		<i>Preterite</i> ( <i>PC<sub>pret_sim</sub></i> / <i>PC<sub>pretWC</sub></i> )	
					<a href="#">[wey'ye'qetel]</a>	
<i>Niphal</i>	/yiqqa'til/ [yɪqqe'tɪl]	/yiqqâ'tel/ [yɪqqo:'tɛ:l]	/yiq'qatil/ [yɪq'qetɪl] or <a href="#">[yɪq'qetel]</a>	/yiqqâ'tel/ [yɪqqo:'tɛ:l]	/wayyiq'qatil/ [wey'yɪq'qetɪl] or <a href="#">[wey'yɪq'qetel]</a>	/wayyiqqâ' tɛl/ *[weyyiqo:'tɛ: :l]
<i>Hiphil</i>	/yaq'ti:l/ [yeq'ti:l]	/yaq'til/ [yeq'ti:l]	/'yaqtil/ ['yeqɪl] or <a href="#">['yeqɛl]</a>	/yaq'tel/ *[yeq'tɛ:l]	/way'yaqtil/ [wey'yeqɪl] or <a href="#">[wey'yeqɛl]</a>	/wayyaq'tel/ *[weyyeq'tɛ: l]
<i>Hithpiel</i>	/yitqat'til/ [yɪtqet'tɪl]	/yitqat'tel/ *[yɪtqet'tɛ:l]	/yit'qattil/ [yɪt'qattɪl] or <a href="#">[yɪt'qattel]</a>	/yitqat'tel/ *[yɪtqet'tɛ: l]	/wayyit'qattil/ [wey'yɪt'qattɪl] or <a href="#">[wey'yɪt'qattel]</a>	/wayyitqat' tɛl/ *[weyyitqet' tɛ:l]

### *Decision Regarding Form Used in [EBHP] Transliterations and Sound Files*

To use the [EBHP] outlined in the above table and analogous forms.

#### *o) Spirantization of the [bgdkpt Consonants](#)<sup>217</sup>*

All scholars would agree the consonants /b/, /g/, /d/, /k/, /p/, /t/ were originally pronounced in all positions as [plosive or stop consonants](#) i.e. [b], [g], [d], [k], [p], [t] respectively. In later Hebrew and Aramaic, the change never occurred in Arabic, each of these phonemes had two allophones (stop and [continuant](#)) in complementary distribution i.e. /b/ - [b], [v]; /g/ - [g], [ɣ]; /d/ - [d], [ð]; /k/ - [k], [x]; /p/ - [p], [f]; /t/ - [t], [θ]. (For the relevant rules for Tiberian Hebrew see [Joüon-Muraoka 1991](#) § 19). [Gogel](#) (p. 40) aptly summed up the situation - "... it is possible only to say that the earliest date of this double pronunciation of the /b/, /g/, /d/, /k/, /p/, /t/ consonants was sometime during the second half of the first millennium B.C."<sup>218</sup>

*Discussion* - Spirantization of the *bgdkpt* consonants is post-exilic and hence is [not relevant](#) to reconstructing EBHP<sup>219</sup>.

### *Decision Regarding Form Used in [EBHP] Transliterations and Sound Files*

There was no spirantization of the *bgdkpt* consonants in EBHP.

#### *5. What quality were the Short Vowels in [EBHP]?*

- a. Note [Semitic Vowels and their Actualization](#)
- b. Note [Proto-Semitic to Tiberian Hebrew - Vowel Phonemes with Possible Allophones](#)

In EBHP we can accept that the short vowels phonemes probably were<sup>220</sup>:

/i/ actualized as [i] and [ɪ] and, probably in some situations, [e/ɛ];

/a/<sup>221</sup> actualized as [e] and/or [a], and, probably in some situations, [ɛ], [ɔ] or [ɔ̄];  
and,

/u/ actualized as [u] and [ʊ] and, probably in some situations, [o] or [ō].

#### *Discussion*

- Note that the range of each short vowel phoneme approaches, and even overlaps, the next. Thus:
  - [e] is very close to, and frequently interchanges with [ɛ]<sup>222</sup>. Thus [ɛ] can be an allophone of either /i/ or /a/;
  - [ɔ̄], [ɔ] and [o] lie between [a] and [o].
- The key question is - in what context was /i/ pronounced as [i], when as [ɪ] etc? Of course parallel questions present themselves regarding /a/ and /u/.
- Post-EBHP vowel lengthenings and other linguistic changes greatly reduce the value of Hebrew tradition in this regard. However, the many surviving Arabic dialects probably provide useful guidance. In common with EBHP, and in contradistinction to current pronunciations of Hebrew, most Arabic dialects maintain the [distinction between long and short vowels and consonants](#), maintain the three-way consonantal

opposition [voiced-unvoiced-emphatic](#) and maintain the gutturals in full force. In addition, many Arabic dialects (e.g. in Arabia and parts of Syria) are spoken by populations with an unbroken tradition of Semitic speech going back to prehistoric times. Of course, concerning the last point, there are Arabic dialects which show signs of the impact of non-Semitic substrates e.g. of Coptic in Egypt and Berber in North Africa. Even in these the parallels to EBHP can be striking. For example, Egyptian Arabic has three short vowels /i/, /a/, /u/ and five long vowels /i:/, /e:/, /a:/, /o:/, /u:/<sup>223</sup> which was the exact situation in EBHP. [As noted elsewhere](#), in Egyptian Arabic the allophone pronounced depends on such factors as: the nature of the surrounding consonants; whether the syllable is long or short, closed or open; stress; dialect; speed of speaking, social context of the utterance, and the social status, education and even the sex of the speaker<sup>224</sup>. This was probably the situation in EBHP. In addition, both the evidence of Arabic dialects and some of the evidence of Hebrew patterns indicate that the [two phonemic vowel lengths often involved the pronunciation of at least 4 phonetic vowel lengths](#).

- Sound shifts and vowel lengthenings may sometimes have been phonetically less drastic than they look phonemically. Egs.:

The qal 3rd person [PC<sub>imp</sub>](#) -

/yaq'tul/ ([/EBHP?/](#)) > /yiq'tul/ ([/EBHP?/](#)) > /yiq'tol/ ([/PTH/\\*](#)) > /yiq'tol/ [[/yiq'to:l/](#)] (TH)

on the phonetic level may have been

[ye/εq'tu/ɔl] > [yɪq'tu/ɔl] > [yiq'to:l]

The common Semitic diphthong contraction /ay/ > /e:/ on the phonetic level may have been

[ey] > [ɛy] > [e:]

- A key point is summarized by [Lipinski 1997](#) (p. 158),

"There is a widespread tendency in Semitic to pronounce high and low vowels, especially when they are unstressed, as mid vowels [e], [ə], [o]....). On the other side, a stressed short vowel tends to become long, and its articulation may at the same time be lowered (e.g. *i* > *ī* > *ē*) or raised (e.g. *a* > *ā* > *ō*). Some of these new vowels may acquire a phonemic status in a determined language."

- In spoken Arabic there is often a noticeable difference in quality between long vowels (e.g. /u:/ [u:], /i:/ [i:]) and short word-final vowels (e.g. /u/ [u], /i/ [i]) on the one hand and short non-word-final vowels (e.g. [ʊ], [ɪ]) on the other<sup>225</sup> with the latter tending to be more centered.

### *Decision Regarding Form Used in [EBHP] Transliterations and Sound Files*

It is impossible to know what allophones were pronounced in [what situations](#). Any selection of the actual short vowel allophone pronounced in a specific situation is no more than an educated guess selecting from the allophones of the Semitic primitive short vowel (/i/, /a/ or /u/) in question existing in the living Semitic languages, in particular spoken varieties of Arabic, including the tendency to have a [slightly more central](#) pronunciation for non-word-final short vowels.

However, a decision must be made or it would be impossible to pronounce the text. Thus, in my phonetic reconstructions of the [EBHP] short vowels, I will assume that:

- [EBHP] /i/ was pronounced:

- i) [ɛ] when it is in a syllable not carrying primary word stress (marked with ' ) and [corresponding to TH /e/ or /ɛ/](#);
- ii) [iː] when it is an [intermediate/indeterminate word-final vowel](#);
- iii) [ɪ] in [all other cases](#).

- [EBHP] /a/ was pronounced:

- i) [ɛ] when the first element of the diphthong /ay/ [ɛy] corresponding to TH /e/ [eː] or /ɛ/ [ɛː] (see [Heterogeneous Diphthong Contraction](#)):

- in a syllable not carrying primary word stress e.g.

\*/bayt/ \*[bɛyt] (EBHP) > /bɛt/ \*[bɛːθ] (TH) "house of-"

\*/hay'ti:b/ \*[hɛy'ti:b] (EBHP) > /hɛ'tib/ [hɛː'ti:v] "he did well"

- or, through vowel dissimilation, preceeding the pronominal suffixes attached to mp. nouns<sup>226</sup> and the like. This diphthong corresponds to TH /ə/ [e:] or /ɛ/ [ɛ:];

ii) [ɔ] when the first element of the diphthong /aw/ [ɔw] not carrying primary word stress corresponding to TH /o/ [o:] (see [Heterogeneous Diphthong Contraction](#)): e.g.

/,mawt/ [mɔwt] (EBHP) > /,mot/ [mo:θ] (TH) "death of-" (see [Heterogeneous Diphthong Contraction](#))

iii) [e] in all other cases, when it is a short vowel or an [intermediate/indeterminate word-final vowel](#)<sup>227</sup>.

- [EBHP] /u/ was pronounced:

i) [o] when it is in a syllable not carrying primary word stress and [corresponds to TH /o/](#);

ii) [u] when it is an [intermediate/indeterminate word-final vowel](#);

iii) [u] in [all other cases](#).

#### 6. When was Word-final *hē'* Consonantal in EBHP?

There are a number of cases in [JEH](#) and BH where it is disputed whether a word-final *hē'* simply served as a vowel letter, representing [a:], [e:], or [o:] or whether the *hē'* had, at least originally, consonantal status i.e. was pronounced [h]<sup>228</sup>. Some examples:

- [Third Person Masculine Pronominal Suffix - see above](#)
- [Fs.](#) noun suffix <h>

Scholars see this developing either<sup>229</sup> -

a) *átu* > *át* > *á:* OR,

b) *átu* > *á(:)h* > *á:* - the consonantal *h* may have persisted in pausal situations<sup>230</sup> or in careful speech until the exile.

[EBHP *á:*]

- *In roots III-Yod -*

- בנה "he built" was its (EBHP) \*/ba'nâ/ (\*ba'nâ/ ← \*/ba'naya/) or \*/ba'nâh/ (\*ba'na:h/ ← \*/ba'naya/)? {EBHP \*/ba'nâ/ \*[bɛ'ne:]}
- שתה "he drank" was its EBHP \*/ša'tâ/ (\*ša'tâ/ ← \*/ša'tiya/) or \*/ša'tâh/ (\*ša'ta:h/ ← \*/ša'tiya/)? {EBHP \*/ša'tâ/ \*[ʃɛ'te:]}
- יבנה "he will build" was its EBHP \*/yib'nê/ (\*yib'ne:/ ← \*/yab'niyu/) or \*/yib'neh/ (\*yib'neh/ ← \*/yab'niyu/)? etc. {EBHP \*/yib'nê/ \*[yɪb'ɛ:]}
- ישתה "he will drink" was its EBHP \*/yiš'tê/ (\*yiš'tê/ ← \*/yiš'tayu/) or \*/yiš'teh/ (\*yiš'teh/ ← \*/yiš'tayu/)? etc. {EBHP \*/yiš'tê/ \*[ɪʃ'tɛ:]}
- שדה "field, open country" was its EBHP \*/ša'dê/ (\*ša'de:/ ← \*/ša'diyu/) or \*/ša'deh/ (\*ša'deh/ ← \*/ša'diyu/)? etc. {EBHP \*/ša'dê/ \*[ʃɛ'dɛ:]}

- Some of the independent pronouns -

- אתה "you (ms.)" was its EBHP \*/'atta(:)/ (\*'atta(:)/ ← \*/'antā/ or \*/'atta(:)h/ (\*'atta(:)h/ ← \*/'antā/)? {EBHP \*/'atta(:)/ \*['ette:]}
- אתנה "you (fp.)" was its EBHP \*/at'tinna(:)/ (\*at'tinna(:)/ ← \*/antinnā/ or \*/at'tinna(:)h/ (\*at'tinna(:)h/ ← \*/antinnā/)? {EBHP \*/at'tinna(:)/ \*['et'tinne:]}
- הםה "they (mp.)" was its EBHP \*/'himma(:)/ (\*'himma(:)/ ← \*/'himmā/ or \*/'himma(:)h/ (\*'himma(:)h/ ← \*/'himmā/)? {EBHP \*/'himma(:)/ \*['himme:]}
- הנה "they (fp.)" was its EBHP \*/'hinna(:)/ (\*'hinna(:)/ ← \*/'hinnā/ or \*/'hinna(:)h/ (\*'hinna(:)h/ ← \*/'hinnā/)? {EBHP \*/'hinna(:)/ \*['hinne:]}

- Locative ה - was its EBHP \*/aha/ or \*/a(:)h/ or \*/a(:)? {EBHP \*/ah/ \*[ɛh]}

*Discussion* - There is no way at present to decide between these alternatives.

### *Decision Regarding Form Used in [EBHP] Transliterations and Sound Files*

For simplicity I have marked above the forms that I will use within {wavy brackets}.

## *7. What was the Nature of the "Emphatic Consonants" in [EBHP] and Probably [TH]?<sup>231</sup>*



## Five quotes -

"The oldest pronunciation of the emphatics was probably with the following release of the glottal stop, as is still the case in modern Ethiopic...." [Bergsträsser 1928/83](#) p. 4.

'Emphatic consonant is a term widely used in [Semitic linguistics](#) to describe one of a series of [obstruent consonants](#) which originally contrasted with series of both [voiced](#) and [voiceless obstruents](#). In specific [Semitic languages](#) the members of this series may be realized as [pharyngealized](#), [velarized](#), [ejective](#)<sup>232</sup>, or plain [voiced](#) or [voiceless consonants](#). It is also used, to a lesser extent, to describe cognate series in other [Afro-Asiatic languages](#), where they are typically realized as either [ejective](#) or [implosive consonants](#). In [Semitic](#) studies they are commonly transcribed using the convention of placing a dot under the closest plain [obstruent](#) consonant in the [Latin alphabet](#)."<sup>233</sup>

"...(t)he Semitic emphatic sounds... are pronounced nowadays in the Ethiopian languages and in modern South Arabian as ejectives, i.e. with vocal cords tightly closed and pushed upward, and followed by a glottal stop ʔ: pʔ, tʔ, sʔ, čʔ, kʔ.... It is uncertain which of these charistics - glottalization in Ethiopic, velularization or pharyngialization in Arabic - should be considered primary. However, ancient phonetic changes and transcriptions of the emphatics ʔ and ʔ... support the primitive character of the pharyngialization.... "<sup>234</sup>

"The vowels around an (Arabic) emphatic consonant tend to become lower, retracted or more centralized than those around corresponding non-emphatics."<sup>235</sup>

"The exact nature of the (ancient Hebrew) emphatic consonants /tʔ/, /sʔ/, and /qʔ/ cannot be determined. The corresponding consonants in Arabic are velarized/ pharyngealized<sup>236</sup>; in Ethiopic and Modern South Arabian they are glottalized. Most likely the glottalization is the original Proto-Semitic manner of articulation, so that this can be postulated for ancient Hebrew."<sup>237</sup>

*Discussion* - The Tiberian Masoretes would certainly have been familiar with Arabic velarized emphatics. However, it is unlikely that they pronounced the Hebrew emphatics in that manner. Had they done so, as Blau<sup>238</sup> has pointed out, the impact on surrounding vowels would have been obvious. Thus we are left with three alternatives:

- a. The Tiberian Masoretes no longer distinguished between the emphatic and non-emphatic consonants while still, apparently making this distinction in their native Aramaic. This is unlikely;

b. The Tiberian Masoretes, probably reflecting the situation in EBHP, pronounced the three emphatic phonemes (/ṭ/, /ṣ/, /q/) as do the [Ethiopian languages](#) and in Modern South Arabian as ejectives ([tʰ], [sʰ], [kʰ] respectively).

c. [As Blau has suggested](#) that

... originally emphatics were pronounced by way of the contraction of the larynx (and the lower pharynx). It was from this pronunciation that, on the one hand, glottalization arose, and, on the other, velarization.

I do not consider that alternative a) has any merit. It is impossible to decide between alternative b) and c)

#### *Decision Regarding Form Used in [EBHP] Transliterations and Sound Files*

i) I accept alternative (b) in principle. In practice, I assume that the EBHP emphatics were: /ṭ/ [ṭʰ]; /ṣ/ [ṣʰ]; and, /q/ [kʰ] (approximate [pronunciation](#)).

ii) For simplicity's sake, when it will not cause confusion, I sometimes use the traditional symbols in my [EBHP] transcriptions. However, it must be borne in mind that, when used in the [EBHP] transcriptions, ṭ is merely a proxy for [ṭʰ]; ṣ for [ṣʰ]; and, q for [kʰ].

#### *8. Were the [Conversive and Contextual Waw](#) Differentiated in EBHP?*

There are two questions here -

a) Was the vowel following the *waw* the same in both cases?

*Discussion* - I believe that most scholars would consider that in EBHP the vocalization would be \*/wa-/ \*[wə-] in both cases. An exception is Hetzron who wrote<sup>239</sup> -

The *waw* conversive before prefix-forms, namely. *waC-*, has nothing to do with the conjunction *\*wa-* "and". First of all, it is not legitimate to represent the forms with *waw* conversive as essentially non-initial and depending on a preceding verb. They occur in speech-initial positions quite often. The form is not a consecutive one with no tense-implication, like the *ka-* forms in Swahili or the converbs in Ethiopian. It does have a tense-connotation, that of perfect. It is the normal expression of the sentence-initial perfect, while the suffix-perfect *qātal* is, with very few

exceptions, reserved to non-initial positions. Furthermore, the conjunction \**wa-* "and", if not reduced to \**wə-* as it normally is, becomes \**wā-* in Hebrew, e.g. *yōmām wā-laylā* "day and night", and never *waC-* like the waw of the "converted" prefix-forms. In my opinion, the best theory about the origin of the waw conversive is still that of J. D. Michaelis, long forgotten by Semitists. Michaelis thought (in 1745) that *waC-* had come from the verbal form \**hawaya* "it was", first reduced, like all the suffix-perfect sg. 3 m. forms, to \**haway* and, as a prefix, to a monosyllabic form \**way-* > *waC-*. The independent use of the same verbal form underwent other changes and became *hāyā*. It is possible that, when the prefix-perfect began to decline and to yield to the suffix-perfect, in the still remaining expressive use of the former, which in most verb-classes had also become homonymous with the jussive, there was a need to reinforce the past-tense meaning:- and this was done by adding a past-tense copula of the formation \**hawaya*

b) Did the [gemination](#) of the prefix in the *conversive* form of the [PC](#) exist in EBHP?

#### Discussion

I believe that most scholars would answer in the affirmative. Joüon-Muraoka ([Joüon-Muraoka 1991](#) §35b) states that the gemination in the following consonant is a sign of the structure "adding force".

Blau, however, holds the position (somewhat restated) that during the period of general penultimate stress ([BHA phase 2](#)), stress always fell on the first syllable of the short prefix-tense consisting of two syllables (which follows the *conversive waw*). Instead of the [pretonic lengthening](#) of the short vowel of \**wa*, the following consonant was geminated as happens elsewhere in Hebrew and Arabic. It should be noted that a long vowel plus a simple consonant is rhythmically (almost) identical to a short vowel plus geminated (long) consonant. Since *pretonic vowel lengthening* probably occurred in the Hellenistic period, this would imply that in EBHP the prefix in the *conversive* form of the [PC](#) was not geminated.

#### *Decision Regarding Form Used in [EBHP] Transliterations and Sound Files*

As a practical matter I accept, for the purpose of my transcriptions, that -

a) in EBHP the vocalization would be \*/*wa-*/ \*[*wə-*] in both cases;

b) in EBHP the prefix in the *conversive* form of the [PC](#) was geminated.

### 9. Object Suffixes of the Prefix Conjugation and Imperative - was the Connecting Vowel *\*ay > \*e: or \*i > \*e?*

The question concerns the EBHP pronunciation of Tiberian forms such as יִקְטֹלְךָ (/yiqṭə'ləni/ [yiqṭə'le:ni:]) and יִבְרַךְךָ (/qəṭ'ləni/ [qəṭ'le:ni:]). The Epigraphic Hebrew forms <yšmrk> "may he keep you (ms.)" and <ybrkk> "may he bless you (ms.)"<sup>240</sup> clearly indicate that the vowel before the pronominal suffix is a monophthong whether long or short. There seem to be two alternatives:

1. The Tiberian -ֵ originated in the diphthong /ay/ taken over, by analogy, from lamed-he verbs. This is supported by a number of major scholars such as [Joüon-Muraoka 1991](#) (§61d), [Blau 1976](#) (§21.2) and [Hendel-Lambdin-Huehnergard](#) (p.22). The history of the form would have been as follows -

*\*/yiqṭu'laynī/ \*[\*yiqṭu'ləyni:] or \*[\*yiqṭu'ləyni:] or \*[\*yiqṭə'ləyni:] or \*[\*yiqṭə'ləyni:] (EBHP) > \*/yiqṭu'lēnī/ → /yiqṭə'ləni/ \*[\*yiqṭə'le:ni:] (TH).*

*\*/quṭ'laynī/ \*[\*quṭ'ləyni:] or \*[\*quṭ'ləyni:] or \*[\*qəṭ'ləyni:] or \*[\*qəṭ'ləyni:] (EBHP) > \*/quṭ'lēnī/ → /qəṭ'ləni/ [qəṭ'le:ni:] (TH).*

2. The Tiberian -ֵ originated in the EBHP connecting vowel /i/ [i] or [e/ε]. This is supported by [Richter](#). The history of the form would have been as follows -

*\*/yiqṭu'linī/ \*[\*yiqṭu'lini:] or \*[\*yiqṭu'leni:] or \*[\*yiqṭə'lini:] or \*[\*yiqṭə'leni:] (EBHP) → /yiqṭə'ləni/ \*[\*yiqṭə'le:ni:] (TH).*

*\*/quṭ'linī/ \*[\*quṭ'lini:] or \*[\*quṭ'leni:] or \*[\*qəṭ'lini:] or \*[\*qəṭ'leni:] (EBHP) → /qəṭ'ləni/ \*[\*qəṭ'le:ni:] (TH).*

*Discussion* - For reconstructing EBHP pronunciation, the question centers on whether the vowel preceding the pronominal suffix was long or short. I find it impossible to decide between these two alternatives.

### *Decision Regarding Form Used in [EBHP] Transliterations and Sound Files*

As a practical matter I accept view [\(2\)](#) for the purpose of my transcriptions.

### 10. Pronominal Suffixes of singular Noun - what was the Connecting Vowel?

The question concerns the EBHP pronunciation of forms such as <susk> = [/EBHP/](#) \*/sū' sxka<sup>241</sup>/; TH /susə'kǎ/ \*[su:sə'kɔ:].

The EBHP vowel that became the Tiberian [ə] before -ka is uncertain. It, presumably, developed from the case ending i.e. *i*, *a* or *u*. (see box [The Case System of Proto-Hebrew and the Pronominal Suffixes of the Noun](#)). In EBHP this, then stressed, vowel would not have been reduced to [ə]. Scholars differ -

[Harris](#) - /uka:/ > /əka:/

[Richter](#) - /ka/ (contextual); /ika/ (pausal)

[Beyer](#) - /aka:/

[Hendel-Lambdin-Huehnergard](#) - /kǎ/ > /ak(a:)/ (due to affect of [vowel harmony](#)) > /əka:/

[Gibson](#) - /aka/ > /ak/; AND, /aka:/

Greek transcription עבדך = αβδρχ

*Discussion* - There is really no way of deciding this issue.

### *Decision Regarding Form Used in [EBHP] Transliterations and Sound Files*

As a practical matter my reconstructed EBHP transcription will be -

1cs - /i/ [i:]

2ms - /áka(:)/; [éke:]

2fs - /é:k/; [é:k]

3ms - /áhu/ > /ô/; [ó:]

3fs - [/áha/](#) > /á:/; [á:]

1cp - /ínu:/; [[ínu:](#)] or [énu:]

2mp - /(a)'kim(m)/; ['kɪmm]

2fp - /(a)'kin(n)/; ['kɪnn]

3mp - /(a)'him(m)/ ['hɪmm];, /-á:m/; [-á:m] or /-mô/; [-mo:]

3fp - /(a)'hin(n)/; ['hɪnn], /-á:n/; [-á:n]

### *11. The Vowel Following Prepositions b, k, l*

In both TH and Biblical Aramaic they appear in the same form i.e. consonant followed by *shwa*. It is thought that their original form was *bi*, *ka*, *la*. Probably in late [BHA phase 2](#), or early [BHA phase 3](#) *bi* > *ba*. There are two options for their further development:

- 1) in *BHA phase 4* *ba*, *ka*, *la* > *bə*, *kə*, *lə*; or,
- 2) at some point in *BHA phase 3* or early [BHA phase 4](#) *ba*, *ka*, *la* > *bi*, *ki*, *li*. Later in *BHA phase 4* *bi*, *ki*, *li* > *bə*, *kə*, *lə*.

*Discussion* - It seems to me likely that the forms *ba*, *ka*, *la* would have continued in formal use in EBHP even if the spoken language had shifted to *bi*, *ki*, *li*.

#### *Decision Regarding Form Used in [EBHP] Transliterations and Sound Files*

- I will use \*/ba/ \*[bə], \*/ka/ \*[kə], \*/la/ \*[lə] in my transcriptions.

#### *12. Transliteration of the Divine Name YHWH*

This is a much discussed topic.

[Andre Lemaire](#) (pp. 135-138) recently reviewed the evidence and concluded -

How did one pronounce the tetragrammaton before the fourth century B.C.E., before the Hellenistic period? It is impossible to say with certainty because, in the earlier period, only consonants were written. As a result there are three possibilities: "Yahwoh," "Yahweh" and "Yahwa".

The argument for "Yahwoh" is based on two characteristics of paleo-Hebrew orthography. First, during the period of the monarchy, the consonant "H" is often preceded by the vowel "O," particularly in marking the third person singular (*ahu>oh*), as in the name "Neboh". (In later Hebrew, the third person singular is denoted by a simple "W"). Second, in the proper names of this period, the divine name is generally shortened to YW (pronounced *yawo>yaw?*) in the northern kingdom or to YHW (pronounced *yahwo>yâhu?*) in the Judahite kingdom. Since the sound "O" is often associated with the semi-consonant "W", the tetragrammaton could well have been pronounced "Yahwoh."

"Yahwoh" evolved into YHW/*yâhu* as a theophoric element in Judahite proper names (with the loss of the final "H") and into YW Yaw/yau in the kingdom of Israel (with the loss of both "H"s)....

The argument for the pronunciation "Yahweh" rests on an interpretation of the meaning of the name....

The argument for "Yahwa" is based on the transcription of theophoric Yahwist names into Babylonian Akkadian around 500 B.C.E....

In all probability, the theonym YHWH was originally pronounced "Yahwoh." The "Yahweh" pronunciation later became widespread, to give a theological interpretation to the mysterious, ancient name YHWH, which may have initially been a place name.

On the other hand, Anson Rasinney, who I find more convincing wrote<sup>242-</sup>

... (In) my letter, "How was the Tetragrammaton Pronounced?" (*BAR* July/August 1985. pp. 78-79), in which I gave the epigraphic and linguistic evidence in support of the pronunciation "Yahweh" .... First, I mentioned the evidence from Greek transcriptions in religious papyri found in Egypt. The best of these is *läouiēe* (London Papyri. xlv, 446-482). Clement of Alexandria said "The mystic name which is called the tetragrammaton ... is pronounced *laoue*, which means 'Who is, and who shall be.'"

The internal evidence from the Hebrew language is equally strong and confirms the accuracy of the Greek transcriptions. *Yahweh* is from a verbal root "*hwy*," "to be." This root usually shows up in Hebrew as *\*hwy*. It is a verbal root developed from the third person pronoun, *\*huwa/\*hiya*. The grammatical form of *Yahweh* is the third person masculine singular of prefix conjugation. The *ya-* is the third person masculine singular prefix....

The final syllable of *Yahweh*, *-é* is normal for the imperfect indicative form (present-future or past continuous). A form like *yahweh* developed from *\*yahwiyu*. This development of *-iyu* to *-é* is thoroughly demonstrated for the verbal system in general. The form *yahweh* seems to be from the causative stem (*hif'il*), and apparently means "He causes to become/be."

The theophoric component on so many personal names in Judah (i.e., *-yāhû*, in such names as *Hizqîyāhû* [Hezekiah]) is the normal shortened form of a verb like *yahwé*. For example, the verb "to do obeisance" in the imperfect is *yîstahwé*, while the shortened form (for preterit or jussive) is *yîstāhû*. In other words *yîstāhû* is to *yîstahwé* as *yāhû* is to *yahwé*. This is not hocus-pocus. Any layman can readily comprehend the equation....

*Discussion* - There seem to be four alternatives - *yah'woh*, *ya'hu*, *yah'weh* and *yah'wê*. It really is impossible to decide between these alternatives on current evidence.

*Decision Regarding Form Used in [EBHP] Transliterations and Sound Files*

I will use EBHP \*[yah'wê]; \*[yeh'wē:].

13. אשר "which, that"

אֲשֶׁר should be seen as originating as a noun in construct having the meaning "place of-"<sup>243</sup> According to Blau<sup>244</sup> -

אֲשֶׁר may be related to Heb אֲשֶׁר 'my steps', Aram אֲשֶׁר 'place', Arab 'atar 'footsteps'. אֲשֶׁר originally introduced local clauses denoting 'where'

It is likely that the EBHP pronunciation would have been:

a) \*/'a,šar/ \*[ʔe,šer]; OR,

b) \*/'ašr/ \*[ʔešr] or \*[ʔešər]

*Discussion* - Although no definite conclusion is possible I incline toward /'a,šar/ because -

i) \*/'a,šar/ \*[ʔe,šer] or \*[ʔe,šer] or \*[ʔa,šer] (EBHP) → /'ăšer/ (/TH/ʔ) is an easily comprehensible development; while,

ii) \*/'ašr/ \*[ʔešr] or \*[ʔešər] would normally develop into \*/'ešer/ in (/TH/ʔ).

*Decision Regarding Form Used in [EBHP] Transliterations and Sound Files*

I will use \*/'a,šar/ \*[ʔe,šer].

14. עֹד

There are two possible etymologies for this word:

- /<sup>c</sup>awd/ (/EBHP/) > /<sup>c</sup>ôd/ > /<sup>c</sup>od/ (TH); or,



- /cād/ > /cōd/ ([\[EBHP\]\\*](#)) > /cod/ (TH)

*Discussion* - the spelling <cw> in the [Siloam Inscription](#) makes it almost certain that the JEH form was \*/cawd/ which I would transcribe in line with my [general approach on short vowel allophones](#) as \*[cɔwd].

#### *Decision Regarding Form Used in [EBHP] Transliterations and Sound Files*

I will use \*/cawd/ \*[ɔwd] when the MT has טע and \*/cōd/ \*[o:d] when the MT has טע.

#### *15. Was the PC Verb following וְנִזְכָּר Referring to the Past in [PreExH](#) Preterite or Imperfect?*

From "The *Waw Consecutive* in Old Aramaic? A Rejoinder to Victor Sasson" by T. Muraoka; M. Rogland, *Vetus Testamentum*, Vol. 48, Fasc. 1. (Jan., 1998), pp. 99-104.

"From a diachronic perspective .... At least as far as Biblical Hebrew is concerned, we need to distinguish [three distinct kinds of imperfect forms](#): 1. Free-standing *\*yaqtul*, a punctiliar-preterite found chiefly in poetic texts, 2. *waw-yaqtul*, the unique form of the *\*yaqtul*/preterite which is not confined to poetic passages, and 3. *\*yaqtulu* (with or without a simple *waw*), the so-called "long imperfect", which can have a durative, iterative, habitual, or frequentative meaning when used in the past tense, or even a punctiliar-preterital meaning when used with temporal adverbials such as *'āz* or *ʔerem*."

From [Rainey 1988](#)

Greenstein<sup>245</sup> suggests that the *yaqtul*/preterite is the normal form used with the temporal presentation adverb, וְנִזְכָּר. He has one good example in 1 Kings 8:1: ... אִזְּכֹרָהּ שְׁלֹמֹה, "Then Solomon assembled..." In this case the verb form, *yaqhēl*, is really the short form used instead of *yaqhīl* (< *\*yaqhīlu* ). His other examples, however, are long forms, viz., *yāšīr* (< *\*yāšīru* ) and *yabḏīl* (< *\*yabḏīlu* ). The rule, usually applied to this construction, namely that an imperfect rather than a preterite is used with וְנִזְכָּר, probably can be explained as the use of the imperfect as a narrative tense made possible by the combination with the adverb, וְנִזְכָּר.

*Discussion* - Though Greenstein's view seems logical, it is very probable that the position of Muraoka & Rogland and Rainey (quoted above) is historically correct.

### *Decision Regarding Form Used in [EBHP] Transliterations and Sound Files*

I will follow the MT is understanding the PC Verb following תִּשָּׁ to be in the [PC<sub>imp</sub>](#).<sup>246</sup>

### *16. Line Form and Meter of Biblical Hebrew Poetry*

Three things are clear about the line form of [Biblical Hebrew Poetry](#):

- a) In most cases poetry is distinguished from prose by the use of [parallelism](#);
- b) There is no rigid [metrical system](#) as found in many other poetic traditions such as English sonnets or Ancient Greek Poetry. Had it existed, such a metrical form would help in the intelligent emendation of corrupted verses;

### *Discussion -*

Biblical Hebrew poetic verses generally break down into 2 or three *versets*<sup>247</sup> which usually have similar, not necessarily identical, numbers of stresses, syllables, [morae](#)<sup>248</sup>, weight<sup>249</sup> and phonemes<sup>250</sup>. For this reason it is unwise to propose emendations designed to achieve an exact balance of any of these measures.

### *Decision Regarding Form Used in [EBHP] Transliterations and Sound Files*

*see Discussion above.*

### *17. Issues Related to Tiberian Hebrew*

- a. Did the Tiberian Masoretes Simply Encode Tradition or Did they "Do Grammar"?

*N.b. -[Tiberian Hebrew \(TH\)](#) refers to the Masoretes pronunciation of Biblical Hebrew.*

#### *i.) Areas of Agreement*

- The Tiberian [Masoretes](#), particularly the members of the [Ben Asher](#) family, were responsible for developing and applying the system of [musical/stress accents](#) and

[vowel points](#) of the [Masoretic Text](#) of the [Hebrew Bible](#). This system was added to the proto-Masoretic text type ([PMT](#)) which became dominant by the second century CE. The orthography of this text type follows the norms of 5th-4th centuries BCE<sup>251</sup> which marks the great majority of word-final vowels, and some non-word-final vowels, by [vowel letters](#) (<w> = [u:] and [o:] as well as [w]; <y> = [i:] and [e:] as well as [y]; <h> for word-final [a:] and [ɛ:] as well as [h]; and <'> for word-final [a:] in cases (e.g. /EBHP/ \*/qa'raʔ/ > /LBHP/ \*/qa'râ/ 'he called') in which [historical word-final \[ʔ\]](#) [had elided](#) with compensatory lengthening of the preceding vowel *a* > *â* [a:].

- The Masoretes spoke [Semitic language\(s\)](#) closely related to Hebrew, i.e. [Aramaic](#) and [Arabic](#). Arabic was then replacing Aramaic as the spoken language of the area.
- The Masoretes' tradition of the pronunciation of Biblical Hebrew had changed substantially since the pre-exilic period and had been heavily affected by the [Aramaic vernacular](#). As Coetzee wrote<sup>252</sup> -

The Masoretes who pointed the biblical text tried to do this in accordance with the biblical pronunciation, which was of course impossible. The Masoretes lived five hundred to a thousand years later than the Bible's authors, and there is no way in which their pronunciation could have been the same as that of the original authors of the text. It is also true that the Bible was written over a long period of time (approximately one thousand years) which implies that the Hebrew language would also have changed during the extended period during which the Bible was written. Despite this fact, the Masoretes pointed the text uniformly, disregarding the different stages in the development of the Hebrew language and the different dialects of Hebrew represented in the Hebrew Bible. The Tiberian pronunciation of the Bible is thus not the same as the original pronunciation.

- The Masoretes goal in designing their vocalization system was, in the words of Morag<sup>253</sup> -

Summing up, it appears that in its system of vocalization the Tiberian school attempted to achieve relative completeness. The philologists of this school regarded as complete a system which fulfilled two requirements: it had to serve as an apparatus for establishing the full phonemic structure of the text and simultaneously supply some information which, although phonemically redundant, would be phonetically relevant ([/TH/+](#)) – that is, pertinent for the correct pronunciation of the text. This two-fold tendency to supply the reader with both phonemic and phonetic data may account for the fact that, in addition to all the phonemes, the Tiberian vocalization includes

signs which represent certain allophones .... It is obvious that no attempt has been made to represent *all* the allophones that were known to the philologists of the Tiberian school. Thus, only a few of the allophones of /ě/ have specific signs.... These philologists, so it seems, were aware of the nature of a purely phonetic approach, which 'may or may not err in telling us too little; but it is quite certain to err in telling us too much.'

## ii.) Area of Disagreement - that the Tiberian Masoretes at Times Acted as Philologists cum Prescriptive Linguists

Some scholars, while accepting that primarily the Tiberian Masoretes encoded their traditional pronunciation of the Hebrew Bible also "improved" on that tradition. They consider that, basing themselves on their knowledge of Hebrew, Aramaic and Arabic, the Masoretes at times attempted to restore the language to what they deduced to be its primitive correctness. Thus, for example, [Paul Kahle](#) proposed that the [ms.](#) pronominal suffix <k> was traditionally pronounced, as in Aramaic [a:x] until the Tiberian Masoretes, basing themselves on Classical Arabic, restored it to its earlier form [xa:]<sup>254</sup>. This proposal, however, was disproved by the spelling of the suffix <kh> in [QH](#)<sup>255</sup>

Ullendorf wrote<sup>256</sup> -

...the elaborate network of vowels and accents ... have effectively disguised many of the distinctive characteristics of the living language .... It is clear, therefore, that this language is the result of a good deal of subsequent doctoring, of levelling and compromise, resulting in a hybrid language rather than a proper *koivḥ*. In any real sense of the term, BH in its Masoretic garb was scarcely a language which in that form was ever actually spoken.

The distinguished Hebraist F. I. Anderson also belongs to this group. In a critique of *Studies in Hebrew and Aramaic Orthography*<sup>257</sup> Gary Rendsburg<sup>258</sup> wrote -

A basic premise of all three authors is that the Masoretes performed the task of vocalizing the consonantal text before them. This premise should be questioned. Recent studies, mainly in Israel, have concluded that Masoretic activity was chiefly one of pointing, not of vocalizing. That is to say, the Masoretes of the ninth century CE were simply recipients of reading traditions of great antiquity. The Tiberian Masoretes invented a series of dots and dashes to mark the vowels of one such reading tradition, but they did not determine what the vowels were to be.

Dennis Pardee, in a critique of the same book, wrote<sup>259</sup> -

... Andersen and Forbes usually referred to the Massoretic tradition but occasionally lapsed into formulations indicating a belief that the Massoretes actually did grammar, consciously related phones to grammar, and used a system that explicitly reflected the phonemic length that was characteristic of Biblical Hebrew grammar, as opposed to their own phonetic system. I do not believe that the Massoretes were grammarians nor that their vocalic system was meant to express length, and I find statements in these studies (e.g., pp. 218, 226) that seem to presume such a situation in need of argumentation.

[Hoffman](#) (p. 76) can also be considered as belonging to this school as he concludes his analysis of the Masoretic system -

We must therefore conclude that the Masoretes had at least two goals: preserving antiquity and establishing a standard.

On the other hand, Emanuel Tov, a very careful scholar wrote<sup>260</sup> -

... it seems that the Tiberian tradition reflects in many details a Tiberian pronunciation of the eighth and ninth centuries, while the ... Samaritan tradition, as well as the transliterations in the [Septuagint](#), the second column of the Hexapla, and the writings of Jerome sometimes reflect earlier or dialectical forms . . . . In all these details the Tiberian vocalization reflects forms which are late or dialectical, but not artificial.

### *Discussion -*

This issue is important because:

- If you 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 attested TH give [our understanding of the linguistic changes that took place between EBHP/JEH and TH](#). (Of course, the same requirement separately exists for [BH<sub>Qum</sub>](#), [BH<sub>Pal</sub>](#), and [BH<sub>Gk-La</sub>](#));
- If you assume that the Tiberian Masoretes at times acted as philologists cum prescriptive linguists one would need to analyse their whole view of language, prestige language varieties etc. before reaching any tentative conclusions as to the nature of their reading pronunciation of Biblical Hebrew before they started reconstructing it according to their unrecorded theories. Obviously this would make the whole matter rather speculative.

Most important scholars now agree that the Tiberian Masoretes simply encoded a traditional pronunciation. *This is also my own view*. Two points that generally support the correctness of this understanding are:

- the extreme rarity of [hypercorrections](#) in *EBHP*; and,
- the Masoretes, living in an increasingly Arabic speaking environment, were certainly aware of the phonemic nature of vowel length in Arabic and would also have been aware of the regular use of vowel letters to represent long, and only long, vowels in Arabic orthography. Of particular importance would have been the use in Arabic of <y> to represent /i:/ and <w> to represent /u:/. It could scarcely escaped them that the almost regular use of *yod* to indicate *ī* and *waw* in the [PMT](#) to indicate *i/ē* and *u/o* respectively indicated that like Arabic, and contrary to their received Biblical Hebrew reading tradition, [vowel length had been phonemic in Biblical Hebrew](#). Had they been language reformers it is hard to understand why they would not have made their system vowel quantity sensitive supported as such a move would be supported by both the consonantal text and the increasingly dominant Arabic language.

**Decision** - With minor exceptions the Tiberian Masoretes simply encoded an extremely precise learned tradition of the pronunciation of the Hebrew Bible tradition.

*b) Were there Long and short vowels in TH and, if so, were they Phonemic?*

Probably most scholars of Biblical Hebrew would agree on the following:

- Vowel Length played a steadily declining role within the evolving Hebrew language system (see [Phonemic Status of Vowel and Consonant Length and Quality and of Word Stress over the History of the Hebrew Language](#)).

- In [Ancient Hebrew](#) vowel and consonant length and quality were [phonological](#) as was word stress.

A few scholars view the Tiberian vowel signs as representing a 5-position system indicating both quantity and quality<sup>261</sup>. However, almost all modern scholars view the seven TH non- *ḥaṭep* vowel signs as indicating only vowel timbre (quality) without regard to whether the vowel was long or short. This [second view](#) is the one that I will assume to be correct.

Khan<sup>262</sup> using medieval transliterations of TH into Arabic script has been able to demonstrate that long and short vowels did occur in TH but that their distribution was almost entirely dependant on syllable structure and stress i.e. vowel length was not phonological.<sup>263</sup> As a result not only *qameš* and *šere* but also *pataḥ* and *sego/* were pronounced long when stressed or when in an open syllable."<sup>264</sup>

"Many of the Genizah manuscripts (of Karaite transcriptions of the MT into Arabic script) have Tiberian vocalisation and Tiberian accents..... Since the majority of the manuscripts employ a predominantly Classical Arabic orthographic system, they reflect many phenomena relating to pronunciation which are not directly discernible in the Hebrew Masoretic Text. The transcriptions are, therefore, an important source for the reconstruction of the Tiberian pronunciation tradition. The aspect of pronunciation on which they shed the most light is that of vowel length, since, in general, all vowels which were pronounced long were transcribed by a mater lectionis. The patterns of occurrence of the matres lectionis make it clear that vowel length in Tiberian Hebrew was not an independent variable but was conditioned by stress and syllable structure. The general principle was that all stressed vowels were long and all unstressed vowels in an open syllable were long, with the exception of vowels represented by a ḥaṭap or šewa sign. The vowels šere and ḥolem were always long."<sup>265</sup>

I will assume that :

- 1) All vowels carrying primary or secondary stress were pronounced long;
- 2) *Šwa* and *ḥatef* vowels in unstressed open syllables were pronounced ultra-short (see below);
- 3) All other vowels in unstressed open syllables were pronounced long; and,
- 4) Vowels in unstressed closed syllables were pronounced short.

*c) What are the Šwa and Ḥatef Vowels<sup>266</sup> and How were they Pronounced?*

There are several alternate reconstructions -

i.) *TH Šwa is a Zero Vowel Phoneme with the Composite Šwas (Ḥatef Vowels) being its Allophones*

## Joüon-Muraoka<sup>267</sup>-

The sign ְ *shewa* indicates the absence of a vowel<sup>268</sup>, comparable to the Arabic *sukūn*. One cannot fail to notice its graphic resemblance to the symbol marking the end of a verse, *sof pasuq*: the latter signifies the absence of a sound at the end of a verse, whilst the former marks the absence of a vowel after a consonant as in שְׁמִרָתִי. Whereas it is common practice to speak of two kinds of *shewa*, namely vocalic (*mobile*) *shewa* and silent (*quiescens*) *shewa*, we believe that the *shewa* is essentially an indication for zero vowel. The vocalic shewa is said to indicate a hurried, murmuring vowel, usually transliterated with either *e* or *a*, something like *a* in Engl. about<sup>269</sup>.... (T)his apparant ambiguity of the shewa sytmbol has been recognized as a major issue ... (since the Middle Ages. However) it is intrinsically inconceivable and highly unlikely that scholars who manifest such a high degree of sensitivity to subtle phonetic nuances as the Naqdanim could have allowed such a margin of ambiguity....<sup>270</sup>

The rules laid down by Massoretic grammarians for the pronunciation of vocalic shewa are: a) a full vowel, before gutturals. similar to that of the gutturals concerned. e.g. בָּאָר roughly = /bə'ər/. b) /i/ before Yod. and c) /a/ elsewhere. It is difficult to accept this traditional view... that shewa mobile before a consonant other than a guttural or Yod had the quality of /a/, presumably short /ă/, thus equivalent to ַ,<sup>271</sup> for surely, if this were so, the inventors of the vowel signs would have used ְ in such cases....

In sum, on a synchronic level, shewa was intended by the Naqdanim as a sign for zero vowel phoneme, whereas the composite shewas were its allophones. Equally allophonic were the various phonetic realisations of shewa mobile as laid down in early grammatical treatises ....

Also in the old Babylonian tradition the distinction between the two kinds of shewa is somewhat doubtful; see Yeivin, *Babylonian Tradition*, pp. 398, 404. Rabin concedes that shewa mobile is to be regarded as allophonic. and admits that in the Tiberian scholars' pronunciation the phonetic value of shewa, whether mobile or quiescens, was most likely zero, i.e. = quiescens: C. Rabin, *The Phoenetics of Biblical Hebrew* [Heb] (Jerusalem. 1970). pp. 24-26.

This understanding of the *šwa* and hatef vowels could be expressed as -

Tiberian Vowel Sign	Traditional Name	/TH/	[TH]
ְ	<i>Mobile or Vocal Šwa</i>	/∅/	The vocal šewa sign, was usually pronounced:



Tiberian Vowel Sign	Traditional Name	/TH/	[TH]
			- as [ǎ], [ĕ], [ǫ], [ĕ], [ö], [ī], or [ü] where the šewa preceded a guttural consonant it which case it took the quality of the vowel after the guttural - as [ī] where it preceded [y], e.g. יום ב' [bi'yo:m] 'on the day' - otherwise as [ə].
	<i>Silent or Quiescent Šwa</i>		[Ø]
ֿ	<i>Ḥatep-pataḥ</i>		[ǎ]
ֿֿ	<i>Ḥatep-səgōl</i>		[ĕ]
ֿֿֿ	<i>Ḥatep-qāmeš</i>		[ǫ]

ii.) *TH Šwa Combines Two Phonemes; Composite Šwas (Ḥatef Vowels) Representing Separate Phonemes*

This is probably the majority position. It is expressed by Blau <sup>272</sup> -

The ... *šwa* ... marks two different phonetic entities<sup>273</sup>: the mobile or vocal *šwa*, denoting an ultra-short vowel, and quiescent or silent *šwa*, which marks the absence of any vowel. The Masoretes did not and indeed could not neatly distinguish these two kinds of *šwa* by using different marks, since mobile and quiescent swa reuently interchanged, depending (among other factors) on the speech tempo and the varying conditions of stress. Since the pronunciation of the Bible text as regards the alternation of an ultra-short vowel and zero largely depended on the reader.... Therefore, the Masoretes did the only thing possible: they marked both kinds of *šwa* with the same sign<sup>274</sup>.

This understanding of the *šwa* could be expressed as -

Tiberian Vowel Sign	Traditional Name	[TH] <sup>275</sup>	/TH/

בִּי	<u><a href="#">Mobile or Vocal Šwa</a></u>	Original pronunciation [ə]. Tiberian Masoretes pronounced it- - as [ă], [ĕ], [ǝ], [ĕ], [ō], [ī], or [ū] where the šewa preceded a guttural consonant it which case it took the quality of the vowel after the guttural; - as [ī] where it preceded [y], e.g. בִּי יוֹם [bi'yo:m] 'on the day'; otherwise, - as [ă]. 276	/ə/
בִּי	<u><a href="#">Silent or Quiescent Šwa</a></u>	[Ø]	/Ø/
בִּי	<i>Ḥaṭeṭ-pataḥ</i> <sup>277</sup>	[ă]	/ă/
בִּי	<i>Ḥaṭeṭ-sĕgōl</i>	[ĕ]	
בִּי	<i>Ḥaṭeṭ-qāmeṣ</i>	[ǝ]	/ǝ/

### iii.) *Khan's Hypothesis*

Khan wrote<sup>278</sup> -

In the Tiberian pronunciation tradition, many short vowels occurred in open syllables, e.g. [jɪfma'Ru:] (יָשֹׁמְרוּ) 'they guard', [ja:ʔa'se:] (הַיַּעֲשֶׂה) 'he does'. These were represented in the vocalization system by the *šwa* sign or one of the *ḥaṭeṭ* signs. These were different from the regular vowel signs. From the Masoretic sources and Judaeo-Arabic texts with Tiberian vocalization, we know that these vowels were equivalent in length to short vowels in unstressed closed syllables....

Principal syllables are those that can stand independently, since they have onsets and codas that can open or close an independent word. A dependent syllable is one that cannot stand independently, but only in combination with a following principal syllable.... Any open syllable with a short vowel must be a dependent syllable. This is a phonotactic distinction....

The reality of the phonotactic distinction between dependent and principal syllables is ... reflected by the vocalization system, which represents the vowel nuclei of dependent syllables with signs (*šewa*

and *ḥaṭep̄im*) that are different from those representing the nuclei of principal syllables....

A vowel is long If it occurs in a stressed syllable or in an open principal syllable<sup>279</sup>.

There are no phonological oppositions between the vowel of a dependent open syllable CV (represented by vocalic *šewa* or a *ḥaṭep̄* sign) on the one hand and zero (represented by silent *šewa*) on the other. The vowel in the syllable CV, therefore, can be regarded as an allophone of zero. It is no doubt for this reason that the Masoretes did not consider vocalic *šewa* to be a vowel and represented it with the same sign as they represented zero. A word such as [ʃa'vu:] (שְׁבוּ) 'sit!' (pl.), therefore, should be represented phonologically as /šbu/. There are phonological oppositions, on the other hand, between the vowel of the dependent syllable CV and that of the principal syllable CV:, e.g. [ʃa'vu:] (שְׁבוּ) 'sit!' (imperative pl.) vs. [ʃn:'vu:] (שִׁבּוּ) 'they captured'.

In the Tiberian reading tradition, a short vowel in the dependent syllable CV, which was represented by the *šewa* sign, was usually pronounced with the quality of [a]. Where, however, *šewa* preceded a guttural consonant it took the quality of the vowel after the guttural and where it preceded [j] it had the quality of a short [i], e.g. אֵרַב [be'ʔe:r] 'well', ' ; מְאֹד [mo'ʔo:ð] 'very', יוֹם [bi'jo:m] 'on the day' .... In places the Masoretes considered that the reader may be uncertain whether to pronounce the *šewa* as vocalic or silent and may have been unsure about the pronunciation of *šewa* where its quality differed from the norm. In such circumstances, the Masoretes added a vowel sign to the *šewa* sign creating a composite sign known as a *ḥaṭep̄* sign. The marking of the *ḥaṭep̄* signs under the gutturals was fixed in the Tiberian Masoretic tradition, and the Tiberian model codices do not exhibit significant differences. The marking of these signs under the non-gutturals, however, was not fixed, and considerable differences are found in the manuscripts.

*according to Khan's Hypothesis*

<i>Tiberian Vowel Sign</i>	<i>Traditional Name</i>	<i>/TH/</i>	<i>[TH]</i>
פַּ	<i>Pataḥ</i>	/a/	[a], [a:], [ȧ], [ɑ:]
פֿ	<i>Ḥaṭep-pataḥ</i>		[a]
פֿ	<i>Səgōl</i>	/ɛ/	[ɛ], [ɛ:]
פֿֿ	<i>Ḥaṭep-səgōl</i>		[ɛ̇]
פֿֿ	<i>Qāmeṣ</i>	/ǝ/(?)	[ɔ̇], [ɔ̇']
פֿֿֿ	<i>Ḥaṭep-qāmeṣ</i>	/ō/(?)	[ɔ:]
פֿֿֿ	<i>Šērê</i>	/e/	[e:]
בּוּ/בֹ	<i>Ḥōlem</i>	/o/	[o:]
בּוּבֿ	<i>QibbuṢ/ Šūreq</i>	/u/	[u], [u:]
בֿֿיבֿ	<i>Ḥireq</i>	/i/	[i], [i:]
בֿֿֿ	<i>Šewa</i>	/∅/	[∅], [a], [ɛ], [ɔ], [e], [o], [i], [u] <sup>280</sup>

## Discussion -

The Tiberian vocalization system denotes word stress, consonant quality and quantity but only vowel quality if you ignore the pre-existing vowel letters.<sup>281</sup> probably because vowel length was automatic and therefore non-phonological.<sup>282</sup> The phonetic length of vowels in various positions varies as outlined in [Khan 1997a](#) §6.2.1.

Khan's position, with its assumption of phonotactically dependent and principal syllables<sup>283</sup>, is quite distinct from those of Joüon-Muraoka and Blau. I do not feel qualified to critically evaluate the relative validity of Khan's approach.

Joŭon-Muraoka's and Blau's positions are, in practice not very different.

Regarding the pronunciation of the mobile *šwa*, I cannot see why the masoretes would have used a single sign to indicate such a wide ranged of vowel sound when they could have simply used *ḥatep̄* signs. For that reason I assume that [e] corresponds to mobile *šwa* in [TH].

Decision - See [Table – Vowel System Tiberian Hebrew](#)

### TH - Distinguishing the Vocal from the Silent *Šewa*

From a practical point of view, [distinguishing between mobile and silent \*šwa\* can be a complicated business](#).

" From the diachronic, historical point of view, the vocal shewa appears where there once occurred a vowel which was subsequently deleted in the wake of stress shift."<sup>284</sup>

"... There are conspicuous cases of the occurrence of an ultra-short vowel (= mobile swa) where originally no vowel existed (= zero, quiescent *šwa*)....

"The ... occurrence of a quiescent *šwa* instead of a mobile one, is common. Indeed it is not only single words but whole word classes that reflect this feature, dependent, it seems, on the speed of recitation, the conditions of stress, and the consonantal environment.

"Perhaps the most conspicuous category of words reflecting the shift of mobile swa to the quiescent one includes words with the so-called *šwa medium*, a special sort of quiescent *šwa*, which arose by the reduction of an original full vowel (and was, therefore, originally a mobile *šwa*) and is preceded by a short vowel. Through the influence of the reduced vowel, a following *bgdkpt* letter became spirantized and remained so even after the reduced vowel has been omitted. At the time of the loss of the vowel, the stop-spirant alternation of the *bgdkpt* letters was no longer automatic, so that the *bgdkpt* letters did not automatically change back to stops after the vowel had disappeared.

"This *šwa medium* is found in plural construct *qat̄l* nouns. Thus מְלָכִים 'the kings of' arose from *\*malakē* (cf. מְלָכִים 'kings'). The form is pronounced *mal<sub>k</sub>ē*, with a spirantized *k*, because at the time the spirantization was active the *k* was preceded by a mobile *šwa*. Some *qal*/infinitives construct also show *šwa medium*, e.g., after *bə*, *kə*, as in בְּנִפְלֵי

## TH - Distinguishing the Vocal from the Silent *Šwa*

‘when it fell’, כָּנָפָל ‘as one falls’, pronounce *binpōl*, *kinpōl*, derived from כָּנָפָל pronounced *nəpōl*....

"The *qal*/infinitives construct present a complex picture, since after *la* followed by *bgdkpt* the form has a quiescent *šwa*. Such forms as לָשֹׁךְ 'in order to break' are due to morphological reshuffling on analogy to the prefix-tense (יָשַׁךְ 'he will break') rather than to a genuine sound shift. The late date of this feature is indicated by forms like אֲנִי נָפַל 'that I fall' Ps 118:13; the *n* immediately preceding another consonant was not assimilated to it because at the time of the action of this shift the *n* was still followed by a mobile *šwa*. Alternatively, one could suggest that this shift was still active, but that at the time of the vocalization of the biblical text its letters had already become hallowed and therefore the *n* of נָפַל could not be omitted. Cf. Ginsberg 1929–30: 129–31.)

"The replacement of mobile *šwa* by quiescent *šwa* is also reflected in the strong tendency ... to pronounce double consonants followed by mobile *šwa* as simple consonants followed by quiescent *šwa*, e.g., יָסַע 'journeys of' = *masē* Num 33:1, instead of the expected *\*massəē*. Moreover, the addition of prosthetic *aleph* to words beginning with a mobile *šwa* intimates that the mobile *šwa* had become quiescent; the difficulty of pronouncing a consonant cluster at the beginning of words then led to the addition of the prosthetic *aleph*. Cf. אֶרֶץ 'arm' (with mobile *šwa*) and אֶרֶץ with prosthetic *aleph*."285

### d) Furtive Pataḥ in TH

Joüon-Muraoka<sup>286</sup> describes this phenomenon as -

The vowel *ṣ* (*pataḥ*) slips in furtively before a guttural closing a stressed final syllable, after the vowels /*q*, *i*, *u*/, which are heterogeneous to gutturals and can never be supplanted, and also after the vowel /*e*/, which in certain circumstances, cannot be supplanted.<sup>287</sup> This *ṣ* (*pataḥ*) ... called *furtive pataḥ*<sup>288</sup>, is an extremely short /*a*/; it is used, in the context just described, as a consonant, i.e. it forms a centering diphthong.<sup>289</sup> with the preceding vowel, e.g. רוּחַ *spirit*<sup>290</sup>; inf. cst. ; עָלָה

This is described in more detail in van der Merwe et al.<sup>291</sup>

*Decision Regarding Form Used in [EBHP] Transliterations and Sound Files*

*The decision follows van der Merwe et al..*

<sup>1</sup> Oral = expressed in spoken form as distinct from written form.

<sup>2</sup> Aural = of hearing or sound; relating to the ear or hearing, or to receptiveness and response to speech.

<sup>3</sup> יָקוּן תִּי (tēqū) = "let it (fem.) stand" in Babylonian Aramaic - i.e. we do not have a solution to the question. *A Dictionary of Babylonian Aramaic* by Michael Sokoloff, Bar Ilan and Johns Hopkins University Presses (2002) p.993.

<sup>4</sup> The discovery of [Neo-Assyrian](#) or [Neo-Babylonian](#) diplomatic archives would be the likely source of such discoveries. Note the Aramaic text in cuneiform presented by J. N. Epstein in his Hebrew *A Grammar of Babylonian Aramaic* (Magnes, Jerusalem, 1960) p. 11 ff.

<sup>5</sup> [Bergstärsser](#); [Birkeland](#), [Blau](#), [Harris](#), [Manuel](#), [Sáenz-Badillos](#).

<sup>6</sup> See [Blau 1968](#) p. 35.

<sup>7</sup> For a detailed discussion see [Manuel 1995](#) pp. 50-55.

<sup>8</sup> I.e. that the case endings on the masculine singular noun have dropped and that shifts such as -*īma* > -*īm*; -*ūma* → -*īm*; -*aymi* > -*aym*; -*āmi* > -*aym* have taken place.

<sup>9</sup> *Israel Oriental Studies* 2 (1972) ,pp.29-30, reprinted in *Topics in Hebrew Linguistics*, 1998 pp. 262-263.

<sup>10</sup> Blau's terminology is confusing as he lapses into using a kind of shorthand. It is clear from the context that what he means is that the form \**'aqtla* (or \**'aqtula*) that probably existed in his *Stress Period 2* ([http://www.adath-shalom.ca/anc\\_heb\\_bib\\_heb\\_history#blau\\_sp2](http://www.adath-shalom.ca/anc_heb_bib_heb_history#blau_sp2) ) developed into *'aqtālā* in his *Stress Period 3* ([http://www.adath-shalom.ca/anc\\_heb\\_bib\\_heb\\_history#blau\\_sp3](http://www.adath-shalom.ca/anc_heb_bib_heb_history#blau_sp3) ).

<sup>11</sup> The EBHP form might have been /ka'lā/ = [ka'la:] or /ka'la/ = [ka'laː].

<sup>12</sup> A good description of this view is in [Blau 1972](#) chapt. 12.

<sup>13</sup> Note comments [Blau 2010](#) §1.18.

<sup>14</sup> The normal form in spoken Arabic.

<sup>15</sup> Re the final vowel being originally short see (for Arabic) Birkeland 1952 pp 12-13

"the short final vowels of the suffixes -ka and -ki ... it is not probable that ... the final vowels were long. Also the final vowels of the independent personal pronouns 'inta, 'inti, 'ihna, 'humma must be assumed to originate from forms with short final vowels. If

they ever were long, they were shortened so early that they could not be preserved in the dialect without the pausal -h

<sup>16</sup> See, for example, *Eastern Arabic with MP3 Files* by Frank A. Rice, Majed F. Said, Georgetown University Press (2005) p. xxxiv.

<sup>17</sup> Nb. Classical Arabic pausal forms must be seen as a later development of the contextual forms in contrast to [TH](#) where the pausal forms often preserve an earlier stage in stress and/or vocalization. [Morag 1989](#) (pp. 101-102) compares pausal forms in TH and [colloquial Arabic](#) dialects in the following -

BH (=TH) discloses a distinction between pausal and contextual (non-pausal) forms. The former differ in having a *qameṣ*, versus a *pataḥ* (e.g. in the pausal *qāṭāl*, the third pers. mast, sing. of the G (*qal*) formation: pausal *kātāṽ* versus contextual *kāṭav*), or in having a full vowel and a penultimate stress *versus* a mobile *šewā* and an ultimate stress (e.g. *qāṭālā*, the third pers. fem. sing, *versus* the contextual *qāṭēlā*: *kātāvā* *versus* *kāṭēvā*), or, in disclosing a *qāṭēl* pattern in some segolate nouns, (e.g. *ʾāreṣ* "land" in pause *versus* *ʾereṣ* in context). [fn. For a recent treatment of pausal forms in BH see [Blau 1981](#).] In fact, the verbal domain of BH consists of two almost systematically distinct categories - the pausal paradigm and the contextual paradigm: for a number of persons there exist almost regularly two forms, pausal and contextual.

Quite a few Arabic dialects possess pausal features, which create a formal pause-context dichotomy. The [phonological](#) nature of the pausal features varies. Thus, e.g., in Yarim (South-Yemen) pausal forms have a glottal stop inserted before the final consonant, a word like *kātib* "a writer" having its final syllable pronounced as [tʰib]....

In the Syro-Israeli area, pausal phenomena are common in many dialects. Once again, the phonological manifestations of pre-pause occurrence are variegated. In Damascus Arabic one finds in pausal forms the lengthening of the vowels *a*, *i* and *u* when the syllable structure is CVC. Cf., e.g., contextual *byəṣṣrab* - pausal *byəṣṣrāb* "he drinks". In numerous Lebanese dialects both vowel quality and quantity are affected by pause, *i*, *u*, and *a* becoming *ē*, *ō* and *ā* (or *ā*); thus, e.g., in Bišmizzin, contextual *byínzil*, "he goes down", *byúktub* "he writes", *byíftaḥ* "he opens" appear in pause as *byínzēl*, *byúktōb*, *byíftāḥ*. In sum, the extent of pausal features in Arabic dialects is far larger than in Classical Arabic.

The similarity between BH (=TH) and those Arabic dialects that possess pausal features lies in the very existence of the dichotomy into contextual and pausal forms.



Viewed historically, BH has retained in pause mostly, although not exclusively, forms that reflect, especially regarding their stress pattern, a more ancient layer of the language than the contextual; in contrast, AD mostly exhibit in their pausal features a tendency for developing phonological markers of various kinds to denote occurrence in pause."

<sup>18</sup> It is important to note that the Arabic pausal forms eliminate singular case endings, the final short vowels on plural and dual case endings, mood endings and the final short vowel on a few forms of the perfect. However, the pausal form maintains, by suffixing an *-h*, most of the short vowel endings of the perfect, probably because they are important to understanding the text.

In normal reading practice of [MSA](#) the reader pronounces all words as pausal. However, this does not lead to any loss of clarity of meaning.

<sup>19</sup> For /at/ > /ā/ -

a) [Joüon-Muraoka 1991](#) §7b implies that the development was /at/ > /ah/ > /ā/

b) [Blau 1980](#) states that while this is possible a direct /at/ > /ā/ is more likely.

<sup>20</sup> Note following quoted from [Steiner 1979](#) fn. 27 p. 168-

... I do not share the widespread belief that final vowels had to be long or anceps in order to escape deletion. I believe that short *\*a*, unlike short *\*i*, and *\*u*, was frequently preserved in word-final position because of its greater sonority.

<sup>21</sup> [Ginzberg 1940](#) p. 549.

<sup>22</sup> [Manuel 1995](#) p. 55.

<sup>23</sup> [Harris 1939](#) Linguistic change no. 35. pp. 59-60.

Elision of final short vowels....

Masoretic vocalization showing no final vowels and showing phonetic changes which took place only after loss of final vowels: [dā'bār] < [da'baru] "word"; ['bayit] < ['baytu] "house"; [bêtî] < [bêtiy] < [bêtiya] "of my house." For traces of early case endings, see BL 522-30, GK 251-4....

TIME: After 1500, since these vowels are still written in Ugarit.... After 1365, since they are written in the Canaanite forms and glosses in the Amarna letters, not merely as mechanical features of cuneiform orthography but even where that orthography did not require them.... After the period of the 18th and 19th

dynasties in Egypt, since there are indications of case endings in the Egyptian transcriptions of Canaanite place .... After the syncope of [y, w] between unstressed short vowels, since final short vowels were involved in most of those syncopes: ['banaya] > [banâ] "he built". Before the stress lengthening of penult vowels which followed immediately upon the dropping of final short vowels. Before the development of the [-â] form of the feminine suffix in the noun in Hebrew. Before the reduction of double consonants which became final after this change.

<sup>24</sup> [Cook 1990](#) p. 54.

<sup>25</sup> [Cook 1990](#) p. 66.

<sup>26</sup> [Beyer 1969](#).

<sup>27</sup> Cf. Classical Arabic.

<sup>28</sup> [Andersen 1999](#).

<sup>29</sup> [Andersen 1999](#) pp. 9-12.

<sup>30</sup> See [Blau 1972](#) p. 85.

<sup>31</sup> See [Gogel 1998](#).

I am working on the assumption that in EH -

- all final stressed vowels were long and generally marked by vowel letters;
- final unstressed long vowels were generally marked by vowel letters; and,
- final unstressed short vowels were unmarked i.e. were not marked by vowel letters or in any other way.

<sup>32</sup> See *Phones and Phonemes* - [http://www.houseof david.ca/anc\\_heb\\_6.htm#phone\\_phonym](http://www.houseof david.ca/anc_heb_6.htm#phone_phonym).

<sup>33</sup> Note, in reconstructed [EBHP] transliterations and sound files -

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

[http://www.houseof david.ca/anc\\_heb\\_tegu.htm#bgdpt](http://www.houseof david.ca/anc_heb_tegu.htm#bgdpt);

2. vowel qualities are outlined here - [http://www.houseof david.ca/anc\\_heb\\_6.htm#ebhp\\_vow\\_qual](http://www.houseof david.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.

<sup>34</sup> there is only one, not fully legible example.

<sup>35</sup> "his" eg. "for him"

See [Third Person Masculine Pronominal Suffix](#).

Where a biblical poem (e.g. Genesis 49:11) uses on one noun הָ and on another י to indicate "his" I assume that there was a traditional distinction of pronunciation missed by the Massoretes – i.e. the poet was deliberately balancing the older pronunciation הָ = á:hu /ó:h against the newer form י = ó:.

<sup>36</sup>

לִי (= "to me") and מִי (= "who?") from [Stuart](#) (p. 117) -

"Albright has suggested a vocalization, *liya*, (see *Yahweh and the Gods of Canaan*, p. 11-12, note 31) which is supported by the orthographies of early Phoenician and Ugaritic inscriptions.... Words such as (MT) *mī* and *lī* probably varied in pronunciation in early periods (e.g. 'lī vs. 'liya ); the composer's choice would often have been *metri causa*."

See also The Oracles of Balaam by W. F. Albright (JBL Vol. 63, No. 3. (Sept. 1944), pp. 207-233 p. 209 and footnote 16 .

<sup>37</sup> In the military documents found at Lachish and Arad <°at> is used meaning 'now' or the like. This may well be the equivalent of BH <°th> ([Kang](#) p. 222.). The final vowel was likely a short, unstressed /a/.

<sup>38</sup> Emphasis mine.

<sup>39</sup> See [Blau 2010](#) §444; [Hendel-Lambdin-Huehnergard](#) p. 17.

<sup>40</sup> Discussion paper prepared for The World Bank The Mediterranean Development Forum Marrakech, 3-6 September 1998 PRELIMINARY COPY by Mohamed Maamouri International Literacy Institute University of Pennsylvania.

<sup>41</sup> See also [Garr 1985](#) pp.61-63.

<sup>42</sup> For /at/ > /a:/ see [Blau 1980](#).

<sup>43</sup> Similar to developments in Arabic – see [http://en.wikipedia.org/wiki/Varieties\\_of\\_Arabic#Phonetic\\_variation](http://en.wikipedia.org/wiki/Varieties_of_Arabic#Phonetic_variation) .

<sup>44</sup> א (ʾ / [ʔ]) is a complicated issue. The best brief discussion I know of is given in [Blau 1976](#) pp. 22-24 which I quote below –

7.1. א (when pronounced = /ʔ/ [ʔ]) has often disappeared, generally compensated for by a lengthening of the preceding vowel; as a rule, it is, however, preserved in spelling.

7.1.1. The dissimilation of an א closing a syllable after an א opening it, accompanied by compensatory lengthening of the vowel between them, is presumably Proto-Semitic. Accordingly: 'a' (preceding a consonant) > 'ā > (§ 9.3.1) ō, as 'a'kud > 'ākud > 'ōkud > ... 'ōkid > אָקִיד (= 'ōḥez) "I shall take". Accordingly, forms like אָקִיד-אָקִיד (= 'ōḥez - ye'ēḥoz); אָקִיד-אָקִיד stood in the same paradigm. Therefore, they were adjusted to one another. As a rule, consonantal alef was newly introduced into the 1st pers. sing. אָקִיד אָקִיד... In some frequent verbs, however, ō of the 1st pers. sing. was transferred to the other persons: אָקִיד (= yōḥad').

7.1.2. א closing a stressed syllable (during [the second ProtoHebrew stress period, v. § 9.1.2](#)) was elided and the preceding vowel compensatorily lengthened: ra'sū > rāsū > (§ 9.3.1) rōsū > ראָס = rōš "head"; nāsī'tu > (§ 9.3.1) nōsī'tu > (§ 9.1.2) nōsī'tu > נָסִי'תו carrying (fem. sing.)."

REMARK: Through analogic change, א was sometimes restituted: maša'tī (later אָמָשָׁתִּי māsātī) "I found", rather than mašōtī < mašātī < maša'tī, through the influence of maša'a (later אָמָשָׁא māsā) according to § 7.1.3: then, of course, since the preserving influence of maša'a ceased, the ' of maša'tī was elided); אָמָשָׁא "well", rather than bē' < bi'r, through the influence of the plural \*bē' ārōt (later, through the mutual influence of the singular and plural, אָמָשָׁא אָמָשָׁא). On the other hand, through analogic influence, ' was sometimes elided when closing unstressed syllables, as אָמָשָׁתִּי (mē'sātēm) "you (masc. pl.) found", in accordance with אָמָשָׁתִּי (māsātā), אָמָשָׁא (māsā).

7.1.3. Later (during the [third Proto-Hebrew stress period, § 9.1.3](#)) final א was dropped, again with compensatory lengthening of the preceding vowel: maša' > אָמָשָׁא = māsā, "he found"; ta' > אָמָשָׁא "chamber" (not tō, since ā > ō had ceased operating by this time); mali' > אָמָשָׁא "was full"; mušu' > אָמָשָׁא "to find".

7.1.4. The optional omission of ' when preceding ḥataf is later. Accordingly, אָמָשָׁא (= a'ā) becomes (אָ)מָשָׁא (long pataḥ), as אָמָשָׁא "to its master"; אָמָשָׁא (following the article) > (אָ)מָשָׁא as אָמָשָׁא Nu 11,4; אָמָשָׁא "the Aramaeans" 2 Chr

22, 5; and אָזְזָא (often originating from /' which may result from a') > (אָזְזָא) as לֵאמֹר "to say"; סְהַתְיָה < ha'tāyū, יִם בְּאֵינָהּ Jonah 3,5.

7.1.5. The optional disappearance of ' and the *šwa* mobile preceding it is exhibited by forms like אִימְטִי "sinners" < *hōtē'im*, that of ' at the beginning of syllables after [sonants](#) by forms like מְאֻכָּה "occupation" < *mal'ākā*; עֲלֵי "left" < *šim'al*. The frequent occurrence of ' under the conditions of this paragraph and those of § 7.1.4 is perhaps a result of restitution owing to analogy and spelling pronunciation, and furthered, perhaps, by dialect mixture as well.

7.1.6. Final ' preceded by a consonant is elided, as *hiṭ'u* "sin" > *hiṭ'* > אִיטְ (yet אִיטְ *deše*) "grass" < *daš'*, has been analogically remodelled after *melek*, etc.). If, however, the consonant preceding ' is *w/y*, the ' is assimilated and the *w/y* doubled: *šaw'* > *šaww* > ... אִישׁ "vanity"; *gay'* > *gayy* > ... אֵי "valley". Similarly, *y* is assimilated to a following *w* *sūsayw* > *sūsaww* > סוּסָיו "his horses".

See also [Garr 1985](#) pp.49-50.

<sup>45</sup> Cf. [Bergsträsser](#)

<sup>46</sup> Quoted from [http://en.wikipedia.org/wiki/Varieties\\_of\\_Arabic#Phonetic\\_variation](http://en.wikipedia.org/wiki/Varieties_of_Arabic#Phonetic_variation).

"The glottal stop (consonantal *aleph* of BH, the *hamza* of Arabic), tends to lose its consonantal value in BH as well as in Arabic dialects. In the former this takes place in final position (e.g. *\*māša'* > *\*māšā* "he found"), and at times also in medial position, where the *aleph* had originally closed a syllable (*\*māša'tī* > *\*māšātī* "I found"). In Arabic dialects as a whole the phenomenon is more extensive than in BH, occurring in all medial and final syllabic and word positions. This process is attested already in pre-Islamic times, and was considered typical of the Ḥiǧāzī dialects." - quoted from [Morag](#) 1989 p. 98.

<sup>47</sup> Examples from *Eastern Arabic with MP3 Files* by Frank A. Rice, Majed F. Said, Georgetown University Press (2005) p. xxxvii.

<sup>48</sup> [Gogel](#) p.82

<sup>49</sup> [Gogel](#) p.97

<sup>50</sup> Quoted from [Andersen 1999](#) pp. 5-8

<sup>51</sup> See [Manuel 1995](#) p. 43 note 17.

<sup>52</sup> C = any consonant; V = short vowel

<sup>53</sup> See [Bergstärsser](#), [Muraoka 1976](#), [Garr 1989](#), [Harris](#), [Birkeland](#), [Sáenz-Badillos](#), [Manuel](#).

<sup>54</sup> See [Manuel 1995](#) p. 59.

<sup>55</sup> [Knobloch 1995](#) pp. 191-194, 202-205..

<sup>56</sup> [Jenssens 1994](#) pp. 147-148.

<sup>57</sup> Quoted from [Knobloch 1995](#) p. 194.

... (H)elp-vowels cannot be considered to be an inner-Greek phenomenon, but rather confirm the antiquity of the MT's segolation (which) is confirmed by the LXX.

Transcriptions showing unsegolated "segolates" in the Secunda must be explained in some other way, perhaps as predating Origen, as belonging to an archaic dialect, as archaizing, or as opting to disregard the unstressed help-vowel.

<sup>58</sup> Blau's footnote (11)

"For epenthetic vowels not being morphophonemically counted cf. e.g. dialectal Arabic *bikitbu* "they will write": would the epenthetic (second) *i* count, it would have attracted the stress (as it does in the speech of some speakers; v. Blanc, (Blanc, H., 1953. *Studies in North Palestinian Arabic*. Jerusalem) pp. 28-29. - Segolate nouns ending in ' exhibit in Hebrew two different forms: one with total loss of the ' (*heṭ* "sin", the ' still spelt after the *t*) other with epenthesis *peṭ* "wonder", the ' still spelt after the second *e* and once perhaps also pronounced. If in fact epenthesis arose immediately with the elision of short final vowels (as I think it happened), *peṭ* could have arisen by real epenthesis, the ' being once pronounced. It could have, however, originated by analogy to "sound" segolates. It stands to reason that ... nouns of the type of *beḳe* "weeping" are not due to sound shift (an epenthetic vowel *ε* preceding *y* being unlikely) but rather to analogy.... With Barth (Barth, J., 1894. *Die Nominalbildung in den semitischen Sprachen*<sup>2</sup>, Leipzig), p. 21, I am inclined to consider nouns like *beḳe* as original *pi'al* forms: \**beḳe* with stress on the ultima. Barth, correctly in our opinion, explains the shift of *e* to *ε* as parallel to the shift of *peṭ* to *peṭ* in "sound" nouns (*neḏer* - *neḏeṭ*); cf. the vacillation of *qeṣeṭ* - *qeṣe*. He does not, however, account for the shift of the stress to the penult. This has to be attributed to the analogy of segolate nouns. [Bauer-Leander, 1922](#), p. 579q' ... posit analogy as well, yet without assuming an original *pi'al*/nominal theme. Yet without this assumption it is difficult to account for the final *h* occurring in the consonantal text (*bkh*, rather than *bky*). Though we think that (phonetic) segolization arose with the elision of

final short vowels, it stands to reason that analogical formations triggered by it were much later, too late to find expression in the consonantal text."

<sup>59</sup> [Harris](#), [Bergstärsser](#), [Birkeland](#), [Manuel](#). For [Colloquial Arabic](#) see [Mitchel 1993](#) pp. 73-89. My Arabic teacher a [Melkite Greek Catholic](#) from the [Beqaa valley](#) in Lebanon, pronounces "house" as [ˈba.yit] and "street" as [ʃa.ri.æ] which closely parallels Tiberian pronunciation norms.

"Viewed historically, BH discloses the emergence of anaptyctic vowels in the segolate nouns (types: *mélek*, *séfer*, *qódeš*) and in the jussive forms of the *III-y* verbs (type: *yíven* "let him build"). In the Babylonian tradition of BH anaptyctic vowels also appear in other morphological categories such as the imperfect forms of the *qal* (type: *yíšimrū* "they will watch").

In Arabic dialects the occurrence of anaptyctic vowels in medial position is common. The syllabic re-structuring of the word that had resulted from these vowels is, at times, similar to that disclosed by BH in its Babylonian tradition: cf., e.g., the morphological type *yíšimrū* (above), to the type *byəkətbu*, "they write" of Damascus Arabics.

Some Arabic dialects, such as the *gilit* dialects of Mesopotamia (and to a lesser extent also the *qəltu* dialects), have a vowel serving to break a final cluster in nouns of the type CVCC. Thus, in Muslim-Baghdadi: *čalib* "a dog", *galub* "a heart". This development is similar to the emergence of the segolates in BH.

In initial position, an auxiliary vowel is occasionally represented in BH by an initial *aleph* - the so-called prosthetic *aleph* - in forms like *etmōl* "yesterday", *ezrōa* "an arm". BH possesses some morphological doublets in this category - e.g., *ezrōa* alongside *zērōa*. This probably indicates dialectal variation: the forms with the initial *aleph* had possibly their origin in dialects where the vowel of the first consonant (that is, eg, the vowel of *z* in *zērōa*) was reduced to zero, thus creating an initial cluster. By the introduction of an initial vowel (represented orthographically by the *aleph*) the syllabic structure changed and the occurrence of an initial cluster was avoided.

On the other hand, the forms that do not have an initial *aleph* represent dialects in which the vowel of the first consonant had been preserved (and later reduced to a mobile *šwà*). Some Arabic dialects also disclose an emergence of an auxiliary vowel before an initial cluster, in forms such as *inzilna* "we went down." - quoted from [Morag 1989](#) pp. 99-100.

<sup>60</sup> [Kaye-Rosenhouse 1997](#) Table 14.2.

<sup>61</sup> Quoted from [Abu-Haidar 1989](#) p. 473.

<sup>62</sup> See [Joüon-Muraoka 1991](#) §88Cc.

<sup>63</sup> [Harris](#), [Bergstärsser](#), [Birkeland](#), [Sáenz-Badillos](#), [Blau](#).

<sup>64</sup> Nb. forms followed by a vowel after loss of the case endings (e.g. /ħiṣ'ṣi:/ "my arrow" or /ħiṣ'ṣi:m/ "arrows") were unaffected by this issue since they never ended in a geminated consonant.

<sup>65</sup> [Lipinski 1997](#)

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-qatt, "only", and in verbs with a second long or geminated radical (e.g. ẓaltu or ẓiltu < \*ẓall-tu, "I became"), unless the long consonant is split by an anaptyctic vowel (e.g. ẓaliltu).

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" ....

24.8. 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 ẓaliltu (§24.5), one can refer to the Hebrew verbal form nifʿal, "was made", differing from the corresponding Arabic form ʾinfaʿala, 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 ʾin/faʿala or nif/ʿal. 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."

<sup>66</sup> I am assuming that all words begin with a consonant. See - [http://www.houseofdauid.ca/anc\\_heb\\_6.htm#syllables](http://www.houseofdauid.ca/anc_heb_6.htm#syllables)

<sup>67</sup> As in Palestinian Christian Aramaic see [Schultess](#) p. 15.



<sup>68</sup> See [Harris 1941](#) p. 145 and is assumed by [Richter](#). [Lipinski 1997](#) §24.5. "... 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*)..."

<sup>69</sup> [Harris 1939](#) Linguistic change no. 59. p.76.

Reduction of final double consonants....

Jerusalem Hebrew (Tiberian masoretic form) - [kol] < [kull] < [kullu] "all"; [ʿam] < [ʿamm] "people"; [ḥay] < [ḥayy] "living" (root ḥyy); [tāw] analogically replacing [taw] < [taww] "mark" (root tww/y, as may be seen in the verb form [wəḥitwītā] "and you shall set a mark").

Not in Babylonian masoretic Hebrew (= North Palestine Hebrew?) - [ʾitt] < [ʾitti] "with" (Kahle, Masoreten des Ostens 199; Kahle in BL 219-20).

Time : After dropping of final short vowels, when these originally hetero-syllabic double consonants became a final cluster. After the Greek borrowing of the alphabet names. After [-āt] > [-â] (in nouns) since [-at] < [-att] did not become [-â] : [ʾaḥadtu] > [ʾaḥattu] > [ʾaḥatt] > [ʾaḥat] "one." There is no lower date before which it must have been completed; the change may be considerably later than here assumed.

CONDITIONS: This precedes a later Hebrew (and perhaps wider Canaanite) tendency to reduce final clusters. Medial double consonants remained, divided into two syllables. Bergsträsser notes (BHG I 24 e) that the regular reflex of these forms had a short vowel since vowel lengthening had not occurred in syllables which were closed before the dropping of short final vowels; forms like [gāg] "roof" were new formations (replacing [ʾgag], etc.) on the analogy of the other nouns which had stress-lengthened vowels in their final closed syllables.

<sup>70</sup> quoted from T. M. Johnstone's review of *Semitic: Damascus Arabic* by Arne Ambros, *Bulletin of the School of Oriental and African Studies, University of London*, Vol. 44, No. 2 (1981), p. 378.

<sup>71</sup> [Mitchel 1993](#) (pp.98-99) as follows (emphasis my own).

<sup>72</sup> Quoted from T. F. Mitchell's review of *The Phonology of Colloquial Egyptian Arabic* by Richard S. Harrell in *Bulletin of the School of Oriental and African Studies, University of London*, Vol. 21, No. 1/3 (1958), pp. 635-637

<sup>73</sup> [Al Ani 1970](#) chapt. VI. The author states (p. 75) "The relative duration of the consonants depends upon whether they occur initially, medially or finally. It also depends upon whether they are [aspirated or unaspirated](#), [voiced or voiceless](#), and single or [geminated](#)."

<sup>74</sup> This pronunciation is very likely to have been [preserved in the formal language](#).

<sup>75</sup> *Linguistique historique et linguistique générale* (Paris 1948), pp. 36-43.

<sup>76</sup> [Kapeliuk 1989](#) demonstrates a number of lines of parallel evolution between Neo-Syriac and Neo-Ethiopian languages which developed among radically different languages and could have had no contact with each other.

<sup>77</sup> The material in this box was adapted from [Morag 1989](#) pp. 111-114.

<sup>78</sup> Rare in BH (Num. 11.15; Dt. 5.24; Ezek. 28.14), common in post-biblical Hebrew (see [Kutscher 1977](#) p. 10 ).

<sup>79</sup> According to [Hendel-Lambdin-Huehnergard](#) p. 19 'attāh (BH).

<sup>80</sup> Only as a *ketib* form. See Gesenius, p. 106. We shall not deal here with the forms for this person.

<sup>81</sup> In the Dead Sea Scrolls. See [Morag 1954](#).

<sup>82</sup> In the Dead Sea Scrolls. See [Morag 1954](#).

<sup>83</sup> In the Dead Sea Scrolls. See [Morag 1954](#).

<sup>84</sup> Four occurrences in the Bible (Gen. 31.6; Ezek. 13.11,20; 34.17).

<sup>85</sup> This form occurs in BH only when preceded by prepositions.

<sup>86</sup> See [Young, Rezetko, Ehrensverd 2008](#) chapt. 7.

<sup>87</sup> For the contrary view see [Young 2004](#).

<sup>88</sup> This is the paper's abstract [Schniedewind-Sivan 1997](#) p. 303.

<sup>89</sup> [Schniedewind-Sivan 1997](#) p. 335.

<sup>90</sup> "The Emergence of Classical Hebrew," 71, 73.

<sup>91</sup> [Blau 1997](#), suggests that the difference may not have been great at first but would have increased with time.

<sup>92</sup> From [Moscati 1964](#) p. 67

10.8 In Hebrew (at least as far as can be judged from the

Masoretic tradition) stress falls on the last syllable—save for some cases of penultimate patterns. In contrast to [Akkadian](#) and Arabic, stress in Hebrew may have distinctive or phonemic value: e.g. 'šābū "they returned", but šā'bū "they took prisoner". Stress patterns and syllabic constitution are bound up with complex rules of vowel evolution which (leaving out of account the difficult question of their origin) may be summarized as follows:

- a) final short vowels are dropped (\*qabara > \*qabar);
- b) stress shifts to the last syllable which the development under (a) has left closed and therefore long (\*qabar > \*qa'bar);
- c) short accented vowels undergo lengthening or change of timbre, or both, either under the influence of the word-accent or by contextual stress patterns (pause) ...: *a* > *ā*, *i* > *ē/ê*, *u* > *o* (\*dabaru > dā'bār; \*qābiru > qō'bēr; \*yaqburu > yiq'bor; before two successive consonants, however, *i* > *a* instead of *i* > *ē/ê* (\*zā'qinta > zā'qanta);
- d) in contrast to the general Semitic tendency, and probably by a relatively late process of restoration, open pre-tonic syllables undergo lengthening and sometimes change of vowel quality: *a* > *ā*, *i* > *ē* (or else *ə* according to the development referred to under [g](#)); *u* remains, but the following consonant is doubled ...: e.g. \*dabaru > dā'bār, \*ʿinabu > ʿēn'āb (but \*ḥi'māru > \*ḥə'mōr > ḥā'mōr), \*lu'qaḥ > luq'qaḥ;
- e) short vowels in closed unstressed syllables may undergo change of quality: *a* > *i*, *i* > *e*, *u* > *o* (\*mad'bār > mid'bār [dissimilation?]; ʾimrā'tō; and ʾemrā'tō; \*ʾud'nī [= \*ʾuḏ'nī] > ʾoz'nī );

f) in final open stressed syllables *ī* becomes *ê* (Ar.

*ṭamānī* [= \**ṭamānī* ], Heb. šəmō' nē);

g) short vowels in open unstressed syllables are reduced to *ə* in accordance with the general Semitic tendency and in contrast to the instances listed under (d) where pre-tonic syllables frequently undergo lengthening; it is likely that these two opposed tendencies were operative at different periods: e.g. \*daba'rīm > dəbā'rīm, \*qā'barū > qābē'rū.

f) *ī* becomes *ē* in final open and stressed syllables (Arabic *ṭamānī*, [Syriac](#) *tēmā'nē*).

<sup>93</sup> From [Moscati 1964](#) p. pp 68-69

10.10. In the Aramaic area, ... Biblical Aramaic reflects the situation in Masoretic Hebrew.... As in Hebrew. (indeed, the Masoretes worked under the impact of Aramaic) there are complex rules of vowel development, connected with the incidence of stress and with syllabic constitution, which may be summarized as follows:

a) final vowels, whether long or short, are dropped (\*qabara > \*qabar; (\*qabarū > \*qabar [the final *ū* is written but not pronounced]) ;

b) stress passes to the final syllable which is now closed and hence long (\*qabar > \*qa'bar);

c) short vowels in open unstressed syllables are reduced to *ə* or dropped (\*qa'bar > \*qə'bar);

d) in closed syllables short *a* and *i* may become *e* (\*qab'rat > \*qəb'rat; sifrā > səfrā);

e) a short stressed *u* becomes *o*, whether by the action of the word-accent ... or by analogy with pronominal forms and verbal suffixes (\*qa'bartumu > \*qabartum > \*qa'bartum > \*qabar'ton > qəbar'ton).

f) *ī* becomes *ē* in final open and stressed syllables (Arabic *ṭamānī*, [Syriac](#) *tēmā'nē*).

<sup>94</sup> [Blau 1976](#) pp. 30-31. Transcription adapted to [my system](#) and the bolding my own.

<sup>95</sup> "Which still preserved final short vowels, when they were dropped in *status constructus*, ... *yiršayu* > יִרְשְׁיוּ against *šaday* > שָׁדַי but were affected by [Philippi's Law](#) ... contrary to *status absolutus*, thus exhibiting that verbs had lost the short final vowels earlier" [Blau 1976](#) p. 31 n. (1).

<sup>96</sup> [Blau 2010](#) §3.5.7.2.1.

<sup>97</sup> יִרְשְׁיוּ /'dāg/ ([/TH/](#)) < /da:g/ ([/EBHP/](#)) < /'dagu/ ([/PH/](#))

<sup>98</sup> יִרְשְׁיוּ /ya'šēn/ ([/TH/](#)) < /ya'še:n/ ([/EBHP/](#)) < /ya'šin/ ([/PH/](#))

<sup>99</sup> יגור (/yā'gor/ ([/TH/](#)) ← /ya'go:r/ ([/EBHP/](#)) < /ya'guru/ ([/PH/](#)))

<sup>100</sup> יִשְׁנִי (/yā'shen/ ([/TH/](#)) ← /ya'shin/ ([/EBHP/](#)) < /ya'shin/ < /ya'sina/ ([/PH/](#)). Nb. /ya'shin/ ([/EBHP/](#)) could have been pronounced as [ya'shin] or [ya'shen].)

<sup>101</sup> יגור (/yā'gor/ ([/TH/](#)) ← /ya'gur/ ([/EBHP/](#)) < /ya'gur/ < /ya'gura/ ([/PH/](#)). Nb. /ya'gur/ ([/EBHP/](#)) could have been pronounced as [ya'gur] or [ya'gor].)

<sup>102</sup> It is possible that the form should be as suggested by [Margolis 1904](#) who concluded -

Meier sees in the plural suffix *-īm* an abstract suffix. Hence *zəḵūn-īm* "old age," *etc.* But the abstract may be used for the concrete (comp. *Sulṭ-ān*, hence *Elōh-īm*, Deity, God). Abstract nouns become collectives, then plurals. He points to the broken plural of *malk-* forms (Hebrew, Arabic, Ethiopic). He knows of the plural of the plural: *rajul*, *rijāl*, *rijāl-āt*. Accordingly he explains *məlāk-īm* on p. 78 as the plural of a plural. The shortening of the vowel is explained neither by Meier nor by Brooks. Here Barth's Law of Compensation (*Nominalbildung*, xiii.) steps in to furnish the wanting explanation. Barth unnecessarily confines himself to the feminine suffix; his law, however, holds good of any abstract suffix. Hence *məlāk-īm* (nevertheless we find *ēlōh-īm* without compensative shortening, cf. *ābōd-ā(h)*). Compensative forms are found also in Arabic (also in broken plurals). *Malk-ay* (with *a*) I explain as due to the analogical influence of the singular. The consonantal environment is another influence. Cf. *kanf-ay* by the side of *dibr-ay*. (Ultimately compensative shortening will be found to rest upon accentual conditions....")

<sup>103</sup> [Gogel](#) p.155.

<sup>104</sup> See the discussion in [Sarfatti 1982](#); [Ben-Hayyim 1954](#).

<sup>105</sup> MH forms based on [Kutscher 1971a](#).

<sup>106</sup> See [Steiner 1979](#).

<sup>107</sup> Cf. [Harris 1939](#) Linguistic change no. 57. p. 75.

[-kī] > [-k], [-tī] > [-t].

PLACE: South Palestine (Jerusalem) - [šāmáʕat] < [šamáʕt] < [šamáʕtī]

"you (f. sg.) heard"; [ʾatt] < [ʾáttī] "you (f. sg.)"; [lāk] < [lákī]

"to you (f. sg.)"; [dā'mēk] < [damá( ? )kī] "your (f. sg.) blood";

[bānáyik] < [banáyk] < [banáykī] "your (f. sg.) sons."...

TIME: Before the early editings of the consonantal text of the bible, since otherwise -y would have been written down as in the North Hebrew material. Hence probably well before the Babylonian exile; the writings without -y cannot be attributed to removal of pre-exilic y by post-exilic editings, since the North Hebrew forms with [-y] were left unchanged.

*CONDITIONS: The dropping of the anceps [-i] of the fem, sg. suffix caused changes in the preceding vowel in some cases; see BHG I 27 a. The North Hebrew forms are listed in GK 157, 256, 258; BL 248, 253, 255. When non-final, this [-i] remained : [yaladtīnī > yəlidtīnī] "you have borne me" (Jer. 15. 10).*

<sup>108</sup> BA forms based on [Rosenthal 1968](#).

<sup>109</sup> For Qumran Aramaic, but also covering other phases of Aramaic see "The Pronominal Suffix of the Second Feminine Singular in the Aramaic Texts from the Judean Desert", Stephen E. Fassberg, *Dead Sea Discoveries*, Vol. 3, No. 1 (Mar. 1996), pp. 10-19.

<sup>110</sup> Galilean Aramaic was the local dialect of [Western Middle Aramaic](#) (c. 200 C.E. - c. 1000 C.E.). A late version was the native language of the [Masoretes](#) who vocalized the Hebrew Bible, the [Masoretic text](#) giving us [Tiberian Hebrew](#). BA forms based on, in order of priority, [Fassberg 1991](#), [Kutscher 1970](#), [Kutscher 1976](#), [Sokoloff 1990](#), [Tal 2000](#), [Stevenson 1924](#), [Schultess](#).

<sup>111</sup> From [Blau 2010](#) §3.5.11.3 -

Heavy *dageš* usually does not appear in the last consonant of a word. The most obvious environment for it would be in geminate roots, and word-final geminates usually simplify (in TH - DS): *qall* 'light' becomes ל ק Exceptions to this limitation include ת נַטַּף 'you (fs)', ת נַטַּף 'you (fs) gave', perhaps by paradigmatic pressure from ת נַטַּף 'you (ms)', ת נַטַּף 'you (ms) gave'. These forms may also be interpreted as reflecting simple *t* with plosive pronunciation ( *at* rather than *att*; *notat* rather than *notatt*), again by paradigmatic pressure. If this proves true, these forms can be attributed to a late stage in which the automatic spirantization of *bgdkpt* outside word-initial position had ceased operating (§ 3.3.2.2, pp. 79ff.).

<sup>112</sup> See [Gesenius](#) §32h

<sup>113</sup> See [Blau 2010](#) §4.2.3.5.2n.

<sup>114</sup> [Kaye and Rosenhouse](#) tab. 14.5.

<sup>115</sup> See [Gogel](#) p. 161.

<sup>116</sup> [Kaye and Rosenhouse 1997](#) table 14.5.

<sup>117</sup> See [Driver 1925](#) p. 28.

<sup>118</sup> See [Blau 2010](#) §4.3.5.6.4.

<sup>119</sup> From [Blau 2010](#) §4.3.5.6.4.

...The (original) *šere* in the (*hitpael*) participle was long (in the pre-Tiberian period), as in every absolute noun, but short in the finite forms of the verbs, as proven by its alternation with *pataḥ*.

<sup>120</sup> [Blau 2010](#) §4.3.5.6.4. In the Babylonian vocalization, the second radical is followed by *pataḥ/segol* in context in the whole paradigm of *hitpa<sup>cc</sup>el* (with the exception of the participle, which reflects *šere*), and by *qamaš* in pause ..... That *a* was indeed the original characteristic vowel of both the prefix- and suffix-tense (as well as the imperative), is demonstrated by Semitic languages (Classical Arabic, Ge'ez), on the one hand, and vestiges of the Tiberian tradition (especially the occurrence of *qamaš* in pause), on the other. In the Tiberian vocalization, by the influence of the *pi<sup>cc</sup>el*, *šere* has penetrated the whole paradigm of *hitpa<sup>cc</sup>el*, however, as stated, vestiges of the original *pataḥ* are well attested ... (which) clearly suggests that the original vowel of the second radical of *hitpa<sup>cc</sup>el* was *a*. The (original) *šere* in the participle was long (in the pre-Tiberian period), as in every absolute noun, but short in the finite forms of the verbs, as proven by its alternation with *pataḥ*.

<sup>121</sup> [Pérez Fernández](#) p. 105.

<sup>122</sup> See [Blau 2010](#) §4.3.8.6.4.2.

<sup>123</sup> *Impact of Philippi's Law and the Law of Attenuation* (\*Qatqat > Qitqat [Hendel-Lambdin-Huehnergard](#) pp. 14-15.)

"Two important laws capable of accounting for alternation between /a/ and /i/ at either a diachronic or synchronic level are often mentioned. The first, Philippi's law, states that /i/ in a closed stressed syllable changes to /a/: e.g. /\*bint/ (as in Classical Arabic) > בִּת (but with the original vowel retained when suffixed, בִּתּוֹ etc.). The second, the law of attenuation, purports to account for the opposite phenomenon: /a/ in a closed, but unstressed syllable changes to /i/: e.g. /\*haqta/ > /\*hiqta/ > (on the analogy of the future) /hiqtil/, which is the standard and basic Hifil pattern. Neither law is free from exceptions or difficulties." Quoted from [Joüon-Muraoka 1991](#) §29 a and aa.

From 3.5.8.6. -

Philippi's Law is limited in its application. It applies to the final syllables of construct forms, but not absolute forms (where the *hiriq* shifts to *sere*): cstr  $\text{אֶבְרָהָם}$  abs  $\text{אֶבְרָהָם}$  cstr  $\text{בֵּית}$  abs  $\text{בֵּית}$  'court'. Further, it is well attested in closed syllables with penultimate stress, e.g.,  $\text{וְיָרְדוּ}$  they (f) will remain', cf.  $\text{וְיָרְדוּ}$  'she will remain';  $\text{וְיָרְדוּ}$  they (f) will bear', cf.  $\text{וְיָרְדוּ}$  'she will bear'. In two small noun classes, Philippi's Law applies to absolute forms, geminate and segolate nouns. These nouns originally terminated in two consonants, and therefore even before the loss of the case endings they contained a closed syllable: *\*bittu* >  $\text{בֵּית}$  'daughter'; *\*sidqu* > *\*šadqu* >  $\text{צֶדֶק}$  (rather than  $\text{צֶדֶק}$ ) 'righteousness'. Through the analogy of nouns like cstr  $\text{אֶבְרָהָם}$  abs  $\text{אֶבְרָהָם}$  geminate nouns like  $\text{אֶבְרָהָם}$  'nest', which should have shifted to *a* ( $\text{אֶבְרָהָם}$  in the absolute as well, < *\*qannu* < *\*qinnu*, since the *a* occurred in a closed syllable) were reformed:  $\text{אֶבְרָהָם}$  in the absolute,  $\text{אֶבְרָהָם}$  only in the construct.

Philippi's law has been examined in detail by Blau in "On Pausal Lengthening, Pausal Stress Shift, Philippi's Law and Rule Ordering in Biblical Hebrew", Hebrew Annual Review 5 (1981), pp. 1-13, reprinted in Topics in Hebrew Linguistics, 1998 and [Blau 2010](#) §3.5.8.

[Harris](#), [Bergstärsser](#), [Sáenz-Badillos](#), [Rendsburg](#)

<sup>124</sup> See [Blau 2010](#) §3.5.8.8, 3.5.8.9.

<sup>125</sup> [Janssens 1994](#) (p. 65).

<sup>126</sup> [Jenssens 1994](#) p. 69.

<sup>127</sup> Among the other common verbs with characteristic vowel i-e in the perfect are  $\text{בָּטַל}$  and  $\text{קָרַב}$ .

<sup>128</sup> [Sokoloff 1990](#) p. 297.

<sup>129</sup> See, for a different approach [Huehnergard 1989](#)

<sup>130</sup> See [Gesenius](#) §44h

<sup>131</sup> See [Blau 2010](#) §3.5.7.6.13, [Rendsburg](#), [Sáenz-Badillos](#), [Harris](#),

Other examples of attenuation sometimes mentioned -

TH  $\text{אֶבְרָהָם}$  (noun, f.s. constr.). Development - /šadaqatu/ > /šadaqat/ (EBHP) > /šidqat/ = [šidqat]

TH  $\text{דְּבָרִי}$  (noun, m.p. constr.). Development - /dabaray/ > /dabaray/<sup>131</sup> (EBHP) > /dibre:/



In both these cases, the first vowel - /i/ is probably a "helping vowel inserted, as often in spoken Arabic, after the first consonant of, what would otherwise be a 3 consonant cluster.

In any case this development is post-exilic.

"In its Tiberian tradition, BH discloses an *a* > *i* shift (the so-called "attenuation shift") in closed unstressed syllables. Other traditions of Hebrew - notably the Babylonian - do not evidence this shift to the same extent. Cf., e.g., \**madbaru* > *midbar* "desert" in Tiberian Hebrew versus *madbar* in Babylonian Hebrew. In a number of Arabic dialects, *i* is the counterpart of Classical Arabic *a* e.g. *innuh* "that", *min* "who" versus *'anna*, *man*. There is, however, a basic difference between BH (in its Tiberian tradition) and Arabic dialects: while in the former there is a certain consistency, although not a full regularity, in the development of *a* into *i*, in the latter we have to deal with a phenomenon of sporadic occurrence. Also, as noted above, in BH the *a* > *i* shift is morphophonemically conditioned, taking place in closed unstressed syllables.[fn. For a comprehensive treatment of /a/ in closed unstressed syllables in the various traditions of Hebrew see [Harviainen](#).]" - quoted from [Morag 1989](#) pp. 96-97.

<sup>132</sup> The shift of the characteristic imperfect prefix vowel from *a* to *i* is also characteristic on many spoken Arabic dialects.

[Moscati 1964](#) pp. 141, 143 sect. 16.54 - "North-West Semitic has put into effect, from the first millennium B.C., all the changes consequent upon the incidence of the stress-accent ...; this has entailed, for. Hebrew, the shedding of final short vowels (\**yaqburu* > *yiqbor*), the transition *u* > *o* of stressed short vowels (same example), the change *a* > *i* in closed unstressed syllables (same example; some scholars, however, regard the vowel *i* of the prefix as primary, alongside *a*, and as peculiar in origin to stative verbs), the reduction to *ə* of short vowels in open unstressed syllables (*yiqbərū*). In Syriac the same changes are operative—save for the process *a* > *e* which takes place in closed unstressed syllables (*neqbor*)."

According to [Morag 1989](#) pp. 104-105) -

"Preformative vowel and stem vowel in the imperfect of G (i.e. Arabic equivalent to the *qaḥ*) formation.

Historically, BH discloses a relationship - formulated by the Berth-Ginsberg law -- between the stem vowel and the vowel of the preformative: the latter was *i* when the stem vowel was *a* (type: *yiqtaḥ*) but *a* when the stem vowel was *i* or *u* (types: *yaqtul* and *yaqtīl*). Although in most cases the differences between the various types were levelled in BH, the preformative vowel becoming regularly *i* (e.g., *yilmad* he will study", *yigmōr*

"he will finish"), some forms show that the rule had indeed been in force. Thus, in the imperfect forms of the C2=C3 verbs, *yēqal* "he will be light" is historically to be interpreted as \**yiqallu* (*i-a* relationship between the vowels of the preformative and the stem) while *yāsōv* "he will turn" represents \**yasubbu* (a-u relationship).

Some Arabic dialects of the Arabian Peninsula also manifest a relationship between the preformative vowel and the stem vowel: as a rule, the former is *i* when the latter is *i* or *a*, but *u* when the latter is *u*. *yibṣir*, *yīṣrab*, *yuktub*. Although there is nothing more here than a general similarity between BH and Arabic dialects, the very occurrence of this relationship in both areas is worthwhile noting."

<sup>133</sup> [Manuel 1995](#) p. 43 note 19.

<sup>134</sup> From [Moscati 1964](#) pp. 141, 143 -

Simple Stem: Prefix-Conjugation

16.54. b) North-West Semitic has put into effect, from the first millennium B.C., all the changes consequent upon the incidence of the stress-accent (cf. §§ 10.8, 10.10); this has entailed, for Hebrew, the shedding of final short vowels (\**yaqburu* > *yiqbor*), the transition *u* > *o* of stressed short vowels (same example), the change *a* > *i* in closed unstressed syllables (same example; some scholars, however, regard the vowel *i* of the prefix as primary, alongside *a*, and as peculiar in origin to stative verbs), the reduction to *ə* of short vowels in open unstressed syllables (*yiqbərū*). In Syriac the same changes are operative - save for the process *a* > *e* which takes place in closed unstressed syllables (*neqbor*).

<sup>135</sup> [Blau 2010](#) §3.3.3.4.3

<sup>136</sup> I should note that considers /'miqdašu/ to be the PH form of the word.

<sup>137</sup> [Sokoloff 1990](#) p. 319

<sup>138</sup> [Sáenz-Badillos](#) p. 70. [Richter](#) on Ex.1:11.

<sup>139</sup> Cf. [Blau 2010](#) §3.5.7.6.13.

<sup>140</sup> [Blau 1976/93](#) p. 124.

<sup>141</sup> This form favored due to vowel harmony. Cf. [Hendel-Lambdin-Huehnergard](#) p. 21.

<sup>142</sup> 1Kings 6:1.

<sup>143</sup> From [Morag 1989](#) p. 100 -

"In its historical development BH shows a conditioned shift of *at* > *ā* in feminine nouns in the non-construct state, e.g. \**malkat* > *malkā* "queen".[fn. This shift differentiates Hebrew from its neighbouring dialects, Phoenician, Moabite, Ammonite, in which the final *t* had been preserved.] ...

The above *at* > *ā* shift is characteristic of all Arabic dialects. In the verbal system there is, from a historical point of view, a marked difference between BH and Arabic dialects. In Hebrew the *at* > *ā* shift is also disclosed in the third pers. fem. sing. of the perfect (e.g., \**katabat* > *kātēvā*), while Arabic dialects retain the final *t*. The *at* > *ā* shift in fem. nouns is also regular in Aramaic, where in the absolute state \**malkat* > *malkā* ."

<sup>144</sup> [Blau 2010](#) §3.5.7.2.1.

<sup>145</sup> [Gibson 1971](#) p.22.

<sup>146</sup> [Gogel](#) p. 89.

<sup>147</sup> This is described in more detail by [Manuel 1995](#) (pp. 48-50)

The Proto-Semitic 3 masculine singular suffix /-hu/ developed at least four instantiations, according to the base it followed, some of which may not have reached their final loan until Tiberian Hebrew. Three of these variations involve diphthong contraction.

1. Dual oblique morpheme [the morpheme /ay/ appears on dual as well as on plural bound forms in biblical Hebrew] + 3 masculine singular morpheme = ay+hu > ayū > āw ([Gibson](#) 1971:3, 24, 41). [...Tiberian Hebrew 'ēlāw (<'ilāw < 'ilayū < 'il+ay+hu = "unto him")]....

2. III-y final sequence + 3 masculine singular morpheme = ay+hu > ēhū ([Gibson](#) 1971:42)

Preformative conjugation hiphil ... [...Tiberian Hebrew ya<sup>c</sup>ālêhû (< ya<sup>c</sup>lēhû < ya<sup>c</sup>lē+hū [≈III-y Preformative conjugation qal] ) << ya<sup>c</sup>liy+hu = "he brought him up", with the secondary opening (/ă/) of an originally closed syllable]....

3. Energic morpheme + 3 masculine singular morpheme = 'an+hu > 'annū > 'ennū

Imperative qal [...Tiberian Hebrew \*šālā'hennū (<šala'hannū < šala'han+hu = "send him")]....

4. Connecting vowel + 3 masculine singular morpheme = a+hu > aw > ō ([Garr 1985:57](#))....

[...Tiberian Hebrew: \*kəṭā'bô (← katā'baw < katāb+a+hu = "send him" ); ʿab'dô (< ʿab'daw < ʿabd+a+hu = "his servant" ); ʾāmā 'tô (← 'ama 'taw < 'amat+a+hu = "his maidservant" ); yəda'c'tô (← yada'c'taw < yada'c+a+hu = "you knew it")];... ; šəlā'hô (← šala'haw < šalaḥ+hu = "send him") or šəlāḥāhû].

See also [Garr 1985](#) pp.54-58.

<sup>148</sup> [Blau 2010](#) § 4.2.3.4.1.

<sup>149</sup> [Hendel-Lambdin-Huehnergard](#) p. 20.

<sup>150</sup> [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: ḥšw "his men" (Lachish 3:18); ḥw "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 *yādô*), 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 יָ ) is phonetic, while the *plene* spelling (= MT יָּ ) retains the etymological *yod*.

<sup>151</sup> [Kaye and Rosenhouse](#) p. 188

<sup>152</sup> The Khirbet el-Kom inscriptions are dated to the 8th-7th century B.C., leaving open the possibility that the spelling of -yh in *mšryh* represents archaic writing (for -yhw). Biblical Hebrew attests to a third masculine singular suffix (-yhw, -ēhū) on plural nouns in Habbakuk 3:10 (*ydyhw*, "its [m.s.] hands") and Job 24:23 (*cynyhw*, "his eyes"); cf. Cowley, *Gesenius*, p. 258.

<sup>153</sup> In contrast to epigraphic Hebrew, the most frequent orthography of the third masculine singular suffix in biblical Hebrew is not *h*, but -w (for -ō), with *waw m.l.* for long *ō*, while the feminine suffix in biblical Hebrew is -h (-āh).

The *hē* suffix on singular nouns in epigraphic Hebrew may indicate the use of *hē* as a *m.l.* for *ō* in pre-biblical times, *ahu* > *aw* > *ō*. On the other hand, the absence of the *waw* as *m.l.* for *ō* in pre-Qumranic texts might lead one to vocalize a *hē* suffix possibly as containing consonantal *hē*. One possible and one tentative epigraphic Hebrew form do

little to dismiss this notion; the suffixed noun *rw* in the Siloam inscription possibly contains the *waw m.l.* for *ō*, and *qšrw* (*qāšrō*), "his harvest," in Mesad Hashavyahu 1:6 is a less likely example. By Qumranic times, historical *-ahu* in final position had become *ō* (*ahu > aw > ō*), and *waw* had all but replaced *hē* as the *m.l.* for *ō* in the third masculine singular suffix.

In epigraphic Hebrew times, however, the suffix *w* was the norm only on plural nouns (and possibly singular nouns from III-weak roots). The statement by Cross ("Cave Inscriptions from Khirbet Beit Lei," in *NEATC*, 1970, p. 301) that "*Waw* does not become a vowel letter for *ō* before the fourth century in Hebrew" cannot yet be verified for lack of data. All that may be stated with certainty is that *-h* is the common third masculine singular pronominal suffix on singular nouns before the texts from Qumran.

<sup>154</sup> Biblical *-a(y)w*.

<sup>155</sup> *On the basis of the Masoretic vocalization without yod, as well as the then attested Judean form written without yod, 'nšw, "his men," Lachish 3:18, the third masculine singular pronominal suffix on a masculine plural noun has been reconstructed on lines similar to the Masoretic form. Cf. Cross and Freedman, Early Hebrew Orthography, p. 54 and Andersen and Forbes, Spelling in the Hebrew Bible; Dahood Memorial Lecture, BibOr 41 (1986).*

"The form with *yod* included in the orthography, *pnȳw*, "his face," KH 2:9, is evidence for:

1) a very archaic historical spelling in which the *yod* is not assumed to be pronounced.

2) a seventh century Judean Hebrew pronunciation that included consonantal *yod*; cf. Barkay, "The Priestly Benediction on Silver Plaques from Ketef Hinnom in Jerusalem," *TA 19 (1992): 165*.

3) a seventh century Judean pronunciation including a vowel for which *yod* was the correct mater lectionis (Cross and Freedman [EHO, pp. 54-55] assumed that it was the correct northern Hebrew form) or

4) a very early instance of secondary graphic insertion of *yod* according to the theory of Andersen and Forbes (cf. *Spelling in the Hebrew Bible*, p. 62); also Pardee, "Review of *Spelling in the Hebrew Bible: Dahood Memorial Lecture* by Francis I. Andersen and A. Dean Forbes," *CBQ 50 (1988): 276-80*.

Mention must also be made not only of nouns (e.g., *'nšw*), but also prepositions that show forms like plurals (e.g. *'lw*, "to him," MHY 1:13 [biblical *'lyw*]).

<sup>156</sup> Cross ("The Cave Inscriptions from Khirbet Beit Lei," in *NEATC*, 1970, p. 304, n. 3) states with confidence that the *waw* of *yrḥw* stands for *ēw* (*yarḥēw*), "the articular suffix

added to a plural or dual noun." The pattern 'ayhū > 'ēhū > 'ēw for the pronominal suffix pertains to Israelite for certain, but also may pertain to Judahite for plural and dual nouns, according to Cross and Freedman (EHO, p. 54). The two do admit the possibility of an -'aw, rather than -'ēw pronunciation for the form at Lachish (EHO, pp. 54-55).

Zevit (*MLAHE*, pp. 29-30, nn. 13-15) suggests the development 'ayhū > 'ayū > 'ayō > 'āw for the ending of 'nšw, mostly on the basis of biblical Hebrew where the -ay diphthong in unstressed syllables essentially remains uncontracted.

Zevit's second suggestion for 'nšw, that the waw is rather the third masculine singular pronominal suffix on a singular collective noun ('anōšō) based on the biblical parallel in Isaiah 24:6, is not likely. The absolute plural noun 'anšm, "men" occurs (A 24:19) while the collective 'nōš does not. In fact, the collective "men" is 'yš in Hebrew; cf. Arad 40:8; Pardee, *HHL*, p. 64.

The form 'nšw may be vocalized \*'anašēw or \*'anašaw. In Northern Hebrew, the suffix would likely have been pronounced \*-ēw (as in Gezer yrḥw, "his two months;" \*yarḥēw, but in Judean Hebrew, the suffix may have been pronounced \*-aw, since the diphthong of the plural construct was preserved in the South (\*-ayhū\* > \*-aw).

In the view of Cross and Freedman (*EHO*, pp. 54-55), the plural form \*-ēw would have extended to the Southern dialect as implied by the writing yw in the Masoretic text. The yod here would be a *mater lectionis* representing ē and would not be explained as an example of historical spelling *per se*.

In other words, the "ketib" of the Masoretic text would represent Israelite pronunciation (\*-ē), while the Masoretic pointing would suggest Judean pronunciation \*-aw. The orthography implies a reading \*-ē, while the vocalization is -āw. According to this theory, the Masoretic vocalization would derive from the Judean pronunciation, while the orthography would represent North Israelite reading. Cross and Freedman suppose a general extension of the \*-ē form in the orthography, and a similar, subsequent leveling through of the \*-āw form in the vocalization.

Regarding the problem presented by the form pnyw (KH 2:9), see the preceding note.

<sup>157</sup> See [Zevit 1980](#) p. 31.

It would be fair to say that the consensus opinion is that word-final *o:* was regularly written <h> in JEH. See the following quotes from two leading scholars:

From [Andersen 1999](#)

It ... can ... be maintained as a rule that all word-terminal vowels were represented by *waw*, *yod* or *hē* .... Occasional scribal lapses are only to be expected, but they are so few that they make no difference to the large picture.

From [Freedman 1992](#) p.8.

"...all final vowels were indicated by appropriate vowel letters:

- w = ū
- y = ī
- h = ā (+ ê + ô )..."

<sup>158</sup> [Kaye and Rosenhouse](#) tab. 14.5.

<sup>159</sup> [Blau 2010](#) § 3.3.5.1.5, 3.3.5.2.4, 3.3.5.3.3.4, 3.3.5.3.3.4n, 3.5.7.2.3, 3.5.12.2.8n, 3.5.12.2.12, 4.4.4.13. See [Manuel 1995](#) p. 57. For the possible origin and history of this form see "The Terminative-Adverbial in Canaanite-Ugaritic and Akkadian" by E. A. Speiser, *Israel Exploration Journal* Vol 4, No. 2, 1954.

<sup>160</sup> [Blau 2010](#) §4.2.7.

<sup>161</sup> For the Canaanite shift as reflected in LXX see [Knobloch 1995](#) pp. 180, 420,

Here is the song, "[The Canaanite Shift](#)".

<sup>162</sup> "Arabic Evidence for proto-Semitic \*/awa/ and \*/o/". *Lg* 36. 60-62

<sup>163</sup> Note that [Steiner 1997](#) (p. 147) "... /a:/ became raised and rounded by the fourteenth century B.C.E. in all or most environments."

<sup>164</sup> It is likely that the correct Biblical and Proto-Hebrew was always /ô not /ô'. DS.

<sup>165</sup> Tiberian Hebrew was *ṭabbâḥ* but the EBHP pronunciation was as the Arabic i.e. *ṭabbâḥ*.

<sup>166</sup> [Blau 2010](#) §4.3.8.7.2.3n.

<sup>167</sup> See [Kutscher 1982](#) p. 23.

<sup>168</sup> [Joüon-Muraoka 1991](#) §88Ha.

<sup>169</sup> [Blau 2010](#) §1.17.3, [Blau 1970](#) pp. 28-30; Blau "Marginalia Semitica III". *Israel Oriental Studies* 7 (1977), pp. 22-23. 106 reprinted in *Topics in Hebrew Linguistics*, 1998 pp. 247-265.

<sup>170</sup> [Beyer 1969](#) and [Richter](#) consider the /'bēr/ to be the norm in EBH.

<sup>171</sup> [Blau 2010](#) §3.5.12.2.9n.

<sup>172</sup> [Bergstärsser](#)

<sup>173</sup> Vocalization as per [Richter](#).

<sup>174</sup> [Manuel 1995](#) p.42.

<sup>175</sup> [Manuel 1995](#) p. 59.

<sup>176</sup> I have used my own nomenclature/abbreviations here.

<sup>177</sup> [Davies 1991](#) 4.116.3 [c. 700 BCE]

<sup>178</sup> [Davies 1991](#) 2.005.2 [late 7th to early 6th c. BCE]

<sup>179</sup> [Davies 1991](#) 1.004.11 [Early 6th c. BCE]

<sup>180</sup> [Manuel 1995](#) p. 59.

<sup>181</sup> p. 70.

<sup>182</sup> Eventually this shifted to [ħä'mo:r] in [BHA phase 6](#) due to weakening of gutturals.

<sup>183</sup> Eventually this shifted to [nə'ho:šet] in [BHA phase 6](#) due to insertion of [anaptyctic vowel](#) to break up the final consonant cluster.

<sup>184</sup> See [Driver 1925](#) chapt. 10.

<sup>185</sup> See [Blau 2010](#) §3.5.7.6.12.

<sup>186</sup> [Blau 1976/93](#) p. 31 which references J. Blau, In Memoriam P. Kahle, 1968, 33-34. See also [Knobloch 1995](#) pp. 179-180, 188, 435-436.

<sup>187</sup> [Blau 2010](#) §3.5.12.2.9. The following is from [Blau 2010](#) §4.4.3.1.

... Since in the construct no pretonic lengthening occurs and the noun behaves as if stress

were on the following (governed) noun, it is often quite different from the absolute: **דָּבָר** 'the speech of' as opposed to the absolute **דְּבַר** 'with the construct feminine ending) 'righteousness of' as opposed to the absolute **צֶדֶק**. The construct noun is ... proclitic in Biblical Hebrew when the construct is hyphenated. On the other hand, the fact that [Philippi's Law](#) (see §3.5.8.6, p. 133) operates in construct nouns attests that they are in fact stressed. One should not be surprised by the operation of Philippi's Law in hyphenated construct nouns, as is the case, e.g., in **בִּתְּצִיֹן** 'the daughter of Zion'. The vowel of the stressed construct noun was changed by Philippi's Law and afterward the noun became hyphenated.



<sup>188</sup> “Let us now consider the Biblical Hebrew-Aramaic cognate pair ‘kings’ .... Both these can be derived from a common NW Semitic protoform \*[malakīma], provided that a different vowel is targeted for Reduction in each language. While Aramaic reduces (deletes) the immediately pretonic vowel, Hebrew rather skips over that vowel and reduces (to schwa) the antepretonic vowel instead.” From *Pretonic lengthening and Early Hebrew Sound Change* by J L Malone *Journal of the American Oriental Society* vol. 110 no. 3 (July-Sept. 1990), p. 462.

<sup>189</sup> Quoted from “Some Difficulties in the Reconstruction of “Proto-Hebrew” and Proto-Canaanite”, *BZAW*, 103, 29-43, 1968.

<sup>190</sup> I have transposed Blau’s notation into the one I am using in this paper.

<sup>191</sup> Homogeneous diphthongs have both phases of the diphthongs are close in articulatory position and share the lip gesture. See [Levin 1988](#) (p. 292) - the highlights in bold are my own.

The analysis of English vowels [ɪʏ] and [eʏ] with and off-glide [ʏ], and [uʷ] and [oʷ] with and off-glide [w], finally made linguists aware of an alternative to vowel-length. Physically the difference in sound between lengthening and off-glide may be quite small, especially between [i:] and [iʏ] or between [u:] and [uʷ]. In English both lengthening and an off-glide are often discernable in the very same syllable at the same time. but when we turn to the ancient Hebrew texts and examine the evidence, the only conclusion that makes sense is that the scribes could and did record off-glides. Vowels, whether lengthened or not, escaped their means of notation, a consonantal alphabet, just as accents and other supra-segmental features did.

<sup>192</sup> See [Blau 2010](#) §3.4.3. N.b. reduction of diphthong to long vowel has no impact on [syllable length](#).

<sup>193</sup> [Blau](#); [Harris](#); [Bergstärsser](#); [Manuel 1995](#) p.41.

<sup>194</sup> See [Garr 1991](#) §8.2.2.

<sup>195</sup> In the Secunda the situation of when the diphthongs \*ay, \*aw, \*iy contract is generally similar to the patterns in TH. [Janssens 1994](#) pp. 127-130.

<sup>196</sup> See [Garr 1991](#) §8.2.2.

<sup>197</sup> See [Manuel 1995](#) pp. 40-42.

<sup>198</sup> For a detailed discussion see [Manuel 1995](#) pp. 43-48. See also [Garr 1991](#) §8.2.1.

<sup>199</sup> Quoted from [Andersen 1999](#) p. 8

<sup>200</sup> [Freedman 1992](#) pp. 6, 8.

<sup>201</sup> [Sarfatti 1994](#) pp. 20-21.

<sup>202</sup> [Andersen 1986](#) p. 138.

<sup>203</sup> [Blau 1995](#) pp. 7, 10.

<sup>204</sup> [Freedman 1992](#).

<sup>205</sup> [Janssens 1994](#) pp. 127-130.

<sup>206</sup> 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.

<sup>207</sup> From [Blau 2010](#) §3.4.2.6 -

Unstressed *aw*, *ay* diphthongs are only preserved when preceding another *w*, *y*: *חַיִּים*, 'life'. Elsewhere, i.e., in unstressed closed syllables (including those with secondary stress) and in stressed and unstressed open syllables, original *aw*, *ay* diphthongs have been monophthongized to *ō*, *ē*, e.g., *מוֹת* 'the death of (cstr)'; *בֵּית* 'the house of (cstr)'; *מוֹתוֹ* 'his death'; *בֵּיתוֹ* 'his house'; *יָדַי* 'our hands' < *\*yadaynū*. (This alternation of diphthongs and monophthongs in the same paradigm was conducive to irregular preservation of *w/y*, on the one hand, and abnormal monophthongization, on the other.

<sup>208</sup> The following is quoted from [Harris 1939](#) pp. 29-32

[bayt] > [bayit]

[ay] > [ê]; [aw] > [ô]

... In early Semitic, diphthongs were phonologically vowel + syllable-closing [y] or [w] ; as such they were always either final or followed by the consonant which began the next syllable : [baytu]. Since every syllable in early Semitic began with a consonant, intervocalic [y] and [w] must be considered phonologically as hetero-syllabic, not making a diphthong, but rather beginning the next syllable: [baytiya] of my house.' In Canaanite, diphthongs were monophthongized in all positions, accented and unaccented, medial and final, except when another [y] or [w] followed; thus [ḥayyîm] 'life,' [ḥayyê] 'life (cst.),' [taw] < [tawwu] 'mark,' all remained in Phoenician and Hebrew. The diphthongs [iy], [uw] in medial position had been monophthongized. in Canaanite times....

New diphthongs arose later in final position, all of which, with the exception of the last group, were later monophthongized ... when [h] elided in the 3rd person suffixes in Hebrew ... [-ahū] > [-aw], somewhat later > [-ô] ....

In Jerusalem Hebrew, unaccented diphthongs were monophthongized as throughout Canaanite, but accented diphthongs remained.... In the nifal verb, the monophthongization could not take place until the verb stress shift : [nawda<sup>a</sup>] > [nawda<sup>e</sup>] > [nawda<sup>e</sup>] > [nôda<sup>e</sup>] 'it became known.' This was also true of those hifil verb forms which did not have [i] in the second syllable, e. g., the infinitive absolute: the Assyrian transcription a-u-si-' (III Rawlinson 10. 2. 28) [hawšic], later > [hōšê<sup>ac</sup>], shows the form before the verb stress shift, or in any event before the reduction of the diphthong. This will explain the biblical Hebrew forms, except for the absolute nouns of type [hêq] 'bosom,' [yôm] day,' which may be due to analogy of the construct forms, or to borrowing from Hebrew dialects where the monophthongization had been complete (cf. the possibly dialectal [lêl] in Jes. 21.11, variant to [layl] 'night.'

Later, after final short vowels were dropped, and the medial diphthongs came to be in doubly closed syllables, they were pronounced as two syllables; [bayt] > [bayit]; [cênaym] > [cênayim]; [mawt] > [mawet]. This was part of the late general tendency to break final consonant clusters by anaptyctic ("segolate") vowels. Final diphthongs remained: [mātay] 'when.'

... It has been suggested that this divergence of Jerusalem Hebrew is a later development, that Jerusalem had originally gone with the rest of Canaanite, but that later foreign influences caused a restoration of the diphthongs in some cases. Such new formations, extending from loan-words which might have come to Jerusalem from a dialect where diphthongs had been preserved, would indeed be possible. However, the fact that the diphthong does not occur in some special group of words or in some morphologic class, but can be explained as having been preserved in one phonetic environment (stress), argues for a regular phonetic development. The probability is therefore that when this change first spread in Canaanite there were some areas, specifically Jerusalem, in which stress was a deciding factor for its occurrence.

<sup>209</sup> It is interesting to note that the diphthong in this word seems to have been contracted in Palestinian Aramaic but not in Babylonian Aramaic (<twwr'> = [tawra:] bab aram [Sokoloff 2003](#) p. 1119).

<sup>210</sup> It is interesting to note that the diphthong in this word seems to have been contracted in Palestinian Aramaic but not in Babylonian Aramaic (<twwr'> = [tawra:] bab aram [Sokoloff 2003](#) p. 1119).

<sup>211</sup> See: [Fassberg 1991](#) pp. 57-61; [Kutscher 1970](#); [Birkeland](#)

<sup>212</sup> [Gogel](#) p. 197.

<sup>213</sup> See [Gogel](#) p. 58 ff. Note brief discussion in [Stuart](#) p. 27.

<sup>214</sup> The decline of the dual is also a feature of most spoken Arabic dialects.

<sup>215</sup> [Studies in Ancient Yahwistic Poetry](#) (Cross and Freedman 1975) top p. 142

<sup>216</sup> [Blau 1972](#) pp.206-207.

<sup>217</sup> For the Greek transcriptional evidence see [Sáenz-Badillos](#) p. 82-83.

<sup>218</sup> [Wikipedia](#) states "*Begeðkefet* spirantization developed sometime during the lifetime of Biblical Hebrew under the influence of Aramaic. Its *terminus post quem* can be found by noting that the Old Aramaic phonemes /θ, ð/ disappeared in the 7th century BC. Its *terminus ante quem* in Hebrew is the 2nd century CE. It is unclear whether they should be considered allophones or separate phonemes, since after a certain development of schwa minimal pairs became theoretically possible (if almost unattested)."

<sup>219</sup> Regarding Second Temple Hebrew, The limitations of the Greek alphabet/phonology make it very difficult to ascertain whether the spirantization of at least some of the *bgdkpt* consonants had already taken place. Jerome's Latin evidence is also indirect and inconclusive but is consistent with the spirantization of *kpt*. Spirantization of the *bgdkpt* consonants is a phonetic feature of both TH and Aramaic and this makes its presence in contemporaneous Hebrew, under Aramaic influence, likely.

<sup>220</sup> [Bergstärsser](#)

<sup>221</sup> Nb. "'Imāla is a phonetic process known to us from the first works of Arab grammarians, and it designates the raising of the vowel a towards ä, e, i." Judith Rosenhouse, "An Analysis of Major Tendencies in the Development of the Bedouin Dialects of the North of Israel", *Bulletin of the School of Oriental and African Studies, University of London*, Vol. 45, No. 1 (1982), p. 18.

<sup>222</sup> Re. TH see [Garr 1991](#) p. 64.

<sup>223</sup> [Birkeland 1952](#)

<sup>224</sup> Note - "Egyptian Arabic (especially Cairene) usually pronounces short vowels; /i/ as → /ɪ~/e/, /u/ as → /o~/ə/. If long /u:/ is shortened, it becomes → /o~/e/. If long /i:/ is shortened, it becomes → /ɪ~/e/, but, this is usually restricted to those vowels when appearing in the middle or beginning of words". from [http://en.wikipedia.org/wiki/Egyptian\\_Arabic](http://en.wikipedia.org/wiki/Egyptian_Arabic)

<sup>225</sup> See, for example, *Eastern Arabic with MP3 Files* by Frank A. Rice, Majed F. Said, Georgetown University Press (2005) p. xxxiv.

<sup>226</sup> [Hendel-Lambdin-Huehnergard](#) p. 9.

<sup>227</sup> In Arabic this is the [allophone of long and short /a/ before a word boundary](#).

<sup>228</sup> For this view see [Hendel-Lambdin-Huehnergard](#).

<sup>229</sup> See [Blau 1980](#).

<sup>230</sup> Similar to current spoken Egyptian Arabic see [Mitchell 1962](#) p. 53, footnote 1.

<sup>231</sup> [Moscatti 1964](#) §8.2; [Lipinski 1997](#) §10.9; [Sáenz-Badillos](#) p. 18; [Joüon-Muraoka 1991](#) §5i; [Blau 2010](#) §2.7; [Rendsburg 1997](#) §5.4.14; "The Modern South Arabian Languages" by Marie-Claude Simeone-Senelle in [Hetzron 1997](#) pp. 382-383; "Arabic Phonology" by Alan S. Kaye, chapt. 13 of in *Phonologies of Asia and Africa* vol. 1 edited by Alan S. Kaye, technical advisor, Peter T. Daniels, Winona Lake, Ind., Eisenbrauns, 1997 (see particularly pp. 193-198).

<sup>232</sup> Following is from [Wikipedia](#).

How to produce an [ejective consonant](#)

In order to produce, for example, an ejective *k*, do as follows:

1. Press the back of your tongue to the roof of your mouth so as to pronounce a [k].
2. Move your glottis upward. If this is not something you normally do, you may need to monitor your adam's apple with your fingers.
3. You may notice the pressure building. Release the back of your tongue, letting out air for a [ka]. The [k] should be clicky and dull. (Your glottis will move down again during the [a], so don't mind that.)

The same principle applies to the other ejective consonants, but [k'] is the easiest.

<sup>233</sup> From [http://en.wikipedia.org/wiki/Emphatic\\_consonant](http://en.wikipedia.org/wiki/Emphatic_consonant)

<sup>234</sup> [Lipinski 1997](#) § 10.9.

<sup>235</sup> Sect 13.4.1 in "Arabic Phonology" by Alan S. Kaye, chapt. 13 of in *Phonologies of Asia and Africa* vol. 1.

<sup>236</sup> *The following is quoted from* Interdialectal lexical compatibility in Arabic: an analytical study of the lexical relationships among the major Syro-Lebanese varieties *by F. J. Cadora, (Brill, Leiden, 1979) pp. 11, 14*

*"Velarization" is no longer tenable as has been demonstrated by slow motion x-ray films made by Lee Ulbrecht. These films showed that the back of the tongue is actually lowered and retracted toward the back of the pharynx. See Valerie Becker, "A Transfer Grammar of the Verb Structures of Modern Literary Arabic and Lebanese Colloquial Arabic", (unpublished Ph.D. dissertation, Yale University, 1964), p. 161, fn. 26. Cf. Richard Harrell, The Phonology of Colloquial Egyptian Arabic (New York, 1957), pp. 69-82 and Walter Lehn, "Emphasis in Cairo Arabic", Language, XXXIX (1963), pp. 29-39 and Roman Jakobson, "Mufaxxama, The 'Emphatic' Phonemes in Arabic", Studies Presented to Joshua Whatmough, Ernst Pulgram, ed. ('s-Gravenhage, 1957), pp. 105-115.... "Pharyngealization" of a speech segment is produced by a constriction of the pharynx and accompanied by a slight rounding of the lips as well as lowering, retraction, lateral spreading, and concavity of the tongue. The pharyngealized segments are, therefore, more fortis than the plain segments; for example, the plain /t/ is dental, while the pharyngealized counterpart, /T/, is dental-palatal. "Pharyngealization" symbolized by a subscript (.), is common to all the varieties. Its domain seems to be the CV(C) sequence, the minimum syllable in the varieties."*

<sup>237</sup> [Rendsburg 1997](#) §5.4.14.

<sup>238</sup> Following is from [Blau 2010](#)

2.7.1. The class of emphatics is characteristic not only of Hebrew but of nearly all the Semitic languages. Ashkenazi (European) Jews have lost the faculty to pronounce these sounds (*t̤, ṣ̤, q̤*) and so pronounce them either as the non-emphatic counterpart (*t, k*) or as an affricate (*ts* for *ṣ*). Arabic-speaking Jews pronounce them in accord with their Arabic environment. Thus the special Jewish tradition of emphatic pronunciation must be considered lost.

2.7.2. In living Semitic dialects two types of emphatic pronunciation are attested. In Ethiopia an emphatic is glottalized (i.e., pronounced with glottalic pressure), whereas in Classical Arabic and many Arabic dialects an emphatic is velarized (i.e., the body of the tongue touches the velum). The velarized pronunciation is used by Arabic-speaking Jews.

2.7.3. Such a pronunciation is not likely for Biblical Hebrew, at least in the time of the Masoretes, because if the emphatics had been velarized, so would the following vowel have been; thus *pataḥ a* would have passed to a *qamaṣ ɔ*. (This is an *argumentum ex silentio* and as such is open to objection.) It stands to reason that originally emphatics were pronounced by way of the contraction of the larynx (and the lower pharynx). It was

from this pronunciation that, on the one hand, glottalization arose, and, on the other, velarization.

<sup>239</sup> [Hetzron 1969](#).

<sup>240</sup> [Gogel](#) p. 93.

<sup>241</sup> x = unknown vowel.

<sup>242</sup> <http://www.yahuwshua.org/en/ansonrainey.htm> . See also - <http://lists.ibiblio.org/pipermail/b-hebrew/1999-April/002815.html> , <http://lists.ibiblio.org/pipermail/b-hebrew/1999-April/002829.html>

<sup>243</sup> [Joüon-Muraoka 1991](#) §38.

<sup>244</sup> [Blau 2010](#) §4.2.6.2.2.

<sup>245</sup> [Greenstein 1988](#) p. 8.

<sup>246</sup> IN EBHP and LBHP THE JUSSIVE (PC<sub>jus</sub>), COHORTATIVE (PC<sub>coh</sub>), IMPERFECT (PC<sub>imp</sub>) AND PRETERITE (PC<sub>pret\_sim</sub>/PC<sub>pretWC</sub>) were, in some forms, distinguished by the placement of syllabic stress when not carrying object suffixes. See -  
- [http://www.adath-shalom.ca/history\\_of\\_hebrew3a.htm#indic\\_jus](http://www.adath-shalom.ca/history_of_hebrew3a.htm#indic_jus) AND  
- [http://www.adath-shalom.ca/history\\_of\\_hebrew3a.htm#Prefix\\_Conjugation](http://www.adath-shalom.ca/history_of_hebrew3a.htm#Prefix_Conjugation)

<sup>247</sup> "Versets is the term used by [Hrushovski](#). In this article he goes on to write -

Rhythm. If the equivalent meaning or syntactic pattern of parallel versets draws the reader's attention to the parallelism and its reinforcing quality, it is the rhythmical structure proper which embodies it. The major rhythmic element is stress. The rhythm is accentual, but the number of stresses in each verset is not necessarily fixed or permanent. There may be an exact repetition: 3:3 stresses, or a freer relationship: 3:4, as well as changing numbers throughout the poem. The specific numerical relationship is however important. The numbers are quite often equal or similar. Moreover, whenever there is freedom it is confined within fixed boundaries. Each verset is usually a phrase, a basic syntactic and logical unit, consisting of 2, 3, or 4 stressed words. The smallness and compactness of the verset lends each stress conspicuous force. The condensed, laconic nature of biblical Hebrew also contributes to the prominence of each word within the line, the more so when it is reinforced by the parallel verset. The versets are static, independent units, well balanced against each other. This is supported by the nature of biblical syntax which favors parataxis to the subordination of clauses and phrases.

Is stress the only sound element determining biblical rhythm? For many generations scholars have argued over the "secrets" of biblical prosody; there have been attempts to

correct or rewrite the text so that it might conform with pseudoclassic ideas of rhythm which require strict numbers of some kind: regularized "feet," equalized hemistichs, or stanzas of recurring numbers of lines. Such attempts seem pointless today since no exact regularity of any kind has been found and since rhythm need not be based on strict numerical regularity. Considering the rhythm to be based on free variation, it is clear, however, that stress is not enough to describe the effects of biblical rhythm. The number of unstressed syllables between two stressed ones, though not fixed in the sense of modern accentual-syllabic versification, is certainly limited: by rule no two stresses are permitted to follow each other, on the other hand long words have secondary stresses. Thus each stress dominates a group of 2, 3, or 4 syllables; there are 2, 3, or 4 such groups in a verset; and 2, 3, or 4 parallel versets in a sentence. It is a three-stage hierarchy of simple, indivisible, though flexible groups. Within this free framework there are clearly functional specific patterns, such as the so-called "rhythm of elegy" based on an opposition of 3:2 stresses. The rhythm of major stresses is so strong that sometimes it may be the only supporter of the parallelism of two versets, without any actual repetition of meaning or syntax.

<sup>248</sup> The concept of morae can be quite complicated. The following is quoted from Khan 1987 (pp. 80-81) -

"In the Tiberian reading tradition of Biblical Hebrew there were two types of syllable, phonological and non-phonological. Non-phonological syllables had a vocalic nucleus which served as an epenthetic vowel in the physical stream of speech. The quantity of such syllables was not fixed. They had either one mora: [yā-<sup>◌</sup>a-l]; two morae: [yā-<sup>◌</sup>am-dū]; or three morae: [wayyē-ebk]. Phonological syllables had a fixed quantity of two morae. Consequently the vowel nucleus of open phonological syllables was always long and that of closed phonological syllables was always short. A potentially closed phonological syllable which had a long vowel nucleus was realized phonetically with an epenthetic vowel of the same quality inserted before the final consonant, thus forming a disyllable, e.g. /yō-ṣē-r/ = [yō-ṣē-er]. If the long vowel was a high vowel and the final consonant was a laryngeal or pharyngeal, the epenthetic was a pataḥ (= pataḥ furtivum), e.g. /pō-tē-ḥ/ = [pō-tē-aḥ]. There is no definite evidence that a hatep vowel or a mobile hwa was any shorter than the short vowel nucleus of a closed syllable.... Vowel length in Tiberian Hebrew was not phonemic. It was always conditioned and never occurred as an independent variable."



<sup>249</sup> By *weight* I mean counting short vowels and singlet consonants as *weight* = 1 and diphthongs, long vowels and geminated consonants as *weight* = 2.

<sup>250</sup> [Freedman 1980](#) -

There is no single solution to the problem of Hebrew meter and poetic structure, but there are many possible descriptions, some more adequate than others, some more pertinent for different sets of questions than others. In comparing systems, we should give up the notion that the poets of Israel used any of them deliberately, or that our task is to find out which one it was. Lacking any useful literature from antiquity on the subject or clear-cut internal data, the best we can hope for is an evaluation of different systems in terms of economy (or parsimony), efficiency, utility, precision, and comprehensiveness. In general, the system which satisfies these criteria best should be adopted, but different systems may be used for different purposes, and it is always wise to check the results derived from one system by another. It is interesting and may be instructive that practically all the systems which have been devised in the past century have produced positive results in measuring and describing aspects of Hebrew poetry. At the same time none has been generally satisfactory, and all have demonstrable weaknesses. The conclusion is that there is no single best system, but that acceptable results will depend to a great extent on the purpose of the measurement and the kind of description desired. Since all systems reflect a certain rhythmic regularity in much of Hebrew poetry, the principal object is to devise a measuring system that is symmetry-sensitive and will describe the metrical pattern as clearly and as simply as the data permit. That is why I have opted for a syllable-counting system in preference to the more traditional stress-system used by most scholars. 14 Basically, the two methods describe the same phenomena in much the same way, but there are more arguments about the number of stresses than about the number of syllables, or I should say that syllable-counters tend to be more accommodating and less dedicated because one syllable more or less does not make as much difference as one stress more or less. In addition, the picture provided by syllable-counting is more precise. An equally simple system that also works with large samples is word-counting. We can define a word as any sequence of Hebrew letters between white spaces on a printed page, leaving open the question of the effect of a maggep (which is roughly equivalent to a hyphen). I have tried more complex methods of counting, distinguishing between long and short vowels, and even adding in consonants in order to secure an exact calculation of the time-span of a poetic unit. For the most part, I think it has been wasted effort, as poets notoriously bend the rules, written and unwritten, and

the point of diminishing returns is reached very rapidly in view of the extraordinary arithmetical effort required."

<sup>251</sup> See [Freedman 1992](#) p. 8-12.

<sup>252</sup> Quoted from [Tiberian Hebrew phonology: Focussing on consonant clusters](#) by Andries W. Coetzee. Publisher Assen : Van Gorcum, 1999

<sup>253</sup> [Morag 1962](#) pp. 20, 29

<sup>254</sup> [Kutscher 1982](#) p. 32.

<sup>255</sup> [Qimron 1986](#) pp. 58-59. Andersen ([Andersen 1999](#) p. 13) wrote -

In *The Cairo Geniza* ([Kahle 1959](#)) Kahle drew an analogy between the efforts to standardize and stabilize the reading of the Qur'an (pp. 141-49) and the standardization of the pronunciation of the words in the Hebrew Bible. In the former case, "The systematic adaptation of the text of the Qur'an to Bedouin poetry triumphed over and obliterated the older forms of the Holy Book" (p. 149). In the latter case, particularly in the matter of supplying end-vowels to words that did not have an appropriate vowel letter, "the Masoretes probably followed the example set by the Arab Readers when they introduced end-vowels into the text of the Qur'an in accordance with Bedouin poetry" (p. 186). The Masoretes also "introduced" (p. 186) two other features into the pronunciation of Hebrew-"a number of new vowels to safeguard the newly-established pronunciation of the gutturals" (p. 186); and "a double pronunciation of the BGDKPT" (p. 186), which might not have existed before the eighth century C.E. (p. 184).

<sup>256</sup> [Ullendorff 1977](#) p. 7.

<sup>257</sup> [Freedman-Forbes-Anderson 1992](#)

<sup>258</sup> Gary A. Rendsburg review of *Studies in Hebrew and Aramaic Orthography* by David Noel Freedman ; A. Dean Forbes ; Francis I. Andersen Source: *Journal of Biblical Literature*, Vol. 113, No. 2 (Summer, 1994), pp. 313-315

<sup>259</sup> *Journal of Near Eastern Studies*, Vol. 56, No. 2 (Apr., 1997), pp. 142-144 Published by: The University of Chicago Press.

<sup>260</sup> [Tov 2001](#) p. 49.

<sup>261</sup> See: [Garr 1991](#) pp. 54-55;

[http://www.linguistics.uwa.edu.au/\\_data/page/71162/Phonology.pdf](http://www.linguistics.uwa.edu.au/_data/page/71162/Phonology.pdf) pp. 21-22.

262 [Khan 1987](#), [Khan 1994](#), [Khan 1997](#). See also [Garr 1991](#) sections 7 and 8.

263 "Vowel length in Tiberian Hebrew was not phonemic. It was always conditioned and never occurred as an independent variable." quoted from [Khan 1987](#) p. 81.

As stated by Steiner ([Ancient Hebrew by Richard C. Steiner in Hetzron 1997](#) pp. 149.)

Outside of closed unstressed syllables, which excluded long vowels, Ancient Hebrew had a contrast between long and short vowels. However, between the tannaitic period (70-200 CE) and the time of the Masoretes (c. 850 CE), short vowels in stressed syllables lengthened, erasing the contrast in those syllables.... As a result of this change, length became to a large extent conditioned by stress.

264 Also the opinion of Blau see [Blau 2010](#) §3.3.3.1.5

265 [Khan 1990](#) p. 11.

266 Mainly, the *hateph vowels* occupy the positions after the gutturals that either category of *šwa* occupy with other consonants. See [Hendel-Lambdin-Huehnergard](#) §3 - *Special Rules involving the Gutturals and Hateph-vowels*

267 [Joüon-Muraoka 1991](#) §8a. Hoffman basically agrees with this position. The following is from [Hoffman](#) pp. 54-56

Everyone agrees that one use of the shewa was to mark the complete lack of a vowel.... This first type of shewa is commonly called *nach* ("resting") in Hebrew, or "silent" in English. (Some books also use shewa quiescens.)

It is commonly argued that another use of the shewa was to mark a sound of some sort. Weingreen, for example, in his classic grammar of Hebrew, uses the example *נַחֵשׁ*, in which he claims that the shewa is pronounced as a "quick vowel-like sound." However, he quickly adds that "נַחֵשׁ is regarded as one syllable." But these claims conflict. If the word is one syllable, then the shewa must be silent. If the shewa is pronounced, we have two syllables. This vocalic-but-not-really-vocalic shewa goes by the name of *na* ("moving") or "vocal" in English. (It is also called shewa mobile in some books.)

Variations on the pronunciation scheme of the vocal shewa abound, but, in short, there is no reason to accept the traditional notion that a silent shewa is always silent and that a vocal shewa is always pronounced.

Indeed, there is little reason to accept the notion that there are two types of shewa. Three arguments against there being two types of shewa present themselves.

Firstly, the Tiberian Masoretes were concerned with preserving the pronunciation of Hebrew. It is hardly likely that they would choose one symbol to represent at once the lack of sound and presence of sound.

More importantly, the analysis that requires two types of shewa is based on a flawed premise. Beyond pronunciation issues, two types of shewa are usually posited because of the way shewa interacts with certain letters, known as "beged kefet letters." After a vowel, the beged kefet letters lose their dot called a dagesh unless the letters are doubled.... However, the beged kefet letters only sometimes lose their dagesh after a shewa.

Because a shewa sometimes behaves like a vowel (in that it eliminates the dagesh of a following beged kefet letter) and sometimes like the lack of a vowel (in that it does not eliminate the dagesh), it was assumed that some shewas actually were vowels, whereas some were not. But the reasoning is flawed, as we see next.

It is a basic premise of linguistics that the pronunciation of one part of a word (call it the "trigger part") can affect the pronunciation of another part of the word ("affected part"). So it is not surprising, for example, that a vowel in Tiberian Masoretic Hebrew changes the pronunciation of the letter it precedes. The vowel is the trigger, and the letter after it is affected....

However, in addition to that first basic premise of linguistics is another: The trigger itself can be affected! In particular, the trigger can be affected so that it is no longer pronounced. So, Trigger One can affect a letter, and then Trigger Two can affect Trigger One so that Trigger One is no longer part of the word....

A similar error led people to think that every instance of shewa that forced the following beged kefet letter to drop its dagesh had to be pronounced. It did not. In this case, Trigger One in the word is the vowel. Trigger One affects the beged kefet letter, which loses its dagesh. But a second trigger eliminates the vowel from the word.

What we end up with, then, is only one purpose for the shewa: to indicate the lack of a vowel. However, the "lack of a vowel" could be because the word never had a vowel where the shewa appeared, or because the word used to have a vowel but some other part of the word got rid of it.

In addition to the first two reasons for rejecting the two-shewa theory, we have a third. Technical details of the theory require that the shewa at the beginning of a word must be of the "vocal" (na) variety, while the shewa before a dagesh must be silent (nach). However, the common word שְׁתִּים ("two") has a dagesh in the letter after an initial shewa. These two rules therefore conflict. The system doesn't work.

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. We also understand the flawed reasoning that led to the flawed conclusion in the first place.

What we do not know, however, is exactly how the shewa was pronounced. "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.

<sup>268</sup> The following is quoted from both from Wikipedia [Tiberian Vocalization Talk](#)

As a linguist, I'm somewhat skeptical that the actual Tiberian Hebrew dialect on which the vocalization system was based actually had such a complicated system for determining whether a shva was pronounced or silent as is described here. In particular, the system described here is at least partly phonemic in that it depends in some cases on the presence of methegs, which were clearly not considered a basic, obligatory part of the system, unlike the niqqud themselves. Native religious linguists of the sort who are interested in recording down the proper pronunciation of a liturgical language tend to be very exacting in describing down to the last detail all that isn't completely predictable (i.e.

phonemic), and in other respects, the Masoretes seem to be equally exacting; hence it seems extremely puzzling to me that they would deliberately create a sign that was ambiguous as to two different phonemes (i.e. no vowel and a pronounced shva), even if the occurrence or not of the pronounced variant was largely predictable -- compare the use of dagesh lene, which is largely predictable.

The only sensible conclusion I can make is that, despite the apparent historical evidence and the conclusions of the bulk of current writers, the actual Tiberian Hebrew dialect must have had a completely non-phonemic vocal shva, whose occurrence was due to an automatic process of [epenthesis](#) in certain well-defined scenarios (e.g. between two consonants at the beginning of a word; between the second and third of three consonants in the middle of a word, including when the first two were actually a geminate consonant; between two identical consonants when written as two letters with a shva between them). Given the desired precision of the Tiberian Masoretes, it seems highly unlikely to me that they would allow rules such as "vocal after vowels /e/, /o/, /ɔ/ except in certain well-known closed syllables" (which indicates at least a questionably phonemic distinction) or even worse "in consonants that expect a dagesh forte but don't actually take one" (which definitely indicates a phonemic distinction and requires a good knowledge of complex hebrew morphology and all the many places where dagesh forte would be expected to occur based on the structure of the word).

I suspect that the historical evidence is pointing to a related but different, and presumably rather more common, as well as more conservative, dialect/pronunciation that did preserve, at least partly, the original etymological distinction of vocal shvas that were derived from short vowels in some unstressed, open syllables (as still preserved in e.g. [Classical Arabic](#)) and quiet shvas that were derived from original lack of vowel between consonants. Presumably, in the particular local dialect that led to Tiberian Hebrew, the vocal shva phoneme disappeared as a phoneme and instead because an automatic process, similar to how in the same dialect the original distinction between long a ("kamatz gadol") and short o ("kamatz katan") merged into a single low-mid back vowel. I also suspect that a number of the researchers working on reconstructing the Tiberian pronunciation are lacking in proper training in modern linguistic theory (esp. in phonology and historical linguistics) and/or are working from sources that were created before the requisite theory in phonology and historical linguistics was even developed (e.g. [Gesenius's](#) famous *Hebrew Grammar*), and are unaware of this fact. This should not be as surprising as it sounds -- working in an area like this requires extensive knowledge of Ancient Hebrew and Jewish History and such, so it's more likely that researchers in this

area have a solid background in Judaic Studies augmented by some basic linguistic background. Also, I've seen a number of books about Ancient Hebrew and other old languages that make lots of elementary linguistic mistakes -- Joel Hoffman's *In the Beginning: A Short History of the Hebrew Language* is a particularly severe example, where his whole thesis that the Masoretes "didn't know what they were doing" is predicated on a number of elementary linguistics-based logical errors.

<sup>269</sup> This is of Sephardic origin, and does not belong to the genuine Tiberian tradition: A. Dotan, *Diqduqé haṭṭē'amim* [n. 1 above], p. 35. The rules laid down by Massoretic grammarians for the pronunciation of vocalic shewa are: a) a full vowel, before gutturals. similar to that of the gutturals concerned. e.g. **שָׁא** *šā* 'toughly' = /be'ər/. b) /i/ before Yod. and c) /a/ elsewhere.

<sup>270</sup> However, see [Blau's comments](#).

<sup>271</sup> This is exactly what Blau ([Blau 2010](#) §3.5.6.4.2n) asserts -

The mobile *šwa*, according to Modern (Sephardic) Hebrew and as it is taught at the universities, is a neutral (ultra-)short vowel (ə). It seems likely that this is its original pronunciation, and in this book we have transcribed it accordingly. According to the Tiberian Masoretes its basic pronunciation is *ā*, identical to *ḥaṭaf pataḥ* ; see §2.4.15n, p. 67. Nevertheless, preceding *y* it was pronounced *ī*, and preceding laryngeals-pharyngeals as the counterpart of the vowel of the laryngeal-pharyngeal.

<sup>272</sup> [Blau 2010](#) §3.5.6.3.

<sup>273</sup> Nb. "The opposition *ə* : zero (i.e. *šwa mobile* : *šwa quiescens*...) is phonemic...." [Blau 1976/93](#) §3.5

<sup>274</sup> The following is quoted from both from Wikipedia [Tiberian Vocalization Talk](#)

The sheva symbol must originally have been invented to represent the indistinct sound "uh". This is shown by its shape: in the Tiberian symbols, adding a dot underneath always denotes flattening or retraction, so sheva is the half-way point between hiriq and qubbutz. (Similarly, qamatz is a flattened form of patach and segol is a flattened form of tzere.)

Then, in certain words (like "divre", "kitve", "li-vne"), this sound drops out though still written, like the first "i" in British English "medicine". We know that it is the remnant of a vowel, because it represents a contraction of a vocalized form ("devarim", "ketavim", "bene"), because of the evidence of cognate languages and because the following

consonant does not take dagesh. In these instances sheva is phonemically vocal but phonetically silent, like the final e in French feminines: I call this evanescent sheva.

But as in these instances the symbol *appears* to represent the absence of a vowel, it is soon coopted to cover instances of a true zero vowel, as in "midbar", where there never was a vowel and the following consonant does take dagesh. In other words the Masoretes needed a symbol corresponding to Arabic "sukun" and this was the nearest they could find. (Interestingly, in many prints of the Aramaic Targums, the sheva symbol is only used for vocal or evanescent sheva, and unvocalized consonants are written with no sign at all.)

So it is really not so odd that the same symbol should represent both the indistinct vowel and no vowel: "bene" and "vne" (in "li-vne") are etymologically the same word and it is only the surrounding context that causes the vowel to be sometimes pronounced and sometimes not. The same ambiguity happens through the reverse process in English, where in words like "schism" and "able" the indistinct vowel is present though not written. The very word "sheva" reflects the same ambiguity: it obviously comes from "shav" ("in vain"), so could equally mean "the nothing vowel" (the vowel without qualities!) or "no vowel".

A further complication is the fact that, like the indistinct vowel in English, each instance of the indistinct vowel etymologically represents one or other of the full vowels, and reverts to it when one is deliberately speaking with emphasis. The hataf symbols were used, inconsistently, to show which vowel this would have been (for example, in the Aleppo Codex every vocal sheva is denoted by hataf patach), though this use now only survives in the vicinity of the gutturals. Hence the fact that, in Sephardic sources as late as 1914, there are elaborate rules for which vowel ought to be used in pronouncing vocal sheva ("i" when before yod, matching the following vowel when before a guttural, "e" otherwise) though these appear seldom if ever to have been observed in practice.

<sup>275</sup> This may not be strictly correct. [Khan 1987](#) (p. 81), basing himself on transcriptions of TH into Arabic script writes "There is no definite evidence that a *ḥatep* vowel has any shorter than the short nucleus of a closed syllable." He concludes that the difference between *ḥatep* vowel and non-*ḥatep* vowels of the same quality was that the non-*ḥatep* vowel were phonological and the *ḥatep* vowels were not.

<sup>276</sup> There is considerable evidence that the Tiberian Masoretes pronounced the mobile, vocal *šwa* as [ä] though in some situations it had other pronunciations ([Blau 2010](#) §3.5.1.2, 3.5.1.3, 3.5.6.4.2n., 3.5.6.5). I will follow Blau's practice (Blau 2010 §33.5.6.4.2n.) -



The mobile *šwa*, according to Modern (Sephardic) Hebrew and as it is taught at the universities, is a neutral (ultra-)short vowel (ə). It seems likely that this is its original pronunciation, and in this book we have transcribed it accordingly.

<sup>277</sup> [Blau 2010](#) §3.5.6.5.3. (See also [Blau 1976/93](#) §3.5) states -

It is clear that *ḥaṭaf qamaṣ* stands in phonemic opposition to *ḥaṭaf pataḥ/mobile šwa* (which, according to Tiberian tradition, were pronounced identically).

<sup>278</sup> [Khan 1997a](#) pp. 94-95

<sup>279</sup> "Vowel length is in most cases predictable from syllable structure and the placement of [stress](#). Meaningful contrasts between words were not usually made by differences in vowel length alone. Differences in length are in virtually all cases relatable to differences in syllable structure or stress placement. Length was not an independent contrastive feature of vowels. The vowel *qameṣ* may have been an exception, since pairs of words can be found in which a contrast of meaning appears to have been made only by a difference in length of vowel, e.g. [ʔox'bo:] 'food' vs. [ʔo:x'bo:] 'she ate. Possible other minimal pairs were words such as [do'mi:] 'silence and [do:'mi:] 'my blood'. The validity of both such minimal pairs, however, is not completely certain....

"The basic context for the occurrence of long vowels are (1) a [stressed](#) syllable or (2) an open unstressed syllable. Examples ['mɛ:lɛx] 'king', [ji'ma:f] 'he hears', [ha:'hu:] 'that'. Many words carry a [secondary stress](#) in addition to the main stress, e.g. [ha:ʔo:'do:m] 'the man', [ni: θ ɬakka'mo:] 'let us deal wisely' (Ex. 1:10).

<sup>280</sup> From [Khan 1997a](#) §6.2.2 -

In the Tiberian reading tradition, a short vowel in the dependent syllable CV, which was represented by the *šewa* sign, was usually pronounced with the quality of [a]. Where, however, *šewa* preceded a guttural consonant it took the quality of the vowel after the guttural and where it preceded [j] it had the quality of a short [i], e.g. רַבֵּי *be'ʔe:r* 'well', יָדָא *mo'ʔo:ð* 'very', יוֹם *bi'jo:m* 'on the day' (Baer and Strack 1879: 12-15; Yeivin 1980: 281-82).

<sup>281</sup> But note the following -

'Assuredly the Tiberian system embodies recognition of seven vowel qualities (mouth positions); but the almost exclusive use of vowel letters for vowels which historical considerations show to have been long and the provision of special symbols for three (if not four) very short vowels shows that the scribes were aware of and recorded differences in length as such' Francis I. Anderson in *JBL* 112/1 (1993) p. 123.

‘Indeed, if one can agree that the phonetic system reflected in the system of vowel notations invented by the Massoretes was based on quality distinctions, it seems just as certain that the Hebrew represented in the consonantal text maintained phonemic length: though not followed with absolute constancy, the use of *matres lectionis* for historically long vowels and the nonuse of a *mater lectionis* when the vowel was historically short shows length still to have been part of the Hebrew phonetic system.... Though this was not the point of F. I. Andersen and D. Forbes’ book entitled *Spelling in the Hebrew Bible* (Rome 1986), statistics on the use of *matres lectionis* found there make the fact itself of phonemic vowel quantity clear enough...’ Dennis Pardee in the *Journal of Near Eastern Studies* vol. 56, no. 2, April 1997 p. 145.

Harrison ([Phonology Semitic Languages](#) pp. 23-24) points out that the Tiberian vocalization can be viewed either as:

- (a) a system distinguishing seven vowel qualities and not indicating quantity; or,
- (b) a system distinguishing 5 vowel qualities while also distinguishing between long and short vowels. Under this system:

- *shureq* followed by *waw* and *hireq* followed by *yod* are long;
- *šere* and *holem* are long;
- *qameš* is ambiguous, marking both /ā/ and /o/.
- *segol* is the short counterpart of *šere*;
- *hireq* and *qibbuš* not followed by vowel letters are usually, but not always, short.

<sup>282</sup> Cf. the classical Arab grammarians completely ignored word stress almost certainly because its position was determined automatically and hence could play no phonemic role.

<sup>283</sup> From [Khan 1997a](#) §6.2.2 -

Any open syllable with a short vowel must be a dependent syllable. This is a phonotactic distinction. It is not usually taken account of by the accent system of Tiberian Hebrew, which counts beats on syllable nuclei between accents without distinguishing between dependent and principal syllables.

The reality of the phonotactic distinction between dependent and principal syllables is reflected by the concept of the syllable that is expressed in the medieval Masoretic literature. It is also reflected by the vocalization system, which represents the vowel nuclei of dependent syllables with signs (*šewa* and *ḥaṭeṭim*) that are different from those representing the nuclei of principal syllables. Furthermore, some features of Tiberian Hebrew phonology are

sensitive to the distinction. The occurrence pattern of the allophones of Tiberian /r/ is a clear example of this. The apico-alveolar allophone of /r/, i.e. [r̥], occurred when it was preceded by one of the dental/alveolar consonants....

<sup>284</sup> [Joüon-Muraoka 1991](#) §8a.

<sup>285</sup> [Blau 2010](#) §3.5.6.3.

<sup>286</sup> [Joüon-Muraoka 1991](#) §21c

<sup>287</sup> There is no trace of this secondary vowel in the [Secunda](#). Furthermore, א, which has become silent at the end of a word, never takes furtive pataḥ.

<sup>288</sup> In good ancient manuscripts this sign is written between the vowel and the final guttural or slightly to the left of the guttural.

<sup>289</sup> "A *centering* diphthong is one that begins with a more peripheral vowel and ends with a more central one, such as [ɪə], [ɛə], and [ʊə] in [Received Pronunciation](#) or [iə] and [ʊə] in [Irish](#). Many centering diphthongs are also opening diphthongs ([iə], [ʊə])." [Wikipedia](#)

<sup>290</sup> Brock, GvG, I, p. 198; BL, p. 169. In spoken Arabic this same phenomenon exists, e.g. in the very same word /rūḥ/ spirit, and in Go away! in the vernacular, which is pronounced /rūʔḥ/. (Note MSA *šaaric* pronounced as *ša(a)riac* in Egyptian Arabic - DS).

<sup>291</sup> Quoted from [van der Merwe et al.](#) §6.2

## 6.2. The Transitional Pataḥ or Pataḥ Furtivum

### 1. Characteristics

The consonants ה, מ and נ are articulated by moving the base of the tongue in the direction of the wall of the throat. This unusual articulation at the end of a closed syllable ... is strenuous. The vowel that produces the least stress on the speech organ in pronouncing מ or נ at the end of a closed syllable is the 'a' (/ā/ or /a/), e.g.

נַּ and מַּ

When one of the other long vowels appears before ה, מ and נ in the last syllable, a transitional vowel or glide element becomes necessary to facilitate pronunciation. In these cases the pataḥ is utilized as the transitional vowel.

Not /rūḥ/ but /ruâḥ/

Not /kōḥ/ but /kōāḥ/

It is important to note that this pataḥ does not begin a new syllable, but only denotes a transition in the current syllable. The combination of the preceding vowel with the pataḥ creates a diphthong before the final consonant.

The pataḥ furtivum written as follows:

כִּי־ and רַי־

Although the pataḥ written after the final consonant, it is pronounced between this consonant and vowel preceding it. This pataḥ is called the transitional pataḥ) or pataḥ furtivum (the pataḥ that slides in).

## 2. The distribution of the pataḥ furtivum

The pataḥ furtivum is a pataḥ that occurs at the end of a word when:

- The final consonant of a word is ה, ח and ע and
- the preceding vowel is not a pataḥ or a qāmeṣ, e.g.:

רַי־ and כִּי־

but שֶׁ־חַ

Because ע and ח in כִּי־ and רַי־ were not originally furnished with a pataḥ, the insertion of the pataḥ furtivum became necessary. In שֶׁ־חַ however, the ח is preceded by a pataḥ and the insertion of the pataḥ furtivum is thus unnecessary.