

Orthoepy in the Tiberian reading tradition of the Hebrew Bible and its historical roots in the Second Temple Period

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Abstract

The Tiberian reading tradition of the Hebrew Bible contains a variety of features that point to its origin in the Second Temple period. One such feature is the careful reading of the inflected forms of the verbs **הָיָה** and **הָיָה** to ensure that they are not confused. The paper directs particular attention to the lengthening of the vowels of the prefix conjugation (imperfect) of these verbs, which can be reconstructed from medieval sources. It is argued through comparison with the Babylonian tradition of Biblical Hebrew that this lengthening is an orthoepic feature that has its roots in the Second Temple Period. This demonstrates that the priestly authorities who were concerned with the careful preservation of the written text were also concerned with the careful preservation of the orally transmitted reading tradition.

Keywords: Tiberian Reading Tradition, Babylonian Reading Tradition, Hexapla, Samaritan, Orthoepy, Second Temple Period

The Tiberian vocalization signs and accents were created by the Masoretes of Tiberias in the early Islamic period to record an oral tradition of reading. There is evidence that this reading tradition had its roots in the Second Temple period,

although some features of it appear to have developed in later centuries.¹ The Tiberian reading was regarded in the Middle Ages as the most prestigious and authoritative tradition. On account of the authoritative status of the reading, great efforts were made by the Tiberian Masoretes to fix the tradition in a standardized form. There remained, nevertheless, some degree of variation in reading and sign notation in the Tiberian Masoretic school. By the end of the Masoretic period in the 10th century C.E. this internal variation had resulted in two main authoritative sub-traditions associated with the Masoretes Aharon ben Asher and Moshe ben Naphtali respectively, though some variants in the later Masoretic period are associated with the names of other Masoretes.²

The activities of the school of Tiberian Masoretes ceased in the 10th century after the generation of Ben Asher and Ben Naphtali. The Tiberian reading tradition continued to be transmitted into the 11th century by teachers in Palestine who had associations with Tiberian Masoretic circles, but in the later Middle Ages the orally transmitted reading tradition fell into oblivion and the Tiberian sign notation remained a fossilized vestige of this tradition. As a consequence of this, Bible texts with the Tiberian signs began to be read with other reading traditions and the

¹ For the evidence see Morag (1974), Grabbe (1977, 179–197), Khan (2013a, 43–107, 2013b) and Joosten (2015b, 2015a).

² Various lists are extant of differences between Ben Asher and Ben Naphtali, the most extensive one being *Kitāb al-Khilaf* ‘Book of differences’ of Misha’el ben ‘Uzzi’el (ed. Lipschütz 1965). For the sub-traditions of other Masoretes see Mann (1926), Morag (1969) and Yeivin (1981).

original denotation of the signs became a matter of interpretation rather than direct knowledge.³ Many features of the original Tiberian reading tradition can now be reconstructed on the basis of medieval sources. The two main types of sources available that have advanced our knowledge of the Tiberian reading are a corpus of Arabic transcriptions of the Hebrew Bible written by Karaite scribes and Masoretic treatises concerning the Tiberian pronunciation. Most Karaite transcriptions are datable to the 10th and 11th centuries and reflect the oral reading of the biblical text (i.e. the *qere*) according to the Tiberian tradition.⁴ The Masoretic treatises in question were written in Palestine during the Masoretic period or shortly thereafter in the early 11th century when knowledge of the Tiberian reading was still alive.⁵

In this paper I would like to focus in particular on a phenomenon in the Tiberian reading that I shall call orthoepy. This consisted of measures adopted to ensure that the reading was performed with maximal clarity. Such orthoepic measures are often not discernible from the vocalized text and can only be reconstructed from external sources, in particular transcriptions and Masoretic treatises.

³ See Khan (2013a, 43–65), where it is noted that even the grammarian Ibn Janāḥ expressed regret that in eleventh century Spain there were no traditional readers and teachers (*ruwāt wa-ʿaṣḥāb al-talqīn*) with a first hand knowledge of the Tiberian reading: *Kitāb al-Lumaʿ* (ed. Derenbourg 1886, 322–323)(1886, 322–323).

⁴ For these transcriptions see Hoerning (1889), Khan (1990, 1992, 1993, 2013c, 2016) and Harviainen (1993a, 1993b, 1994, 1996).

⁵ For an overview of Tiberian Masoretic treatises see Khan (2013a, 71–77).

The basic principle of orthoepy is to ensure that the distinct elements of the text are given their optimal oral realization, keeping them maximally distinct and avoiding slurring over them. These elements include letters, vowels, syllables and words.

There was an increasing orthoepic effort, for example, to ensure that words that were joined to the following word by a *maqeph* retained distinctness in the reading. One clear example of this is the reading of the word מָה vocalized with *patah* and connected by *maqeph* to the following word, the first letter of which has *dagesh*, e.g. וּמַה־דִּבֶּר ‘and what did he say’ (Jer 23:35). It is clear that the *patah* in this particle originally developed due to its prosodic and syllabic bonding with the following word. It is still, however, written as an orthographically separate word. In order to ensure that the orthographic distinctness was expressed clearly in pronunciation one of two orthoepic strategies were followed, both of which are reflected by Karaite transcriptions of the Tiberian reading into Arabic script. The most common strategy was to lengthen the *patah*, e.g. مَا تَصْعَاق (BL Or. 2542, 62r, 7 || BHS מַה־תִּצְעַק ‘why do you cry?’ Exod 14:15). Another strategy was to glottalize the *patah* vowel by pronouncing an /h/ after the vowel, which separated it syllabically from what followed, e.g. مِه-شَّمُو (BL Or 2544 fol. 76v, 12 || BHS מַה־שָׁמֹו Exod 3:13 ‘what is

his name?').⁶ The Masoretic treatise *Hidāyat al-Qāri'* (early 11th century) treats phrases such as מִהֲתַצְטַק as *deḥiq* (Eldar 1994, 114; Khan 1989), implying that the vowel was long as in other cases of *deḥiq* such as אֲשֶׁר־תִּשְׁבֹּן 'come near, please/now' (Gen 27:26) and וּמִשְׁנֵה־כֶּסֶף 'double portion of money' (Gen 43:15).

Another orthoepic measure that developed in the Tiberian tradition is what I call the extended *dagesh forte* reading.⁷ This involved pronouncing the *dagesh lene* of *bgdkpt* letters at the beginning of syllables as *dagesh forte*. Evidence for this can be found in the Karaite transcriptions, several of which mark the Arabic *shadda* sign (i.e. the sign for gemination in Arabic) both where the Tiberian vocalization has *dagesh forte* and also where, according to the normal interpretation, it has *dagesh lene*, e.g.

BL Or. 2540

Dagesh forte

نِشْحَكَمَا [nīḥakkamā] (BL Or 2540, fol. 4r, 4 || BHS נִתְחַכְמָה Ex. 1.10 'let us deal wisely').

وَاتَّصِفْنَاهُو [vāttiṣpanēhū] (BL Or 2540, fol. 5v, 4 || BHS וְתִצְפְּנֵהוּ Ex. 2.2 'and she hid him').

Dagesh lene

يَرْبِّبَا [yirbbē] (BL Or 2540, fol. 4v, 1 || BHS יִרְבֵּה Ex. 1.12 'He increases').

⁶ Khan (1989).

⁷ For a more detailed treatment of this feature see Khan (2017b).

جاذ [ggād] (BL Or 2540, fol. 3v, 4 || BHS גַּד Ex. 1.4 'Gad').

דָּאן [ddān] (BL Or 2540, fol. 3v, 3 || BHS דָּן Ex. 1.4 'Dan').

میهرتآن [mīharttān] (BL Or 2540, fol. 7r, 5 || BHS מְהִירָתָן Ex. 2.18 'you hurried').

A close reading of a passage in the Masoretic treatise *Hidāyat al-Qāri'* reveals the same phenomenon:

באב פי מא יגי מן אלחרוף עלי תלאתה מנאזל

אעלם אן כמא גא פי אלחרוף מא אדא אסתנד עלי גירה כפפה ורפאה כדאך פי אלחרוף מא יגי עלי ג

מנאזל פי אלתקל ואלכפה אלמנולה אלא אלתכפף אלב אלדגש אלמעווד אלג אלדגש אלכביר והו

אלתו

אעלם אן אלתו מן דון סאיר אלחרוף קד יגי רפי כק ותִאֵי השער וקד יגי דגש כקול תחת הנחשת תורי זהב

וקד יגי דגש כביר והו תלת תאואת וְשִׁימָה תִלְעוּלָם וּבִתְיֹו וּגְנֻזְכִּיּוּ וּגְבִרְיָא אֵלֶךְ תִּלְתְּהוֹן

Chapter concerning letters that occur in three grades

Know that just as there are among the letters those that when they are adjacent to another letter, this latter makes them light with *raphe*, likewise among the letters are those that occur in three grades with regard to heaviness and lightness. The first grade is lightening. The second is the normal *dagesh*. The third is the major *dagesh*.

This includes the *taw*.

Know that the *taw*, unlike the other letters, may occur *rapheh*, as in וְתַאי הַשַּׁעַר 'rooms of the gate' (Ezek 40:10); it may occur with *dagesh*, as in תַּחַת הַנְּחֹשֶׁת 'instead of bronze' (Isa 60:17), תּוֹרֵי זָהָב 'ornaments of gold' (Cant 1:11); and it may occur with major *dagesh*. The latter includes three *taws*: וַיִּשְׂימָהּ תְּלֵעוּלָם 'He made it an eternal heap of ruins' (Josh 8:28), וְאֶת־בְּתֵימוֹ וְגִנְזָבוֹ 'and its houses and its treasuries' (1 Chron 28:11), וְגִבְרֵיָא אֵלֶּיךָ תִּלְתָּהוֹן 'and these three men' (Dan 3:23).⁸

In the passage in question the author states that the letter *taw* has three degrees of 'heaviness'. These three degrees include (i) *taw* with *raphe*, i.e. fricative, (ii) normal *dagesh* and (iii) major *dagesh*. The grades (ii) and (iii) do not refer to *dagesh lene* and *dagesh forte* respectively, as we normally understand them. Rather 'normal *dagesh*' includes both what we would normally interpret as *dagesh lene* and also *dagesh forte*. 'Major *dagesh*', i.e. grade (iii), is restricted to a few examples of *taw* where the *dagesh* is extra-long, e.g. in the word בְּתֵימוֹ 'houses' (with two accents *azla geres*) (1 Chron 28:11).⁹

The extended *dagesh forte* reading arose by giving the *dagesh* sign its full value in all contexts. The primary motivation for this was most likely an attempt to make a maximally clear distinction between fricative and plosive forms of the *bgdkpt*

⁸ MS II Firk. Evr. Arab. I 2390, fols. 18a-18b; cf. Eldar (1994, 77–78).

⁹ For further discussion of this passage and the extended *dagesh forte* reading see Khan (2017b, 2018).

letters. Another effect of strengthening the pronunciation of the *dagesh* was to mark a clear separation between syllables.

The phenomenon of using *dagesh forte* to give prominence to syllable division has a natural phonological explanation. The optimal contact between two adjacent syllables is where the onset of the second syllable is stronger than the offset (coda) of the preceding syllable (Vennemann 1988, 40). In a sequence of two consonant segments CC a syllable division between the two is more preferred if the second consonant is less sonorant, i.e. stronger, than the first.

This enhanced accuracy of reading words with *bgdkpt* consonants was achieved without deviating from the standard Tiberian notation system. On account of an analogical extension of such a method of reading, however, this orthoepic principle came to be visible in some Tiberian manuscripts. The analogical process involved extending the gemination marking syllable onsets from *bgdkpt* consonants to all consonants in syllable onsets that could be geminated, e.g.

נִשְׁבֵּר *niš.bbōr*

נִשְׁמֵר *niš.mmōr*

This type of extended fortition of syllable onsets becomes visible in what Yeivin calls the extended Tiberian type of vocalization, i.e. a type of non-standard Tiberian vocalization that has the characteristic feature of marking *dagesh* on all

letters in syllable onsets that can be geminated. This is found in many Genizah fragments and also in a variety of medieval manuscripts that were produced in Europe, such as the Codex Reuchlinianus, written in Karlsruhe in 1105.¹⁰

Embryonic forms of the extended Tiberian type of marking of *dagesh* are sporadically found in standard Tiberian Masoretic manuscripts in places where clear syllable division was deemed to be particularly crucial. In L, for example, a *dagesh* is sometimes placed on an initial *lamedh* of the second word of a phrase connected with *maqeph* when the first word ends in *nun*, e.g. וַיִּתֵּן־לּוֹ ‘and he gave him’ (Gen 24:36). This can be regarded as a measure to separate the two words clearly and prevent the coalescence of the consonants by a process of assimilation.¹¹ The *dagesh* would mark the articulation of the *lamedh* with increased muscular pressure to ensure it maintains its correct articulation. According to the Masoretic Treatise *Kitāb al-Khilaf* Ben Naphtali placed a *dagesh* in the first *nun* of the name נון in the combination בָּן־נֹן (ed. Lipschütz 1965, כד). This was a measure to prevent the coalescence of two identical letters across a word-boundary. An alternative strategy to separate the two letters was to place a *paseq* between the words, e.g. לְהַגְדִּיל |

¹⁰ Yeivin (1983), Kahle (1927 vol. 2, 45*-68*), Prijs (1957), Morag (1959), Díez Macho (1963), Eldar (1978), Dotan (2007, 645). For a detailed study of the Genizah manuscripts with this type of vocalization see Blapp (2017).

¹¹ Yeivin (1980, 294–95). For an alternative explanation see Kister :(2016, sec. 8).

לְמַעַלָּה 'to make exceedingly great' (1 Chron 22:5), וּבְרִיָּל | לָרֹב 'iron in abundance' (1 Chron 22:3).

According to *Kitāb al-Khilaf* Ben Naphtali marked a *dagesh* in the *qoph* of the verb יַעֲקֹב 'he surplants' (Jer 9:3) (ed. Lipschütz 1965, לג) and this is found also in a number of Tiberian Masoretic manuscripts (Yeivin 1968, 51). This indicated that there was a syllable division before the *qoph* and that, therefore, the *ʿayin* had a silent *shewa*. This alerted the reader to the fact that the syllable division was different from that of the more frequent form יַעֲקֹב 'Jacob'.

The orthoepic measures that have described so far appear to have been late developments in the Tiberian reading tradition. With regard to the reading of the word מָה, for example, the *pataḥ* shows that at some stage of the transmission of the reading the vowel must have been short. The sources just discussed show that it was in existence by the 10th century. A feature of the accent system of the Tiberian notation, furthermore, reflects the reading of the *pataḥ* as short. This is the fact that when the *gaṣya* sign is marked on the *pataḥ*, it must be identified as the minor *gaṣya*, i.e. *gaṣya* that is marked on syllables with short vowels. It occurs only under the conditions that are suitable for minor *gaṣya*, e.g. מָה-נִעֲבֹד '[with] what shall we serve?' (Exod 10:26), מָה-תַּעֲשֶׂה 'What will you do?' (Hos 9:5). In these examples the *gaṣya*

occurs in a phrase with a disjunctive accent and a pattern that Yeivin (1980, 244) has established is one of the regular patterns that take minor *ga'ya*, viz. one consisting of a closed syllable followed by an open syllable, followed by a *ḥateph* vowel of the same quality of the vowel of the open syllable, followed by the syllable bearing the main stress (represented by Yeivin as מְהַטֵּעִים). The marking of the minor *ga'ya* became fixed in the Tiberian Masoretic tradition. This is shown by the fact that there is agreement across the accurately written Tiberian biblical manuscripts with regard to the marking of minor *ga'ya* and also by the fact that it is the subject of recorded differences between the Masoretes Ben Asher and Ben Naphtali (Yeivin 1968, 89–194, 1980, 240–64). This fixing of the minor *ga'ya* must have taken place before the subsequent lengthening of the *pataḥ* that is reflected in the Karaite transcriptions and *Hidāyat al-Qāri'*.

The extended *dageš forte* reading was also a late phenomenon. It seems to have developed in Tiberian Masoretic circles side-by-side with the older reading tradition with *dageš forte* and *dageš lene*. Some Karaite transcriptions clearly reflect the older *dageš forte*—*dageš lene* type of reading in that they use the Arabic *šadda* sign only to represent original *dageš forte*. Without doubt a *bgdkpt* consonant with *dageš lene* was historically ungeminated. This is seen, for example, in pre-Masoretic Greek and Latin transcriptions such as the Greek transcriptions of the second column of Origen's Hexapla and the Latin transcriptions of Jerome: βααρ = בְּקָר,

ερδoφ = אָרְדוּף, vs. δαββερ = יִדְבֵּר, σαδδoαυμ = צְדִיקִים (Brønno 1943b, 357, 383), iegdal = יִגְדַל (Sperber 1937, 158), marphe = מְרַפֵּא (Sperber 1937, 192), baddim = בְּדִים (Sperber 1937, 211), thephphol = תִּפְּל (Sperber 1937, 159).

The Tiberian reading, that is the *qere*, which came to be represented by the Tiberian vocalization sign system, exhibits a number of features of considerable antiquity that are likely to have their roots in the Second Temple Period. Some of these features are the following.

Distribution of *qere* and *ketiv* in verbal forms

There is internal evidence for the antiquity of the *qere* in the distribution of *qere* and *ketiv* within the Masoretic text. This is found, for example, in the vocalization of some verbal forms. In Late Biblical Hebrew certain verbs with a reflexive or non-agentive meaning appear as *niph'al* in the suffix conjugation form (perfect) whereas they appear as *qal* in Classical Biblical Hebrew. The intransitive form of the verb 'to stumble' (כָּשַׁל), for example, appears in the *niph'al* נִכְשַׁל in the book of Daniel (וְנִכְשַׁל 'and he will stumble' Dan 11:19) but in the *qal* form כָּשַׁל elsewhere. In the prefix conjugation (imperfect), however, the verb is vocalized as a *niph'al* throughout the Bible. This is because the *ketiv* of the prefix conjugation (יִכְשַׁל) is ambiguous as to the verbal conjugation and could, in principle, be read as *qal* or *niph'al*. The Tiberian reading tradition treats the verbal forms as *niph'al* where this would be compatible

with the consonantal text, but the occurrence of the *qal* form in the suffix conjugation in Classical Biblical Hebrew suggests that the verb was originally read as *qal* in all forms. This is clearly the case in the infinitive form of this verb וּבְכַשְׁלוֹ (Prov 24:17), where the consonant text lacks the initial *he* of the *niph'al* (הִכְשִׁיל) and so must have represented the *qal*, but it is nevertheless read as a *niph'al*. The crucial point is that the replacement of the *qal* by the *niph'al* is reflected by the consonantal text itself in Late Biblical Hebrew in the book of Daniel.¹²

Unique case of unaspirated *peh*

One example that demonstrates the conservative nature of the phonology of the Tiberian reading is the pronunciation of the *pe* in the word אֶפְרָיִם 'his palace' (Dan 11:45). According to medieval sources this was pronounced as an emphatic unaspirated stop, whereas the letter *pe* with *dagesh* in all other places in the reading tradition was pronounced as an aspirated stop (i.e. a stop followed by a short flow of air before the onset of the voicing for the ensuing vowel). The hard pronunciation of the *pe* is also mentioned by Jerome, who states that it is the only 'Latin' *p* in the entire Bible (*p* in Latin was regularly pronounced as an unaspirated stop). The word is in origin a loan from Old Persian. The unaspirated pronunciation of the *pe*, which

¹² For these issues relating to the vocalization of verbal forms see Ginsberg (1934), Ben-Ḥayyim (1958, 237) and Qimron (1986). For further re-interpretations of the Masoretic orthography in the Samaritan reading tradition see Ben-Ḥayyim (2000, 338–39) and Schorch (2004).

is uncharacteristic of Hebrew, evidently preserves a feature that existed in the pronunciation of the source language.¹³ The fact that this feature, which conflicted with normal Hebrew pronunciation, should have been preserved from the original period of composition right down to the period of the Masoretes, centuries after contact of the transmitters of the tradition with the source language had ceased, demonstrates great conservatism in the Tiberian reading tradition.

Variations in morphology reflected by vocalization

There is some evidence that the historical layering of the Biblical books is reflected by differences in the vocalization. In two cases in Chronicles, for example, the *niph'al* of the verb ילד is vocalized in an unusual way, with *shureq* rather than *holem* and *dagesh* in the middle radical: נוֹלְדוּ 'they were born' (1 Chron. 3.5, 20.8). This morphological feature is not found in the vocalization of the earlier books but is common in Post-biblical Hebrew. The vocalization of these forms apparently reflects a dialectal form of morphology that was current in the time of the Chronicler. By implication, the vocalization of the earlier books must reflect a different, presumably slightly earlier tradition (Morag 1974, 309–310). A further example is the difference in vocalization between אֶמְלֵל 'feeble' (Psa 6:3) and הָאֶמְלֵלִים 'the feeble' (Neh 3:34). The vocalization הָאֶמְלֵלִים in the late biblical book reflects the

¹³ For details see Steiner (1993).

one that is used in Rabbinic sources (Boyarin 1988, 63–64). The vocalization of these words in the later biblical books suggest that the reading tradition was formed with progressive historical layers in conjunction with the formation of the proto-Masoretic text.

The early dating of the vocalization of pronominal suffixes

The vocalization of some pronominal suffixes offers insight into the background of the linguistic form of the reading tradition. The *qere* of the suffixes ך-, ך- and ך-, for instance, is reflected by the orthography of the consonantal text in a few sporadic cases, e.g. יָדְךָ 'your hand' (Exod 13:16), גַּרְתָּהּ 'you have sojourned' (Gen 21:23), וְחֵץ 'his arrows' (Psa 58:8). The spellings כה-, תה- and ו- are found also in Qumran manuscripts and Hebrew epigraphic texts from the first millennium B.C.E. (Cross and Freedman 1952, 53, 66–67; Qimron 1986, 58–60). The spelling of these suffixes with the normal Masoretic type of orthography is also found in the Qumran and epigraphic texts, suggesting that two different traditions of reading the suffixes existed. Since these texts come from periods when Hebrew was still a living language, these differences could be regarded as dialectal variations of Hebrew. The spellings כה-, תה- and ו- can be identified with the phonetic form that the suffixes have in the Tiberian *qere*. The spellings ך-, ך- and ך-, on the other hand, would

reflect a pronunciation such as $-\bar{a}k$, $-t$ and $-\bar{e}w$. The readings $-\bar{a}k$ and $-t$ are the forms of the 2ms. suffixes in Aramaic, in the Greek transcription of Hebrew of Origen's Hexapla and in some Sephardi reading traditions of Post-biblical Hebrew (Kutscher 1979, 442–443; Fassberg 1989). It is also found in some pausal forms in the Tiberian reading tradition (e.g. קָז , pausal form of קִז). The Tiberian *qere*, therefore, represents forms of the suffixes that are dialectal variants of the forms reflected by the *ketiv*. They are not chronologically later than the *ketiv* forms.

Another indicator of the roots of the Tiberian reading tradition in the Second Temple period is its close relationship with the Babylonian reading tradition, which is reflected by manuscripts with Babylonian vocalization. This close relationship between two branches of tradition transmitted in different geographical locations is most easily explained as the result of a common genetic connection in a single location at an earlier period. The most obvious place of origin would be Second Temple Palestine. Just as the written text of both the Babylonian tradition and the Tiberian tradition has its origins in a proto-Masoretic text of the Second Temple Period, it is likely that there was a Proto-Masoretic orally transmitted reading tradition, which likewise split into an eastern and western branch. This Proto-Masoretic reading tradition was clearly distinct from the Samaritan reading tradition, which itself exhibits some features that can be correlated with Second

Temple sources, such as the long pronominal forms (*attimma*, *-kimma*).¹⁴ The so-called proto-Masoretic texts found in Qumran, or to use Tov's (2012, 107–9) more recent terminology 'Masoretic-like' texts, do not reflect a totally uniform text, but rather a family of closely related texts with minor variations among them. Fragments of biblical scrolls discovered in sites outside Qumran datable to the first two centuries C.E. contain a consonantal text that is identical with that of the medieval Masoretic manuscripts, even in the smallest details of orthography and cancellation dots above letters. These include fragments found in Masada (first century C.E.) and the somewhat later sites of Wadi Sdeir (Naḥal David), Naḥal Ḥever, Wādī Murabba'āt and Naḥal Şe'elim (early second century C.E.). The same applies to the recently published charred fragments of a scroll of Leviticus from En Gedi, which have been dated to roughly the same period (Segal et al. 2016). According to Tov (2008, 150) these texts from communities outside Qumran constitute an 'inner circle' of proto-Masoretic texts that derive directly from temple circles and were copied from the master copy in the temple court. The proto-Masoretic texts of Qumran, on the other hand, formed a second transmission circle copied from the inner circle, and so exhibits small differences. We may hypothesize

¹⁴ It is relevant to note that the Tiberian reading tradition of the Aramaic portions of the Bible closely resemble not only the Babylonian reading tradition of Biblical Aramaic but also that of the official Targums Onqelos and Jonathan. Here again one may posit that this similarity reflects a common origin in Second Temple Palestine.

that the proto-Masoretic reading tradition of temple circles was likewise stabilized in a fixed form.

As remarked, there is evidence of great conservatism in some elements of the Tiberian reading tradition, such as the *peh* of אֶפְדָּנוּ (Dan 11:45), but a comparison of the Tiberian and Babylonian branches of the biblical reading tradition shows that in some features the Babylonian reading appears to be more linguistically conservative. This is shown by the fact the Babylonian tradition sometimes has parallels with earlier sources that are lacking in the Tiberian tradition. For example, the preservation of an /a/ vowel in unstressed closed syllables that is found in the transcriptions of the Septuagint, Origen and Jerome is a feature of Babylonian pronunciation, whereas this vowel is more widely attenuated to /i/ in the Tiberian tradition, e.g. Septuagint Μαβσαρ ‘Mabsar’ (Tiberian: מִבְּצָר, 1 Chron. 1.53), Origen’s Hexapla λαμαλαμα ‘for the battle’ (Tiberian: לְמַלְחָמָה Psa. 18.40), Jerome: *macne* ‘cattle’ (Tiberian: מִקְנֵה), Babylonian מִזְבֵּחַ [mazbēḥ] ‘altar’ (Tiberian: מִזְבֵּחַ). Babylonian corresponds to Origen and Jerome and also to some Qumran texts in preserving the unstressed /o/ vowel in prefix conjugation verbs where it is reduced to *shewa* in Tiberian, e.g. ישְׁמֹרֵנִי [yīšmorēnī] ‘he guards me’ (Tiberian: יִשְׁמְרֵנִי); cf. Jerome *iezbuleni* ‘he will honour me’ (Tiberian: יִזְבְּלֵנִי, Gen 30:20). There are also

parallels between the syllable structure of the Babylonian tradition and the Greek and Latin transcriptions, which are lacking in Tiberian.

Some features of the Tiberian reading that differ from Babylonian may have developed under the influence of the vernacular Aramaic of the Jews of Palestine. It is not clear whether this applies to the aforementioned features, but we can identify a possible case of influence in the pronunciation of consonantal *waw*. We know from medieval sources that in the Tiberian tradition this was pronounced as a labio-dental [v] (unless in contact with a rounded vowel, in which case it was pronounced as a labio-velar approximant [w]) (Khan 2013a, 87–88). In Jewish Palestinian Aramaic *waw* appears to have had the same labio-dental pronunciation. This is shown by the interchange of *waw* and fricative *beth* in Jewish Palestinian Aramaic texts. The fact that fricative *beth* in these texts also sometimes shifts to *peh* due to devoicing shows that it must have been labio-dental and this implies that *waw* also was labio-dental.¹⁵

The phonology and morphology reflected by the Tiberian reading tradition, therefore, contains some archaic features, which are likely to have their roots in the Second Temple Period, and some innovative features, which are likely to have developed at a later period, after the Tiberian and Babylonian traditions had separated.

¹⁵ For these interchanges Jewish Palestinian Aramaic see Dalman (1894, 74–75).

I should like to argue here that orthoepic features of the Tiberian reading likewise have a variety of different historical depths. The orthoepic practices that we have examined so far are developments that took place in the later stages of the transmission of the Tiberian reading, probably around the end of the Masoretic period in the 10th century. It is possible to identify some orthoepic measures, however, that have a greater time depth. One example of this is the reference to the need for careful reading of the *Shema*⁶ (Deut 6:4-9; 11, 13-22; Num 15:37-41) in a Baraitha, i.e. a Tannaitic source not transmitted in the Mishnah, preserved in the Babylonian Talmud (*Berakot* 16b):

תני רב עובדיה קמיה דרבא ולמדתם שיהא למודך תם שיתן ריוח בין הדבקים עני רבא בתריה כגון על

לבבך על לבבכם בכל לבבך בכל לבבכם עשב בשדך ואבדתם מהרה הכנף פתיל אתכם מארץ

R. 'Obadyah reports in the presence of Raba (bar Joseph) a tannaitic tradition: לבבך על לבבכם 'and you shall teach' (Deut 11:19) means that your teaching should be perfect, that one should make a space between the (letters) that stick together. Raba says after him: as in על לבבך 'on your heart' (Deut 6:6), על לבבכם 'on your heart' (Deut 11:18), בכל לבבכם 'with all your heart' (Deut 11:13), עשב בשדך 'grass in your field' (Deut 11:15), ואבדתם מהרה 'and you will perish quickly' (Deut 11:17), אתכם מארץ 'the extremity (of the garment) a cord' (Num 15:38), אתכם מארץ 'you from the land' (Num 15:41)'

Here the *baraita* refers to the need to make a careful separation between identical letters across word boundaries, thus ensuring that words in the text do not become slurred together. A similar motivation for clear word-division between adjacent identical or similar consonants lies behind several of the orthoepic features discussed above, such as the *dageš* in phrases such as וַיִּתֵּן־לּוֹ ‘and he gave him’ (Gen 24:36) and בְּגִזְנוֹן and the *paseq* between words such as לְמַעַלְהָ | לְהַגְדִּיל ‘to make exceedingly great’ (1 Chron 22:5).

The Mishnah (*Berakot* 2.3) refers generically to the practice of carefully reading the letters of the *shema*:

קרא ולא דקדק באותיותיה רבי יוסי אומר יצא רבי יהודה אומר לא יצא

‘(If) he has read and not paid careful attention to the letters (i.e. to distinguish them carefully), Rabbi Yose says: he has performed his obligation; Rabbi Yehudah says: he has not fulfilled his obligation.’

From this text it appears that some Rabbinic authorities attached more importance to orthoepy than others. The two cited passages, however, demonstrate clearly that in the Tannaitic period attention was paid to orthoepy.

In the remainder of this paper I should like to discuss a distinctive feature of the medieval Tiberian reading tradition that, I shall argue, can be interpreted as demonstrating that orthoepy was a feature of the proto-Masoretic reading of the

Hebrew Bible in the Second Temple Period before the Tiberian and Babylonian traditions divided.

Most manuscripts of the Karaite transcriptions into Arabic script represent the *hireq* vowels in the closed unstressed syllable of prefixes of the verbs הָיָה ‘to be’ and חָיָה ‘to live’ with *mater lectionis yā*’ and the *pataḥ* in the prefix of the forms וַיְחַיֶּה and וַיְחַיֶּה with *mater lectionis ’alif*. This reflects the fact that these vowels were regularly read as long in these forms, e.g.,

تِيهْيَا [tīhyē] (BL Or. 2549, fol. 58r, 12 || BHS תִּהְיֶה ‘it will be’ Jer 7:34)

بِيهْيَوْت [bīhyōt] (BL Or. 2553, fol 6r, 12 || BHS בְּהִיּוֹת ‘when it is’ Prov 3:27)

يِيحْيَا [yīhyē] (BL Or. 2556, fol. 44v, 9 || BHS יִחְיֶה ‘let him live’ Neh 2:3)

مِيحْيَا [mīhyā] (BL Or. 2556, fol. 31v, 1 || BHS מְחַיֶּה ‘reviving’ Ezra 9:8)

وَايְهِي [wāyhī] (BL Or. 2547, fol. 6v, 6 || BHS וַיְחַיֶּה ‘and it was’ Josh 3:14)

وَايْحِي [wāyhī] (BL Or. 2548, fol. 28r, 9 || BHS וַיְחַיֶּה ‘and he lived’ Isa 38:9).¹⁶

The lengthening of the vowel of the prefixes in the verbs היה and חיה is likely to have been an orthoepic measure taken to ensure that the initial guttural consonants were not weakened. If these consonants were weakened the two verbs would not be formally distinguished. Guttural consonants were felt to be particularly vulnerable when in contact with the highly sonorant glide consonant *yod* and a vowel

¹⁶ For details see Khan (1994).

preceding a guttural in such contexts is generally lengthened by a phonetic *gaʿya* in the Tiberian tradition,¹⁷ e.g. יִשְׁעֵיָהוּ ‘Isaiah’ (Isa 1:1), וּפְתָחֵיהָ ‘and Pethahiah’ (Neh 11:24). The purpose of this lengthening with a phonetic *gaʿya* is orthoepic, i.e. it slowed down the reading to ensure that gutturals were not slurred over. On some occasions the prefix vowels of the verbs היה and חיה are marked by a *gaʿya* but the Karaite transcriptions show us that the vowels were regularly pronounced long, even when there is no *gaʿya* in the Masoretic codices. The lengthening, therefore, appears to be a pre-Masoretic phenomenon, which is not dependent on the marking of *gaʿyot*.

We shall focus here on the lengthened *hireq* in the prefix conjugation forms of the verbs הִיָּה and חִיָּה. The /i/ vowel in the prefixes of these verbs is anomalous in the Tiberian reading tradition. Normally in the Tiberian tradition the prefixes of prefix conjugation verbs with an initial *he* or *heth* have the lower vowels *seghol* or *patah*. It is significant, however, that in the Babylonian tradition the prefix in such verbs generally have *hireq* (in the examples below OB = Old Babylonian, and MB = Middle Babylonian) (Yeivin 1985, 302):

תְּהַדְּפוּ Ezek 34:21 ‘you will push’ OB תְּהַדְּפוּ [tīhdōpū]

וַיִּהְיוּ בְלֵי Jer 2:5 ‘and they became worthless’ OB וַיִּהְיוּ בְלֵי [wayyihbōlū]

יִהְיֶה Jer 6:23 ‘it will roar’ OB יִהְיֶה [yihmā]

¹⁷ For the phonetic *gaʿya* and its various functions see Yeivin (1980, 257–64).

יִהְרֹגוּ Ps 94:6 ‘they will kill’ OB יִהְרֹגוּ [yihrōgū]

יִהְרֹס Job 12:14 ‘he will tear down’ OB יִהְרֹס [yihrōs]

יִחַבֵּט Isa 27:12 ‘he will thresh out’ MB יִחַבֵּט [yihbōṭ]

יִחַבְּלוּ Job 24:3 ‘they will take as pledge’ OB יִחַבְּלוּ [yihblū]

אֶחַבְּשׁ Ezek 34:16 ‘I will bind up’ OB אֶחַבְּשׁ [ʾihbōš]

יִחַטְּבוּ Ezek 39:10 ‘they will cut down’ OB יִחַטְּבוּ [yihṭbū]

The easiest explanation for the existence of *hireq* in the prefixes of הִיה and חִיה is that at some earlier period in the ancestor of the Tiberian reading tradition initial *he* and *het* verbs regularly had an /i/ vowel in the prefix as is the case in the Babylonian tradition. The Babylonian tradition can be regarded as more archaic in this respect. As we have seen, the Babylonian reading tradition is more archaic than the Tiberian in numerous features. The regular lengthening of the vowel of the prefix of the verbs הִיה and חִיה in the proto-Masoretic tradition preserved the original /i/ quality in the prefixes in the course of the transmission of the Tiberian tradition in the first millennium C.E., whereas the /i/ vowel in other verbs in the Tiberian tradition subsequently underwent a lowering process.

In the Babylonian tradition the *hiph'il* of the suffix conjugation of initial *he* and *heth* verbs also generally preserves an original /i/ vowel in the initial syllable whereas in the Tiberian tradition the vowel of the prefix is *seghol* or *pataḥ*:

הַחָרִים 1 Sam 15:8 'he destroyed' OB [hiḫrīm]

הִחְזִיק Judg 7:8 'he retained' OB [hiḫzīq]

וְהִחְרַמְתִּי Mic 4:13 'and I shall devote' OB [wihīḫramtī]

וְהִחְרַדְתִּי 2 Sam 17:2 'and I threw [him] into panic' LB [wihīḫradtī]

It is significant to note that the *hiph'il* of the verb *חיה* in the Tiberian tradition has *seghol* in the initial syllable of the prefix conjugation, whereas Babylonian has *hireq* (Yeivin 1985, 402):

הִחְיֶה Josh 14:10 'he has let live' OB [hiḫyē]

This indicates that the original /i/ of the initial syllable of the *hiph'il* of *חיה* was not lengthened in the Second Temple period before the proto-Tiberian and proto-Babylonian traditions split. The reason is likely to be that there is no *hiph'il* of the verb *היה* in the biblical corpus, so there was no danger of two similar verbs being confounded in the reading by weakening of the gutturals.

So, the lengthening of the /i/ vowel of the prefixes of the prefix conjugation of *היה* and *חיה* must have taken place in the Second Temple period before the proto-

Tiberian and proto-Babylonian traditions split and the motivation for this lengthening was to ensure that similar forms with different meanings preserved their formal distinction and were not confounded.

There is ample evidence from Second Temple sources of the weakening, elision and confusion of the guttural consonants. This must reflect a phonological development in some forms of spoken Hebrew at that period, presumably under the impact of Greek in the Hellenistic period. This evidence mainly comes from Qumran sources and the loss of gutturals in the Samaritan reading tradition, which must have its roots in the pre-Islamic period before the Samaritan tradition came into contact with Arabic. There is evidence that the gutturals were preserved in some Palestinian Jewish communities in non-hellenized circles. The gutturals were certainly not, however, preserved in all Jewish circles in Palestine in the first millennium C.E. Weakening is attested in rabbinic literature and in the Palestinian *piyyuṭim*, where they are interchanged and omitted in some contexts.¹⁸ It has been argued by some scholars that the gutturals were transmitted intact in the Tiberian reading tradition down to the Middle Ages.¹⁹ The Greek transcription in the second column of Origen's *Secunda* can be interpreted as reflecting the preservation of the

¹⁸ For the sources and references see the survey by Mor (2013).

¹⁹ E.g. Barr (1967), Kutscher (1977, ריט-רכו), in rebuttal of Kahle (1947, 86–95), who expressed the view that the gutturals had become weakened in the Tiberian tradition and the Masoretes restored them in the Islamic period in imitation of Arabic.

gutturals. The presence of gutturals is reflected in the absence of vowel lengthening, e.g. *φεθεθα* ‘you opened’ (פִּתַּחְתָּ [Psa 30:12]), *θελαθαχ* ‘your praise’ (תִּלְתַּח [Psa 35:28]), or in a sequence of two short vowels, e.g., *νεεμαν* ‘faithful’ (נִמְנַם [Psa 89:38]) (Yuditsky 2007). Likewise there is evidence from the statements of Jerome that the gutturals were preserved in the reading tradition that he heard in Palestine (Barr 1967; Kutscher 1977, רכב).

It has been pointed out by some scholars that a liturgical reading tradition may be conservative and not necessarily reflect the phonological system of the local vernacular (Steiner 2005, 240–42; Ben-Ḥayyim 1954, 59–62). It is important to distinguish, therefore, between the preservation of gutturals in a living vernacular spoken by the Jews in late antiquity, on the one hand, and the preservation of these consonants in a liturgical reading tradition. If the transmitters of the reading tradition speak vernaculars in which the gutturals have been weakened, extra care would be needed to preserve the reading tradition. Their survival in liturgical reading traditions down to the Middle Ages is testimony to such careful reading.

The Biblical manuscripts from the Second Temple period show us that great efforts were made in some circles, apparently the Temple authorities, to preserve a stable text (Tov 2014; van der Kooij 2014). This is reflected by the so-called proto-Masoretic, or ‘Masoretic-like’, group of manuscripts from Qumran, which exist

alongside a diversity of other text-types. Scholarly discussions about the emergence of a stable proto-Masoretic text in the Second Temple period focus on the written form of the text, as is reflected in the surviving manuscripts. There is little consideration of the stabilization of a proto-Masoretic orally transmitted reading tradition, i.e. the reading tradition that subsequently split into the Tiberian and Babylonian reading traditions. If the reconstruction of the background of the lengthening of the /i/ of the prefixes of הִיהַ and חִיהַ is correct, then this can be taken as evidence that orthoepic measures were taken already in the Second Temple period to preserve the oral reading of the text. The strategy was applied to these verbs due to their high frequency and the importance of distinguishing their meaning. The motivation for this orthoepy was the preservation of the oral tradition of reading that was adopted by the Temple authorities rather than standardization entailing elimination of other traditions. This would conform to the activity of the Temple authorities with regard to the written text, which is more likely to have been motivated by a desire to preserve rather than standardize and eliminate rival texts (Tov 2014).

In the development of Masoretic notes at a later period one of the most common methods of helping the preservation of the correct written transmission was to collate similar words that differed in small details to ensure that they were not confused. One of the clearest examples of this is the Tiberian Masoretic treatise

known as *'Okhla we-'Okhla*, which contains approximately four hundred Masoretic lists, mostly collating words that differ in small details. The work is named after the first two words of the first list (אָכַלְהָ 'eating' [1 Sam 1:9], וְאָכַלְהָ 'and eat [ms]!' [Gen 27:19]), which enumerates pairs of words, one occurring with the conjunctive *waw* and the other without it (Frensdorff 1864; Díaz Esteban 1975; Ognibeni 1995). In some cases the Masoretic notes refer to features of the reading tradition, the intention of which is to draw attention to homographs or near homographs that have variant vocalizations. These differing vocalizations are mainly variants across the biblical corpus. On a few occasions variant readings of specific words by different Masoretic traditions are referred to. The existence of variant ways of reading of homographs across the biblical corpus creates the risk of confusion among them and the main purpose of the notes is to ensure that scribes pointing the texts (*naqdanim*) and readers distinguish them, e.g.

הִבַּת (Exod 1:22): הַתּוּ ' (one of) four cases pointed with *pataḥ*' (contrast הִבַּת Ezek 45:11).

שָׁפַץ (Lev 17:4): הַקִּמְצוּ ' (one of) two cases with *qameṣ*' (contrast שָׁפַץ 1 Kings 2:31 etc.).

The error of reading is not due to an inaccurate or lax phonetic articulation. Masoretic notes are concerned essentially with the avoidance of textual confusions

based on internal variants and presuppose that the variant forms across the biblical corpus are already a fixed tradition. This is a different phenomenon from the confusion between inflections of the verbs *היה* and *חיה* due to the weakening of the gutturals. Here what is guarded against is textual confusion resulting from inaccurate articulation. It presupposes a lesser degree of fixing of the text, or at least a greater vulnerability of the text, since the source of the confusion is external, whereas the Masoretic notes are premised on the assumption that the source of confusion is internal to an already fixed text, both in the *ketiv* and the *qere*. The main external factor that had a bearing on the weakening of the gutturals in the Second Temple period was the spoken Hebrew or Aramaic of the readers, in which gutturals had generally undergone weakening. It is likely that another external factor was the weakening of the gutturals in the less accurately preserved reading traditions that existed at the period.

There is, therefore, a methodological analogy between the Masoretic notes and the enhanced orthoepy relating to *הִיָּה* and *חִיָּה* in that in both cases the measures concern the avoidance of confusion of similar forms that differ only in small details and their purpose is to preserve the text. The Masoretic notes, however, are a product of a later period in which the textual tradition, both written and oral, had become fully fixed.

In the Tiberian reading tradition of the Aramaic portions of the Bible, the Aramaic verb הָוּה 'to be', which is cognate with Hebrew הָיָה, has *seghol* in the prefixes of the prefix conjugation. The Babylonian tradition of Biblical Aramaic, on the other hand, has *hireq*, e.g.

Tiberian

Babylonian

תְּהִיָּה 'it will be' (Dan 2:42)

תְּהִיָּה [tihyē] (Morag 1973, 84)

In the Tiberian reading of Biblical Aramaic, therefore, the vowel of the prefix has undergone lowering in conformity with the general process of lowering of prefix vowels before *heh* in the Tiberian tradition. This reflects the fact that there was no orthoepic measure taken in the proto-Masoretic reading to lengthen the prefix vowel. The most obvious explanation for this is that, unlike in the corpus of Biblical Hebrew, in the corpus of Biblical Aramaic there are no minimal pairs consisting of inflections of the verb הָוּה and those of another verb differing only in the initial guttural radical and so requiring particular caution in reading to keep them apart.

In the Greek transcription of Origen's Hexapla the prefix conjugation of the verbs הָיָה and חָיָה are transcribed as follows (Brønno 1943a, 25):

יְהִיָּה (Psa 89:37) 'will be' ιειε

יְחִיָּה (Psa 98:49) 'lives' ιειε

The epsilon in the first syllable of these forms reflects a lack of lengthening, which, according to Yuditsky (2007) should, in principle, be interpreted as reflecting the presence of a guttural closing the syllable.²⁰ Evidently, therefore, the Hexapla does not reflect the orthoepic lengthening of the prefix vowel that is found in the Tiberian tradition. This is probably due to the fact that the reading reflected by the Hexapla does not derive directly from the proto-Masoretic tradition.

In the Samaritan reading tradition the gutturals have been weakened. The expected consequence would be, therefore, that the inflections of the verbs *הִיָּה* and *הִיָּה* would become confused. In reality the inflections of these two verbs are kept apart by morpho-phonological changes (Ben-Ḥayyim 2000, 166; Florentin 1996, 227, 236). These were motivated by a desire to distinguish the two verbs after the gutturals were lost.²¹

הִיָּה *yēyyi*

הִיָּה *yiyya*

In conclusion, the regular lengthening of the vowel of the prefixes of the Hebrew verbs *הִיָּה* and *הִיָּה* in the Tiberian reading tradition is an orthoepic measure

²⁰ The dieresis in the form יֵיֵיֵ does not reflect a difference in the pronunciation in the period in which the transcription was made. This was a scribal practice that was added in manuscripts in the Middle Ages (Janssens 1982, 38–39).

²¹ For examples of other cases of morphological restructuring to distinguish between the meaning of homophones in the Samaritan tradition see Florentin (1996).

that had its origins in a proto-Masoretic reading tradition in the Second Temple Period before the Tiberian and Babylonian branches of this tradition had split. This is evidence that in priestly circles of the Second Temple Period there was a concern not only to preserve carefully the written form of the biblical text but also to preserve carefully the oral reading of the text. Just as the tradition of careful preservation of the proto-Masoretic written tradition was continued after the destruction of the Temple down to the Middle Ages so was the proto-Masoretic oral reading tradition carefully preserved through orthoepic measures in the Tiberian tradition.

The Hexapla seems to represent a tradition of reading with a different origin, which lacked the orthoepic feature in question. There is less evidence for such orthoepy in the Babylonian branch. In the word מָה before *dagesh*, for example, Babylonian has a short vowel. This is shown in several manuscripts with the so-called compound Babylonian vocalization that represent a genuine Babylonian, non-Tiberianized, tradition. In this system short vowels before *dagesh* are marked by a compound sign combining a vowel sign and *shewa*. Such a sign is used for the vowel in question, demonstrating that it was pronounced short (Yeivin 1985, 338), e.g.

$\text{מָה} \text{זֹאת}$ [ma-zzo:t] (L מָה־זֹאת Exod 13.14 ‘what does this mean?’)

There is no evidence of the existence of the extended *dagesh forte* orthoepic feature in the Babylonian tradition. Even the ancient orthoepic tradition of lengthening of the *hireq* of the prefixes of the verbs היה and חיה appears to have been lost in the Babylonian tradition. This is shown by the fact that in compound Babylonian manuscripts representing a non-Tiberianized Babylonian tradition the *hireq* of the verbs היה and חיה are marked as short, e.g.

תְּהִיָּה [tihyā] (T-S A38.10, fol. 5v || BHS תְּהִיָּה Lev. 15.3 ‘it (fs.) is’)

It was the Tiberian reading that was the most prestigious tradition in the Middle Ages and was the one that particular efforts were made to stabilize and preserve. In respect to its status, therefore, the Tiberian branch was the most direct heir to the proto-masoretic reading of the temple.²²

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²² For further discussion of continuities between the reading of the Hebrew Bible in Second Temple Period and that of the world of the medieval manuscripts see Khan (2017a)

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