10 General conclusion

The aim of this work was to establish to what degree the development of the vowels from Proto-Northwest-Semitic to Biblical Hebrew could be described from a Neogrammarian framework, modified by insights from more recent scholarship. Specifically, the issue was whether sound change could be conditioned by non-phonetic factors. We have seen that on closer examination, the vast majority of sound changes considered are strictly phonetically conditioned.

In chapter 3, we found no evidence for stress conditioning of the Canaanite Shift. All Proto-Northwest-Semitic cases of *ā and *aˀ shifted to *ō, except when preceded by a rounded vowel or *w. The operation of the Canaanite Shift in some words where an *u should be reconstructed in the syllable preceding the *ā, like *rummānum > *rimmon* 'pomegranate', revealed the existence of a dissimilatory sound change of unstressed *u (or *o) to *i (or *e) when adjacent to a bilabial consonant.

Chapter 4 confirmed that the position of the stress in Biblical Hebrew results from the regular stressing of penultimate syllables in Proto-Canaanite, if not earlier, with some regular sound changes shifting the stress forward in different phonetic and prosodic environments. Tonic lengthening was not conditioned by morphology, as would be the case if it affected nouns differently than verbs, but by phonetics alone: the different reflex of stressed vowels in different word classes can be explained by a difference in reconstructed form. The few seeming exceptions to pretonic lengthening were explained as resulting from unusual syllable structures (as with *t̲nayma > *šnáyim* 'two (m.)') or from analogy (as with ˀĕmɛ̆t̲ 'truth'), while the regularity of pausal lengthening is uncontroversial. Some apparently irregular processes were identified as well: the reflex of *qaṭ̬ṭum nouns as either *qaṭ̬* or *qåṭ̬*, the prosodic retraction of the stress (*nsiḡå*), the stress shift in the consecutive perfect, and that in some hollow verbal forms.

The discussion of the development of the triphthongs in chapter 5 mainly yielded a somewhat simpler account of the history of II-wy and III-wy roots, which also explains why these roots show seeming counterexamples to the Canaanite Shift.

We saw that original triphthongs (i.e. *VWV) behave differently than original diphthongs (i.e. *VWC or *VW#). A new finding concerning the latter is that *-o-*, not *-ǻwɛ-*, is the regular reflex of stressed *-áw- in Hebrew.

Chapter 6 identified a number of sound changes at work in what is generally known as Philippi's Law, all of them phonetically regular. After (*i >) *e had changed to *ɛ in several environments at different points in time, a late change of stressed *ɛ́ > *á, referred to as Blau's Law, yielded the Biblical Hebrew situation.

A similar interplay between different sound changes was identified in chapter 7 on the Law of Attenuation. Many different changes of *a > *e affected earlier stages of Hebrew and its ancestors. As argued in chapter 2, these vowels are still phonemically /e/ in Biblical Hebrew, but phonetically, they have shifted to *i* or ɛ. While the operation of the exclusively Tiberian dissimilation of *a to *i* could be explained based on phonetic conditioning and analogy, it may alternatively be a case of lexical diffusion.

Finally, chapter 8 examined the seemingly erratic behavior of word-final vowels in the personal pronouns and related forms. These could all be explained as resulting from their Proto-Northwest-Semitic reconstructions through accepted linguistic processes, with contamination and analogy playing a large role besides sound change.

Thus, while most of the sound changes affecting the Biblical Hebrew vowels can be formulated as regular laws, a small group of irregular changes remains. How should we interpret these?

Three of the seemingly irregular changes identified in chapter 4 belong to the realm of prosody. The *qåṭ* reflexes of *qaṭ̈ṭum nouns were explained as minor pausal forms. Their alternation with *qaṭ* reflexes of the same words is probably governed by the prosodic context, which cannot accurately be recovered from the written text; the same goes for *nsiḡå* and the stress shift in the consecutive perfect. These changes are not unconditioned, then, but conditioned by factors that we do not have access to. The irregular stressing of verbal endings in hollow verb forms may be due to contamination with strong verbs and other weak categories, where these endings are normally stressed in context; like other forms of morphological change, contamination is not expected to operate regularly.

In conclusion, then, Biblical Hebrew does not provide any evidence that is incompatible with the purely phonetic conditioning of sound change. The search for phonetically conditioned, plausible sound laws also uncovered a considerable number of previously unrecognized sound changes and had some interesting

implications for the reconstruction of Proto-Northwest-Semitic and its ancestors, discussed in chapter 9 together with the historical morphology of Biblical Hebrew. Similarly fruitful results may be expected from research into the historical grammar of other Semitic languages, taking the Neogrammarian Hypothesis as its point of departure – which, in all fairness, has never really ceased since Brockelmann (1908), however accepted non-phonetically conditioned sound change may be among some Semiticists. It is my hope that the additional support lent to the Neogrammarian point of view by the present study will encourage such research in future.

The following section contains a combined relative chronology of the sound changes discussed in this work, inspired by that in Dolgopolsky (1999).

10.1 Combined relative chronology

This section lists the various sound changes affecting vowels which were operative between Proto-Northwest-Semitic and Biblical Hebrew. The first subsection contains the relative chronology. It should be noted that only numerals (both Arabic and Roman) indicate a chronological order; sound changes that are only distinguished by letters cannot be dated relative to one another. Thus, for example, (4(a)iA) must postdate (3) and antedate the changes listed under (4(a)iiA) and (4(a)iiB), but it cannot be dated relative to (4(b)i) and (4(b)ii). Every sound change is illustrated by one or more examples and sometimes counterexamples supporting the sound change's conditioning. The entire development of all the words used as examples and counterexamples can be found in the second subsection. Sound changes and examples are cross-referenced.

As the development of the Proto-Northwest-Semitic affricates, interdentals, velar fricatives and *s does not interact with the vowels, the Biblical Hebrew value of these phonemes has anachronistically been projected back for simplicity's sake. Some other minor sound changes that only affected one or two words have also been left out of this overview.

To avoid nesting lists with more than five levels, some sound changes have been listed as having occurred before or after some other changes for which this cannot be ascertained. For example, most of the stress shifts are listed under (5), even though some of them may have antedated some changes in (4). In general, though, the order given seems the most likely. As far as absolute dating goes,

the changes under (1–2) and maybe (3) can be dated to the Proto-Canaanite stage (second millennium BCE), (4) largely yields the Proto-Hebrew stage (first millennium BCE), while the changes in (5–8) predominantly seem to have affected the reading tradition (first millennium CE).

10.1.1 Sound changes

1. a) i. A. 1. All prosodic words stress the penultimate syllable. Example: *burāšum > *burášum (1).

   2. *aC$_1$C$_1$V́$_1$ > *V$_1$C$_1$C$_1$V́$_1$. Example: *qaṭṭílat > *qiṭṭílat (2).

   3. In unstressed syllables, *u > *i next to labial consonants. Example: *burášum > *birášim (1).

   4. Elision of intervocalic *h: *V$_1$hV$_2$ > *V$_1$ / _C$_1$(C$_1$)V, *V$_1$hV$_2$ > *V$_2$ / _C$_1$C$_2$. Examples: *mihaqím > *miqím (3), *bahímma > *bámma (4), *mihaqṭílim > *maqṭílim (5).

   B. 1. *i > *e, *u > o. Example: *yabníyu > *yabnéyo (6).

   2. *V^{ʾ}> *V̄ /_$. Many cases of syllable-final *^{ʾ} were analogically restored. Example: *ra^{ʾ}šum > *rāšum (7).

   ii. The Canaanite Shift: *ā > *ō, except after rounded vowels or *w in the preceding syllable. In unstressed, non-word-initial syllables, *ā > *ū. Examples: *birášim > *birőšim (1); *qawámnā > *qawámnū (8). Counterexample: *kurā^{ʿ}áyma (9).

   b) *o > *e / _#. Example: *yabnéyo > *yabnéye (6).

2. Contraction of triphthongs: *V̆$_1$WV$_2$ > *V̄$_2$. Examples: *yabnéye > *yabné (6); *bawóša > *bőša (10); *qawámnū > *qámnū (8); *bōneye > *bōnē (11).

3. *V̄ > *V̆ /_C$. Example: *qámnū > *qámnū (8).

4. a) i. A. First apocope: unstressed *V̆ > Ø /_#. Example: *korā^{ʿ}áyma > *korā^{ʿ}áym (9).

   B. *Vt > *V̄ /_#. Example: *qeṭṭélat > *qeṭṭélā (2).

   ii. A. 1. Loss of mimation: *m > Ø/_# after unstressed vowels. Remaining instances of mimation were analogically deleted.

Example: *berṓšem > *berṓše (1). Counterexample: *qōṭelím (12).

2. *ē > *ɛ̄ / _#. *ē at the end of proclitic words does not count as word-final. Example: *yebné > *yebnɛ́ (6).

B. 1. Tonic lengthening: *V̆́ > *V́ /_CV̆. Example: *śeʿáre > *śeʿā́re (13). Counterexample: *qaṭálū (14).

2. *ah > *ā /_#. Example: *qédmah > *qédmā (15).

3. *VCCVC > *VCCV́C. Example: *yáqṭol > *yaqṭól (16).

4. *a > *e / _C[-guttural]CV́#, _C[-guttural]CV̆́C#, _CCá, _CCáC#. Examples: *yabnɛ́ > *yebnɛ́ (6); *yaqṭól > *yeqṭól (16, 17); *naqṭál > *neqṭál (18).

iii. Second apocope: unstressed *V̆ > Ø /_#. Example: *berṓše > *berṓš (1).

iv. A. 1. Philippi's Law: *é > *ɛ́ /_C_1C_2, except in word-initial syllables of polysyllabic words. Example: *kabédtī > *kabɛ́dtī (19). Counterexample: *qédmā (15).

2. *nC > *CC. Example: *bɛ́nt > *bɛ́tt (20).

B. 1. *y > *i /C_#. Example: *bɛ́ky > *bɛ́ki (21).

2. Minor pausal lengthening: *V̆́ > *V́ / _CV in minor and major pause. Example: *ʾánī > *ʾā́nī (22).

3. *w > *u /C_#. Example: *wayyeštáḥw > *wayyeštáḥu (23).

C. 1. *ʾ > Ø /C_#. Example: *šáwʾ > *šáw (24).

2. *aw > *ō /_C[-w], except in word-final syllables, if followed by *t, *k, or preceded by *ʾ. Example: *yáwm > *yṓm (25). Counterexamples: *šáw (24); *máwt (26).

D. *ay > *ē in non-word-final syllables, except before *y. Example: *dabaray > dabarē (27). Counterexample: *korāʿáym (9).

E. *á́t > *á́ / _#. Example: *šaná́t > *šaná́ (28).

b) i. *e, *o > ə /_CV[-low]. *e and *o were analogically restored before morpheme boundaries. Example: *berṓš > *bərṓš (1).

ii. Pretonic lengthening: *a > *ā /_CV́, *e > *ē / _CV́ except after a heavy syllable, *C_1 > *C_1C_1 /o_V́ except after a heavy syllable. Examples: *kabɛ́dtī > *kābɛ́dtī (19); *śeʿár > *śēʿár (13); *ʿamoqím > *ʿamoqqím (29). Counterexample: *qōṭelím (12).

5. a) i. *V̆CV̄ > *V̆CV́. Example: *qāṭálū > *qāṭalú (14).

ii. Unstressed *V̆ > *ə /_CV. After gutturals, *ḥåṭepē* vowels occur as allophonic variants of *ə. Example: *korāʿáym > *kərāʿáym (9).

b) i. #CV́CVC > #CVCV́C. Example: *yélek > yēlék (30). Counterexample: *wayyélek (31).

ii. In unstressed, lexically word-final syllables, *e > *ɛ, *o > *ɔ. The last syllable of construct states exceptionally counts as word-final for this rule. Example: *wayyélek > *wayyélɛk (31)

iii. In pause, *V́CVC# > *VCV́C#. Example: *wayyélɛk > *wayyēlɛ́k (31).

c) i. *V́CaC > *VCáC. Example: *wayyíšan > *wayyīšán (32).

ii. Major pausal lengthening: *V̆́ > *V́ in major pause. Example: *wayyīšán > *wayyīšáń (32).

6. a) i. *á > *ǻ /_w, _m. Example: *bámm > *bǻmm (4).

ii. Many construct states become stressed in the reading tradition, receiving the stress on the same syllable as their absolute states. Example: *bōnē > *bōné (11).

b) i. Guttural degemination: *VC_1[guttural, r]C_1 > *$\bar{V}C_1$. In many cases, the short vowel and geminate were analogically restored, the geminate only being simplified in (8(a)ii). Each guttural consonant may have been degeminated under different conditions: especially *ḥ and, to a lesser degree, *h seem to have withstood this sound change. Example: *yəbarrék > *yəbārék (33).

ii. *ā > *å. Example: *kərāʿáym > *kərǻʿáym (9).

iii. A. Blau's Law: *ɛ́ > *á /_C$, *ɛ̄́ > *á́ /_C$. Long and short stressed *ɔ́ > *ó in the same environment. Examples: *bɛ́tt > *bátt (20), *wayyēlɛ̄́k > *wayyēlák (31)

B. Segolization: *VyC[-y]# > *V̄yiC#, *VC$_1$[guttural]C$_2$# > *V̄C$_1$aC$_2$# (*V̄C$_1$ɛC$_2$# in some cases), *VC$_1$[-y -guttural]C$_2$# > *V̄C$_1$ɛC$_2$#. Examples: *kərå̊ʿáym > *kərå̊ʿáyim (9); *báʿl > *báʿal* (34); *kálb > *kálɛb (35).

C. *é́ > *ɛ́ / _Cå̊. Example: *ʿå̊lékå̊ > *ʿå̊lɛ́kå̊ (36).

7. a) i. *ā > *ɛ̄/_Cɛ. Example: *kálɛb > *kɛ́lɛb (35).

ii. *V̆ > *a /_C[guttural]#. Example: *zɛ́rɛʿ > *zɛ́raʿ (37).

b) i. *é > *ɛ́ /_C$_1$[coronal]C$_1$. Example: *karméll > *karmɛ́ll (38).

ii. Word-final degemination: *C$_1$C$_1$ > *C$_1$ /_#. Example: *bátt > *bát (20).

iii. Spirantization: post-vocalic, non-geminate *p > *p̄, *b > *b̲, *t > *t̲, *d > *d̲, *k > *k̲, *g > *ḡ. Example: *yebné́ > *yeb̲né́ (6).

c) *a > *e / C[-guttural]_C$_1$[-guttural]C$_2$[-nasal]{å|á|é́}, except in reduplicated syllables or if the consonant cluster following the first *a contains *ʾ. Example: *magd̄å̊l > *megd̄å̊l (39). For more examples and counterexamples, see section 7.3.1.

8. a) i. In closed syllables, unstressed *e > *ɛ next to gutturals, *i elsewhere; unstressed *o > *u before geminates, *ɔ elsewhere. Examples: *yeb̲né́ > *yib̲né́ (6); *ʿamoqq́im > *ʿamuqq́im (29).

ii. Second round of guttural degemination: *VC$_1$[guttural]C$_1$ > *VC$_1$. Example: *ʾaḥḥå̊d̲ > *ʾaḥå̊d̲ (40).

iii. *a > *ɛ / _Cå̊. Example: *ʾaḥå̊d̲ > *ʾɛḥå̊d̲ (40).

b) All accented and word-final vowels are lengthened. *ə is deleted after light syllables, making it completely predictable and no longer phonemic. *ə in newly closed syllables shifts to *a* when adjacent to gutturals or preceding *r, *l, or *n and to *i* elsewhere. In many unstressed syllables ending in a guttural, an epenthetic vowel with the same quality as the preceding vowel is inserted, with compensatory lengthening of the vowel before the guttural.

10.1.2 Examples

1. *burāšum > *burā́šum (1(a)iA1) > *birā́šim (1(a)iA3) > *berā́šem (1(a)iB1) > *berṓšem (1(a)ii) > *berṓše (4(a)iiA1) > *berṓš (4(a)iii) > *bərṓš (4(b)i) > *broš* (8b) ‘juniper’.

2. *qaṭṭilat > *qaṭṭílat (1(a)iA1) > *qiṭṭílat (1(a)iA2) > *qeṭṭélat (1(a)iB1) > *qeṭṭélā (4(a)iB) > *qeṭṭelā́ (5(a)i) > *qeṭṭəlā́ (5(a)ii) > *qeṭṭəlǻ (6(b)ii) > *qiṭṭəlǻ (8(a)i) > *qiṭṭlå* (8b), *pi‹el* third person feminine singular perfect.

3. *muhaqīmum > muhaqḯmum (1(a)iA1) > mihaqḯmim (1(a)iA3) > miqḯmim (1(a)iA4) > meqḯmem (1(a)iB1) > meqḯme (4(a)iiA1) > meqḯm (4(a)iii) > *meqim* (4(b)ii) ‘erecting (m.sg.)’.

4. *bahimma > *bahímma (1(a)iA1) > *bámma (1(a)iA4) > *bámm (4(a)iii) > *bǻmm (6(a)i) > *bǻm (7(b)ii) > *båm* (8b) ‘in them (m.)’.

5. *muhaqṭīlum > *muhaqṭḯlum (1(a)iA1) > *mihaqṭḯlim (1(a)iA3) > *maqṭḯlim (1(a)iA4) > *maqṭḯlem (1(a)iB1) > *maqṭḯle (4(a)iiA1) > *maqṭil* (4(a)iii), *hipʿil* m.sg. participle.

6. *yabniyu > *yabníyu (1(a)iA1) > *yabníyi (1b) > *yabnéye (1(a)iB1) > *yabné́ (2) > *yabné̱ (4(a)iiA2) > *yebné̱ (4(a)iiB4) > *yeḇné̱ (7(b)iii) > *yiḇné̱ (8(a)i) > *yiḇnɛ* (8b) ‘he will build’.

7. *ra›šum > *rá›šum (1(a)iA1) > *rá›šim (1(a)iA3) > *rá›šem (1(a)iB1) > *rā́šem (1(a)iB2) > *rṓšem (1(a)ii) > *rṓše (4(a)iiA1) > *roš* (4(a)iii) ‘head’.

8. *qawamnā > *qawámnā (1(a)iA1) > *qawámnū (1(a)ii) > *qā́mnū (2) > *qámnu* (3) ‘we stood up’.

9. *kurāʿayma > *kurāʿáyma (1(a)iA1) > *korāʿáyma (1(a)iB1) > *korāʿáym (4(a)iA) > *kərāʿáym (5(a)ii) > *kərǻʿáym (6(b)ii) > *kərǻʿā́yim (6(b)iiiB) > *krǻʿáyim* (8b) ‘shins’.

10. *bawuša > *bawúša (1(a)iA1) > *bawóša (1(a)iB1) > *bṓša (2) > *boš* (4(a)iA) ‘he was ashamed’.

11. *bāniyu > *bōniyu (1(a)ii) > *bōniyi (1b) > *bōneye (1(a)iB1) > *bōnē (2) > *bone* (6(a)ii) ‘building (m.sg. construct)’.

12. *qāṭilīma > *qāṭilíma (1(a)iA1) > *qāṭelíma (1(a)iB1) > *qōṭelíma (1(a)ii) > *qōṭelím (4(a)iA) > *qōṭəlím (5(a)ii) > *qoṭlim* (8b), *qal* masculine plural active participle.

13. *śiʿarum > *śiʿárum (1(a)iA1) > *śiʿárim (1(a)iA3) > *śeʿárem (1(a)iB1) > *śeʿáre (4(a)iiA1) > *śeʿáre (4(a)iiB1) > *śeʿár (4(a)iii) > *śēʿár (4(b)ii) > *śeʿår* (6(b)ii) ‘hair’.

14. *qaṭalā > *qaṭálā (1(a)iA1) > *qaṭálū (1(a)ii) > *qāṭálū (4(b)ii) > *qāṭalű (5(a)i) > *qāṭəlű (5(a)ii) > *qå̊ṭəlű (6(b)ii) > *qåṭlu* (8b), *qal* third person feminine plural perfect.

15. *qidmah > *qídmah (1(a)iA1) > *qédmah (1(a)iB1) > *qédmā (4(a)iiB2) > *qédmå̊ (6(b)ii) > *qéḏmå̊ (7(b)iii) > *qéḏmå* (8b) ‘eastwards’.

16. *yaqṭul > *yáqṭul (1(a)iA1) > *yáqṭol (1(a)iB1) > yaqṭól (4(a)iiB3) > *yeqṭól (4(a)iiB4) > > *yiqṭól (8(a)i) > *yiqṭol* (8b), *qal* third person masculine singular jussive.

17. *yaqṭulu > *yaqṭúlu (1(a)iA1) > *yaqṭúli (1b) > *yaqṭóle (1(a)iB1) > *yaqṭól (4(a)iA) > *yeqṭól (4(a)iiB4) > *yiqṭól (8(a)i) > *yiqṭol* (8b), *qal* third person masculine singular imperfect.

18. *naqṭala > *naqṭála (1(a)iA1) > *naqṭál (4(a)iA) > *neqṭál (4(a)iiB4) > *niqṭál (8(a)i) > *niqṭal* (8b), *nipʿal* third person masculine singular perfect.

19. *kabidtī > *kabídtī (1(a)iA1) > *kabédtī (1(a)iB1) > *kabɛ́dtī (4(a)ivB1) > *kābɛ́dtī (4(b)ii) > *kå̊bɛ́dtī (6(b)ii) > *kå̊bádtī (6(b)iiiA) > *kå̊b̲ád̲tī (7(b)iii) > *kåb̲ád̲ti* (8b) ‘I was heavy’.

20. *bintum > *bíntum (1(a)iA1) > *bíntim (1(a)iA3) > *béntem (1(a)iB1) > *bénte (4(a)iiA1) > *bént (4(a)iii) > *bɛ́nt (4(a)ivA1) > *bɛ́tt (4(a)ivA2) > *bátt (6(b)iiiA) > *bát (7(b)ii) > *bát̲ (7(b)iii) > *baṯ* (8b) ‘daughter’.

21. *bɛkyum (from earlier *bakyum; the originally allophonic change of *a to *ɛ in this environment must precede (4(a)ivB2), but is otherwise hard to date) > *bɛ́kyum (1(a)iA1) > *bɛ́kyim (1(a)iA3) > *bɛ́kyem (1(a)iB1) > *bɛ́kye (4(a)iiA1) > *bɛ́ky (4(a)iii) > *bɛ́ki (4(a)ivB1) > *bɛkí (5(a)i) > *bəkí (5(a)ii) > *bəḵí (7(b)iii) > *bḵi* (8b) ‘weeping’.

22. *ʾanī > *ʾánī (1(a)iA1) > ʾā́nī (4(a)ivB2) > ʾǻ*ni* (6(b)ii) ‘I (pause)’.

23. *wayyištaḥwi (the origin of the gemination of the prefix consonant is uncertain) > *wayyištáḥwi (1(a)iA1) > *wayyeštáḥwe (1(a)iB1) > *wayyeštáḥw (4(a)iA) > *wayyeštáḥu (4(a)ivB3) > *wayyištáḥu (8(a)i) > *wayyištáḥu* (8b) ‘and he prostrated himself’.

24. *šawʾum > *šáwʾum (1(a)iA1) > *šáwʾim (1(a)iA3) > *šáwʾem (1(a)iB1) > *šáwʾe (4(a)iiA1) > *šáwʾ (4(a)iii) > *šáw (4(a)ivC) > *šǻw (6(a)i) > *šåw* (8b) ‘falsehood’.

25. *yawmum > *yáwmum (1(a)iA1) > *yáwmim (1(a)iA3) > *yáwmem (1(a)iB1) > *yáwme (4(a)iiA1) > *yáwm (4(a)iii) > *yom* (4(a)ivC2) ‘day’.

26. *mawtum > *máwtum (1(a)iA1) > *máwtim (1(a)iA3) > *máwtem (1(a)iB1) > *máwte (4(a)iiA1) > *máwt (4(a)iii) > *mǻwt (6(a)i) > *må̋wɛt (6(b)iiiB) > *mǻwɛ̱t* (7(b)iii) ‘death’.

27. *dabaray > *dabarē (4(a)ivD) > *dəbərē (5(a)ii) > *dəbərḗ (6(a)ii) > *dəḇərḗ (7(b)iii) > *diḇre* (8b) ‘words (construct)’.

28. *šanatum > šanátum (1(a)iA1) > šanátim (1(a)iA3) > šanátem (1(a)iB1) > šanáte (4(a)iiA1) > šanā́te (4(a)iiB1) > šanā́t (4(a)iiA1) > šanā́ (4(a)ivE) > šānā́ (4(b)ii) > *šånå* (6(b)ii) ‘year’.

29. *ʿamuqīma > *ʿamuqī́ma (1(a)iA1) > *ʿamoqī́ma (1(a)iB1) > *ʿamoqī́m (4(a)iA) > *ʿamoqqī́m (4(b)ii) > ʿă*muqqim* (8(a)i) ‘deep (m.pl.)’.

30. *yaylik > *yáylik (1(a)iA1) > *yáylek (1(a)iB1) > *yḗlek (4(a)ivD) > *yēlék (5(b)i) > *yēléḵ (7(b)iii) > *yeleḵ* (8b) ‘may he go’.

31. *wayyaylik (gemination of uncertain origin) > *wayyáylik (1(a)iA1) > *wayyáylek (1(a)iB1) > *wayyḗlek (4(a)ivD) > *wayyḗlɛk (5(b)ii) > *wayyēlɛ́k (5(b)iii) > *wayyēlɛ́k (5(c)ii) > *wayyēlák (6(b)iiiA) > *wayyeláḵ* (7(b)iii) ‘and he went (pause)’.

32. *wayyīšan (gemination of uncertain origin) > *wayyī́šan (1(a)iA1) > *wayyīšán (5(c)i) > *wayyīšā́n (5(c)ii) > *wayyišǻn* (6(b)ii) ‘and he slept (pause)’.

33. *yabarriku > *yabarríku (1(a)iA1) > *yabarréko (1(a)iB1) > *yabarréke (1b) > *yabarrék (4(a)iA) > *yəbarrék (5(a)ii) > *yəbārék (6(b)i) > *yəbå̄rék (6(a)i) > *yəb̲å̄rék̲ (7(b)iii) > *yb̲åreḵ* (8b) ‘he will bless’.

34. *baʿlum > *báʿlum (1(a)iA1) > báʿlim (1(a)iA3) > *báʿlem (1(a)iB1) > *báʿle (4(a)iiA1) > *báʿl (4(a)iii) > *báʿal* (6(b)iiiB) ‘master’.

35. *kalbum > *kálbum (1(a)iA1) > *kálbim (1(a)iA3) > *kálbem (1(a)iB1) > *kálbe (4(a)iiA1) > *kálb (4(a)iii) > *kā́lɛb (6(b)iiiB) > *kɛ́lɛb (7(a)i) > *kɛ́lɛb̲* (7(b)iii) ‘dog’.

36. *ʿalaykah > *ʿaláykah (1(a)iA1) > *ʿaláykā (4(a)iiB2) > *ʿalékā (4(a)ivD) > *ʿālékā (4(b)ii) > *ʿå̄lékå̄ (6(b)ii) > *ʿå̄lɛ́kå̄ (6(b)iiiC) > ʿ*ålɛ́ḵå* (7(b)iii) ‘on you (m.sg.)’.

37. *zarʿum > *zárʿum (1(a)iA1) > *zárʿim (1(a)iA3) > *zárʿem (1(a)iB1) > *zárʿe (4(a)iiA1) > *zárʿ (4(a)iii) > *zā́rɛʿ (6(b)iiiB) > *zɛ́rɛʿ (7(a)i) > *zɛ́raʿ* (7(a)ii) ‘seed’.

38. *karmillum > *karmíllum (1(a)iA1) > *karmíllim (1(a)iA3) > *karméllem (1(a)iB1) > *karmélle (4(a)iiA1) > *karméll (4(a)iii) > *karmɛ́ll (7(b)i) > *karmɛ́l (7(b)ii) > *karmɛl* (8b) ‘orchard’.

39. *magdalum > *magdálum (1(a)iA1) > *magdálim (1(a)iA3) > *magdálem (1(a)iB1) > *magdále (4(a)iiA1) > *magdā́le (4(a)iiB1) > *magdā́l (4(a)iii) > *magdå̄́l (6(b)ii) > *magd̄å̄́l (7(b)iii) > *megd̄å̄́l (7c) > *mīgdål* (8(a)i) ‘tower’.

40. *ʾaḥḥadum > *ʾaḥḥádum (1(a)iA1) > *ʾaḥḥádim (1(a)iA3) > *ʾaḥḥádem (1(a)iB1) > *ʾaḥḥáde (4(a)iiA1) > ʾaḥḥā́de (4(a)iiB1) > ʾaḥḥā́d (4(a)iii) > ʾaḥḥå̄́d (6(b)ii) > ʾaḥḥå̄́d̲ (7(b)iii) > ʾaḥå̄́d̲ (8(a)ii) > ʾɛ*ḥåd̲* (8(a)iii) ‘one (m.)’.