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Biblical Hebrew Poetry and Word Play

Reconstructing the Original Oral, Aural and Visual Experience

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A Few Introductory Words

> "It's not just a question of what the theatre practices were like at the time… I feel that you can, if you wanted to, reconstruct everything except the audience. And the real exciting thing in the theatre is how you bridge the gap between what's happening on the stage and what's happening in the audience - because we only do it for the audience."
>
> William Christie in a talk accompanying the DVD of the Rameau's opera - *Les Boreades*

William Christie made this statement in regard to French Baroque opera, on which he is a leading expert, supporting the use of modern dance techniques to act as a cultural interpreter within his production of *Les Boreades*. The modern opera-goer has grown up in a society whose values, structures, cultural and linguistic associations and assumptions are totally different from that of the mid-eighteenth century courtiers who were Rameau's audience. In addition their life experiences, how they are maintained, life expectancies, sanitation and a thousand other factors were very different from the modern audience. Indeed, the use of familiar words, apparently analogous events etc. may be *faux amis* leading the viewer even further astray. For Baroque Opera, we can compensate for this problem by learning relevant socio-cultural information that would have been in the bones of the original audience but must be studied, as one studies the values and literature of an extinct civilization, by the modern opera-goer. We can do this because scholars have examined and digested masses of official and unofficial documents, historical and philosophical writings, music, paintings, clothing, buildings etc. from the period and social context that produced French Baroque opera. Thus, properly prepped, we can understand, intellectually if not viscerally, cultural allusions, linguistic nuances etc. as they were understood by the original audience.

Even the cultural products much closer to our period require this sort of treatment. For example, the attitudes to women displayed by Verdi and Dickens have more in common with the following famous song from Oliver Goldsmith's *The Vicar of Wakefield* (1766) than they have with attitudes in our own society.

> When lovely woman stoops to folly,
> And finds too late that men betray,

What charm can sooth her melancholy,
What art can wash her guilt away?

The only art her guilt to cover,
To hide her shame from every eye,

To give repentance to her lover,
And wring his bosom--is to die.

Unlike the society of eighteenth century France, we have only miniscule sources of information about the societies of ancient Israel and Judah that produced the earlier texts in the Hebrew Bible. Our few sources of information – the biblical text, a handful of inscriptions, archaeology - are not only sparse but ambiguous and reflect the reality or hopes of different groups, in different situations at different periods. In addition, all of the earlier texts underwent a change of script and orthography and possibly some degree of editing in later periods.

It is interesting to consider the interpretations likely placed on the following quotes from the Psalms (adapted from the New Revised Standard Version):

- Between the Assyrian siege that failed to capture Jerusalem (c. 701 BCE) and the first Neo-Babylonian conquest of the city (c. 597 BCE). During this period the Kingdom of Judah remained the sole Israelite state under the seemingly divinely guaranteed rule of the ancient Davidic dynasty;
- In the 597-586 BCE when a king of the Davidic dynasty, selected by the king of Babylon, was still enthroned in a Jerusalem conquered, controlled and partially depopulated by the Babylonians;
- In the Babylonian Exile (c. 586-516 BCE) when longing for a restoration of Zion (see Ps. 126);
- In the early Second Temple period (c. 516-400 BCE) when descendents of the Davidic dynasty were still in evidence and there remained hope for their restoration to power;
- In the late Second Temple period (c. 200 BCE-70 CE) when it was no longer remembered who was descended from the Davidic dynasty and messianic ideas were rife many of which involved a political liberation from foreign rule under a scion of the

House of David and some of which (see War of the Sons of Light Against the Sons of Darkness) were apocalyptic;

- In the early post-Second Temple period (c. 70-200 CE) when messianic ideas were fundamental to Jewish eschatology.

Psalms 48

Great is the LORD and greatly to be praised in the city of our God. His holy mountain, beautiful in elevation, is the joy of all the earth, Mount Zion, in the far north, the city of the great King. Within its citadels God has shown himself a sure defense. Then the kings assembled, they came on together. As soon as they saw it, they were astounded; they were in panic, they took to flight, trembling took hold of them there, pains as of a woman in labor …. As we have heard, so have we seen in the city of the LORD of hosts, in the city of our God, which God establishes forever….

Psalms 2

Why do the nations conspire, and the peoples plot in vain? The kings of the earth set themselves, and the rulers take counsel together, against the LORD and his anointed, saying, "Let us burst their bonds asunder, and cast their cords from us." He who sits in the heavens laughs; the LORD has them in derision. Then he will speak to them in his wrath, and terrify them in his fury, saying, "I have set my king on Zion, my holy hill." I will tell of the decree of the LORD: He said to me, "You are my son; today I have begotten you. Ask of me, and I will make the nations your heritage, and the ends of the earth your possession. You shall break them with a rod of iron, and dash them in pieces like a potter's vessel." Now therefore, O kings, be wise; be warned, O rulers of the earth….

I The Purpose of this Web Page (detailed explanation below)

To enable advanced students of Biblical Hebrew to recover, as closely as possible, the pronunciation that a scribe in Jerusalem 700-600 BCE would have used in reading poetry to upper class Judeans or members of the king's court with the aim of better appreciating Biblical Hebrew poetry and wordplay whose effectiveness depends on similarities of sound[1].

Box 1 - Sense and Nonsense from Robert Alter

In his justly influential book *The Art of Biblical Poetry*, Robert Alter correctly writes -

> "…even where there are doubts about the poem's meaning, it may exhibit perfectly perceptible formal patterns that tell us something about the operations of the underlying poetic system."[2]

Equally the following is justified -

> "The actual sound of biblical poetry will remain at least to some extent a matter of conjecture. Certain distinctions among consonants have shifted or blurred over the centuries, and what is worse, we cannot be entirely sure we know where accents originally fell, what the original system of vowels and syllabification was, or whether there were audible changes in these phonetic features during the several hundred years spanned by biblical poetry. (The indications of stress and vocalization of the Masoretic text were codified well over a millennium after the composition of most of the poems and centuries after Hebrew had ceased to be the vernacular.) On the level of meaning, although comparative Semitic philology in a remarkable age of archaeological discovery has done heroic work in restoring the original sense of poorly understood words, it would be foolhardy to imagine that we can always recover the real nuances of biblical terms, or the relation between poetic diction and colloquial diction (of which there is no record) or between poetic diction and other specialized usages of the ancient language." [3]

However, he goes on from there to use a transcription system based on the vowels and some of the consonants (eg. *waw* transcribed as *v*) of current Israeli pronunciation which we have every reason to believe are substantially different from the pronunciation of biblical Hebrew at the time of writing ([EBHP] and [LBHP]. It is as if we were to say: (1) we cannot know exactly how Geoffrey Chaucer would have pronounced his poetry; therefore, (2) we will read it as if it were educated New York English of today!

An example of the result is found at the foot of p. 5 (Gen. 4:23-24)

Robert Alter's transcription -

> ʿa'dah vetzi'lah she'maʿan qo'li
> ne'šei 'lemekh haʾ'zena ʾimra'ti
>
> ki 'ʾish ha'ragti lefitz'ʿi
> ve'yeled leḥabura'ti
>
> ki šivʿa'tayim 'yuqam 'qayin
> ve'lemekh shiv'ʿim veshiv'ʿah

Box 1 - Sense and Nonsense from Robert Alter

The following would be my attempt to approach much closer to the original pronunciation -

Step 1 */EBHP/[4]	Step 2 *[EBHP] [5]
ᶜa'dâ waṣil'lâ š'maᶜn qō'lî naˌšay 'lamk haˀ'zinna(:) ˀimra'tî ˌki: 'ˀīīš ha'ragti(:) ləpiṣ'ᶜî wạ'yald ləḥabbūra'tî ˌki: šibᶜa'taym yuq'qam 'qayn wạ'lamk šib'ᶜīm wešib'ᶜâ	ʕe'de: wesˁɪl'le: ʃĕ'meʕn kˁo:'li: neʃˌɛy 'lemk heʔ'zɪnnəˑ ʔɪmre'ti: ˌki: 'ʔi:ʃ he'regtiˑ lepɪsˁ'ʕi: we'yeld leħebbu:re'ti: ˌki: ʃɪbʕe'teym yʊkˁ'kˁem 'kˁeyn we'lemk ʃɪb'ʕi:m weʃɪb'ʕe:

See *Short Poems of the Hebrew Bible*

You will note that Alter's transcription eliminates vowel and consonant length - a very prominent feature of Ancient Hebrew. It is interesting to hear how the three major reconstructions of this originally oral poem compare.

*[EBHP]	*[TH]	[BH/IH] based on Alter's Transcription
ʕe'de: wesˁɪl'le: ʃĕ'meʕn kˁo:'li: neʃˌɛy 'lemk heʔ'zɪnnəˑ ʔɪmre'ti:	ʕɔ:'ðɔ: wəsˁil'lɔ: ʃə'me:ʕen kˁo:'li: nəʃˌẹ: 'lɛ:mɛx heʔ'zẹ:nnɔ: ʔimrɔ:'θi:	ɐ'dɐ vətzi'lɐ ʃə'mɐ.ɐn ko'li nəʃˌẹ 'lɛmɛx haˀ'zẹnɐ imrɐ'ti
ˌki: 'ʔi:ʃ he'regtiˑ lepɪsˁ'ʕi: we'yeld leħebbu:re'ti:	ˌki: 'ʔi:ʃ hɔ:'re:χti: ləfisˁ'ʕi: wə'yɛ:lɛð ləħebbu:rɔ:'θi:	ki ˀiʃ he'regti ləfitz.'i və'yɛlɛd ləḥeburɐ'ti
ˌki: ʃɪbʕe'teym yʊkˁ'kˁem 'kˁeyn we'lemk ʃɪb'ʕi:m weʃɪ'bʕe:	ˌki: ʃivʕɔ:'θe:yim yukˁkˁem- 'kˁɔ:yin wə'lɛ:mɛx ʃiv'ʕi:m wəʃiv'ʕɔ:	ki šiv.ɐ'teyim 'yukɐm 'kɐyin və'lɛmɛx ʃiv.'im vəʃiv.'ɐ
MP3 sound file	MP3 sound file	MP3 sound file

The underlying assumption is that a clear understanding of the probable approximate pronunciation of the Hebrew of the Bible, at time of its writing[6], is vital to appreciating the rhythm of biblical poetry[7] and to detecting word play[8] etc.

Word Play – *See Bibliography on Word Play in the Hebrew Bible and Other Ancient Near Eastern Literature*

Box 2 - Wordplay in the Hebrew Bible

"…the biblical authors consistently opted for word play, especially the alliterative type, whenever the opportunity arose. When a choice of synonyms was available, the writers typically chose the word that produced the greater alliterative effect. This can be seen especially in the case of rare words, even *hapax legomena*."[9]

As stated by the Encyclopedia Judaica

"Within this framework of rhythmical parallelism there is a whole gamut of sound repetition and sound patterns, freely distributed, but clearly embellishing the text." All of these can be vitally effected by changes in pronunciation.

(1) Alliteration based on sounds that were heard as similar by the author not necessarily by the modern reader. E.g. the biblical writer could play off חסד חן and חבה against each other because, in each case, he would have pronounced the ח as ḥ [ħ]. He could similarly play off החביא and נוח against each other because, in each case he would have pronounced the ח as /ḫ/ = *kh* [x]. However, to his ear /ḫ/ [x] may have more closely resembled /k/ [k] = כ than it would have resembled /ḥ/ [ħ]. Likewise, to the biblical writer /ḥ/ [ħ] may have more closely resembled /h/ [h] = ה than it would have resembled /ḫ/ [x].

(2) Puns on similar sounding words requires and understanding of what did, and what did not sound the same. ש = /ś/ [ɬ] clearly sounded similar to both צ = /ṣ/ [sˁ] and ס = /s/ [s] and eventually merged into the latter. E.g. שחק = צחק and סתם = שתם but never שחק = שחק. Thus we should watch out for these similarities in looking for word play.

(3) General resemblances of words. Due to the distortion of modern pronunciation one might think that there is a play on words between word וְאֵיבָה "hostility" (Gen. 3:15) and חַוָּה "Eve". However, that this is not the case is shown by the fact that in EBHP, ואיבה would probably have been pronounced something like /waʾayˈbâ/ [weʔeyˈbɐː] or [weʔɛyˈbɐː] with only the final vowel in common with /ḥawˈwâ/ [ħewˈwɐː] "Eve". The development of the pronunciation of ואיבה would

Box 2 - Wordplay in the Hebrew Bible

have been something like /waʾayˈbâ/ (EBHP) > /waʾêˈbâ/, which might have been completed as early as the 6th century BCE, which developed into TH /wəʾeːˈba/ [wəʾeːˈvɛː] by the ninth century CE. The development of the pronunciation of חוה from [ħewˈwɔː] [TH] to [xɛˈvɔ], and ואיבה from [wəʾeːˈvɛː] [TH] to [wəʾeˈvɛ],would have taken place in Europe in the Middle Ages at least 1,500 years later.

(4) Assumption for common root meaning.

a) There were two roots, both spelled עלם but pronounced distinctively differently in the First Temple period.

ע ל ם (see) √*ġlm* – root meaning = to be agitated, strong. This is probably the root of the nouns ע ל ם/ˢ ע ל ם = boy/girl.

ע ל ם = √^{c}*lm* – root meaning = to conceal

Although one might postulate, on the basis of TH and modern pronunciation, that all children are devious and conceal what they can, this would have no basis in historical linguistics.

b) בָּחוּר occurs in Eccl. 11:9 with the meaning of 'young man' and in Ps. 89:20 as the passive participle meaning 'chosen'. One might think that there was an association i.e. that בָּחוּר in Eccl. 11:9 refers to a select or favored youth. However, it is probable that the two are unrelated and would have constituted a Minimal Pair in pre-exilic Hebrew i.e. */baˈḫūr/ : */baˈḥūr/ meaning respectively youth and chosen[10].

c) In the Hebrew Bible נַחֲלָה = “inalienable, hereditary property”, נַחַל = “stream, wadi”, and possibly date palms”. Given the fundamental importance of water for fertility one might associate the two words. However, historically they were unrelated. In EBHP the first was pronounced /naḥaˈlâ/ [neħeˈlɛː] and the second /ˈnaḫl/ ['nɛxl] or ['nɛxəl].

Box 3

The Functions of Puns

The literary impact of a pun is based on its perception as a linguistic anomaly. On account of its striking phonetic or semantic characteristics the pun stands out against the coherence of the "main" text, attracts the attention of the audience, and itself becomes a medium of communication A pun, therefore, is a menace to the textual coherence of the “grammatical” text (the main text) on the one hand, but may generate a new text on the other. The coherence of this new text is based on the kind of pun, whether of the semantic or phonetic type[11]. With regard to the intention of the utterance, this text competes with the grammatical text. In some cases, the sense of the "pun-text" even may superimpose the sense of the grammatical text.

The following functions of puns can be distinguished: (1) emphatic; (2) exegetic; and (3) symbolic. In the first case—the emphatic function—the pun is arbitrary and only underlines the sense of the main text in which it is embedded. In the second case—the exegetic function—the pun creates a new semantic level. In the third case—the symbolic function—the pun-text is the symbol of a non-linguistic phenomenon.

…the emphatic pun is a literary device used to shape the "main text." The exegetic pun, by contrast, creates a second literary level, a new text, which competes with the main text. The textuality, of this pun-text is created by distinctive semantic or phonetic features that appear as deviations from the norm of the main text. These deviations separate the pun-text from the main ("grammatical") text and constitute the pun-text as an independent text.

The sense of the pun-text does not follow the rules of a grammatical text, namely the rules of syntax, but is founded only on phonetic links (in the case of sound-based puns) or on semantic links (in the case of sense-based puns). It seems clear, that the possibilities of such links normally are much fewer than the possibilities of creating a grammatical text.

Quoted from "Between Science and Magic: The Function and Roots of Paronomasia" in *The Prophetic Books of the Hebrew Bible* by Stefan Schorch[12] pp. 206, 207, 211.

II The Pronunciation of Hebrew Changed Substantially Between EBHP and the Time of the 8th-11th CE Masoretes Who Vocalized the Masoretic Text of the Hebrew Bible

1. Biblical Skeleton, Changing Script and Orthography, Medieval Vowel Signs, Modern Pronunciation

Box 4

The Three Orthographic Elements in the Masoretic Text

"Of the three distinct orthographic elements in the MT. the consonantal text (including graphemes for consonants which quiesced in the course of time), the m.l., and the vowel points, the third was the last to he added to the text. While the first two elements were certainly combined by the 3rd century B.C.E., as evidenced by the proto-Massoretic text types found at Qumran[13],- the vowel points were not added before the 6th century C.E.[14] The relative lateness of these signs does not indicate that the tradition of pronunciation which they were intended to record and preserve originated in the period of the Massoretes themselves. The text without vowel signs was read orally long before the diacritical marks were invented to indicate vowels. The vowel signs were intended to guide readers in the correct pronunciation of the words according to traditions known to the different schools of Massoretes. As A. Dotan indicates (Masorah, cols 1401-82, Encyclopedia Judaica, vol. 16, Keter, Jerusalem, 1971: ref. is to col. 1409)[15]:

> ... the notes concerning the text of the Bible and the instructions for its proper pronunciation and its exact copying were handed down orally from generation to generation before they were set down in writing. It may be assumed that these comments could be written down and were committed to writing ... apparently in the sixth or seventh century C.E. Therefore, one must differentiate quite clearly between the oral Masorah which is endless and cannot be defined even though there are allusions to it and evidence thereof, and between the written Masorah whose notations were written in the margins of the codices and which is simply called "the Masorah."

This of course does not imply that the massoretic traditions accurately reflect the manner in which these texts were pronounced by their authors. Nevertheless, the traditions do reflect an archaic phonology. Investigations of Qumranic and Mishnaic Hebrew (ca. 50 B.C.E.-200 C.E.) indicate that postbiblical Hebrew phonology was different than that of biblical Hebrew; e.g., the laryngeals ' and h and the pharyngeals ʿ and *ḥ* became weakened (Kutscher 1974: 505-7; 1971: cols. 1586, 1595-96). Massoretic vocalisation indicates that these were not weakened or leveled in the reading tradition, but that they were preserved (Kutscher 1974: 510-11)."

> Quoted from Zevit 1980, p. 9.
>
> See also Did the Tiberian Masoretes Simply Encode Tradition of Did they "Do Grammar"?

When dealing with vocalized texts from the past, though occasionally historic spellings cause complications, scholars normally have graphemes representing both consonants and vowels from the same period. This is true whether we are referring to texts in Old and Middle English, Old and Middle French etc. When studying these languages, scholars will use the texts, and any other relevant information, to reconstruct a synchronic consonantal and vowel phonology of a given dialect in a given period.

With Biblical Hebrew, the traditional approach is quite different and when you think about it, rather bizarre. The printed text of the Hebrew Bible consists of -

(a) The consonantal skeleton of Biblical Hebrew (c. 850-550 BCE) i.e. letters representing consonants and some vowels (PMT) written in a script and, more importantly, an orthography[16] different from that used when the texts were originally written down. (See *Phonemic Structure of Hebrew*).

(b) The superimposed pointing of the Tiberian Masoretic tradition i.e. the vowel signs and the cantillation signs, which indicate syllabic word stress, of the Masoretic Text. These represent the extinct pronunciation tradition of the Masoretes of Tiberias (c. 850 C.E.) which they used in reading the biblical text. It must be pointed out that the Jewish scribes, who presumably maintained the traditions of pronunciation of this ancient form of Hebrew, during the millennium and a half up to the time of the Masoretes, were always familiar with various forms of Aramaic and for most or all of this period had an evolving Western (Palestinian) Jewish Aramaic as their native tongue. An evolving, and highly Aramaicized, form of Hebrew was still spoken by some elements of the Judean peasantry until the mid second century CE. The most prominent scholar of this form of Hebrew has written -

> … Aramaic had a far-reaching impact and left its mark on all facets of the language, namely, orthography, phonetics and phonology, morphology including inflection, syntax, and vocabulary. There is room for investigation as to whether Mishnaic Hebrew was a Hebrew-Aramaic mixed language. This question may be posed owing to the fact that A(ramaic) had a pervading influence in all spheres of the language, including inflection, which is generally considered to be impenetrable to foreign influence….

Thus, the pointed Hebrew Bible imposes on a mid-first millennium BCE consonantal structure a vocalization system, influenced by Aramaic, of about 1,500 years later!

The reason that this strange arrangement is maintained is that, though the Tiberian pointing is the latest of the sources of information regarding the pronunciation of Biblical Hebrew, it alone provides a complete transcription of its vowel phonemic system as well as enough additional information to reconstruct its phonetic system (*[TH]) with some certainty. In addition, the superbly crafted and comprehensive nature of the Tiberian masoretic system, in many cases preserves evidence of early pronunciations lost in the various non-Tiberian traditions[17].

However, the strange approach does not end there. The conventional scholarly transcription of TH (TH_{CST}/TH_{SBL}) does not, in fact reflect the known pronuncition of the Tiberian Masoretes (/TH/ *[TH]) and the actual pronunciation of the text by scholars ([BH_{IH}] or [$TH_{CSP\ IS\text{-}ENG}$]) reflects modern pronunciations quite at variance with BH (*EBHP/*LBHP), TH and TH_{CST}/TH_{SBL}. [BH_{IH}] and [$TH_{CSP\ IS\text{-}ENG}$] are particularly problematic in that, effectively, most English and German speaking learners approach Biblical Hebrew through the pronunciation of Israeli Hebrew. However, aspects of the pronunciation of pre-exilic Hebrew had more in common with English and especially German that it has with Israeli Hebrew. In particular Biblical Hebrew, as did Akkadian, and as does German, Arabic, and to a lesser extent English, maintained phonetic and phonemic distinctions of vowel length. This sharply contrasts with Israeli Hebrew (see *Vowel System - Modern Israeli Hebrew*) in which vowels of a given quality do not significantly vary in length. The patterning of long and short vowels and consonants, a characteristic going back to proto-Semitic would have been important in the language's sound structure and rhythm. Nb. the distinction between long and short vowels and consonants is a clear requirement if we are to fully appreciate biblical poetry word play.

2. The Problem of Music

Harper's Bible Dictionary[18] states -

> Music - Instrumental and vocal sounds having rhythm, melody, or harmony. Secular and sacred music played no less a role in the lives of the people of biblical times than it does in our own day. It added to the pomp of national celebrations, bolstered the soldier's courage, enlivened work and play, lent comfort in times of sadness, and provided inspiration in religious expression. The sound of early ear Eastern music would seem less strange to the modern ear than previously thought. Though we are not informed about ancient rhythms and tempos, we do know that heptatonic, diatonic scales, familiar to us from Western

> music, also existed in antiquity. A number of stringed instruments would have produced sounds similar to modern small harps, lyres, and lutes. Other instruments, notably woodwind, percussion, and the simpler stringed instruments, were merely less sophisticated forms of modern orchestral or folk instruments, and some are still in use in the traditional cultures of the contemporary Near East.

Much of the biblical poetry was probably intended to be sung or chanted to the accompaniment of instruments. This is clearest with the Psalms -

> In addition to the titles used for the Book of Psalms there are numerous musical terms in the book which indicate that the Psalms were written to be sung. The words “psalm” (Heb. *mizmor*, used 57 times) and “song” (Heb. *šir*, found in the heading of 30 Psalms, frequently with *mizmor*) are both musical terms.[32] In 55 Psalms there is a reference to the “choir director.”[33] Various musical instruments are mentioned in the Psalms, both stringed (e.g. Pss. 4,6,54,55), wind instruments, such as the flute (Ps. 5), and perhaps the harp (Pss. 8,81,84).[34] Some of the musical terms in the superscriptions are difficult to interpret. These terms may be instructions to the various sections of the choir, such as the sopranos and the basses.[35] In Psalms 45 and 69 it is possible, if not probable, that the reference to “the Lilies” is the name of a well-known tune, to which the words of the song were to be sung (cf. the superscription in the NIV).[19]

As stated by Watson[20] -

> Our knowledge of the extent to which musical accompaniment was a feature of ancient oral poetry is derived by inference from ... field studies[21]... and from indications in Greek poetry. Yugoslav poets sing to the sound of the *gusle* (a one-stringed violin); in ancient Greece the *kitharis* (a harp) was used. Such instruments were used (a) to mark the accentual stresses in a line of verse; (b) to fill out the line, especially at the beginning or end; (c) to provide emphasis at important points, and (d) to hide the poet's hesitation as he improvised, allowing him time to think.

In the Second Temple the Levitical choir of men and boys sung psalms. According to the Jewish Encyclopedia " Singing seems to have been the principal feature of their art, the instruments being used by the singers for their self-accompaniment only ."

One would expect that the musical accompaniment probably was founded on stress patterns and/or syllabic structure. Beyond that it is impossible to say much. We have to be aware that this represents a major lacuna in any attempt to recover the sound of Biblical Hebrew poetry.

3. Phases of Biblical Hebrew and its Antecedents (BHA) and the Development of the Biblical Hebrew Reading Tradition of the Tiberian Masoretes[22]

(For more detail see the examples in *Excursus 2* and *Excursus 3*. For various opinions see *Linguistic Changes Affecting the Pronunciation of Biblical Hebrew 2000 B.C.E. - 850 C.E. According to Various Scholars*)

*1. BHA Phase 1 - *Proto-Northwest Semitic*

Sources - Egyptian transliterations particularly the Execration Texts (20th-18th centuries BCE)[23]; Amarna Letters (early to mid 14th centuries BCE); the (mostly undeciphered) Proto-Canaanite inscriptions (c. 1500 BCE[24]); and, comparative Semitic linguistics[25].

Time Period - Commenced c. 2000 BCE when the dialects that would develop into the Canaanite languages and Aramaic languages underwent the sound shift of word-initial [w] > [y] which distinguishes them from the other Semitic languages. *Phase 1* ended c. 1200 BCE with the establishment of a uniform penultimate word stress. Middle-Late Bronze Age.

Geographical Coverage - Southern Levant.

Languages/Dialects in Contact - Egyptian in extreme south, proto-Arabian in east, non-Semitic languages in extreme north, Akkadian in extreme northeast. In the Canaanite heartland the only foreign language heard would have been that of the Egyptian administrators and soldiers. Akkadian familiar to chancery scribes (see Amarna Letters).

Political Situation - many city states. No large political units which could have crystallized one or more widely used standard literary language(s). Egyptian dominance in the center and south, Mittanian and then Hittite dominance in the north. Akkadian used as language of diplomatic correspondence (see Amarna Letters).

Stress - This is the earliest period for which stress patterns can be deduced. There are two views regarding stress in this period:

1. Stress was on the penultimate syllable, if it was long closed (*CvC*) or containing a long vowel or was the first syllable of the word. Otherwise on the antepenult.[26] OR,

2. If:

> (a) a word contained one or more long vowels, then the stress was on the long vowel most closely preceding the case and mood endings; OR,
>
> (b) if the word contained only short vowels, then the syllable preceding the case or mood ending is stressed.[27]

Phonemic System - During this period vowel and consonant quality and length were phonemic. N.b. a convenient way to learn to hear and articulate vowel length is to listen carefully to: (a) recordings of a couple of spoken Arabic dialects; or, (b) recordings of Akkadian poetry. Since it was the presence or absence of long vowels or long syllables, and if present, the location of the final long vowel or syllable of the word, that

determined stress, the place of stress was not phonological. These conditions still pertain to most varieties of colloquial Arabic today.

Important Linguistic Developments -

- *Canaanite shift*[28] (Here is the song, "The Canaanite Shift.")- There are two views:

1. Stressed [a:] shifts to [o:] (This continued into *phase 2*.)[29].

2. Irrespective of stress, [a:] shifts to [o:]. [30]

This is the isogloss that separates proto-Canaanite (including proto-Hebrew) from proto-Aramaic).

N.b. We have very little evidence regarding this phase of the language. Some of the linguistic developments listed under *phase 2* may have taken place or commenced in *phase 1*.

b) *BHA Phase 2* - **Proto-Hebrew (PH)*[31]

Sources - Largely reconstructed on the bases of *phase 1* and *phase 3* with assistance from comparative Semitic linguistics.

Time Period - c. 1200 - c. 1000 BCE. Iron Age 1

Geographical Coverage - Territory of the future kingdoms of Israel and Judah, particularly the highland area from the Negev desert to the Valley of Jezreel.

Languages/Dialects in Contact - Similar to the following phase - see the table *Linguistic Influences on the Regions of Judah and Israel*.

Political Situation - Israelite highland settlement with declining Late Bronze Age Canaanite city states in the lowlands. Residual Egyptian military presence early in this era.

Stress - Phase 2 commenced with the establishment of a uniform penultimate word stress[32]. *Phase 2* ended with the loss of most or all word-final short vowels which occurred in three stages:

- Nouns in the construct state dropped their final short case ending[33] vowels; then,
- verbs; and finally,
- nouns (including participles) in the absolute state. In the words of Blau[34] -

  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[35] …, then verbs[36] and at last nouns (including participles) in *status absolutus*.[37] 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 *ā*, *i* to *ē*, and *u* to *ō*, as *'dagu* > דָּג (*'dåg*) "fish" [Cf. Harris 1939 pp. 60-62] (as against *'qallu* > קַל "light", because it was originally

closed); *ya'šinu* > יָשֵׁן(*yå'šēn)* "sleeping"; *ya'guru* > יָגוֹר "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: דַּג־, שָׁמַר "he kept", with final short vowels, *viz, pataḥ*. Since the *ṣere* and *ḥolem* in יָשֵׁן "he slept" and יָגוֹר "he was afraid" correspond to *pataḥ*, they have to be considered short as well, whereas the same words when serving as participles contain long *ṣere* and *ḥolem*, similarly שֹׁמֵר *qṭl* as against the participle יָרֵא יֹלֵךְ *yqṭl/yqṭl* against the participle מְבֹרָךְ.

N.b.

1. In the case of a verbal form being used as a name the stressed vowel undergoes compensatory lengthening[38]. E.g.

<ycqb> (/EBHP/): /yiᶜ'qub/ "he over reaches etc."; /yiᶜ'qo:b/ "Jacob" both derived from *BHA phase 2* /yaᶜ'qubu/

<ntn> (/EBHP/): /na'tan/ "he gave"; /na'ta:n/ "Nathan" both derived from *BHA phase 2* /na'tana/

2. In some cases, if the preceding syllable was closed or when open contained an unchangeable long, vowel, /a/ remained short though in similar situations /u/ lengthened to /o:/ and /i/ to /e:/. Egs. PH */ʾiṣ'baᶜu/ > /EBHP/ /ʾiṣ'baᶜ/ 'finger', PH */šu:'šanu/ > /EBHP/ /šu:'šan/ 'lily', PH */map'tiḥu/ > /EBHP/ /map'te:ḥ/ 'key', PH */ša:'piṭu/ > /EBHP/ /šo:'pe:ṭ / 'judge', PH */ṣip'puru/ > /EBHP/ /ṣip'po:r/ 'bird', PH */'mutu/ > /EBHP/ */'mo:t/ 'man'. However, in many cases, the EBHP form assimilated to the /da'ba:r/ class, i.e. the stressed /a/ lengthened to /a/. Egs. PH */miq'dašu/ > /EBHP/ /miq'da:š/ 'sanctuary', PH */ᶜa:'lamu/ > /EBHP/ /ᶜo:'la:m/ 'world, age'.[39]

Table 1 - Changes in the Noun from PH to TH - General Case					
		*PH (c. 1200 BCE)	EBHP */EBHP/+ *[EBHP] (c. 850-550 BCE)	PTH */PTH/+ *[PTH] (c. 400 CE)	TH /TH/+ *[TH] (c. 850 CE)
דבר 'word'	s.	*/da'**ba**ru/[40] */da'**ba**ra/[41] */da'**ba**ri/[42]	*/da'**ba**:**r**/ *[dö'**ba**:**r**]	*/da:'**ba**:**r**/	דָּבָר /då'**bå**r/ *[ðʊ'**vɔ**:**r**]
	du.[43]	*/daba'**rāma**i/ */daba'**ray**mi/[44]	*/daba'**raym**/		
	pl.	*/daba'**rūma**/ */daba'**rīma**/[45]	*/daba'**rīm**/ *[döbö'**ri**:**m**]	*/dɒba:'**rīm**/	דְּבָרִים /dɒbå'**rim**/ *[dɒvʊ'**ri**:**m**]
	constr. s.	*/da˛bar/	*/da˛bar/ *[dö˛bòò]	*/dɒ˛bar/	דְּבַר /dɒ˛bar/ *[dɒ˛vö:r]

Table 1 - Changes in the Noun from PH to TH - General Case					
		*PH (c. 1200 BCE)	EBHP */EBHP/+ *[EBHP] (c. 850-550 BCE)	PTH */PTH/+ *[PTH] (c. 400 CE)	TH /TH/+ *[TH] (c. 850 CE)
	constr. du.	*/daba˛rŭ/ */daba˛ray/	*/daba˛ray/ *[döbö˛öy] or *[döbô˛öy]	*/diḇɒ˛rê/	דִּבְרֵי /diḇ˛rG/ *[div˛rG]
	constr. pl.	*/daba'**rū**/ */daba'**rī**/			
דג 'fish'	ms.	*/'**da**gu/ */'**da**ga/ */'**da**gi/	*/'**da**:**g**/ *['**da**:**g**]	*/'**da**:**g**/	דָּג /'**då**g/ *['**dɔ**:**ġ**]
	mp.	*/da'**gū**ma/ */da'**gī**ma/	*/da'**gīm**/ *[dö'**gi**:**m**]	*/da:'**gīm**/	דָּגִים /då'**gim**/ *[dƟ'**ġi**:**m**]
שנה 'year'	fs.	*/ġa'**na**tu/ */ġa'**na**ta/ */ġa'**na**ti/	*/ġa'**nâ**/ *[ġö'**nɐ**:]	*/ġa:'**nâ**/	שָׁנָה /ġå'**nå**/ *[ġƟ'**nɔ**:]
ידות 'handles'	fp.	*/ya'**dō**tu/ */ya'**dō**ta/ */ya'**dō**ti/	*/ya'**dōt**/ *[yö'**do**:**t**]	*/ya:'**dōṯ**/	יָדוֹת /yå'**ḏoṯ**/ *[yƟ'**ð**o:**θ**]
√קטל (*qal* a.p.)	ms.	*/'**qā**ŭ̆lu/ > */'**qō**ŭ̆lu/ > */qØ'**ṭi**lu/[46]	*/qØ'**ṭe**:**l**/ *[qo:'**ṭę**:**l**]	*/qØ'**ṭe**:**l**/	קֹטֵל /qo'**ṭęl**/ *[qo:'**ṭę**:**l**]
	fs. (form 1)	*/'**qā**ŭ̆latu/ > */'**qō**ŭ̆latu/ > */qØ'**la**tu/	*/qØ'**lâ**/ *[qo:ŭ̆ɷ̈**lɐ**:]	*/qØ'**lâ**/	קֹטְלָה /qoŭ̆ɒ'**lå**/ *[qo:ŭ̆ɒ'**lɔ**:]
	fs. (form 2)	*/'**qā**ŭ̆latu/ > */'**qō**ŭ̆latu/ > */qØ'**ṭil**tu/	*/qØ'**ṭilt**/ > */qØ'**ṭalt**/[47] *[qo:'**ṭɐlt**]	*/qØ'**ṭe**le**ṭ**/	קֹטֶלֶת /qo'**ṭɛlṷ̇ṯ**/ *[qo:'**ṭɛ**:**l**ʊ̈**ð**]
	du.	*/qØ̆i'**lā**mi/ */qØ'**lay**mi/	*/qØ'**laym**/		
	mp.	*/'**qā**ŭ̆l˛ma/ > */'**qō**ŭ̆l˛ma/ > */qØ'**lī**ma/	*/qØ'**līm**/ *[qo:ŭ̆ɷ̈**li**:**m**]	*/qØ'**līm**/	קֹטְלִים /qoŭ̆ɒ'**lim**/ *[qo:ŭ̆ɒ'**li**:**m**]
	fp.	*/qŬ̆i'**lā**tu/ > */qØ'**lō**tu/	*/qØ'**lōt**/ *[qo:ŭ̆ɷ̈**lo**:**t**]	*/qØ'**lōṯ**/	קֹטְלוֹת /qoŭ̆ɒ'**loṯ**/ *[qo:ŭ̆ɒ'**lo**:**θ**]
√שלח (*qal* a.p.)	ms.	*/'**šā**li^u/ > */'**šō**li^u/ > */ġØ'**li**^u/	*/ġØ'**le**:**ḥ**/ *[ġo:'**lę**:**ḥ**]	*/ġØ'**le**:**ah**/[48]	שֹׁלֵ֫ח /ġo'**leah**/ *[ġo:'**le**:**ɐh**]

Table 1 - Changes in the Noun from PH to TH - General Case					
		*PH (c. 1200 BCE)	EBHP */EBHP/+ *[EBHP] (c. 850-550 BCE)	PTH */PTH/+ *[PTH] (c. 400 CE)	TH /TH/+ *[TH] (c. 850 CE)
√קטל (*piel* a.p.)	ms.	*/ˈ**mu**qaĭ̈̈ilu/ > */muqaĭˈ**ṭil**u/[49]	*/muqaĭˈ**ṭeːl**/ *[mŏ̯qöĭ̈ˈ**ṭẹːl**]	*/mɒqaĭˈ**ṭeːl**/[50]	מְ קַטֵּ ל /mɒqaĭˈ**ṭẹl**/ *[mɒqöĭ̈ˈ**ṭẹːl**]
	fs. mp. fp.	*/muqaĭ̈̈iˈ**la**tu/ */muqaĭ̈̈iˈ**lī**ma/ */muqaĭ̈̈iˈ**lō**ti/	*/muqaĭ̈̈iˈ**lâ**/ *[mŏ̯qöĭ̈ĭ̈ẅ**lɐ**ː] */muqaĭ̈̈iˈ**līm**/ */muqaĭ̈̈iˈ**lōt**/	*/mɒqaĭ̈̈ɒˈ**lâ**/ */mɒqaĭ̈̈ɒˈ**līm**/ */mɒqaĭ̈̈ɒˈ**lōt**/	/mɒqaĭ̈̈ɒˈ**lå**/ *[mɒqöĭ̈ĭ̈ɒˈ**lɔ**ː] /mɒqaĭ̈̈ɒˈ**lim**/ /mɒqaĭ̈̈ɒˈ**lot**/
√קטל (*hithpael* participle)	ms.	*/muhitqaĭˈ**ṭil**u/ */muhitqaĭˈ**ṭil**a/ */muhitqaĭˈ**ṭil**i/	*/mitqaĭˈ**ṭeːl**/[51] *[mŏ̯qöĭˈ**ṭẹːl**]	*/miṯqaĭˈ**ṭeːl**/	מִ תְ קַטֵּ ל /miṯqaĭˈ**ṭẹl**/ *[midŏ̯qöĭˈ**ṭẹːl**]
	fs. mp. fp.	*/muhitqaĭ̈̈iˈ**la**tu/ */muhitqaĭ̈̈iˈ**lī**ma/ */muhitqaĭ̈̈iˈ**lō**tu/	*/mitqaĭ̈̈iˈ**lâ**/ */mitqaĭ̈̈iˈ**līm**/ */mitqaĭ̈̈iˈ**lōt**/	*/miṯqaĭ̈̈ɒˈ**lâ**/ */miṯqaĭ̈̈ɒˈ**līm**/ */miṯqaĭ̈̈ɒˈ**lōt**/	/miṯqaĭ̈̈ɒˈ**lå**/ /miṯqaĭ̈̈ɒˈ**lim**/ /miṯqaĭ̈̈ɒˈ**lot**/
√קטל (*qal* inf. constr.)	not in construct relationship	*/ˈ**qu**ĭ̆ul**u**/ > */quˈ**ṭul**u/ Similar in form to imperative (ms.) possibly due to shared origin before the functions were distinguished.[52]	*/quˈ**ṭoːl**/[53] *[qoʿ**ṭoːl**] > */qˈ**ṭoːl**/ *[qÄ**ṭoːl**	*/qˈ**ṭoːl**/	קְ טֹל /qɒˈ**ṭol**/ *[qɒˈ**ṭoːl**]
	in construct relationship	*/quˌĭ̆ul/	*/quˌĭ̆ul/ *[qŏ̯ˌĭ̆ŏ̯l] > */qˌĭ̆ul/ *[qɒˌĭ̆ŏ̯l] or *[qɒˌĭ̆O]	*/qˌĭ̆ul/	קְ טֹל /qɒˌĭ̆ol/ *[qɒˌĭ̆oːl]
	with suffixes	*/quĭ̆uˈ**la**kã/ etc.	*/quĭ̆ˈ**la**ka(ː)/ *[qŏ̯ĭ̆ˈ**lɐ**kö˙] etc.	*/quĭ̆lˈ**ka**ː/ etc.	קְ טָ לְ ֯ /qɣ̆ɬɒˈ**kå**/ *[qʿ̆ɬɒˈ**kɔ**ː]
√קטל (*hiphil* inf. abs.)		*/haqˈ**ṭil**u/ */haqˈ**ṭil**a/ */haqˈ**ṭil**i/	*/haqˈ**ṭeːl**/ *[hȯ̆qˈ**ṭẹːl**]	*/haqˈ**ṭeːl**/	הַ קְ טֵל /haqˈ**ṭẹl**/ *[hȯ̆qˈ**ṭẹːl**]

Table 2 - Changes in the Noun from PH to TH - Possible Special Cases

		*PH (c. 1200 BCE)	EBHP */EBHP/+ *[EBHP] **(c. 850-550 BCE)**	PTH */PTH/+ *[PTH] (c. 400 CE)	TH /TH/+ *[TH] (c. 850 CE)	*Comments*
Prim-itive *qaṭul*	ms.	*/ga'**dul**u/ */ga'**dul**a/ */ga'**dul**i/	*/ga'**do:l**/ *[gö'**do:l**]	*/ga:'**do:l**/	גָּדוֹל /gå'**dol**/ *[gˈʊ'**ðo:l**]	
	fs.	*/gadu'**lat**u/ */gadu'**lat**a/ */gadu'**lat**i/	*/gadu'**lɐ:**/ *[gödˤ'**lɐ:**] or *[gödɒˤ'**lɐ:**]	*/gɒdo:'**lâ**/	גְּדוֹלָה /gɒdo'**lå**/ *[gɒðo:'**lɔ:**]	Assumes that, in feminine and plural forms, */u/ > /ō/ due to pretonic lengthening, i.e. c. 300 BCE. This is the option I will use in EBHP transcriptions
	mp.	*/gadu'**lÎm**a/ */gadu'**lɯ**a/	*/gadu'**lɪm** / *[gödˤ'**li:m**] or *[gödɒˤ**li:m**]	*/gɒdo:'**lɪm**/	גְּדוֹלִים /gɒdo'**lim**/ *[gɒðo:'**li:m**]	
	fp.	*/gadu'**lōt**u/ */gadu'**lat**a/ */gadu'**lat**i/	*/gadu'**lōt** / *[gödˤ'**lo:t**] or *[gödɒˤ**lo:t**].	*/gɒdo:'**lōt**/	גְּדוֹלוֹת /gɒdo'**lot**/ *[gɒðo:'**lo:θ**]	
	ms.	*/ga¦dul/	*/ga¦dul/ *[gö¦dˤl] or *[gö¦dɒɬ]	*/gɒ¦do:l/ or */gɒdul/	גְּדוֹל /gɒ¦dol/ *[gɒ¦ðo:l] or גְּדָ֫ל- */gɒdɣ̊-/ *[gɒðʊ̈]	*Construct*
	fs.	*/gadu¦lat/	*/gadu¦lat/ *[gödˤ¦löt] or *[gödɒɬ¦löt]	*/gɒdo:¦lat/	גְּדוֹלַת /gɒdo¦lat/ *[gɒðo:¦lö:t]	
	mp.	*/gadu¦lÎ/ */gadu¦lɯ	*/gadu¦lay/ *[gödˤ¦löy] or *[gödɒɬ¦löy]	*/gɒdo:¦lê/	גְּדוֹלֵי /gɒdo¦lɪ/ *[gɒðo:¦lɪ]	
	du.	*/gadu¦lɪ̈/ */gadu¦lay				
	fp.	*/gadu¦lØt/	*/gadu¦lØt/ *[gödˤ¦lo:t] or *[gödɒɬ¦lo:t]	*/gɒdo:¦lØt/	גְּדוֹלוֹת /gɒdo¦lot/ *[gɒðo:¦lo:d]	
	ms.	*/ga'**dul**u/ */ga'**dul**a/ */ga'**dul**i/	*/ga'**do:l**/ *[gö'**do:l**]	*/ga:'**do:l**/	גָּדוֹל /gå'**dol**/ *[gˈʊ'**ðo:l**]	
	fs.	*/gadu'**lat**u/ */gadu'**lat**a/ */gadu'**lat**i/	*/gado:'**lâ**/ *[gado:'**lɐ:**]	*/gɒdo:'**lâ**/	גְּדוֹלָה /gɒdo'**lå**/ *[gɒðo:'**lɔ:**]	Assumes that in Biblical Hebrew

Table 2 - Changes in the Noun from PH to TH - Possible Special Cases						
		*PH (c. 1200 BCE)	EBHP */EBHP/+ *[EBHP] **(c. 850-550 BCE)**	PTH */PTH/+ *[PTH] (c. 400 CE)	TH /TH/+ *[TH]* (c. 850 CE)	*Comments*
	mp.	*/gaduˈlÎma/ */gaduˈlɯa/	*/gado:ˈ**līm**/ *[göd̥o:ˈ**li:m**]	*/gɒd̲o:ˈ**līm**/	גְּדוֹלִים /gɒd̲oˈ**lim**/ *[gɒðo:ˈ**li:m**]	grammatical analogy in which fs., mp., fp. forms based on new EBHP ms. form.[54]
	fp.	*/gaduˈ**lōtu**/ */gaduˈ**lat**a/ */gaduˈ**lat**i/	*/gado:ˈ**lōt**/ *[göd̥o:ˈ**lo:t**]	*/gɒd̲o:ˈ**lōt̲**/	גְּדוֹלוֹת /gɒd̲oˈ**lot̲**/ *[gɒðo:ˈ**lo:θ**]	
Part.						
√כבד 'heavy'(*qal stat-ive)*	ms.	*/kaˈ**bid**u/ */kaˈ**bid**a/ */kaˈ**bid**i/	*/kaˈ**bɐ̯:d**/ *[köˈ**bɐ̯:d**]	*/ka:ˈ**bɐ̯:d̲**/[55]	כְּבֵד /kåˈ**bɐ̯̣d̲**/ *[kʘˈ**vɐ̯̣:ð**]	
	fs.	*/kabiˈ**dat**u/ */kabiˈ**dat**a/ */kabiˈ**dat**i/	*/kabiˈ**dɑ̂**/ *[köbɞ̈ˈ**dɐ̯:**] or *[köbʊ̈ˈ**dɐ̯:**]	*/kɒbɐ̯:ˈ**dɑ̂**/	כְּבֵדָה */kɒb̲Gˈ**d̲ɑ̂**/ *[kɒvGˈ**ðɔ:**]	Assumes that, in feminine and plural forms, */i/ > /e:/ due to pretonic lengthening, i.e. c. 300 BCE. This is the option I will use in EBHP transcriptions.
	mp.	*/kabiˈ**dīm**a/ */kabiˈ**dīm**a/	*/kabiˈ**dīm**/ *[köbɞ̈ˈ**di:m**] or *[köbʊ̈ˈ**di:m**]	*/kɒbɐ̯:ˈ**dīm**/	כְּבֵדִים /kɒb̲Gˈ**d̲im**/ *[kɒvGˈ**ði:m**]	
	fp.	*/kab**i**ˈ**dōt**u/ */kab**i**ˈ**dōt**a/ */kab**i**ˈ**dōt̲**i/	*/kabɞ̈ˈ**dōt**/ *[köbɞ̈ˈ**do:t**] or *[köbʊ̈ˈ**do:t**]	*/kɒbɐ̯:ˈ**dōt̲**/	כְּבֵדוֹת /kɒb̲Gˈ**d̲ot̲**/ *[kɒvGˈ**ðo:θ**]	
√כבד 'heavy of-'	ms.	*/kaˌbid/	*/kaˌbid/ *[köˌbɞ̈d]	*/kɒˌbad̲/	כְּבַד */kɒˌbad̲/ *[kɒˌva:ð]	*Construct*
	fs.	*/kabiˌdat/	*/kabiˌdat/ *[köbɞ̈ˌdöt]	*/kib̲ɒˌdat/	כִּבְדַת /kib̲ˌdat/ *[kivˌðöːt]	
	du.	*/nikbaˌdɯ̈/ */nikbaˌday/	*/kabiˌday/ *[köbɞ̈ˌdöy] or *[köbʊ̈ˌdʊ̈y]	*/kibɒˌdɐ̂/	כִּבְדֵי /kib̲ˌdG *[kivˌðG]	
	mp.	*/kabiˌdÎ/ */kabiˌdɯ̈/				
	Fp.	*/kabiˌdʘ́t/	*/kabiˌdʘ́t/ *[köbɞ̈ˌdo:t]	*/kibɒˌd̲ʘ́t/	כִּבְדוֹת /kib̲ˌd̲ot̲/ *[kivˌðo:d]	
√כבד	ms.	*/kaˈ**bid**u/	*/kaˈ**bɐ̯:d**/	*/ka:ˈ**bɐ̯̣:d̲**/	כְּבֵד /kåˈ**bɐ̯̣d̲**/ *[kʘˈ**vɐ̯̣:ð**]	

Table 2 - Changes in the Noun from PH to TH - Possible Special Cases						
		*PH (c. 1200 BCE)	EBHP */EBHP/+ *[EBHP] **(c. 850-550 BCE)**	PTH */PTH/+ *[PTH] (c. 400 CE)	TH /TH/+ *[TH]* (c. 850 CE)	*Comments*
'heavy'			*[kö'**bę**:**d**]			
	fs.	*/kabi'**da**tu/	*/kabe:'**dâ**/ *[köbG'**da**:]	*/kɒbe:'**dâ**/	כְּבֵדָה */kɒbG**då**/ *[kɒvG'**ðɔ**:]	Assumes that in Biblical Hebrew grammatical analogy in which fs, mp., fp. forms based on new EBHP ms. form.[56]
	mp.	*/kabi'**dÎ** ma/ */kabi'**dɯ**ma/	*/kabe:'**dīm**/ *[köbG'**di**:**m**]	*/kɒbe:'**dīm**/	כְּבֵדִים /kɒbG**dim**/ *[kɒvG'**ði**:**m**]	
	fp.	*/kabi'**dōt**u/	*/kabe:'**dōt**/ *[köbG'**do**:**t**]	*/kɒbe:'**dōt**/	כְּבֵדוֹת /kɒbG**doţ**/ *[kɒvG'**ðo**:**θ**]	
Nifal						
√כבד 'honorable, honored'	ms.	*/nik'**ba**du/ */nik'**ba**da/ */nik'**ba**di/	*/nik'**ba**:**d**/[57] *[nɑ̊k'**ba**:**d**]	*/nik:'**ba**:**d**/	נִכְבָּד /nik:'**båd**/ *[nix'**bɔ**:**ð**]	
	fs.	*/nikba'**da**tu/ */nikba'**da**ta/ */nikba'**da**ti/	*/nikba'**dâ**/ *[nɑ̊kbö'**dɐ**:]	*/nikba:'**dâ**/	נִכְבָּדָה /nikbå'**då**/ *[nixbƟ'**ðɔ**:]	Assumes that, in feminine and plural forms, */a/ > /a:/ due to pretonic lengthening, i.e. c. 300 BCE. This is the option I will use in EBHP transcriptions.
	mp.	*/nikba'**dū**ma/ */nikba'**dī**ma/	*/nikba'**dīm**/ *[nɑ̊kbö'**di**:**m**]	*/nikba:'**dīm**/	נִכְבָּדִים /nikbå'**dim**/ *[nixbƟ'**ði**:**m**]	
	fp.	*/nikba'**dō**tu/ */nikba'**dō**ta/ */nikba'**dō**ti/	*/nikba'**dōt**/ *[nɑ̊kbö'**do**:**t**]	*/nikba:'**dōt**/	נִכְבָּדוֹת /nikbå'**dot**/ *[nixbƟ'**ðo**:**θ**]	
√כבד 'hon-ored of'	ms.	*/nik¸bad/	*/nik¸bad/ *[nɑ̊k¸böd]	*/nik:¸bad:/	נִכְבַּד־ /nik:¸bad:/ *[nix¸bö:ð]	*Construct*
	fs.	*/nikba¸dat/	*/nikba¸dat/ *[nɑ̊kbö¸döt]	*/nikbɒ¸dat:/	נִכְבְּדַת־ /nikbɒ¸dat:/ *[nixbɒ¸ðö:ɗ]	
	du.	*/nikba¸dŨ/ */nikba¸day/	*/nikba¸day/ [nɑ̊kbö¸döy] or [nɑ̊kbö¸dʊ̈y]	*/nikbɒ¸dê/	נִכְבְּדֵי־ /nikbɒ¸dG/ *[nixbɒ¸ðG]	
	mp.	*/nikba¸dÎ/				

Table 2 - Changes in the Noun from PH to TH - Possible Special Cases						
		*PH (c. 1200 BCE)	EBHP */EBHP/+ *[EBHP] **(c. 850-550 BCE)**	PTH */PTH/+ *[PTH] (c. 400 CE)	TH /TH/+ *[TH]* (c. 850 CE)	*Comments*
		*/nikba˩dʊ̯/				
	fp.	*/nikba˩dɑ́t/	*/nikba˩dɑ́t/ *[nɑ̆kbɔ̆˩do:t]	*/nik̲bɒ˩d̲ɑ́t̲/	נִכְבַ֫ ,דוֹת־ /nik̲bɒ˩d̲ot̲/ *[nixbɒ˩ðo:ɗ]	
√כבד 'honor-able, hon-ored'	ms.	*/nik'**ba**du/ */nik'**ba**da/ */nik'**ba**di/	*/nik'**ba:d**/ *[nɑ̆k'**ba:d**]	*/nik̲'**ba:d̲**/	נִכְבָּד /nik̲'**båd̲**/ *[nix'**bɔ:ð**]	
	fs.	*/nikba'**da**tu/ */nikba'**da**ta/ */nikba'**da**ti/	*/nikba:'**dâ**/ *[nɑ̆kba:'**dɐ:**]	*/nik̲ba:'**d̲â**/	נִכְבָּ֫ה /nik̲bå'**d̲å**/ *[nixbƆ'**ðɔ:**]	Assumes that in Biblical Hebrew grammatical analogy in which fs, mp., fp. forms based on new EBHP ms. form.
	mp.	*/nikba'**dū**ma/ */nikba'**dī**ma/	*/nikba:'**dīm**/ *[nɑ̆kba:'**di:m**]	*/nik̲ba:'**d̲īm**/	נִכְבָּ֫ים /nik̲bå'**d̲im**/ *[nixbƆ'**ði:m**]	
	fp.	*/nikba'**dō**tu/ */nikba'**dō**ta/ */nikba'**dō**ti/	*/nikba:'**dōt**/ *[nɑ̆kba:'**do:t**]	*/nik̲ba:'**d̲ōt̲**/	נִכְבָּ֫ות /nik̲bå'**d̲ot**/ *[nixbƆ'**ðo:θ**]	
√קטל *Pual*[58]						
	ms.	*/muquˇ'**ṭa**lu/ */muquˇ'**ṭa**la/ */muquˇ'**ṭa**li/	*/muquˇ'**ṭa:l**/ *[mɑ̆qɑ̆qɑ̆ˇ'**ṭa:l**]	*/mɒquˇ'**ṭa:l**/	מְקֻטָּל /mɒquˇ'**ṭål**/ *[mɒquˇ'**ṭɔ:l**]	
	fs. mp. fp.	*/muquˇˇa'**la**tu/ */muaquˇˇa'**lī**ma/[59] */muquˇˇa'**lō**tu/	*/muquˇˇa'**lâ**/ *[mɑ̆qɑ̆qɑ̆ˇˇö'**lɐ:**] */muquˇˇa'**l̲īm**/ */muquˇˇa'**lōt**/	*/mɒquˇˇa:'**lâ**/ */mɒquˇˇa:'**l̲īm**/ */mɒquˇˇa:ː'**lōt**/	מְקֻטָּ֫לָה /mɒquˇˇå'**lå**/ *[mɒquˇˇƆ'**lɔ:**] /mɒquˇˇå'**l̲im**/ /mɒquˇˇå'**lot**/	Assumes that, in feminine and plural forms, */a/ > /a:/ due to pretonic lengthening, i.e. c. 300 BCE. This is the option I will use in EBHP transcriptions.
	ms.	*/muquˇ˩ˇal/	*/muquˇ˩ˇal/ *[mɑ̆qɑ̆qɑ̆ˇˇö˩lö:]	*/mɒquˇ˩ˇal/	מְקֻטָּל /mɒquˇ˩ˇal/	*Construct*

Table 2 - Changes in the Noun from PH to TH - Possible Special Cases						
		*PH (c. 1200 BCE)	EBHP */EBHP/+ *[EBHP] **(c. 850-550 BCE)**	PTH */PTH/+ *[PTH] (c. 400 CE)	TH /TH/+ *[TH]* (c. 850 CE)	*Comments*
					*[mɒquĭ̯ˌt̆ö:l]	
	fs. mp. fp.	*/muquĭ̯ˌlat/ */muquĭ̯ˌlˌ */muquĭ̯ˌlÓt/	*/muquĭ̯ˌlat/ *[mq̆qq̆ĭ̯ˌlöt] */muquĭ̯ˌlay/ */muquĭ̯ˌlÓt/	*/mɒquĭ̯ˌlat/ */mɒquĭ̯ˌlê/ */mɒquĭ̯ˌlÓt/	/mɒquĭ̯ˌlat/ *[mɒquĭ̯ˌlö:d] /mɒquĭ̯ˌlG /mɒquĭ̯ˌlot/	
	ms.	*/muquĭ̯ˈ**ṭa**lu/	*/muquĭ̯ˈ**ṭa:l**/ *[mq̆qq̆ĭ̯ˈ**ṭa:l**]	*/mɒquĭ̯ˈ**ĭ̯a:l**/	מְקָטָל /mɒquĭ̯ˈ**ṭål**/ *[mɒquĭ̯ˈ**ṭɔ:l**]	
	fs. mp. fp.	*/muquĭ̯ˈ**lat**u/ */muquĭ̯ˈ**lī**ma/ */muquĭ̯ˈ**lō**tu/	*/muquĭ̯ˈ**lâ**/ *[mq̆qq̆ĭ̯ˈ**lɐ:**] */muquĭ̯ˈ**l̲ī̲m**/ */muquĭ̯ˈ**lōt**/	*/mɒquĭ̯ˈ**lâ**/ */mɒquĭ̯ˈ**l̲ī̲m**/ */mɒquĭ̯ˈ**lōt**/	/mɒquĭ̯ˈ**lå**/ *[mɒquĭ̯ˈO**lɔ:**] /mɒquĭ̯ˈ**l̲ī̲m**/ /mɒquĭ̯ˈ**lot**/	Assumes that in Biblical Hebrew grammatical analogy in which fs, mp., fp. forms based on new EBHP ms. form.
√קטל *Hofal*						
	ms.	*/mɒˈ**huq**ĭ̯a**ṭ**u/ > */mɒhuqˈ**ṭa**lu/	*/muqˈ**ṭa:l**/ *[mq̆qˈ**ṭa:l**] OR *[moqˈĭ̯**a:l**]	*/muqˈ**ṭa:l**/ *[muqˈĭ̯**a:l**] OR *[moqˈĭ̯**a:l**]	מְקָטָל /muqˈ**ṭål**/ *[muqˈ**ṭɔ:l**] OR מְקָטָל /mʏ̆qˈ**ṭål**/ *[mʻQqˈ**ṭɔ:l**]	
	fs. Form 1	*/mɒhuqˈ**ṭa**latu/ > */mɒhuqĭ̯ˈ**a**ˈ**lat**u/	*/muqĭ̯ˈ**lâ**/ *[mq̆qĭ̯öˈ**lɐ:**] OR *[moqĭ̯öˈ**lɐ:**]	*/muqĭ̯ˈ**lâ**/	/muqĭ̯ˈ**lå**/ *[muqĭ̯Oˈ**lɔ:**] OR /mʏ̆qĭ̯ˈ**lå**/ *[mʻQqĭ̯Oˈ**lɔ:**]	Assumes that, in feminine and plural forms, */a/ > /a:/ due to pretonic lengthening, i.e. c. 300 BCE.
	Fs. Form 2	*/mɒhuqˈ**ṭa**latu/ > */mɒhuqˈ**ṭalt**u/	*/muqˈ**ṭalt**/ *[mq̆qˈ**ṭɐlt**]	*/muqˈ**ṭelet**/	/muqˈ**ṭɛlʊ̆t**/ *[muqˈ**ṭɛ:lʊ̆d**] OR /mʏ̆qˈ**ṭɛlʊ̆t**/ *[mʻQqˈ**ṭɛ:lʊ̆d**]	

Table 2 - Changes in the Noun from PH to TH - Possible Special Cases						
		*PH (c. 1200 BCE)	EBHP */EBHP/+ *[EBHP] **(c. 850-550 BCE)**	PTH */PTH/+ *[PTH] (c. 400 CE)	TH /TH/+ *[TH]* (c. 850 CE)	*Comments*
	mp.	*/mɒuqĭa'**lūm**a/	*/muqĭa'**lūm**/ *[mɑ̆qĭö'**li:m**]	*/muqĭa:'**lūm**/	1./muqĭå'**lim**/ *[muqĭʊ'**li:m**] OR 2./mʏ̆qĭå'**lim**/ *[mʊ̈qĭʊ'**li:m**]	
	fp.	*/mɒhuqĭa'**lōtu** /	*/muqĭa'**lōt**/ *[mɑ̆qĭö'**lo:t**]	*/muqĭa:'**lōt**/	1./muqĭå'**lōt**/ *[muqĭʊ'**lo:θ**] OR 2./mʏ̆qĭå'**lōt**/ *[mʊ̈qĭʊ'**lo:θ**]	
	ms.	*/mɒhuq¸ĭal/	*/muq¸ĭal/ *[mɑ̆q¸ĭöl]	*/muq¸ĭal/ *[muq¸ĭal] OR *[moq¸ĭal]	מְקִטַל /muq¸ĭal/ *[muq¸ĭö:l] OR מְקִטַל /mʏ̆q¸ĭal/ *[mʊ̈q¸ĭö:l]	*Construct*
	Fs. Form 2	*/məhuq¸ĭalt/	*/muq¸ĭalt/ *[mɑ̆q¸ĭölt]	*/muq¸ĭalt/	/muq¸ĭʊ̈lʊ̈t/ *[muq¸ĭʊ̈:lʊ̈d] OR /mʏ̆uq¸ĭʊ̈lʊ̈t/ *[mʊ̈q¸ĭʊ̈:lʊ̈d]	
	du.	*/mɒhuq¸ĭŪ/ */mɒhuq¸ĭay/	*/muqĭa¸lay/ *[mɑ̆qĭö¸löy] or *[mɑ̆qĭö¸lʊ̈y]	*/muqĭɒ¸lê/	/muqĭɒ¸lʊ̈/ *[muqĭɒ¸lʊ̈]	
	mp.	*/mɒuqĭa¸lÎ / */mɒuqĭa¸lِ				
	fp.	*/mɒhuqĭa¸tʊ́/	*/muqĭa¸lʊ́t/ *[mɑ̆qĭö¸lo:t]	*/muqĭɒ¸lʊ́t/	1./muqĭɒ¸lot/ *[muqĭɒ¸lo:d] OR 2./mʏ̆qĭɒ¸lot/ *[mʊ̈qĭɒ¸lo:d]	
	ms.	*/mɒ'**huq**ĭalu/ > */mɒhuq'**ţa**lu/	*/muq'ĭ**a:l**/ *[mɑ̆q'ĭ**a:l**] OR *[moq'ĭ**a:l**]	*/muq'**ţa:l**/ *[mɑ̆q'**ţa:l**] OR *[mʊ̈q'**ţa:l**]	מְקִטַל /muq'**ţål**/ *[muq'**ţɔ:l**] OR מְקִטַל /mʏ̆q'**ţål**/* [mʊ̈q'**ţɔ:l**]	

Table 2 - Changes in the Noun from PH to TH - Possible Special Cases						
		*PH (c. 1200 BCE)	EBHP */EBHP/+ *[EBHP] **(c. 850-550 BCE)**	PTH */PTH/+ *[PTH] (c. 400 CE)	TH /TH/+ *[TH]* (c. 850 CE)	*Comments*
	fs. Form 1	*/mɒhuqˈ**ta**latu/ > */məhuqbaˈ**ra**tu/	*/muqĭaːˈ**lâ**/ *[mɑ̃qɑ̆aːˈ**lɐː**] OR *[moɑ̆qĭaːˈ**lɐ**ː]	*/muqĭaːˈ**lâ**/	/muqĭåˈ**lå**/ *[muqĭʊˈ**lɔ**ː] OR /mʏ̊qĭåˈ**lå**/ *[mʊ̈qĭʊˈ**lɔ**ː]	Assumes that in Biblical Hebrew grammatical analogy in which fs, mp., fp. forms based on new EBHP ms. form.
	Fs. Form 2	*/mɒhuqˈ**ta**latu/ > */məhuqˈ**ta**ltu/	*/muqˈ**ta**lt/ *[mɑ̃qˈ**tɐ**lt]	*/muqˈ**te**let/	/muqˈ**tɛ**lʊ̆t/ *[muqˈ**tɛ**ːlʊ̈ɗ] OR /mʏ̊qˈ**tɛ**lʊ̆t/ *[mʊ̈qˈ**tɛ**ːlʊ̈ɗ]	
	mp.	*/mɒuqĭaˈ**lī**ma/	*/muqĭaːˈ**līm**/ *[mɑ̃qĭaːˈ**liːm**]	*/muqĭaːˈ**līm**/	1./muqĭåˈ**lim**/ *[muqĭʊˈ**liːm**] OR 2./mʏ̊qĭåˈ**lim**/ *[mʊ̈qĭʊˈ**liːm**]	
	fp.	*/mɒhuqĭaˈ**lō**tu/	*/muqĭaːˈ**lōt**/ *[mɑ̃qĭaːˈ**loːt**]	*/muqĭaːˈ**lōt**/	1./muqĭåˈ**lo̲t**/ *[muqĭʊˈ**loːθ**] OR 2./mʏ̊qĭåˈ**lo̲t**/ *[mʊ̈qĭʊˈ**loːθ**]	

Phonemic System - vowel and consonant quality and length were phonemic . Reduction in number of consonantal phonemes due to following mergers (some of these shifts may have occurred in some dialects during *phase 3* - see also diglossia) -

/t̲ / > /ṣ/; /ɗ/ > /ṣ/; /ð/ > /z/; [θ] > [š]

Important Linguistic Developments -

- ʾ/ʔ/ (א) closing a stressed syllable was elided with compensatory lengthening. The â [a:] created by this elision shifted to ô [o:] as in -

/ˈraʾšu/ > */ˈrâšu/ → /ˈrôš/ 'head'; /ˈyaʾḫuð/ > /ˈyâḫuð/ > /ˈyôḫuð/ > /ˈyôḫid/ → (TH) יִקַּח'let him take'). This shows that the shift [a:] > [o:] still functioned during this period.

- Homogeneous diphthong contraction[60]. Accented PS short vowel followed by an unvoweled homogeneous consonant and another consonant (other than a pharyngeal or [r]) contracted with the first consonant to form the corresponding long vowel.[61] Examples -

1. úw > û [u:] e.g. ˈhúwšabtima > ˈhûšabtima > hûšabˈtima (TH יְהוֹשַׁבְתִּים) = 'you were made to dwell'

2. úy > î [i:] e.g. wayˈyuyśam > wayˈyîśim (TH וַיִּיסֶם) 'he put'.

3. íw > û [u:] e.g. 'yíwkalu > 'yûkalu > yû'kalu (TH ʟ ﻟ ﻫ) 'he was able'.

4. íy > î [i:] e.g. 'yiybašu > 'yîbašu > yî'bašu (TH ¯ ﻳ ﻫ) 'it will be dry'.

5. íwy >ú:y >íyy > î [i:] e.g. 'kíwyu > 'kûy > 'kiyy > (/EBHP?/) 'kiy > (/EBHP?/) 'kî (TH) ﻫ' 'burning'

6. [á'] not immediately followed by a vowel shifts to â [á:] and then via the Canaanite shift to ô [ó:] e.g/'ra'šu/ > /'râšu/ → (/EBHP/+) /'rôš/ 'head'.

- Use of article

- Preterite *yaqtul* replaced, except for its use in *waw conversive*, by *suffix conjugation*. This was eventually extended, by analogy to the *suffix conjugation*.

- [n] immediately preceding a consonant assimilates resulting in the gemination of the following consonant

- [ki] >[ti:] as suffix 1st singular of suffix conjugation

c) *BHA Phase 3* - Pre-Exilic Classical Biblical Hebrew (CBH); Pronunciation (*/EBHP/+ *[EBHP])

Sources - Pre-exilic biblical texts such as Samuel-Kings; First Temple Period; epigraphic remains (EH)

Time Period - c. 1000-586 BCE with the majority of texts being after 750 BCE.

Geographical Coverage - Kingdom of Judah, a few from Kingdom of Israel

Languages/Dialects in Contact - See the table *Linguistic Influences on the Regions of Judah and Israel*. Under Assyrian suzerainty, from the mid-eighth century BCE, Akkadian would probably have been heard from some Assyrian officials, soldiers and merchants. However, much more important would have been scribal familiarity with Aramaic used as the *lingua franca*. (See *The Impact of Aramaic*).

Political Situation - Jerusalem capital of the Kingdom of Judah until destruction of Judah in 586 BCE. Samaria capital of Israel until its destruction in 722 BCE.

Stress - Remained on the same syllable as it had been in *phase 2*. However, with the dropping of the final short vowels, words that, during *phase 2*, had ended in such vowels, now became stressed on their last syllable, whereas those that terminated in consonants or long vowels continued being stressed on the penultimate.

Phonemic System - Vowel and consonant quality and length[62] were phonemic as was place of stress.

Important linguistic developments

- Elision of feminine marker (/at/ >> /â/) in noun and verb. N.b. - this could only have occurred after the dropping of the final short vowels.

- The suffix /at/ of fem. sing. noun becomes /á:/ e.g. */mal'kat/ >> */mal'kâ/[63] 'queen'.

- The suffix /at/ in *SC* of verb (3rd fem. sing.) becomes /a:/ e.g. */ma'lakat/ >> */ma'lakâ/[64] 'she ruled'.

- in final open stressed syllables:

[iˀ] > [ê] (e.g. Ar. *θamānī*, Heb. *šəmōnê*)

[uˀ] > [ô]

[i:ˀ] > [i:]

[u:ˀ] > [u:]

[a:ˀ] > [a:]

- Noun form maqtal → miqta:l e.g. */mad'bar/ → /mid'ba:r/ 'desert'

'qutul (qal inf. constr. and ms. imp.) > *qtul/qut/*

- Final diphthongs previously uncontracted due to stress contracted e.g. (PH) */yib'nayu/ >> (early *phase 3*) */yib'nay/ >> (*/EBHP/+) /yib'nê/

- Preposition [bi] > [ba]

- Dissimilation the /a/ of the discontinuous pronominal morpheme in the prefix conjugation changed to /i/ when the theme vowel was /u/ or /i/. i.e. the 3 forms of the qal *PC* became -

*yiqtul[65]

*yiqtil

*yiqtal

- [y] and [w], directly following a consonant, and now word final after the loss of the final short vowels shift

[y] > [i:] e.g. (PH) */'bikyu/ > (/EBHP?/) */'biky/ → (/EBHP?/) */'bikî/ → (TH) בְּכִי /b'ki/ *[bə'xi:]; (pausal[66]) /'bɛki/ *['bɛ:xi:] 'crying'

- [w] > [u:] e.g. (PH) /'śaḥwu/ >> (/EBHP+/) /'śaḥû/ → (TH) שְׂחוּ 'swimming'.[67]

- ˀ/ʔ/ directly following a consonant, and now word final after the loss of the final short vowels was dropped in (informal?) speech though maintained in writing as */'ḫiṭˀu/ > */'ḫiṭˀ/→ (TH) חֵטְא /'ḥeṭ/ *['ḥe:ṭ] 'sin'.

- [y][68] and [w] between 2 vowels frequently quiesces. When two vowels brought into contact by this, they merge into a monophthong e.g. [a] + [u] > [o:]

- [h] between 2 vowels mostly quiesces e.g. - Third Person Masculine Pronominal Suffix */ahu/>>*/aw/ >> /ô/ [o:]

- Philippi's law by which short [i] changes to [a] in closed stressed syllables e.g. šō'mirt > šō'mart MT : שֹׁמַרְתְּ

- Law of attenuation by which short [a] in closed unstressed syllables changes to [i]

- The vowel before the second person (m.s.) pronominal suffix becomes either [a] or [i] e.g. 'your (m.s.) horse (m.s.)'

Table 3

Change in Case Ending Vowel (ms. noun) with Attached Pronominal Suffix

Case	*BHA phase 2*	*BHA phase 3* (note non-spirantization of the *bgdkpt* consonants)	*TH (BHA Phase 6)*
nominative	*/sūˈsukã̲/	*/sūˈsaka(:)/ or */sūˈsika(:)/	/susəˈkå̲/ *[suːsəˈxɔˑ] (pausal - /suˈsɛk̲å̲/ *[suːˈsɛːxɔˑ])
accusative	*/sūˈsakã/		
genitive	*/sūˈsikã/		

d) *BHA Phase 4* - Post-exilic Reading Traditions of Biblical Hebrew

Sources - PCBH biblical texts such as Chronicles[69]

Time Period - late 6th century BCE to the extinction of Hebrew as a spoken language in the mid-second century CE.

Geographical Coverage - Judea

Languages/Dialects in Contact - The dominant influence was Aramaic. (See *The Impact of Aramaic*). Greek would have had an increasing impact from the late fourth century BCE.

Political Situation - Judea was a province of successive Persian, Ptolemaic, Selucid and Roman empires except for a short period of independence under the Hasmoneans. Jerusalem was destroyed in 70 CE during the first revolt against Rome and Judea largely depopulated of Jews with the suppression of the Bar Kochba rebellion in 135 CE.. This effectively displaced or destroyed the last Hebrew speaking population center.

Stress - As in *Phase 3* except that a number of forms, having penultimate stress in *phase 3* now became ultimately stressed except for pausal forms. The distinction between the PC_{jus} and PC_{imp}, previously based on place of stress, is erased. For examples see *Evolution of Pronunciation and Stress Patterns.*

Phonemic System - Vowel and consonant quality and length were phonemic as was place of stress. Reduction in number of consonantal phonemes due to mergers (see below).

Important linguistic developments

(i) Developments that probably started, at least in spoken Hebrew, in *Phase 3* -

- [iy] > [ī] - /ḥeṣî/ = "half"; /yihî/ = "may he be"

- Elision of syllable or word-final aliph. This probably occurred early in this period.

- [ś] > [s]

- Reduction of final doubled consonants

- Disappearance of intervocalic [h]

- Spirantization of the *bgdkpt* Consonants

- unstressed [aw] > [ô];

- unstressed [ay] > [ê̯];

- Reduction of certain unstressed vowels to *shewa* or, in the environment of a laryngeal consonant, to another ultra-short vowel. Egs.

prepositions

[ba] > [bə]

[la] > [lə]

[ka] > [kə]

(ii) Developments that clearly occurred in *Phase 4*

- [ḫ] > [ḥ]; [ġ] > [ʿ] before c. 200 CE

- in contrast to the general Semitic tendency open pre-tonic syllables undergo lengthening and sometimes change of vowel quality: a>ā, i>ệ. In the case of /u/, the short u remains, but the following consonant is doubled. e.g. */luqaḥ/ > /luqqaḥ/ (see - *Pretonic Vowel Lengthening and doubling*) c. 300 BCE

(iii) Developments that may have occurred in *Phase 4* or in *Phase 5.*

- pausal lengthening of vowels

- earlier vowel allophones become phonemes (ẹ ɛ o)

- tendency toward stressing of the last syllable[70]. With very few exceptions open penultimate short stressed syllables were not preserved except, frequently, in pause. The vowel changes which accompanied this stress shift were different from those in the preceding stress period. Examples -

- *Nouns* - */'piryu/ > */'piry/ or */'pirî/ (*phase 3)* → /'pri/ ['pri:] or [pə'ri:] (context TH), /'pɛri/ ['pɛri:] (pausal TH)

- *Verbs PC* - most root types and stems stress in the second person feminine singular, the second person feminine plural and the third person masculine plural moves to the final syllable in the contextual form but not in the pausal form due to the pausal lengthening of the stressed vowel. The same is true in the

closely related *qal* imperative (fs.and mp.) of the strong verb.

- *Verbs SC* - most root types and stems stress in the third person feminine singular and the third person plural moves to the final syllable once again pausal lengthening blocks this shift. E.g.

contextual */qaʿtalâ/ (/EBHP/+) → /qåtʿlå/ *[qɔːtəʿlɔː] (TH) but

pausal */qaʿtalâ/ (/EBHP/+) > */qåːʿtalåː/ → */qåːʿtaːlåː/ > /qåʿtalå/ *[qɔːʿtaːlɔː] (TH)

- The *waw conversive* of the suffix conjugation became mainly ultimately stressed thus becoming distinct from the contextual form i.e.

qaːʿtaltī = "I killed"

wəqaːtalʿtī = "and I will kill"

- In the *prefix conjugation*, the distinction in stress between PC_{jus} and PC_{pret_sim}, on the one hand, and PC_{imp} on the other was effaced[71] -

Table 4

Phase 3 *EBHP (*/EBHP/+ *[EBHP]) Imperfect, Jussive and Preterite

	PC_{imp}	*PC_{jus}*	*Preterite* (*PC_{pret_sim}/PC_{pretWC}*)
Qal	/yiqʿtul/ [yɪqʿtʊl] or [yɪqʿto̯l]	/ʿyiqtul/ [ʿyɪqtʊl] or [ʿyɪqto̯l]	/wayʿyiqtul/ [wɛyʿyɪqtʊl] or [wɛyʿyɪqto̯l]
Piel	/yaqatʿtil/ [yɛqɐtʿtɪl] or [yɛqɐtʿtɛl]	/yaʿqattil/ [yɛʿqɐttɪl] or [yɛʿqɐttɛl]	/wayyaʿqattil/ [wɛy.yɛʿqɐttɪl] or [wɛy.yɛʿqɐttɛl]
Niphal	/yiqqaʿtil/ [yɪqqɐʿtɪl] or [yɪqqɐʿtɛl]	/yiqʿqatil/ [yɪqʿqɐtɪl] or [yɪqʿqɐtɛl]	/wayyiqʿqatil/ [wɛy.yɪqʿqɐtɪl] or [wɛy.yɪqʿqɐtɛl]
Hiphil	/yaqʿtiːl/ [yɛqʿtiːl]	/ʿyaqtil/ [ʿyɛqtɪl] or [ʿyɛqtɛl]	/wayʿyaqtil/ [wɛy.ʿyɛqtɪl] or [wɛy.ʿyɛqtɛl]
Hithpiel	/yitqatʿtil/ [yɪtqɐtʿtɪl] or [yɪtqɐtʿtɛl]	/yitʿqattil/ [yɪtʿqɐttɪl] or [yɪtʿqɐttɛl]	/wayyitʿqattil/ [wɛy.yɪtʿqɐttɪl] or [wɛy.yɪtʿqɐttɛl]

Table 5

Phase 4 *LBHP (*/LBHP/ *[LBHP]) Imperfect, Jussive and Preterite

	PC_{imp}	*PC_{jus}*	*Preterite* *(PC_{pret_sim}/PC_{pretWC})*
Qal	/yiqʿtol/ [yɪqʿtol]	/yiqʿtol/ [yɪqʿtol]	/wayyiqʿtol/ [wɐy.yɪqʿtol]
Piel	/yqatʿtil/ [yəqɐtʿtɪl] or [yəqɐtʿtel]	/yqatʿtil/ [yəqɐtʿtɪl] or [yəqɐtʿtel]	/wayqatʿtil/ [wɐyqɐtʿtɪl] or [wɐyəqɐtʿtel]
Niphal	/yiqqaːʿtil/ [yɪqqaːʿtɪl] or [yɪqqaːʿtel]	/yiqqaːʿtil/ [yɪqqaːʿtɪl] or [yɪqqaːʿtel]	/wayyiqʿqaːʿtil/ [wɐyyɪqqaːʿtɪl] or [wɐyyɪqqaːʿtel]
Hiphil	/yaqʿtiːl/ [yɐqʿtiːl]	/yaqʿtil/ [yɐqʿtil] or [yɐqʿtel]	/wayʿyaqʿtil/ [wɐy.yɐqʿtil] or [wɐy.yɐqʿtel]
Hithpiel	/yitqatʿtil/ [yɪtqɐtʿtɪl] or [yɪtqɐtʿtel]	/yitqatʿtil/ [yɪtqɐtʿtɪl] or [yɪtqɐtʿtel]	/wayyitqatʿtil/ [wɐy.yɪtqɐtʿtɪl] or [wɐy.yɪtqɐtʿtel]

Table 6

End of Phase 6 TH (/TH/⁺ *[TH]) Imperfect, Jussive and Preterite

	PC_{imp}	*PC_{jus}*	*Preterite* *(PC_{pret_sim}/PC_{pretWC})*
Qal	/yiqʿtol/ [yiqʿtoːl]	/yiqʿtol/ [yiqʿtoːl]	/wayyiqʿtol/ [way.yiqʿtoːl]
Piel	/yəqatʿtẹl/ [yəqɐtʿtẹːl]	/yəqatʿtẹl/ [yəqɐtʿtẹːl]	/wayqatʿtẹl/ [wɐyqɐtʿtẹːl]
Niphal	/yiqqåʿtẹl/ [yiq.qɔːʿtẹːl]	/yiqqåʿtẹl/ [yiq.qɔːʿtẹːl]	/wayyiqqåʿtẹl/ [wɐy.yiqqɔːʿtẹl]
Hiphil	/yaqʿtil/ [yɐqʿtiːl]	/yaqʿtẹl/ [yɐqʿtẹːl]	/wayyaqʿtẹl/ [wɐy.yɐqʿtẹːl]
Hithpiel	/yitqatʿtẹl/ [yitqɐtʿtẹːl]	/yitqatʿtẹl/ [yitqɐtʿtẹːl]	/wayyitqatʿtẹl/ [wɐyyitqɐtʿtẹːl]

e) *BHA Phase 5* - Reading Tradition of Biblical Hebrew leading to Proto-Tiberian Hebrew (*PTH)

Sources - Inferred from Masoretic Text

Time Period - mid-second century CE to c. 500 CE

Geographical Coverage - Unknown

Languages/Dialects in Contact - Mishnaic or Rabbinic Hebrew becomes extinct as a spoken language in the mid-second century CE in the wake of the suppression of the Bar Kochba rebellion. The dominant influence was Aramaic (See The Impact of Aramaic) though the speaking of Greek was wide-spread and presumably had some impact.

Political Situation - Jews a small minority under first Roman-pagan and then Byzantine-Christian rule. Judaea almost totally non-Jewish after 135 CE; Samaria mixed gentile and Samaritan; Galilee goes from about 75 percent Jewish in the second century[72] to about half Jewish in the mid-third century[73] to about 10-15 percent in the early seventh century[74].

Stress - As in Phase 4 except that the phonemicization of anaptyctic vowels creating new classes of phonologically penultimately stressed nouns-

> */ˈmawt/ (/LBHP/) *[ˈmawĕt] ([LBHP]) → /ˈmåwɛt̲/ (/TH/*) * [ˈmɔːwɛθ] ([TH]) 'death'
>
> */ˈbayt/ (/LBHP/) *[ˈbayĭt] ([LBHP]) → /ˈbayit̲/ (/TH/*) * [ˈbaːyɪθ] ([TH]) 'house'[75]
>
> */ˈmalk/ (/LBHP/) *[ˈmalĕk] ([LBHP]) → /ˈmɛlɛk̲/ (/TH/*) * [ˈmɛːlɛk̲] ([TH]) 'king' and similarly for the other classes of 'segolates'.

Phonemic System - Vowel and consonant quality and length were phonemic as was place of stress.

Important linguistic developments *(as far as possible in chronological order)*

- development of "segolates"

- Weakening of the pharyngeal and laryngeal consonants; vowel changes before and after the laryngeals including the insertion of helping (anaptyctic) vowels ; reduction of double laryngeals and of double [r][76]

- A number of consonants loose the ability to geminate when followed by [ə]

- [y] and [q] loose the ability to geminate when followed by [ə]

e) *BHA Phase 6* - Reading Tradition of Biblical Hebrew leading to Tiberian Hebrew (TH)

Sources - Masoretic Text

Time Period - sixth century CE to c. 850 CE

Geographical Coverage - Scholarly families in Tiberias known as the Masorites

Languages/Dialects in Contact - The dominant influence was Aramaic. (See *The Impact of Aramaic*). Arabic would have had an increasing impact from the eighth century CE.

Political Situation - Jews a small minority under Muslim rule. Rabbinic - Karaite struggle.

Stress - As in Phase 5.

Phonemic System - *vowel and consonant quality and place of stress were phonemic*.

Important linguistic developments (as far as possible in chronological order)

- /aː/ > /ɔː/; in some situations /u/ > /ɔ/

- /ɛ/:/ɛː/ > /ę/:/ęː/; /a/:/aː/ > /a/:/ɔː/[77]

- All unreduced short vowels in open syllables and all stressed short vowels are lengthened. Often this lengthening is accompanied by a "change in timbre (quality): [i] > [eː]; [u] > [oː]

- Vowel and consonant length cease to be phonological. Regarding vowel length Steiner[78] wrote -

> - "Outside of closed unstressed syllables, which excluded long vowels, Ancient Hebrew had a contrast between long and short vowels. However, between the tannaitic period and the time of the Masoretes, short vowels in stressed syllables lengthened, erasing the contrast in those syllables. Thus, while Hebrew was still a spoken language, the *o* of infinitival yå'ko(ʷ)l 'be able' was long, while the *o* of sg. 3m. perfect yå'kol 'he was able' was short, like the ancestor of *å* in yəkål'täm. In the Pre-Tiberian reading tradition, the *o* of sg. 3m. perfect yå'kol lengthened, splitting off from the ancestor of *å* in yəkål'täm and merging with the long o of infinitival yå'koʷl[79].
>
> "As a result of this change, length became to a large extent conditioned by stress."

Khan wrote[80] -

> "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.[81] 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. [ʔɔx'lɔː] 'food' vs. [ʔɔːx'lɔː] 'she ate. Possible other minimal pairs were words such as [dɔ'miː] 'silence and [dɔː'miː] '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 ['mɛːlɛx] 'king', [jiʃ'maːʕ] 'he hears', [haː'huː] 'that'. Many words carry a secondary

stress in addition to the main stress, e.g. [ˌhaːʔɔːˈðɔːm] 'the man', [ˌniːθḥakkaˈmɔː] 'let us deal wisely' (Ex. 1:10).

Regarding consonant length Steiner[82] wrote -

> "Consonant length (like vowel length) was phonemic in Proto-Hebrew, but it was not represented in the biblical period, even in an unsystematic way. Thus, the spelling *ᶜrwmym* was used for both members of the minimal pair Job 5:12 [ᶜăruːmiːm ּ ֲ ֻ ִ ם] not = Job 22:6 [ᶜărumːiːm ּ ֲ ֳ ִ ם] 'crafty (pl. m.) not = naked (pl. m.)'. And the spelling *ntnw* was used for both [nåtanːuː] 'we gave' and [nåtănuː] 'they gave'. It is only in Mishnaic Hebrew that representation of consonant length began to appear….
>
> "Most of the Proto-Hebrew minimal pairs (based on consonant length) are no longer valid for the Tiberian system…. The fact remains, however, that the Masoretes considered consonant length important enough to create a sign for it ("strong" *dagesh*). Two minimal pairs noted by the Masoretes themselves are Job 5:12 *ᶜăruwmiym* (ּ ֲ ֻ ִ ם) not = Job 22:6 *ᶜăruwmːiym* (ּ ֲ ֳ ִ ם) ... and Lev. 7:30 *təbiyʾäynåh* (ּ ָ ֵ ִ ה) not = Lev. 6:14 *təbiyʾänːåh* (ּ ַ ֵ ִ ה) ' they (f.) shall bring not = you/she shall bring it'. Although Arabic transcriptions suggest that, in the first pair, the vowel preceding the lengthened consonant was shorter than the vowel preceding its unlengthened counterpart, the Masoretes clearly considered this difference to be secondary, unworthy of being represented."

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[1] I should mention that some important scholars deny that such a task is feasible eg. Ben-Hayyim 2000 pp. 4-5.

[2] P. 5.

[3] P. 4.

[4] See *Phones and Phonemes* - http://www.houseofdavid.ca/anc_heb_6.htm#phone_phonym.

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

1.there is no spirantization of the *bgdkpt* consonants - http://www.houseofdavid.ca/anc_heb_tequ.htm#bgdpt;

2. vowel qualities are outlined here - http://www.houseofdavid.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.

[6] For the difficulties of reconstructing the sound system of ancient Hebrew see Hoffman.

[7] Note the parallel with spoken Arabic "The relative length of consonants and vowels contributes greatly to the rhythmic patterns of speech...." (Mitchel 1993 p. 145).

[8] Put another way, the fact that many French speakers pronounce the English words "hat" and "at" identically does not entitle them to assume that there may therefore be some profound or ancient relationship between the words and their meaning in English!

[9] Wordplay in Biblical Hebrew: an Eclectic Collection by Gary A. Rendsburg in Puns and Pundits: Word Play in the Hebrew Bible and *Ancient Near Eastern Literature* by Scott B. Noegel (Editor), Capital Decisions Ltd (March 2000), ISBN-10: 1883053498. P.p. 137-162.

[10] See Rechenmacher and Christo pp. 63-64.

[11] This corresponds with the distinction between "sound-based" (paronomasia) and "sense-based" (polysemous) puns.

[12] In *Puns and Pundits: Word Play in the Hebrew Bible and Ancient Near Eastern Literature* by Scott B. Noegel (Editor), Capital Decisions Ltd (March 2000), ISBN-10: 1883053498. P.p. 205-222.

[13] E.g.. 4QExod(f): *'wtw (*'oto); ᶜwlm (*ᶜōlām);* 4QJerᵃ: *ntwš (*nātōš); 'zwr (*'ẓezōr).* Cf. Freedman 1962: 99-100

[14] "They are not mentioned in the Jerusalem Talmud, which was completed by the first half of the 5th century (C.E.), in the Babylonian Talmud, which was completed by the end of the 5th century (C.E.), nor in the earliest Midrashim. However, Asher b. Nehemia (the grandfather of Aaron Ben-Asher) lived, at the latest, in the first half of the 9th century (C.E.). His grandfather Asher, "the Great Elder," founder of the dynasty of Massoretes, lived in the second half of the 8th century, which means that the vowel signs were fixed before that time (Dotan 1971: cols. 1416-17). On the function of these signs and their early development, cf. Morag 1962: 9-10, 17ff

[15] Cf. also Goshen-Gottstein 1963: 90-98, especially pp. 94-96. Goshen-Gottstein's study is of particular importance because it exposes the misunderstanding of massoretic activity espoused by P. Kahle which was partially accepted by the authors of *EHO.* For a general appreciation of the massoretic activities and traditions, cf. J. Barr 1968: 194-207; L. L. Grabbe 1977: 179-97.

[16] The internal vowel letters, not resulting from diphthong reduction, as we know from epigraphic finds, must have been added during the post-exilic period see *Table - Matres Lectionis in JEH* http://www.houseofdavid.ca/anc_heb_bib_heb_EH.htm#ML .

[17] Kutscher 1982 §246 -

> As in the Septuagint, (in the Secunda) the short /i/ and /u/ of the Masoretic vocalization are transliterated by [e] and [o].... (T)his apparently parallels the situation in Mishnaic Hebrew. Therefore, it seems highly probable that this pronunciation represents the sub-standard, that is to say, the pronunciation that prevailed in the spoken Hebrew and Aramaic in Palestine at that time. But the original /i/ and /u/, as preserved for us by the Masoretes, survived in the standard pronunciation, i.e. in the reading of the bible text in synagogue. Although the vocalization of the Masoretes is known to us only from a period about 600 years later that that of the (Secunda) transliterations, it faithfully preserved older forms. This is proved by the fact that nearly all short [u]'s and a large number of the [i]'s in the Masoretic texts represent PS /u/'s and /i/'s. Therefore, of course they must reflect an earlier stage of the language..... (T)he Septuagint also sometimes reflects the substandard pronunciation rather than the standard.

[18] SBL 1985 p. 665.

[19] From http://bible.org/seriespage/what-psalm .

[20] Watson 1984 pp. 73-74.

[21] See too, J. R. Smart, 'A bedouin Song from the Egyptian Western Desert' *JSS* 12(1967) 245-267. For the relationship between music and poetry cf. M. C. Beardsley, 'Verse and Music' in W. K. Wimsatt, *Versification: Major Language Types*, Hodder & Stoughton Ltd., 1973, 238-252.

[22] My debt to the work of various scholars is evident from *Linguistic Changes Affecting the Pronunciation of Biblical Hebrew 2000 B.C.E. - 850 C.E. According to Various Scholars*. In particular I have found Blau 1993 pp. 30-34; 213-214, Blau 1976/93 and Blau 2010 particularly useful.

Moscati neatly summarizes the changes *EBHP → TH*

From Moscati 1964 p. 67

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 šābū "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 > *qabar);

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>ẹ/ệ, u>o (*dabaru > dābār; *qābiru > qōbệr; *yaqburu > yiqbor; before two successive consonants, however, i>a instead of i>ẹ/ệ (*zāqinta > zāqanta);

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>ệ (or else ə according to the development referred to under g); u remains, but the following consonant is doubled …: e.g. *dabaru > dābār, *ᶜinabu > ᶜệnāb (but *ḥimāru > *ḥəmōr > ḥămōr), *luqaḥ > luqqaḥ;

e) short vowels in closed unstressed syllables may undergo change of quality: a>i, i>e, u>o (*madbār >midbār [dissimilation ?]; ʾimrātō; and ʾemrātō; *ʾudnī [=*ʾuðnī]> ʾoznī);

f) in final open stressed syllables ī becomes ệ (Ar. tamānī [=*ʾθamānī], Heb. šəmōnệ);

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. *dabarīm > dəbārīm; *qābarū > qābərū.

[23] See O'Connor 2004

[24] See von Dassow 2004, Rainey 1996.

[25] See Bennett 1998

[26] Blau 1976/93

[27] Blau 1993 p. 213.

[28] Garr 1991 pp. 71-72 and Blau 2010 §3.5.9.2.

[29] This is emphatically Blau's view. See Blau 1976, Blau 2010. It is also the position of Bergstärsser and others.

[30] This is the view of Huehnergard and others.

[31] For the Proto-Hebrew verbal and case system see Young, Rezetko, Ehrensvärd 2008 chapt. 12.

[32] See Blau 2010 §3.5.12.2.4.

[33] See Blau 2010 §4.4.4; Hendel-Lambdin-Huehnergard p. 17.

[34] Blau 1976/93 pp. 30-31. Garr 1985 pp. 34-35 wrote (n.b. I have slightly modified his orthography for lengthened vowels for typographic convenience) -

> As inferred from the Masoretic vocalization, **á* in nouns was stress-lengthened, whereas in verbs it remained [á] [*n.* Ginsberg 1936 p. 139; Brockelmann, review of Harris 1936 *OZL* 40 (1937) and Harris 1939 p. 72]. Although there is no evidence for the quantity of this vowel in the epigraphic texts, the consistency with which BH treats nominal vs. verbal **á* suggests that the Masoretic rules were operative in the epigraphic texts as well.... The dialectical status of Ammonite, the Deir Alla dialect, Moabite and Edomite, in this respect, is unknown.... Whereas **á* in Hebrew forms was only stress-lengthened to [á:], in Phoenician **á* was stress-lengthened to **á:* and was then treated as an originally long, accented **ā*, becoming [ó:]*. Hebrew distinguished (stressed) **ā* from (stressed) **â* and **á* ; the first always shifting to [ó:], the second shifting only when **â* resulted from **a'* in a doubly closed syllable, and the third retaining its quality but lengthening to [á:] in nouns but remaining [á] in verbs.
>
> * See also Fox 1996 p. 38.

[35] Due to words in the construct carrying secondary stress. See Blau 2010 §3.4.5.5n.

[36] From Blau 2010 §3.5.7.1.5 -

> (I)t seems reasonable to posit that in construct (and the finite verb) the final short vowels were dropped at an earlier period than they were from absolute forms. At this earlier period, no law of compensation yet operated. When it started operating, the final vowels in the construct forms already stood in closed syllables and were, accordingly, not lengthened. The case endings were dropped first from the construct

because the main stress on a construct + absolute phrase is borne by the absolute noun. As for the reason for the earlier loss of final short vowels from the verb, one can only guess. On the face of it, the simplest proposal seems to be that the final short vowels in the verb were redundant and, accordingly, more prone to drop. In the suffix-tense 3ms form the final *-a* was superfluous. In the prefix-tense, the opposition between the PC_{imp} **yašmúru* and the PC_{jus} **yášmur* was sufficiently indicated by the difference in stress (see §3.5.12.2.14, p. 150, and Blau 1983).

[37] Blau 2010 §3.5.7.1.5.

[38] See Ginsberg 1936 p. 139.

[39] Cf. Gibson 1965 p. 40.

[40] Nominative case.

[41] Accusative case.

[42] Genitive case.

[43] For the dual see Blau 2010 §3.5.1.1.3. N.b.The dual does not exist for this, and the great majority of nouns in BH but was probably more widely used in PH as is the case in Arabic and Ugaritic. I have included the dual form to illustrate the development of inflections since the BH construct mp. is a continuation of the dual construct not of the PH mp. construct. In addition, the possessive pronominal suffixes of ms. nouns in BH are added to the dual construct ending i.e. /ay/.

[44] From Blau 2010 §3.5.1.1.3.. -

> According to the evidence from the other Semitic languages, the nominative ending of the dual was *-ani* and that of the oblique case was -*ayni*. In Biblical Hebrew, as generally in Semitic languages that lost case endings, the oblique case ending, representing two cases and therefore being more frequent, superseded the nominative ending. The dual ending is added to the singular noun (יָד - יָדַ֫יִם). The feminine ending is preserved before the dual ending (עֶשְׂרֵ֫ה עֶשְׂרֵ֫תַיִם). In construct and *status pronominalis* the *-n* is omitted....

[45] Oblique case i.e. corresponding to both genitive and accusative in singular.

[46] Given only in nominative case to save space.

[47] Khan 1994 p. 140.

[48] From Blau 2010 §3.5.8.4.

> **...** In forms from III-laryngeal-pharyngeal roots for which we posit a short vowel (e.g., in contextual finite verbal forms,שִׁלַּח he sentô cf. שִׁבַּר he brokeô), the *e* is assimilated to the following laryngeal-pharyngeal, to become *a*. In contrast, in the absolute state of nouns, where the *ṣere* is supposed to be long, it remains, e.g.,שֵׁל sendingô (The same applies to pausal forms, in which pausal lengthening operated; see §3.5.13, p. 154.)

[49] For the u prefix vowel of the piel participle I follow Blau 2010 §4.3.5.4.5. -

> The participle begins with m, which originally had the vowel u, based on the testimony of Akkadian, Classical Arabic, and Ugaritic....

[50] The loss of the short vowel under the prefix is exactly parallels in Arabic. Some dialects pronounce the participle of *form II* (= Hebrew *piel*) as [mqattil] and others retain the classic [muqattil]. Eg. [mᶜallim], [muᶜallim] 'teacher'.

[51] From Blau 2010 §4.3.5.6.4.

> ...The (original) *ṣere* in the (*hithpael*)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* .

[52] Blau 1976/93 p. 124.

[53] Blau 2010 §4.3.5.2.6.1.

> As stated (see §4.3.4.2.1, p. 213), the construct infinitive is, as a rule, formally identical to the imperative, so that it was originally disyllabic as well, containing the same vowel in both syllables: **quṭul*, **qaṭal*, **qiṭil* (see §4.3.5.2.4.1, p. 224). The prevailing form is **quṭul* > פְּעֹל(which has to be analyzed as containing long *ō* in the pre-Tiberian period, arising by secondary lengthening from original short *o* < *u*, as is the rule in absolute nouns). ל ְ ֹ is formed even from verbs with characteristic *a* in the prefix-tense: ֹ ְ ַ he will hear', לְשְׁמֹ. It appears that originally the prefix-tense and the construct infinitive had the same characteristic vowel; with the restriction of the *yafᶜil* prefix-tense, the corresponding *i*-infinitive fell into desuetude as well. In *III-laryngeal/pharyngeal* verbs, the *o* of the prefix-tense and the imperative, being short, was assimilated to the laryngeal/pharyngeal to become *a*. In contrast, the long *o* of the infinitive was preserved (... see §4.3.7.3.5, p. 240), thus giving rise to the structure of *a* in the prefix-tense and the imperative in contrast to *o* in the construct infinitive. This pattern (*a* in the prefix-tense : *o* in the construct infinitive) spread to verbs that had original *a* in the prefix-tense, such as יִרְכַּב he will ride' in contrast to the infinitive לָרֹכֶב rather than **lirkaḇ*. The vowel *a* in the infinitive has only been preserved in לִשְׁכַּב to lie' (alongside בְּשָׁכְבְּ when being low'.
>
> 4.3.5.2.6.1n. The *i*-infinitive was preserved mainly in weak verbs: לָתֶת to give', לָצֵאת to go out', לָשִׁיר to sing'.... It is remarkable that these *a*-infinitives have *pataḥ* rather than *qamaṣ*, in spite of its reconstruction above as a long vowel! It appears that the *pataḥ* does not reflect the archaic *a* infinitive but instead exhibits the influence of Rabbinic Hebrew on the Masoretes. In Rabbinic Hebrew, the trend of development has been reversed and infinitives (following ל; as always in Rabbinic Hebrew) with *a* as the characteristic vowel spread in the wake of prefix-tenses with *a* .... In Rabbinic Hebrew, the construct infinitive was felt to be derived from the prefix-tense and was restructured according to it (as in לִקַּח 'to take', in the wake of the prefix-tense יִקַּח, in contrast to biblical לָקַחַת

[54] See Blau 2010 1.15.3, 3.5.7.6.11. In 3.5.7.6.11 Blau wrote -

> Usually ... *ṣere* stemming from originally short *i* (as in זְקֵנִים 'old ones') is reduced in open syllables in construct (i.e., far from the stress). The preservation of such a *ṣere* in the second syllable of שְׁנֵי 'sleeping' (p cstr) indicates that the first *ṣere* behaves as an originally long vowel, which must be preserved in every position. In other words, a new base with this pretonic *long ē* (שְׁנֵים 'sleeping ones') is formed, from which other forms are derived. This process was furthered by the disappearance of the quantitative phonemic differences between vowels in the Tiberian system; short and long *ṣere* were no longer phonemically distinguished. Thus forms like שְׁנֵי also reflect the tendency to preserve originally short *ṣere* in the whole paradigm, as if it were originally long.

[55] From Blau 2010 §4.3.5.2.5.1. The participle of action verbs in the *pāʿal* pattern is *pōʿēl*, historically **pāʿil*; the participle of the stative patterns is an adjective, as a rule identical to the 3ms of the suffix-tense: suffix-tense זָקֵן, יָגֹר; participle זָקֵן, יָגוֹר. There is, however, a difference in the length of the last syllable (in the pre-Tiberian period): in the suffix-tense it is short (as demonstrated by the *pataḥ* in the parallel action verb suffix-tense פָּתַב) in the participle, it is long, as it is in every noun in the absolute (see §3.5.7.1.2, p. 119). Therefore, the transcription of the forms according to the pre-Tiberian system, which differentiates long and short vowels, is: suffix-tense *zāqen*, *yāgor*, participle *zāqēn*, *yāgōr*. However, these participles are basically identical to the suffix-tense, which actually must be considered originally to have been a conjugated adjective; cf. the qal participles קָם 'rising', קַל 'light', identical to the suffix-tense in verbs II-w/y and geminate verbs. However, in strong verbs these stative adjectival participles were being superseded by the פּוֹעֵל of action verbs (just as the stative suffix-tense was being replaced by pāʿal). In some cases *pāʿel* and *pōʿel* coexist: שׁוֹכֵב שֹׁכֵב 'forgetting', כּוֹעֵס כֹּעֵס 'vexed' (in all likelihood *pāʿēl* was the original form). In other cases *pōʿēl* alone serves as a veritable participle, *pāʿēl* being clearly relegated to nominal function: שׁוֹכֵן 'inhabiting' in contrast to שָׁכֵן 'inhabitant'. Sometimes, however, *pāʿēl* has totally disappeared: from שָׂנֵא 'he hated', only the participle שֹׂנְאֵי survived.

[56] See Blau 2010 1.15.3, 3.5.7.6.11

[57] See Blau 2010 §4.3.5.3.3; 4.3.5.3.3n.

[58] Blau 2010 §4.3.5.5.2. According to the evidence from Classical Arabic, apparently the original form of the suffix-tense was *puᶜᶜila with i in the second syllable. The Hebrew a in these forms (לִמַּד, כִּתַּב) seems to be partly due to the analogical pressure of the prefix-tense (יְלַמֵּד, יְכַתֵּב) and partly to the influence of Philippi's Law. לִמַּד itself arose, it seems, from *yuṗaᶜᶜal(u), as attested by Ancient Canaanite ... and Classical Arabic yuqattal(u): the u in the prefix was reduced in open unstressed syllables and, because the passive was felt to be closely connected to u, it was restructured to לֻמַּד with u (after the first radical) as the mark of the passive. The participle, originally *muqattal, developed in a similar way....

[59] Oblique case only to save space.

[60] 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 [jʸ] and [eʸ] with and off-glide [ʸ], 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 [iʸ] 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.

[61] Manuel 1995 p.41.

[62] Outside of closed unstressed syllables, which excluded long vowels, *Early Biblical Hebrew* (i.e. late *phase* 3) pronunciation had a phonemic distinction between long and short vowels.

[63] Blau 2010 §3.5.7.2.1.

[64] Blau 2010 §3.5.7.2.1.

[65] IN EBHP and LBHP THE JUSSIVE (PC_{jus}), COHORTATIVE (PC_{coh}), IMPERFECT (PC_{imp}) AND PRETERITE (PC_{pret_sim}/PC_{pretWC}) are, 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 AND
- http://www.adath-shalom.ca/history_of_hebrew3a.htm#Prefix_Conjugation

[66] See Blau 2010 §3.5.13.

[67] Bergsträsser §17q.

[68] [y] = [j]

[69] See the work of Rooker, Hurvitz, Polzin. See *Some Factors in the Rise of Late Biblical Hebrew*

[70] See Blau 2010 §3.5.12.2.6 - 3.5.12.2.8. Note that this is in contrast to the ambient Aramaic which generally maintained its stress structure -

> "The pattern of word-stress ... appears, in general, to be that of Biblical Aramaic, Targum Onqelos, and Syriac: stress is penultimate when the final syllable is a vowel, except in the case of vowels which are reflexes of original diphthongs or originally closed syllables; otherwise it is ultimate. Evidence for the stress pattern comes from three sources: the consonantal text, the vocalized text, and the position of the accent signs." Fassberg 1991 p. 75.

Note the jussive stress shift evidenced in the Secunda.

[71] The following is quoted from Hetzron 1969 P. 20 (See also Lipinski 1997 §38.2) -

"Evidence brought from East Semitic (Akkadian), Central Semitic (biblical Hebrew in its Tiberian form) and south Semitic … points to the existence in proto-Semitic of a perfect **y'aqtul*, with stress on the prefix and a jussive **yaqt'ul*, with final stress. Since the stress-system of each branch of Semitic was later reorganized, this stress-

opposition could not be maintained as such. This led to radical changes in the verbal system, mainly to the gradual elimination of the perfect **y'aqtul*."

[72] Avi-Yonah 1976 p. 19.

[73] Avi-Yonah 1976 p. 133.

[74] Avi-Yonah 1976 p. 241.

[75] I have heard 'house' pronounced [bayɪt] in the spoken Arabic of the Lebanese Biqa valley and a Boston pronunciation of the English word 'mine' as [mayɪn].

[76] Kapeliuk 1989 pp. 303-305 discusses this as a general tendency in Semitic languages.

[77] Khan 1994 p. 141.

[78] Steiner 1997 p. 149.

[79] DS - In fact there was a distinction of both quality and quantity.

Qal of √YKL

	/EBHP/	[EBHP]	/TH/[+]	[TH]	Distinction /EBHP/ - /TH/
Inf. abs.	/ya'ko:l/	[ya'ko:l]	/yɔ'kol/	[yɔ:'ko:l]	Vowel length and quality
Inf. constr.	/yu'kult/ > /y'kult/	[yə'kult] or [yŭ'kult] or [yŏ'kult]	/y'kolet/	[yə'ko:let]	Vowel quality
Suffix Conjugation 3rd person m.s.	/ya'kul/	[ya'kul]	/yɔ'kol/	[yɔ:'ko:l]	Vowel quality
3rd person m.p.	/ya'kulu:/	[ya'kulu:]	/yɔk'lu/ (pausal /yɔ'kolu/)	[yɔ:kə'lu:] (pausal [yɔ:'ko:lu:]	Stress in contextual form. Vowel length and quality
1st person	/ya'kulti:/	[ya'kulti:]	/yɔ'kolti/	[yɔ:'ko:lti:]	

[80] Khan 1997a §6.2.1.

[81] This is fairly similar to the BH reading tradition of Yemenite Jews - see Morag 1963

pp. 73-208

[82] Steiner 1997 pp. 149-150.