

are generally also applied in colloquial Hebrew. This is always true for the use of *dagesh xazaq* ('forte'), for instance מכל *mi-kol* 'from all [...]'. The rule concerning gutturals, changing the vowel from *i* to *e*, is applied in set expressions, e.g., מהארץ *me-ha-'ares* 'from Israel (lit. "from the land")', מאשר *me-'ašer* 'than [REL]', מראש *me-roš* 'in advance', מאז *me-'az* 'since (then)'. However, in other situations the vowel *i* may be heard even before gutturals. So we find e.g., מהולנד *mi-holand* 'from Holland', מארץ *mi-'eres* 'from a country', מהבית *mi-ha-bayit* 'from the house'. The rule is also applied hypercorrectly, e.g., מחוץ לארץ *me-xuṣ la-'ares* 'from abroad' (cf. Coffin and Boložky 2005:230).

A general problem with the description of the relationship between the standard vocalization and colloquial pronunciation is the lack of a comprehensive description of the spoken language, with due notice of the distinction between phenomena of production and phenomena of grammar (Borochofsky Bar-Aba 2006; → Modern Hebrew: Features of the Spoken Language).

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## Vocalization, Babylonian

The term Babylonian vocalization is used to refer to a group of related systems of vocalization that were developed in medieval Babylonia (corresponding broadly to modern Iraq). It was used mainly in medieval biblical manuscripts, but is attested also in manuscripts of other types of Hebrew texts, in particular rabbinic texts and *piyyut*.

This type of vocalization came to the attention of modern scholarship in the middle of

the 19th century, when Abraham Firkovitch discovered a number of Biblical manuscripts containing it in Chufut Kale (Crimea). These were studied by various scholars, in particular by Pinsker (1863), who established that the vocalization was Babylonian in origin. One of the manuscripts, which came to be known as Codex Babylonicus Petropolitanus, was published in facsimile by Strack (1876), a philological analysis of which was made by Praetorius (1899). In the second half of the 19th century scholars became aware of numerous manuscripts of Yemenite origin in European libraries containing Hebrew Bible and Aramaic Targum texts with Babylonian vocalization. The vocalization of the Hebrew was studied by Kahle (1902). Subsequently, Kahle (1913; 1928) discovered and described numerous fragments of manuscripts with Babylonian vocalization among the medieval manuscripts from the Cairo Genizah and in other collections. The grammars of Biblical Hebrew by Bauer and Leander (1922) and Bergsträsser (1918) incorporated material on Babylonian vocalization from Kahle's work. Kahle's particular interest was in the biblical manuscripts. The vocalization of rabbinic texts was investigated by his students, the most detailed study being that of Porath (1938). Further manuscripts with Babylonian vocalization were discovered by Díez-Macho (1971) and his students, in particular Díez-Merino (1975), and this school of Spanish scholars published editions of Babylonian Biblical texts (e.g., Navarro Peiro 1976; Navarro Peiro and Pérez Castro 1977; Díez Macho and Navarro Peiro 1987). Yeivin made a detailed investigation of Babylonian vocalization in all available manuscripts in his PhD thesis (Yeivin 1968a). This was subsequently expanded into a monumental two-volume work (Yeivin 1985), which is currently the most comprehensive and authoritative description of the material. This work of Yeivin's is the main source for the current entry.

The manuscripts attest to a considerable diversity of types of Babylonian vocalization. These various types differ both in their system of vocalization and in the pronunciation tradition of Hebrew that they reflect. We know from various sources that the Hebrew pronunciation tradition of the Jews of Babylonia was different from the Tiberian pronunciation tradition. The Karaite scholar al-Qirṣānī, writing in the first

half of the 10th century, states that Babylonian pronunciation was found among Jewish communities over a wide geographical area in his time, including not only Babylonia, but also Iran, the Arabian peninsula, and Yemen (*Kitāb al-ʿAnwār w-al-Marāqib*, ed. Nemoy 1939:II §§16–17). Some of the extant manuscripts with Babylonian vocalization were, indeed, written in Iran, Yemen, and Egypt. The pronunciation tradition of Hebrew preserved by Yemenite Jews down to modern times, moreover, continues many features of the Babylonian pronunciation of Hebrew that is reflected by the medieval manuscripts (Morag 1963; → Biblical Hebrew: Pronunciation Traditions). A form of Babylonian pronunciation is reflected in some medieval Arabic transcriptions, especially those found in Muslim sources (→ Transcriptions into Arabic Script: Medieval Muslim Sources) and also by Hebrew words and phrases in incantation bowls from Babylonia datable to 4th–7th centuries C.E. (Mishor 2007; → Epigraphic Hebrew: Roman and Byzantine Period).

Not all manuscripts with Babylonian vocalization reflect the Babylonian pronunciation tradition. Some manuscripts, in fact, represent the Tiberian tradition in Babylonian vocalization signs, and these can be used as a source for the reconstruction of Tiberian pronunciation (see, for example, Ben-David 1957). Babylonian vocalization reflecting Tiberian pronunciation is occasionally found in the Masoretic notes of Tiberian Bible manuscripts (Yeivin 1980:120). The Tiberian pronunciation was regarded as highly prestigious in the Middle Ages and had a wide diffusion among scholars beyond the confines of Palestine (Khan 1990). The medieval Hebrew grammarians based their descriptions of the language on the prestigious Tiberian tradition, but some features of Babylonian pronunciation sporadically appear in the works of the eastern grammarians, such as Saʿadya (Dotan 1997:39) and the Karaites (Vidro 2011:131–136).

Yeivin classifies the various types of pronunciation reflected by manuscripts with Babylonian vocalization into three categories: Old Babylonian, Middle Babylonian, and Late Babylonian. The first two of these reflect two stages of development of the local Babylonian pronunciation, whereas Late Babylonian pronunciation was a mixed tradition, exhibiting

various degrees of influence from Tiberian. Old and Middle Babylonian vocalization also differ in the use of signs, most conspicuously in the fact that Old Babylonian manuscripts have only partial vocalization, whereas a fuller system is used in Middle Babylonian manuscripts. This terminology is more typological than chronological, since the manuscripts containing the different pronunciations types overlap chronologically to a certain extent. The earliest dated manuscript exhibiting Old Babylonian pronunciation was written in 905 C.E., and Middle and Late Babylonian pronunciation begin to be attested also from the 10th century. It should be noted, however, that manuscripts from the later Middle Ages reflect only the Late Babylonian type and are largely imitations of the Tiberian tradition. This applies especially to manuscripts from Yemen, which are attested down to the 15th century.

In addition to different pronunciation types, Babylonian vocalization also exhibits different systems of signs. These sign systems are classified broadly into two main groups known, respectively, as the ‘simple system’ and the ‘compound system’. The simple system is attested in two varieties, one containing signs consisting of lines and dots (line system), which is found in the majority of manuscripts, and another, rarer variety, containing signs consisting of dots.

Tiberian	Babylonian lines	Babylonian dots
𐤀 ʾi	𐤀 ʾi	𐤀 ʾi
𐤁 ʾa	𐤁 ʾa	𐤁 ʾa
𐤂 ʾā	𐤂 ʾā	𐤂 ʾā
𐤃 ʾē	𐤃 ʾē	𐤃 ʾē
𐤄 ʾō	𐤄 ʾō	𐤄 ʾō
𐤅 uʾ	𐤅 uʾ	𐤅 uʾ

Kahle (1959:65) believed that the dot system was the earliest and was related to the eastern Syriac (so-called Nestorian) system of vocalization with dots. The relationship with Syriac, however, is not clear, since the Babylonian signs have in most cases different values from what is found in the Nestorian vocalization system. Furthermore, according to Yeivin (1985:54–64), the dot system does not have a clear chronological antecedence to the line

system, since the line system is found in some of the earliest manuscripts. Rather, the two systems seem to have developed concomitantly.

The Babylonian sign equivalent to Tiberian *pataḥ* in the line system was originally a miniature form of the letter פ'. The equivalent to Tiberian *qameš* in the line system was originally a miniature form of the letter ש'. The Babylonian equivalent to *hireq* was originally a miniature form of the letter י, and the Babylonian equivalent to *qibbuš* a miniature form of ו. In some manuscripts these miniature letter shapes are still recognizable. In addition to the vowel signs there was also a sign with the shape of a horizontal line (𐤀) known as חטפא *hitfa*, which corresponded to Tiberian *shewa*.

If there were *matres lectionis* in a word, the vowel signs were generally written on these *matres lectionis* rather than on the letters before them, unlike Tiberian, where this is the case only with *holem* and *shureq*, e.g., בית *bēt* (Tiberian בית *bēt*) 'house', יוסיפו *yōsīpū* (Tiberian יוסיפו *yōsīpū*) 'they (m) add'.

As can be seen from the table above, there was no sign corresponding to Tiberian *seghol*. One possibility is that the Babylonian *pataḥ* was pronounced between the qualities *pataḥ* and *seghol*, i.e., a slightly raised [a], which is the pronunciation of the vowel in the modern Yemenite reading tradition. Some later manuscripts use an additional sign corresponding to *seghol* in an attempt to represent Tiberian pronunciation. Various signs are used for this, including the *šere* sign 𐤁, a combination of *pataḥ* and *šere*, inverted Tiberian *seghol*, and the sign 𐤁 (the sign 𐤁 being used for *pataḥ*). The fact that the additional sign always corresponds to Tiberian *seghol* and not *pataḥ* implies that Babylonian *pataḥ* was in fact pronounced [a] rather than in between the two Tiberian vowels. In the Babylonian Masorah the 𐤁 sign, corresponding to Tiberian *pataḥ*, is referred to by the Aramaic terms מיפתח פומא *miḥtaḥ pumma* 'opening of the mouth' or פיתחא *piḥta* 'opening'. The sign 𐤁, corresponding to Tiberian *qameš*, is referred to in the Masorah as מיקפץ פומא *miqpaš pumma* 'contraction (i.e., rounding) of the mouth', indicating that it had a rounded quality in the region of [ɔ], similar to that of the Tiberian *qameš* (→ Tiberian Reading Tradition). This is reflected by the representation of *qameš* with *wāw* in medieval Arabic transcriptions that reflect other features of Babylonian pronunciation, e.g., كيو *kyū*

*ḥmw* '(the planet) Mercury' (Tiberian חמה *ḥama*, see below). In the Babylonian incantation bowls a *waw* is sometimes written in Hebrew words corresponding to *qameš* (Juusola 1999:54–68; Mishor 2007:219), e.g., בורוך *bwruk* 'blessed' (Tiberian ברוך *bārūk*), קודוש *qwdwš* 'holy' (Tiberian קדוש *qāḏōš*). Another term used for *qameš* in the Babylonian Masorah is מיעף פומא *mešaf pumma*, which appears to have meant 'heedfulness with regard to the mouth', indicating, it seems, the accuracy that must be observed in articulating correctly the *qameš*, between *pataḥ* and *holem* (Morag 1974).

The sign equivalent to Tiberian *shewa* 𐤁 known as *hitfa* is marked only sporadically in the manuscripts (Yeivin 1985:398–412). Its marking in Old Babylonian is found mainly in contexts where *shewa* is vocalic in Tiberian and only sporadically where it is quiescent in Tiberian. In Middle Babylonian it is marked only where *shewa* is vocalic in Tiberian. It appears, therefore, that it tended to be used to mark a short vowel segment, as in some non-standard systems of Tiberian vocalization, rather than phonological zero (→ *Shewa*: Pre-Modern Hebrew; Syllable Structure: Biblical Hebrew). Indeed, as in non-standard Tiberian systems, the *shewa* in some Babylonian manuscripts is occasionally used to mark a short [a] vowel segment in a closed syllable (Yeivin 1985:413–416), e.g., יען *[ya:ʔan]* (Tiberian יען *yā'an*) 'because' (Ezek. 34.21), דלתות *[dalθo:θ]* (Tiberian דלתות *dalθōt*) 'doors' (Ezek. 41.25). In Old Babylonian there is evidence that there was no vocalic segment in some contexts where Tiberian has vocalic *shewa*. This is seen in deviations from Tiberian vocalic patterns that result from the formation of consonantal clusters. *Hireq*, for example, sometimes occurs instead of *shewa* on initial *yod*, e.g., יסוד *īsōd* (Tiberian יסוד *yāsōd*) 'foundation', which appears to be the development of an initial cluster *ys* to *īs* (*ysōd* > *īsōd*). Furthermore, where Tiberian has vocalic *shewa* in word-internal position, Old Babylonian sometimes has an additional vowel on the preceding letter. This is an epenthetic vowel that has developed before a consonantal cluster, e.g., תקרבו *tiqrbū* < *tiqrḇū* (Tiberian תקרבו *tiqrḇū*) 'you (mpl) approach' (→ Epenthesis).

The 'compound system' of Babylonian vocalization distinguished between long and short vowels, in that it marked short vowels in open

and closed syllables by the use of different signs from those used to indicate long vowels. Most of the signs marking short vowels were formed by combining a vowel sign with the *hitfa* sign (𐤀), and so were formally equivalent to the Tiberian *ḥateph* signs. Unlike the Tiberian *ḥateph* signs, the Babylonian compound signs were used to mark short vowels also in closed syllables (although a few examples of Tiberian *ḥateph* signs in closed syllables are found in the Tiberian Masoretic codices, including in Codex Leningradensis and the Aleppo Codex [cf. Yeivin 1968b:18, 20; Dotan 1985; Khan 1991:861–863]).

The *hitfa* sign is placed over the vowel sign in unstressed syllables closed by *dagesh* in Tiberian, viz., 𐤀 *a*, 𐤁 *i*, 𐤂 *u*. Examples: יִבְקֶשׁ *yəbaqqēš* (Tiberian יִבְקֶשׁ *yəbaqqēš*) ‘he seeks’, מִגִּדּוֹ *māgiddō* (Tiberian מִגִּדּוֹ *māgiddō*) ‘Megiddo’, וּמִכְלָם *u-mik-kullām* (Tiberian וּמִכְלָם *u-mik-kullām*) ‘and from all of them (m)’. These signs are used also on the final vowel of a word that is followed by a word beginning with a consonant with *dagesh* in *dahiq* constructions, reflecting the shortening of the vowel (→ Vowel Length), e.g., לִי הִשָּׁבְעָה לִי *hiššābā lli* (Tiberian לִי הִשָּׁבְעָה לִי *hiššābā lli*) ‘swear to me’ (Gen. 21.23) (Yeivin 1985:338–339).

In Babylonian there is a *dagesh* sign (see below), but this is only marked sporadically, whereas the compound signs mark the presence of *dagesh* systematically.

The *hitfa* sign was placed under the vowel sign in unstressed syllables closed by *shewa* in Tiberian, in closed syllables at the end of a word, and where Tiberian has *ḥateph* signs, viz., 𐤀 *u*, 𐤁 *e*, 𐤂 *ā*. Examples: בְּקִרְבוֹ *bə-qirbō* (Tiberian בְּקִרְבוֹ *bə-qirbō*) ‘within it (m)’, וַתֵּרֶד *wat-tēred* (Tiberian וַתֵּרֶד *wat-tēred*) ‘and she came down’, אָנוֹשׁ *ʾenōš* (Tiberian אָנוֹשׁ *ʾenōš*) ‘man’, וַיִּשָּׂא *way-yāqām* (Tiberian וַיִּשָּׂא *way-yāqām*) ‘and he arose’. Two further signs are used from the dot system, viz., 𐤀 *a* and 𐤁 *u*. The first (𐤀 *a*) represents a vowel corresponding to short *pataḥ* in a closed syllable in Tiberian or to the Tiberian *ḥateph pataḥ* sign. The second (𐤁 *u*) is used in contexts corresponding to short *qibbuš*, *qameš ḥatuf*, and *ḥateph qameš* in Tiberian (see below). Examples: וַיִּרְאֵם *way-yarʾēm* (Tiberian וַיִּרְאֵם *way-yarʾēm*) ‘and he showed them (m)’, עֲנָוִים *ʾanāwīm* (Tiberian עֲנָוִים *ʾanāwīm*) ‘humble (mpl)’, וַזְּנָאוֹ *ʾuznāw* (Tiberian וַזְּנָאוֹ *ʾuznāw*) ‘his

ears’, הַרְבּוֹת *ḥurābōt* (Tiberian הַרְבּוֹת *ḥārābōt*) ‘ruins’.

The following diacritical signs are written over specific letters in the manuscripts. The letter *shin* is distinguished from *šin* by writing a miniature ש above the former and a miniature ש above the latter. The consonantal pronunciation of final ה is expressed by writing a miniature ה above the letter, which corresponds in function to Tiberian *mappiq*. *Dagesh* is expressed by a miniature ד above a letter. The Babylonian term for *dagesh* was דִּגְשָׁא *digša*. The first letter of this term (ד *d*) was not used, since this was already in use as an accent sign, demonstrating that the accent signs were developed before the consonantal diacritics (→ Biblical Accents: Babylonian). *Rafe* is marked by placing over the letter a miniature letter ק *q*, representing the Babylonian term קִיפְיָא *qipya*. In some manuscripts with compound vocalization a dot is placed between the two words to mark *dahiq*, e.g., אֱלֹהֵיךָ קִצְף *ʾalakā qqašaf* (Tiberian אֱלֹהֵיךָ קִצְף *ʾalekā qqešef*) ‘against you is wrath’ (2 Chron. 19.2) (Yeivin 1985:338).

Manuscripts with Babylonian vocalization exhibit a number of features of phonology and morpho-phonology that are different from the Tiberian tradition. Some of the most important of these are the following.

#### I. INTERCHANGE OF *ḤOLEM* AND *ŠERE*

Some manuscripts exhibit an interchange of *ḥolem* and *šere*, e.g., יִרְחֵף *yəraḥōp* (Tiberian יִרְחֵף *yəraḥēp*) ‘it (m) hovers’ (Deut. 32.11), כֶּבֶדִי *kəbōdī* (Tiberian כֶּבֶדִי *kəbēdī*) ‘my liver’ (Lam. 2.11) (Yeivin 1985:369–371). This appears to reflect a fronting of the *ḥolem* vowel in Babylonian Hebrew pronunciation. The Karaite al-Qirqisānī, writing in the 10th century C.E., states that some Jews of Iraq said קִדְשִׁי *qādēš* instead of קִדּוֹשׁ *qādōš* ‘holy’ due to influence from the language of the ‘Nabat’ (i.e., the Aramaic speaking population of Iraq) (cf. al-Qirqisānī, *Kitāb al-Anwār u-al-Marāqib*, ed. Nemoy 1939:II 140). In medieval Arabic transcriptions of Hebrew made in the region where the Babylonian pronunciation was in use *ḥolem* is sometimes transcribed by *yā*, e.g., كَيْحُو *kyḥw ḥmw* ‘(the planet) Mercury’ (al-

Birūnī, *Chronology*, ed. Sachau 1878:187–192), which corresponds to Tiberian כֹּכַב הַמָּה *kōkab hammā* (→ Transcriptions into Arabic Script: Medieval Muslim Sources). In some varieties of the Yemenite tradition of Hebrew pronunciation, which are likely to have their historical roots in the Babylonian pronunciation, *holem* is fronted to the front rounded quality [ø:] or the front unrounded quality [e:], identical to *šere* (Morag 1963:92ff).

## 2. REFLEX OF HISTORICAL SHORT \*U

The vowel *holem* sometimes occurs in a number of contexts where there was a short \**u* at an earlier historical period. This is regularly found in prefix conjugation verbs before pronominal object suffixes in forms that have *holem* when not taking object suffixes. So, the forms יקטול *yiqṭōl*, תקטול *tiqṭōl*, אקטול *'iqṭōl*, נקטול *niqṭōl* (< \**yaqṭul*, \**taqṭul*, \**aqṭul*, \**naqṭul*, respectively), when taking pronominal suffixes, retain the *holem* in Babylonian, whereas in Tiberian the vowel is reduced to *shewa*, e.g., ישמרוני *yišmorēnī* (Tiberian ישמרני *yišmarēnī*) 'he guards me'. When, however, the form without object suffixes does not have *holem*, such as the forms יקטלו *yiqṭālū* and תקטלי *tiqṭālī*, then the corresponding form with object suffixes lacks *holem*, e.g., ישמרוני *yišmarūnī* (Tiberian ישמרוני *yišmarūnī*) 'they (m) guard me' (Yeivin 1985:469–472).

*Holem* regularly occurs before the cohortative suffix in 1st person verbal forms where Tiberian has *shewa*, e.g., אשמורה *'išmorā* (Tiberian אשמרה *'ešmārā*) 'I guard', נשמורה *nišmorā* (Tiberian נשמרה *nišmārā*) 'we guard' (Yeivin 1985:472–478).

In a few isolated places in the Tiberian tradition *ḥateph qameš* rather than *shewa* occurs on verbs in the aforementioned contexts, e.g., אשתלנו *'eštālennū* 'I will plant it (m)' (Ezek. 17.23), ואשקלה *wā-'ešqālā* 'and I weighed' (Ezra 8.25), אלקטהנא *'ālaqātā-nnā* 'let me glean' (Ruth 2.7). It is likely, therefore, that the Babylonian *holem* in such contexts reflects a short unstressed /o/ vowel rather than long /o/. In the Babylonian pronunciation tradition a short /o/ vowel did not shift to the quality of *qameš* /ɔ/, as was the case in Tiberian, so in this respect Babylonian is more archaic. This short

*o* can be assumed to derived ultimately from an original short \**u*.

The very preservation of a vowel in these verbal forms where Tiberian reduced it to *shewa* is also an archaic feature of Babylonian. The presence of a short rounded vowel in such forms is reflected also by earlier Latin and Greek transcriptions. Jerome (ca. 347–420 C.E.), for example, transcribes יזבלני *yizbālēnī* 'he will honor me' (Gen. 30.20) *iezbuleni*. In the Hexapla of Origen (ca. 185–254 C.E.) an *omicron* is sometimes written where Tiberian has *shewa* in prefix conjugation verb forms, reflecting a short *o* vowel, e.g., יפלו *yippālū* 'they [m] fall' Ps. 118.39) (→ Transcription into Greek and Latin script: Pre-Masoretic Period). In the Hebrew of the Dead Sea Scrolls prefix conjugation verbs are frequently written with *waw* after the second radical where Tiberian has *shewa*, e.g., יקטולו *yqṭulw*, אקטולה *'qṭulw*, יקטולוהו *yqṭulhw*. Yeivin considers that the *waw* after the second radical in all these forms reflects the preservation of an unstressed short *o* vowel (Yeivin 1972). Qimron (1986:51), on the other hand, holds that only in the forms with pronominal suffixes is the *waw* in an unstressed syllable, since in the other forms it was stressed, as in Tiberian pausal forms.

A *holem* preserving a short *o* vowel (< \**u*) in an open unstressed syllable occurs in a number of noun forms in Babylonian vocalization where Tiberian has *shewa* or *ḥateph qameš*, e.g., לבקרים *lab-boqārīm* (Tiberian לבקרים *lab-boqārīm*) 'in the mornings' (Lam. 3.23), צרי *šorī* (Tiberian צרי *šārī*) 'balm' (Jer. 51.8), הגרנות *haḡ-gorānōt* (Tiberian הגרנות *haḡ-gārānōt*) 'the threshing floors' (1 Sam. 23.1).

Short *holem* also occurs in unstressed closed syllables that originally contained a short \**u*. In many cases this corresponds to *qameš ḥatuf* /ā/ in Tiberian, which had developed by the further shift of the vowel \**o* to \**ā* (\**u* > \**o* > \**ā*), e.g., רני *ronnī* (Tiberian רני *rānnī*) 'rejoice (fs)!' (Zeph. 3.14), וימת *way-yāmot* (Tiberian וימת *way-yāmāt*) 'and he died' (2 Sam. 12.18). Vocalizations such as ויקם *way-yāqām* 'and he arose' with a compound *qameš* are due to the influence of the Tiberian reading tradition (ויקם *way-yāqām*). In a few cases Babylonian has short *holem* in such syllables where Tiberian has preserved the /u/ vowel, e.g., מועזי *mō'ezī*

*u-mā'ozzī* (Tiberian וּמְעֹזִי *u-mā'uzzī*) 'and my stronghold' (Jer. 16.19).

In some cases Babylonian preserves an original short *u* vowel in a closed or open unstressed syllable where Tiberian has a short *qameš* (*qameš haṭuf* or *ḥateph qameš*), e.g., חִכְמָה *ḥukmā* (Tiberian חִכְמָה *ḥākṁā*) 'wisdom' (Job 38.36), קֹדֶשׁ *quḏšō* (Tiberian קֹדֶשׁ *qāḏšō*) 'his holiness' (Ps. 24.3), הַקְּדוֹשִׁים *haq-quḏāšīm* (Tiberian הַקְּדוֹשִׁים *haq-qāḏāšīm*) 'the holy things' (2 Chron. 3.8) (Yeivin 1985:374–375).

### 3. SHORT ŠERE

In a number of contexts Babylonian has *šere* in unstressed syllables where Tiberian has *seghol* or *ḥateph seghol*, e.g., בֶּן רְאוּבֵן *ben-r'ūbēn* (Tiberian בֶּן־רְאוּבֵן *ben-r'ūbēn*) 'the son of Reuben' (Josh. 15.6), וַיֵּרֵד *way-yēred* (Tiberian וַיֵּרֵד *way-yēred*) 'and he went down' (Jer. 36.12), אֲנוֹשׁ *'enōš* (Tiberian אֲנוֹשׁ *'ēnōš*) 'man' (Job 5.17). In manuscripts with compound vocalization these vowels are represented by *šere* combined with the *hitfa* sign, demonstrating that they were short, e.g., בֶּן מְנַשֶּׁה *ben-mənašše* (Tiberian בֶּן־מְנַשֶּׁה *ben-mənašše*) 'son of Menasseh' (Num. 32.41), וַיִּבֶן *way-yiben* (Tiberian וַיִּבֶן *way-yiben*) 'and he built' (Exod. 1.11), אֲנוֹשׁ *'enōš* (Tiberian אֲנוֹשׁ *'ēnōš*) 'man' (Ps. 10.18). In Tiberian a short *e* shifted quality to *ε*, whereas Babylonian preserved its quality (Yeivin 1985:373–374). Not all cases of short unstressed *seghol* in Tiberian correspond to short *šere* in Babylonian. In the unstressed syllable of *segholate* nouns, for example, Babylonian normally has *pataḥ*, e.g., מֶלֶךְ *malak* (Tiberian מֶלֶךְ *melek*) 'king', סֵפֶר *sēpar* (Tiberian סֵפֶר *sēper*) 'book'. In *segholate* verbal forms, however, short *šere* is marked, as we have seen in וַיִּבֶן *way-yiben* 'and he built'.

### 4. THE LETTER RESH

In many manuscripts with Babylonian vocalization *dagesh* and *rafe* signs are marked on *resh* according to the same principles as with the *bgdkpt* letters (Yeivin 1985:351–355), in that the *dagesh* is *dagesh lene*, marking a harder pronunciation when not preceded by a vowel, rather than *dagesh forte* that marked gemination. Morag (1960:232) proposed that a more robust pronunciation of *resh* with *dagesh lene* in the Babylonian reading was manifested in a greater number of trills than *resh* with *rafe*.

This phenomenon in the Babylonian reading is referred to in the סֵפֶר יְצִירָה *sēper yešira* 'Book of Creation' (written in the 7th or 8th century C.E.) (→ *Resh*: Pre-Modern Hebrew).

### 5. EPENTHETIC VOWEL

As has been remarked above, in Old Babylonian manuscripts one finds vocalizations such as תִּקְרְבוּ *tiqirbū* (Tiberian תִּקְרְבוּ *tiqrəbū*) 'you (mpl) approach'. These reflect the insertion of an epenthetic vowel between the first two consonants of a word-internal consonantal cluster CCC [tiqrvu:] > [tiqirvu:]. In Tiberian, by contrast, an epenthetic is inserted between the last two consonants of the cluster, resulting in a vocalic *shewa*, viz., [tiqravu:]. Epenthesis of the type found in תִּקְרְבוּ *tiqirbū* reflects a typology of syllabification that was different from that of Tiberian (→ Syllable Structure: Biblical Hebrew). It does not occur systematically in the manuscripts. It is more frequently attested in verbal forms than nominal forms (Yeivin 1985:386–396). Where it occurs the second consonant of the internal cluster is often one of the sonorants למנר *lmnr*, e.g., וְנִכְרְתָּהּ *w-nikirtā* (Tiberian וְנִכְרְתָּהּ *wə-nikrətā*) 'and it will be cut off', וַיִּשְׁלְחוּ *way-yišlahū* (Tiberian וַיִּשְׁלְחוּ *way-yišlahū*) 'and they sent', וְנִבְנְתָהּ *w-nibnātā* (Tiberian וְנִבְנְתָהּ *wə-nibnātā*) 'and it shall be built', יִרְמִיָּהוּ *yirimyāhū* (Tiberian יִרְמִיָּהוּ *yirməyāhū*) 'Jeremiah'. The epenthetic is *hireq* where the preceding vowel is *hireq*, as in the preceding examples. If the preceding vowel is *shureq* the epenthetic is *shureq*, e.g., וְהִשְׁלְכוּ *w-hušlākū* (Tiberian וְהִשְׁלְכוּ *wə-hušlākū*) 'and they were cast' (Jer. 22.28).

In some cases the letter preceding the letter with the epenthetic has no vocalization or is marked with *shewa*, e.g., תִּשְׁמְעוּ *tšim'ū* (Tiberian תִּשְׁמְעוּ *tšmā'ū*) 'you (mpl) hear'. This appears to reflect elision of the vowel. The vocalization is often absent when the cluster is preceded by a vowel, e.g., וַיִּקְרְבוּ *wa-yqirbū* (Tiberian וַיִּקְרְבוּ *way-yiqrəbū*) 'and they (mpl) drew near'.

An epenthetic vowel is found also where the second consonant is a guttural, especially ה *h* and ח *ḥ*. In such cases the epenthetic is *pataḥ*, e.g., נִקְהְלוּ *niqahlū* (Tiberian נִקְהְלוּ *niqhālū*) 'they assembled', יִשְׁחֲטוּ *yšahṭū* (Tiberian יִשְׁחֲטוּ *yišḥāṭū*) 'they (mpl) slaughter'. A Tiberian type of syllabification is normally found when the

second consonant is ע' or א', e.g., יִזְעָקוּ *yiz'āqū* (Tiberian יִזְעָקוּ *yiz'āqū* 'they cry', וַיִּשְׁאַלוּ *way-yiš'ālū* (Tiberian וַיִּשְׁאַלוּ *way-yiš'ālū* 'and they asked'). The *pataḥ* vowel here is likely to reflect a short vowel corresponding to the *ḥateph pataḥ* of the Tiberian forms.

The insertion of an epenthetic before *yod* results in a long *i* vowel, as seen in forms such as כְּלִיָּאָ *kliḳā* (< *kiliyḳā* < *kilyḳā*, Tiberian כְּלִיָּאָ *kelyḳā*) 'your vessel', נְהִיָּאָ *nhīḳā* (< *nihiyḳā* < *nihyḳā*, Tiberian נְהִיָּאָ *nihyḳā*) 'it came about'.

The vocalization of initial *yod* with *hireq* where Tiberian has vocalic *shewa* in forms such as יְסוֹד *isōd* (Tiberian יְסוֹד *yəsōd*) 'foundation', also reflects epenthesis in the form of a prosthetic vowel before the initial cluster *ys* > *iy* > *īs*. Prosthesis of a vowel before initial consonantal clusters can be identified in some Arabic transcriptions in medieval Muslim sources of Hebrew proper names such as أرغو *rgw* (Tiberian רְעו *rə'u*) 'Reu' and أخوخ *hnuḥ* (Tiberian אֲחֻיָּאָ *hānōḳ*) 'Enoch' (→ Transcription into Arabic Script: Medieval Muslim Sources). It is likely that these reflect a Babylonian type of pronunciation.

Some Latin and Greek transcriptions of Hebrew from an earlier period reflect a similar typology of epenthesis, as in the following forms. Jerome (ca. 347–420 C.E.): *masarfoth* 'burnings' (Jer. 34.5, cf. Babylonian מַשְׂרַפּוֹת *masirfōt*, but Tiberian מִשְׂרַפּוֹת *mišrafōt*). Origen (ca. 185–254 C.E.): ἕπεσον 'let (my haters not) wink' (Ps. 35.19, cf. Tiberian יִקְרָשׁוּ *yiqrašū*). Septuagint (last quarter of 1st millennium B.C.E.): Ἰερειμίας 'Jeremiah' (cf. Babylonian יִרְמִיָּהוּ *yirimyāhū*, but Tiberian יִרְמִיָּהוּ *yirmayāhū*).

## 6. VOCALIZATION OF GUTTURALS

The vocalization of gutturals in the middle of a word in the Babylonian system exhibits a number of differences from Tiberian.

The unvoiced consonants ה *h* and ח *ḥ* have the same vocalization as strong consonants. Where, for example, a prefix of a verb with initial ה *h* or ח *ḥ* in Tiberian has a low vowel (*pataḥ* or *seghol*) and often a *ḥateph* vowel is inserted after the guttural, in Babylonian the vocalization of the prefix is identical to that of a strong verb with a *hireq*, e.g., יְהָרוֹס *yibrōs* (Tiberian יְהָרוֹס *yabārōs*) 'he destroys' (Job 12.14), וַיִּחַלְפוּ *wə-yihlōfū* (Tiberian וַיִּחַלְפוּ *wə-yahālōfū*) 'and they pass away' (Ps. 102.27), יִחַשְׁבֹּב

(Tiberian יִחַשְׁבֹּב *yahšōb*) 'he (does not) impute' (Ps. 32.2) (Yeivin 1985:301–303).

Where Tiberian has a *ḥateph* on the consonants א' and ע' and a vowel sign on the preceding letter, Babylonian has a vowel sign on the guttural and no sign or a *shewa* sign on the preceding letter: יַעֲמֹד, יַעֲמֹד (Tiberian יַעֲמֹד *yā'āmōd*) 'he stands' (Yeivin 1985:301–317). The *shewa* sign here appears to be representing a short vowel before the guttural, reflecting a pronunciation [jaʃamo:ð]. This contrasts with Tiberian, in which the vowel before the guttural was pronounced long [jaʃamo:ð] (→ Tiberian Reading Tradition; Vowel Length). Babylonian and Tiberian, therefore, reflect different typologies of syllabification in this respect (→ Syllable Structure: Biblical Hebrew). Two other types of vocalization of gutturals are attested in these contexts in Babylonian manuscripts, viz., יַעֲמֹד and יַעֲמֹד. The first can be regarded as a variant notation of יַעֲמֹד reflecting the pronunciation [jaʃamo:ð], whereas the second, which is the normal vocalization in Late Babylonian manuscripts, is an imitation of the Tiberian type of vocalization יַעֲמֹד *yā'āmōd*.

Gutturals at the beginning of a word that would have a *ḥateph* sign in Tiberian typically have a vowel sign in Babylonian vocalization, e.g., אַנִּי *anī* (Tiberian אַנִּי *ānī*) 'I', עֲשִׂיתָם *ʿasītam* (Tiberian עֲשִׂיתָם *ʿasītem*) 'you (mpl) did', אֱמוּנָה *emūnā* (Tiberian אֱמוּנָה *ʿemūnā* 'faith'). In manuscripts with compound vocalization the initial vowel is represented by a short vowel sign or by the *shewa* vowel, e.g., אַנְשִׁים, אַנְשִׁים *anāšim* (Tiberian אַנְשִׁים *ānāšim*) 'men, people', אַנּוֹשׁ *enōš* (Tiberian אַנּוֹשׁ *ʿenōš*) 'man', suggesting that the initial vowel in the corresponding forms vocalized by a vowel in the simple system of vocalization was read as short. The Babylonian incantation bowls have spellings such as אֵלוּהַ *ylwḥ* (Tiberian אֵלוּהַ *ʿēlōah*) 'god', in which the *mater lectionis yod* in the first syllable reflects *šere*, as in the Babylonian vocalization (Mishor 2007:220).

When gutturals occur at the end of a word after a long high vowel a furtive *pataḥ* is generally not inserted as it is in Tiberian, e.g., רוּחַ *rūḥ* (Tiberian רוּחַ) 'spirit', יוֹדֵעַ *yōdē* (Tiberian יוֹדֵעַ) 'knows'. In Old Babylonian, however, a *pataḥ* sometimes follows a word-final *ʿayin* (Yeivin 1985:326–330). This is found when the *ʿayin* is preceded by any vowel and is particularly

common after *qameṣ*, e.g., לַמִּפְגָּע *lə-miḥgāʿ* (Tiberian לַמִּפְגָּע *lə-miḥgāʿ*) ‘as a target’ (Job 7.20), וְתָרְעָה *wi-tārēʿa* (Tiberian וְתָרְעָה *wə-tārēʿa*) ‘and Tarea’ (1 Chron. 8.35). When the vowel preceding the ‘ayin is unstressed and corresponds to *pataḥ* in Tiberian, this vowel is represented by the *hitfa* sign and a *pataḥ* sign is written on the final ‘ayin, e.g., בָּצַע *baṣʿa* (Tiberian בָּצַע *beṣaʿ*) ‘profit’, שָׂבַע *šōbʿa* (Tiberian שָׂבַע *šōbaʿ*) ‘satiety’. This corresponds to vocalizations of gutturals in word-internal position, such as יַעֲמֹד, which represents the pronunciation [jaʕamo:ð]. The *pataḥ* at the end of the word can be interpreted as an epenthetic added to the preceding syllable, corresponding to the syllabification of gutturals word-internally, viz., [jaʕa.mo:ð], [šo.vaʕa] (→ Syllable Structure: Biblical Hebrew).

## 7. VOCALIZATION OF CONJUNCTIVE WAW

Before a letter with *shewa* conjunctive *waw* is generally vocalized with *hireq*, like other prefixed particles, rather than *shureq* (Yeivin 1985:1152–1156), e.g., וְתַלְבֵּב *wi-tlabbēb* (Tiberian וְתַלְבֵּב *u-tlabbēb*) ‘and let her make cakes’ (2 Sam. 13.6). This includes cases where the *waw* is followed by another prefixed particle, e.g., וּבַיּוֹם *wi-b-yōm* (Tiberian וּבַיּוֹם *u-b-yōm*) ‘and on the day’ (Isa. 49.8), וּלְלַעַג *wi-l-laʿaḡ* (Tiberian וּלְלַעַג *u-l-laʿaḡ*) ‘and into derision’ (Ezek. 36.4). The appearance of an *i* vowel before the *waw* is reflected also in the Babylonian incantation bowls, e.g., וּיְכַרְבּוּבִים *wy-krubym* ‘and cherubim’ (Mishor 2007:219). Before labial consonants (בּוּמֵפ *buṃp*) that are followed by a vowel the *waw* is generally vocalized with *shewa* rather than *shureq*, e.g., וַיֵּבֶן *w-bā* (Tiberian וַיֵּבֶן *u-bā*) ‘and he went in’ (2 Sam. 12.16), וַיִּמְלֹק *w-mālaq* (Tiberian וַיִּמְלֹק *u-mālaq*) ‘and he will wring off’ (Lev. 1.15), וַיִּפְּאֵן *w-pō* (Tiberian וַיִּפְּאֵן *u-pō*) ‘and here’ (Job 38.11).

## 8. LACK OF ATTENUATION

An *a* vowel in an unstressed closed syllable is often preserved where it has been attenuated to *i* in the Tiberian pronunciation tradition (Yeivin 1985:381–383; → Attenuation). This is particularly common in nominal patterns with the derivative affix *m-*, e.g., מִזְבֵּחַ *mazbēḥ* (Tiberian מִזְבֵּחַ *mizbēḥ*) ‘altar’, מַכְשׁוֹל *maḥšōl* (Tiberian

מַכְשׁוֹל *miḥšōl*) ‘stumbling-block’, מַדְבָּר *maḏbār* (Tiberian מַדְבָּר *miḏbār*) ‘desert’. It is attested also elsewhere. In segholate forms with suffixes which have an *i* vowel after the first radical in Tiberian due to attenuation, Babylonian often preserves the original *a* vowel, e.g., קַבְרוֹ *qabrō* (Tiberian קַבְרוֹ *qibrō*) ‘his grave’, בִּטְנִי *batnī* (Tiberian בִּטְנִי *biṭnī*) ‘my belly’. The opposite, however, is occasionally attested, e.g., רַגְלָיו *raglāw* (Tiberian רַגְלָיו *raglāw*) ‘his legs’ (Yeivin 1985:832), which is also attested in the incantation bowls (Mishor 2007:223): רִיגְלוֹ *ryglw*. In nouns and verbal forms which have an *i* vowel in Tiberian due to the shift of stress after the attachment of pronominal suffixes, Babylonian often has *a*, e.g., בְּצַבָּאוֹתֵינוּ *b-ṣabʿōtēnū* (Tiberian בְּצַבָּאוֹתֵינוּ *ba-ṣibʿōtēnū*) ‘with our armies’ (Ps. 44.10), דָּמָכֶם *damkam* (Tiberian דָּמָכֶם *dimkam*) ‘your (mpl) blood’ (Gen. 9.10), יְלַדְתִּיךָ *yladtikā* (Tiberian יְלַדְתִּיךָ *yaliditkā*) ‘I have begotten you (ms)’ (Ps. 2.7). The original *a* is preserved also in the numerals שֶׁבַע *šabʿā* (Tiberian שֶׁבַע *šibʿā*) ‘seven’ and שֶׁבַעִים *šabʿim* (Tiberian שֶׁבַעִים *šibʿim*) ‘seventy’.

The lack of attenuation of original *a* is reflected by earlier transcriptions of Hebrew into Greek and Latin script, e.g., Septuagint: Μαβσαρ (Tiberian מַבְּסָר *maḥṣar*) ‘Mabsar’; Origen’s Hexapla: λαμαλαμα (Tiberian לַמְּלַחְמָה *lam-milḥāmā*) ‘for the battle’ (Ps. 18.40); Jerome: *macne* (Tiberian מִקְנֵה *miqne*) ‘cattle’ (→ Transcription into Greek and Latin Script: Pre-Masoretic Period).

## 9. PATAḤ IN MORPHOLOGICAL PATTERNS WHERE TIBERIAN HAS ŠERE

In a number of nominal and verbal morphological patterns Babylonian has *pataḥ* where Tiberian has *šere*.

Many monosyllabic nouns with an originally doubled final consonant which have *šere* in Tiberian are vocalized with *pataḥ* in both context and pause (Yeivin 1985:778–785), e.g., לֵב *lab* (Tiberian לֵב *lēb*) ‘heart’; אֵשׁ *ʿaš* (Tiberian אֵשׁ *ʿeš*) ‘fire’, עַת *ʿat* (Tiberian עַת *ʿēt*) ‘time’, צֶלַל *šal* (Tiberian צֶלַל *šēl*) ‘shadow’, קַן *qan* (Tiberian קַן *qēn*) ‘nest’, קֵץ *qaš* (Tiberian קֵץ *qēš*) ‘end’, שֵׁן *šan* (Tiberian שֵׁן *šēn*) ‘tooth’. Occasionally the pausal form is vocalized with *qameṣ*, e.g., בְּצֶלַל *baš-šāl* (Tiberian בְּצֶלַל *baš-šēl*) ‘in the shade’ (Jon. 4.5). A few nouns of this pattern have *šere* as in Tiberian, e.g., אֵם *ʿem* (Tiberian אֵם

'em) 'mother', הֵן *hēn* (Tiberian הֵן *hēn*) 'grace', חֵץ *hēs* (Tiberian חֵץ *hēs*) 'arrow'. The occurrence of *pataḥ* in words of this pattern can be attributed to the operation of → Philippi's Law. This was operative in a few nouns with final geminated consonants in Tiberian, e.g., בַּת *bat* < \**bitt* 'daughter' (cf. בִּתִּי *bittī* 'my daughter'), גַּת *gat* < \**gatt* 'winepress' (cf. גִּתּוֹת *gittōt* 'winepresses'). The extent of its operation was wider in Babylonian. It should be noted that stressed *pataḥ* in these forms was pronounced long, so there was no difference in the length of the vowel in the various forms, only in its quality: Babylonian [la:b] vs. Tiberian [le:b], Tiberian [ga:t] vs. Tiberian [ʕe:t] (→ Vowel Length).

*Pataḥ* appears in various plural pronouns where Tiberian has *šere* (Yeivin 1985:1104–1105), e.g., אַתָּן 'attan 'you (fpl)' (Tiberian אַתָּנָן *attēn*); הֵם *ham* 'they (mpl)' (Tiberian הֵם *hēm*), הֵם *hā-ham* 'those' (mpl) (Tiberian הֵם *hā-hēm*); הֵמָּה *hammā* 'they (mpl)' (Tiberian הֵמָּה *hēmṁā*), הֵנָּה *hannā* 'they (fpl)' (Tiberian הֵנָּה *hēnnā*). The *a* vowel in these contexts also can be considered to be the result of Philippi's law (Bauer and Leander 1922:249–250). It is only partially operative in Tiberian in pronouns; cf. בָּהֶם *bāhem* 'in them (mpl)' (Babylonian בָּהֶם *bāham*), where the *seghol* can be regarded as the result of the lowering of the vowel by Philippi's law.

*Pataḥ* occurs in the numeral 'five', especially in pause (חַמֵּשׁ *ḥāmaš*), though the form with *šere* is also found (חַמֶּשׁ *ḥamēš*) (Yeivin 1985:1109–1110).

Many *segholate* nouns that have *šere* or *holem* in the first syllable in Tiberian have *pataḥ* in Babylonian, e.g., נָצַר *našar* (Tiberian נָצַר *nēšer*) 'sprout' (Isa. 60.21), בַּשָּׁפֶל *baš-šāpal* (Tiberian בַּשָּׁפֶל *baš-šēpel*) 'in a low place' (Eccl. 10.6), חֹטֶר *ḥatar* (Tiberian חֹטֶר *ḥōšer*) 'rod' (Prov. 14.3), רַתָּם *raṭam* (Tiberian רַתָּם *rōšem*) 'broom tree' (1 Kgs 19.5) (Yeivin 1985:817–850).

Most verbal forms that have *šere* in the final syllable in Tiberian are attested in many cases with *pataḥ* in this syllable in Babylonian.

Suffix conjugation verb forms with the Tiberian pattern קָטַל *qāṭel* regularly have *pataḥ* when occurring in context, e.g., זָקַן *zāqan* (Tiberian זָקַן *zāqēn*) 'he grew old' (2 Sam. 19.33), יָבֵשׁ *yābaš* (Tiberian יָבֵשׁ *yābēš*) 'it has dried' (Ps. 22.16). In pause they usually have *šere*, as in Tiberian, e.g., וְטָהַר *w-tāhēr* (Tiberian וְטָהַר *w-tāhēr*) 'and it shall be clean' (Lev. 14.53), though occasionally they have *pataḥ*, e.g., דָּבַק

*dābāq* (Tiberian דָּבַק *dābēq*) 'he stuck to' (2 Kgs 3.3) (Yeivin 1985:434–435).

Many verbs that in Tiberian have *šere* in the final syllable of the singular of the prefix conjugation *qal* have *pataḥ* in Babylonian, in both context and pause, e.g., תֵּלַךְ *tēlaḥ* (Tiberian תֵּלַךְ *tēlek*) 'she will [not] go' (Gen. 24.39), תֵּלַד *tēlad* (Tiberian תֵּלַד *tēled*) 'she will give birth' (Deut. 28.57), יָשַׁב *yēšab* (Tiberian יָשַׁב *yēšēb*) 'he will dwell' (Num. 35.28), יָרַד *yērad* (Tiberian יָרַד *yērēd*) 'he shall go down' (1 Sam. 26.10). In pause forms of the prefix conjugation that end in a vowel always have *šere* in the penultimate syllable, as in Tiberian, e.g., תֵּלְכִי *tēlekī* (Tiberian תֵּלְכִי *tēlekī*) 'are you going?' (Gen. 16.8), וְיֵלְכוּ *w-yēlēkū* (Tiberian וְיֵלְכוּ *w-yēlēkū*) 'that they (m) may go' (Job 38.35), יֵשְׁבוּ *yēšēbū* (Tiberian יֵשְׁבוּ *yēšēbū*) 'they (m) sit' (Eccl. 10.6) (Yeivin 1985:602–603).

*Nif'al* prefix conjugation forms generally have *pataḥ* in the final syllable in context (יִקְרָא *yiqqāṭal*). In pause they are usually vocalized with *šere* (יִקְרָא *yiqqāṭel*) and occasionally with *pataḥ* (יִקְרָא *yiqqāṭal*). In pause forms that end in a vowel always have *šere* in the penultimate syllable, e.g., תִּנְצָלִי *tinnāšēli* (Tiberian תִּנְצָלִי *tinnāšēli*) 'you (fs) will be rescued' (Mic. 4.10) (Yeivin 1985:505–507).

The final syllable of the 3ms suffix conjugation *pi'el* always has *pataḥ* in both context and pause (קִיְטַל *qiṭṭal*). The pausal form of the 3mpl has *šere* (קִיְטְלוּ *qiṭṭēlu*). In the 3ms of the suffix conjugation the vowel of the final syllable is usually *šere* (יִקְרָא *yiqqāṭel*), but is occasionally vocalized with *pataḥ* (יִקְרָא *yiqqāṭal*). Pausal forms in the prefix conjugations regularly have *šere* (Yeivin 1985:514–515, 526–527).

In the participles that in Tiberian have the patterns קוֹטֵל *qōṭel*, קוֹטֵל *qāṭel*, and מְקוֹטֵל *maqāṭel*, also the Babylonian tradition regularly has *šere*. There are sporadic cases where *pataḥ* occurs. Most of these can be interpreted as construct forms, e.g., חֹתֵן מֹשֶׁה *ḥōtan mōša* (Tiberian חֹתֵן מֹשֶׁה *ḥōtēn mōše*) 'the father-in-law of Moses' (Judg. 1.16) (Yeivin 1985:438–445, 519–522).

#### 10. FIRST PERSON SINGULAR VERBAL PREFIX

The prefix of the first person singular in the prefix conjugation has a vocalization that is different from that of Tiberian. Where Tiberian has *seghol* in the prefix Babylonian generally has *hireq*, e.g., וְאִתְּפֹס *w-ā-itpōs* (Tiberian

וָאֶתְפַּשׁ *wā'etpōš* 'and I seized' (Deut. 9.17) (Yeivin 1985:449). In the *pi'el* Babylonian generally has *šere* in the prefix, where Tiberian has *ḥateph pataḥ*, e.g., אֶדְבַּר *'edabbēr* (Tiberian אֶדְבַּר *'ādabbēr*) 'I speak' (Num. 12.8). In manuscripts with compound vocalization the *šere* is marked as short with the addition of a *ḥitfa* sign, e.g., וְאֶדְבַּרְהָ *w-'edabbərə* (Tiberian וְאֶדְבַּרְהָ *wa-'ādabbərə*) 'and I will speak' (Deut. 5.31) (Yeivin 1985:522). This feature is reflected in the Babylonian incantation bowls by a *mater lectionis yod*, e.g., אִירְחִים *'yrḥym* (Tiberian אִרְחִים *'araḥēm*) 'I have mercy' (Mishor 2007:221). According to Steiner (1980) it reflects the original \**i* vowel of the prefixes of the *pi'el* in proto-Hebrew.

## 11. SUFFIXES ON THE PREPOSITION מִן *MIN*

Whereas the 3ms and the 1cpl pronominal suffixes on the preposition מִן *min* have the same vocalization in Tiberian (מִמֵּנּוּ *mimmennū* 'from him/from us'), these are distinguished in Babylonian vocalization. The Babylonian form of the 3ms corresponds to Tiberian, viz., מִמֵּנּוּ *mimmannū* 'from him'. The 1cpl is pointed with *šere* and without a following *dagesh*: מִמֵּנּוּ *mimmēnū* 'from us'. This distinction between Tiberian and Babylonian pronunciation is mentioned in some medieval grammatical sources (Yeivin 1985:1139–1141; Dotan 1997:39).

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