The Tiberian Pronunciation Tradition of Biblical Hebrew

Volume I

GEOFFREY KHAN







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I.3. DAGESH AND RAFE

I.3.1. DAGESH

I.3.1.1. Preliminary Remarks

Dagesh is a dot that is marked within a letter. It is in origin an Aramaic active participle meaning 'stabbing' from the Aramaic root d-g- \check{s} 'to stab'. This referred, it seems, to the 'stabbing' of the letter by the pen when the sign was marked.

The *dagesh* sign was used mainly in two contexts. These are (i) on a consonant that was geminated (traditionally referred to in modern grammars as *dagesh forte*) and (ii) on the consonants when they were realized as plosives (traditionally referred to as *dagesh lene*).¹ In both cases the letter with *dagesh* was pronounced with greater pressure than its counterpart without *dagesh*.

The majority of consonants in the Tiberian pronunciation tradition could be marked with a *dagesh*.

¹ Our terms dagesh forte and dagesh lene go back to David Qimḥi (1160-1235), who uses the Hebrew terms דגש חזק (dagesh forte) and דגש קל are used also (dagesh lene) in his Mikhlol. The terms דגש חזק and דגש are used also by Yequti'el ha-Naqadan, who was active in medieval Ashkenaz in the second half of the thirteenth century. He does not mention David Qimḥi's Mikhlol, which was written earlier, but it is possible that Yequti'el borrowed this terminology from Qimḥi (Yarqoni 1985, 105–13).

Dagesh is not marked, however, on the laryngeals and pharyngeals (אהעת) in the Standard Tiberian tradition, except in a few isolated cases to ensure correct reading (e.g. the *dagesh* in *'alef* in four words, see §I.1.1.). In principle, therefore, these consonants are not geminated.

The letter *resh*, like the laryngeal and pharyngeal consonants, is generally not geminated by *dagesh*. Occasionally, however, the *resh* does have *dagesh*, e.g.

- L: לֹא־כַרֵת שַׁרֵּך 'your navel string was not cut' (Ezek. 16.4)
- L: מֵרֵת נְפְשֵׁו 'the bitterness of its soul' (Prov. 14.10)
- L: שֶׁרְאִשִׁי 'because my head' (Cant. 5.2)
- L: מאומה רֵע 'anything bad' (Jer. 39.12)
- L: הַּרְעְמֵה 'to irritate her' (1 Sam. 1.6)

When it is marked in cases such as these, it should be identified as *dagesh forte*, indicating the gemination of the consonant. In the attested examples, the *resh* with *dagesh* in the Tiberian Masoretic tradition would have had its primary realization as an uvular trill according to the rules that have come down to us from the medieval sources (§I.I.1.20.). This does not appear, however, to have been a relevant conditioning factor for the *dagesh*. Some Middle Eastern Jewish communities pronounce the *resh* as geminate in their biblical reading where the *dagesh* was marked, but in all cases they pronounce the *resh* as an apical-alveolar.²

In medieval manuscripts of Rabbinic Hebrew that belong to the eastern tradition of transmission, *dagesh* is marked on *resh*

² Morag (1960, 207–8).

more frequently than it is in the Tiberian biblical text.³ The tendency to mark *dagesh* is greater in some eastern manuscripts than in others. It is particularly common in the Parma B manuscript of the Mishnah. The dagesh is marked on resh after the relative particle v še and on the medial resh of a number of verbal and nominal morphological patterns with a geminated middle radical, e.g. עירב 'he mixed' (pi'el) and מעורבת 'mixed' (pu'al), שירב 'weavers.'4 The resh is pronounced geminated in a similar range of contexts in Middle Eastern reading traditions of Rabbinic Hebrew that have survived into modern times, e.g. Aleppo [[erra?a'ta] (שראתה) 'who has seen (fs)' (Berakhot 3.6), [Sər're:β] (ערב) 'he created an 'eruv' ('Eruvin 2.6), [leharra gin] 'to murderers' (להרגין) (Nedarim 3.4).5 The gemination is more widespread in some traditions than in others. Also in verbal and nominal patterns with a geminated middle radical it tends to be restricted to certain verbal roots and lexical items, as is the case in the medieval manuscripts. Sometimes there are variations within the same root that are exploited to express a semantic distinction. In Jerba, for example, the resh in the root ערב is geminated in the pi'el when it has the meaning of mixing one thing with another, but it is not geminated when it has the sense of creating an 'eruv. Morag believes that the lack of consistency in the gemination of the resh across the traditions of Rabbinic reading and within

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³ Bar-Asher (1987).

⁴ Bar-Asher (1987, 13–14).

⁵ Katz (1981, 32–36).

individual traditions may have been the result of varying degrees of influence from biblical reading traditions.⁶

The *dagesh* in the *resh* in the Tiberian biblical tradition in a case such as שָׁרֹאשִׁ 'because my head' (Cant. 5.2) after the particle -שֶׁ, which corresponds to one of the contexts where it occurs in the eastern Rabbinic traditions, suggests that the tradition of gemination of this letter is of considerable time depth. It is likely to have had its origin at a period when Hebrew was a living language, assuming that Rabbinic Hebrew originated in the vernacular of the Tannaitic period. Its occurrence here may reflect the influence of spoken Hebrew at the time of the formation of the Tiberian reading tradition, the particle -ψ itself being a feature of Rabbinic Hebrew.

I.3.1.2. Morphological Gemination

A dagesh may reflect gemination that is a feature of the morphological pattern of a word. This typically occurs in the second radical of the root, e.g. בָּקָשׁ 'he sought', נַּנָב 'thief', יְדָנּוּן 'gracious'. A possible case of morphological gemination of resh in the Tiberian biblical tradition is לְא־כָבְרַת שָׁבֵּיֹך 'your navel string was not cut' (Ezek. 16.4).

Morphological gemination also includes gemination that is inherent to the root. When a root has identical consonants as its two final radicals, these appear as a geminated consonant with *dagesh* when adjacent to each other before an affix. This

⁶ Morag (1960, 208–16).

gemination does not occur in word final-position when the stem does not have an affix, e.g.

עמים 'peoples', עמי 'his people'; cf. sing. עם '*'amm 'gardens', אַני 'his garden'; cf. sing. 3 < *gann

I.3.1.3. Dagesh to Distinguish Meaning

In various cases, gemination of a consonant reflected by a *dagesh* sign is used in the Tiberian tradition as a strategy to distinguish homophones (Yeivin 1980, 49, 294).

This may be contextually dependent. When, for example, the negator \aleph^i is juxtaposed with the homophonous prepositional phrase \aleph^i a *dagesh* is added to the negator to distinguish the two, e.g.

- L: אָא לְּוֹ יִהְיֶה הַחָּבֶרע [ˈlloː ˈloː] 'The offspring would not be his' (Gen. 38.9)
- L: עַל־רְיב לְאִ־לְוּ [ˌllo:-ˈlo:] 'in an argument that is not his' (Prov. 26.17)

Gemination to distinguish homophones, however, is generally a permanent feature of the morphological pattern. It can be regarded, therefore, as a type of morphological gemination. Examples of this include cases such אֲבִיר 'powerful' referring to God, used in phrases such as אֲבִיר יַשָּקֹב 'the Mighty One of Jacob' (Gen. 49.24, Isa. 49.26, Isa. 60.16, Psa. 132.2, 5) vs. אַבִּיר 'powerful', used to refer to humans, עֲצָבִים 'toils' vs. עֲצַבִּים 'four spend the night' יַנִיח 'he gives rest' vs. יְנִיח 'you spend the night' vs. יְנִיח 'you murmur against', and the historical gemination

separating the pairs יְחֵל 'he begins' (Jud. 10.18) vs. יַחֵל 'he profanes' (Num. 30.3). The gemination in these pairs of forms most likely originates in existing variant morphological patterns that have been exploited to avoid homophony. 8

The gemination marked by dagesh in the interjection word אָּנָּׁא (also written אָּנָּׁא) may have been a device to distinguish it from אַנֿה 'to where?.'9

The use of *dagesh* to distinguish the meaning of homophones or polysemous words is more frequently encountered in the Babylonian tradition of Biblical Hebrew (Yeivin 1985, 355–63). In Babylonian vocalization, a *dagesh* (known as *digsha* in the Babylonian tradition) is represented by a superscribed minute *gimel* and *rafe* (known as *qipya*) by a superscribed minute *qof*.

In many cases in the Babylonian tradition a *dagesh* is added to distinguish between the use of a word that has an association with God and the use of the same word that has an association with humans (often with negative connotations) or foreign gods. This has been seen already in the Tiberian tradition in pairs such as עֵצָבִים vs. עֵצָבִים vs. עֵצָבִים vs. עֵצָבִים As in the Tiberian tradition, the *dagesh* is used in the Babylonian tradition in the member of the pair associated with humans or foreign gods. The word

⁷ Yeivin (1985, 361–63).

⁸ A few cases of a *dagesh* that appear in the BHS edition and were identified by Knauf (1979) as serving to distinguish meaning have recently been shown by Golinets (2013, 247–52) to be no more than specks on the parchment of the manuscript.

⁹ Yeivin (1985, 1119).

אלוהים, for example, is marked with *dagesh* when it refers to foreign gods (Yeivin 1985, 357, 909–10), e.g. 10

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אלהים (OB | L [BHS]: אֱלֹהִים אֲחֵלִים Deut 11.16 'other gods') אלהי (OB | L [BHS]: אֱלֹהִי מִצְרָיִם Exod. 12.12 'the gods of Egypt')
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The *dagesh* is used also in the cognate word in Biblical Aramaic when it refers to foreign gods, e.g.

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לֹאלֹה" דהבא (MB | L [BHS]: לַאלָהֵי הַבְּבָא Dan 5.4 'the gods of gold')
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The word בהנים is marked with a *dagesh* when it refers to 'priests of foreign gods' (Yeivin 1985, 358), e.g.

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הבֹהנים (MB | L [BHS]: הַבּּהְנִים Zeph 1.4 'the priests') בּהְנִים (MB | L [BHS]: הַבּּהְנִים בְּחָנִים (MB | L [BHS]: בּהְנִים בְּחָנִים (MB | L [BHS]: בּהְנִים (MB | L [BHS]: בּהְנִים (בּחַבְּיִם (MB | L [BHS]: בּהְנִים (MB | L [BHS]: בּהְנִי
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A *dagesh* is used elsewhere in manuscripts with Babylonian vocalization to mark other types of semantic distinctions of homophones. It is frequently marked on the prepositional phrase לא, for example, to distinguish it from the homophone לא (Yeivin 1985, 1132–33), e.g.

ישלֹם (OB | L [BHS]: מָי יְשַׁלֶּם־לְּז Job 21.31 'who will repay him')

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 $^{^{10}}$ Data supplied by Shai Heijmans. OB = Old Babylonian, MB = Middle Babylonian.

לאוֹיב לוֹ (OB | L [BHS]: לְאוֹיב לְוֹ Job 33.10 'as an enemy for him')

This includes cases where the qere is $\dagger \dot{b}$ but the ketiv is \dot{b} , e.g

אלא (OB | ketiv ולא־שֵׁם, qere וְלוֹי 1 Chron. 11.20 'and he has a name')

Other cases include, for example, a *dagesh* on the word נא in Exod. 12.9, where it denotes 'raw', to distinguish it from אז expressing a request (Yeivin 1985, 357) and a *dagesh* on the *resh* of עריך 'your enemy' in 1 Sam. 28.16 presumably to distinguish it from the plural of ערים 'towns' (Yeivin 1985, 354):

מֹמֹנוֹ נֹא (OB | L [BHS]: אַל־תּאַכְלְוּ מִמֶּנוּ נָּא Exod. 12.9 'do not eat any of it raw')

'עְבֶּדְ (OB | L [BHS]: טֶבֶדְ 1 Sam. 28.16 'your enemy')

The examples of dagesh functioning to distinguish meaning in the Babylonian tradition cited above are most easily interpreted as innovative additions to existing forms rather than morphological variants. It should be noted that in some cases the dagesh is marked after a long vowel, e.g. עמֹל , דֹר עׁמֹל . The question arises as to whether these dagesh signs reflect gemination or are simply diacritical signs. Yeivin (1985, 355–63) believes they indeed have the function of dagesh forte. There is, moreover, objective evidence of gemination of dagesh to distinguish meaning in the Tiberian tradition in forms with a long vowel such as אָבָּה by the marking Arabic shadda in the Karaite transcriptions, e.g.

וטֿן (BL Or 2556, fol. 40r, 9 | L [BHS]: אָנָא Neh. 1.5. 'Oh!') איי וויט (איי אַנָא Neh. 1.5. 'Oh!')

There is also evidence of morphophonemic restructuring by means of innovative gemination in a variety of other reading traditions, including those that have come down to modern times in oral form.

The function of gemination to distinguish meanings of homophones is identifiable, for example, in the reading traditions of Rabbinic Hebrew that are reflected in the early vocalized manuscripts of the Mishnah. Kutscher (1969, 56, 76) drew attention to the following pair of words in the Kaufmann manuscript:

'piece' חַתִּיכָה (cutting' vs. חַתִּיכָה 'piece'

The use of the pattern with *dagesh* to distinguish the concrete entity that is the result of the cutting from the verbal noun of the same root is likely to have developed by analogy with other nouns with the morphological pattern *CCiCCa* that express concrete entities in Rabbinic Hebrew (Bar-Asher 2015, 1342).

Various cases of gemination to distinguish meaning have been identified in the living oral tradition of Rabbinic Hebrew of the Yemenite Jews and the Hebrew component in their speech by Gluska (1995). These include distinctions between verbal forms and nouns, in which the noun has the gemination, e.g.

¹¹ In this manuscript initial 'alef + long qames, i.e. [?ɔ:], is represented by a single Arabic 'alif. In Biblical Aramaic a long vowel is more widely tolerated in an unstressed syllable closed by a geminated consonant, e.g. עָּלִּיץ 'they enter' (Dan. 4.4 qere); cf. also Syriac 'āllīn (Nöldeke 1869, 457).

יְבִינְה 'making cheese' vs. גְבִינָה 'cheese (noun)' 'living (3pl. verbal adjective)' vs. חַיִּים 'life (noun)'

Morag (1996) draws attention to some uses of gemination to distinguish meaning in the living oral tradition of Aramaic among the Yemenite Jews, e.g.

י (referring to God) vs. מָיָא 'living' (referring to humans)

In the Samaritan oral tradition of reading the Pentateuch there are numerous examples of morphophonemic restructuring to distinguish homophones.¹² These include the strategy of distinguishing forms by the addition of gemination to one of the pair, e.g.

'āːrəm 'the cities' (Tiberian הֶּעֶרִים) vs. 'arrəm 'cities' (Tiberian ערים)¹³

wāmå 'and the cubit' (Tiberian וְהָאַמְּה) vs. wammå 'and a cubit' (Tiberian ואמה) 14

adani 'Lord' (divine) vs. adanni 'master' (human)¹⁵

āssīda 'the stork' (animal) (Tiberian הַחֲסִידָּׁה Lev. 11.19) vs. assidak 'your pious one' (human) (Tiberian חֲסִידֶדְ Deut. 33.8)¹⁶

¹² See in particular Florentin (1996) for examples of this phenomenon.

¹³ Ben-Ḥayyim (2000, 92).

¹⁴ Ben-Ḥayyim (2000, 92).

¹⁵ Ben-Hayyim (1957a-77 vol. 4, 8-9, vol. 5, 194, 2000, 260).

¹⁶ Florentin (1996, 231).

yamən 'Yamin' (proper name) (Tiberian יֶמֶין Gen. 46.10) vs. yammən 'right hand' (Tiberian יֶמֶין)¹⁷ wyā̈båd 'and he perished (past)' (Tiberian וִיאֹבַד) vs. yäbbåd 'he perishes (non-past)' (Tiberian יאבר)¹⁸

I.3.1.4. Gemination Resulting from Assimilation

In some cases, gemination has resulted from the process of a consonant assimilating another consonant with which it is contact. This typically occurs at the boundary between the stem of a word and an affix. It also functions, therefore, as a marker of a morphological boundary, e.g.

```
'נְפֹׁל [jip-'pho:ol] 'he falls' < *yinpol

אָּהַיְ [nɔː'θa:atʰ-tʰ] 'you (fs) gave' < *natant

מָּשְׁים [miʃ-'ʃɔ:ɔm] 'from there' < מָן שָׁים מְּשִׁים 
מִשְּׁים '[jiq-'qa:aħ] 'he takes' < *yilqaḥ

וְתִּכּוֹנֵן (Num. 21.7) [vaθikʰ-kʰoːˈne:en] 'and let it be established' < מָתְכּוֹנֵן
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¹⁷ Florentin (1996, 234).

¹⁸ Florentin (1996, 218). This particular minimal pair is not attested in the Samaritan Pentateuch, but it can be inferred from the contrasting patterns used for the attested forms of the past and non-past, e.g. wyā̄bā̄du יְּאַבְּדְּ 'and they perished' (Num. 16.33) vs. tā̄bbàd מֹא 'it becomes lost' (Deut. 22.3).

I.3.1.5. Gemination to Preserve High Lexical Vowels

In a number of cases a consonant after a high lexical vowel, most commonly /u/, though occasionally /i/, has been geminated to preserve it. High lexical vowels exhibit a higher tendency to be reduced to an epenthetic *shewa* than low vowels:

I.3.1.5.1. After *qibbuş*

עָמָקִים ,עְמָקִּים ,עְמָקִּים ,עְמָקִּים ,עְמָקִּים ,עְמָקִּים ,עְמָקִּים ,עְמָקִּים ,עְמָקִּים ,עְמָקִּים ,אַדְמָּה 'red (fs, mpl)'; cf. ms. אָדִמְּה *'aðum (Gen. 3.7) 'naked' (mpl); cf. ms. עִירִמְם *'ērum קרְדִּוֹם (1 Sam. 13.20) 'his axe'; cf. sing. קרְדָּמֹּח 'qardum

This can be identified in various pu^cal forms verbs that appear to be in origin passives of the qal pattern without morphological gemination (Gesenius, *Hebrew Grammar*, §52e):

אַכְּלִּוּ 'they have been eaten' (Neh. 2.3) < *ʾukalū 'the was taken' (Gen. 3.23) < *luqaḥ 'and it will be poured' (Zeph. 1.17) < *šupak

I.3.1.5.2. After hireq

אָסֶר 'bond' < *ʾisār

I.3.1.6. Gemination of a Consonant in Place of Vowel Lengthening

In a number of cases, a consonant is geminated after an original short *a. This is attested predominantly at a morphological

boundary between the stem of a noun or adjective and an inflectional suffix. As a result, the vowel remains short and does not undergo pretonic lengthening, as would have typically been the case if the *a was in an open pretonic syllable, e.g.

```
נְמָלִים 'camels'; cf. sing. נְמָלִים 'small (mpl)'; cf. ms. קְטָנִים קְטְנִים 'small (mpl)'; cf. ms. מְטָנִים 'few'; cf. ms. מְעַטִים 'few'; cf. ms. מְעַטִים 'marshes'; cf. sing. אֲנִמִים 'myrtles'; cf. sing. הֲדָסִים 'scorpion' עַקְרָב (Isa. 23.8) 'honoured of'; cf. ms. נְּבְבַּדִי (Psa. 18.3) 'my stronghold'; cf. sing. מְשְנֵבְיּ (Isaiah 51.10) 'the depths of' בְּבְּלְגִּוֹת (Gen. 27.4) 'tasty foods' מְחָמַדִּים (Cant. 5.16) 'desirable things'
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In the following the *a vowel undergoes attenuation to a hireq:

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יְהַמּרְגְּיִם (2 Sam. 24.22) 'and the threshing-sledges'; cf. sing. למוֹרֶג (Isa. 41.15)
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Historical gemination of this nature can be reconstructed for *het* in various forms where this letter is now preceded by *patah*, e.g.

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בְּחוּרִים (< *baḥḥūrīm) 'young men'; cf. sing. בְּחוּרִי (< *bāḥūr)
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מְבְטָחִים (< *mib̄ṭaḥḥ̄ɪm) 'confidences'; cf. sing. מְבְטָחִים (< *mib̄ṭāḥ) 

< *\alpha (< *\alphaaḥḥ̄ɪm) 'brothers'; cf. sing. אַחִים (< *\alphaaḥ
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I.3.1.7. Gemination Associated with Stress

In a few verbal forms, a final sonorant radical is geminated when preceded by a main stress accent and followed by an inflectional suffix, e.g.

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יְחֵקְלּוּ (Jud. 5.7) 'they ceased'

יְחֵלּוּ (Job 29.21) 'and they waited'

יָרְמוּ (Job 29.12) 'they are lofty'

(Ezek. 27.19) 'they gave'
```

I.3.1.8. Gemination after a Prefix

In some cases, gemination occurs at the boundary between a prefixed particle and the stem of a word, e.g.

```
יַבּמְּה 'in what?' < *ba + m\bar{a} 'in what?' < *ka + m\bar{a} 'how much?' < *ka + m\bar{a} 'עָד שַׁלַּמְתִּי (Jud. 5.7) 'until you (fs) arose' < *ša + stem 'שַׁרְאָשָׁ 'because my head' (Cant. 5.2) < *š\varepsilon + stem
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We can include here לֶּמְהּה 'why' < *la + ma. The gemination in this word is also associated with stress on the preceding syllable (see §I.3.1.7.), since it, in principle, does not occur in variant forms in which the stress occurs on the final syllable, e.g.

לְמֶה (Exod. 5.22). Gemination, however, still occurs when the word has maggef and so is unstressed, e.g. לְמָה־ (Prov. 17.16).

Another possible case of this type of gemination is the dagesh that occurs after the prefixed conjunction vav in the יַּקְטֹל [vaɟjiqˈtˤo:ol] verbal form. Another motivation for the dagesh here, however, is likely to be to distinguish the meaning of this form from the potentially homophonous but semantically distinct form (§I.I.3.1.3.).

Gemination is occasionally used as a strategy to mark a morphological boundary between the interrogative particle *he* and what follows, when the following word begins with *shewa*, e.g.

הָבֶּר־נְא הַכְּתְּנֶת בְּנְדֶּ הָוֹא [hakkʰaˈθo:nɛθ] 'acknowledge now whether it is your son's robe' (Gen. 37.32)

הַרְאִיתֵם [haʀʀiʔiːˈθε:ɛm] 'Have you seen?' (1 Sam. 10.24)

הַבְּצַעֲקְתֵּה [hakkʰasˤaːʕaq̞ɔːˈθɔːh] 'Is it according to its outcry' (Gen. 18.21)

הַבְּמֵחֲנֵים [habbama:ħaˈniːim] 'is it in camps?' (Num. 13.19)

When the word following interrogative *he* begins with a guttural, the particle has a full *pataḥ* vowel or, before *qameṣ*, a full *segol*. These were pronounced as long vowels and can be regarded as substitutes for gemination of the initial guttural, e.g.

הַעְּוֹד [haːˈʕoːoð] 'is here still' (Gen. 31.14)

האֵלֶּדְ [ha:?e:ˈle:ex̪] 'shall I go' (Exod. 2.7)

הַאַנֹּכִי [hɛːʔɔːnoːˈχiː] 'Is (it the case that) I ...' (Job 21.4)

I.3.1.9. Gemination at Word Boundaries (Dehiq)

The phenomenon known as *deḥiq* (Aramaic 'compressed') has been described in §I.2.8.1.2. This involves the gemination of a word-initial consonant after an unstressed vowel in the preceding word, e.g.

יְּאֶעְידָה בָּּׁם 'I shall cause to witness against them' (Deut. 31.28)

יַּמְשֶּׂה־לְּדְּ 'you make for yourself' (Prov. 24.6)

 $Hid\bar{a}yat\ al\text{-}Q\bar{a}ri^{\flat}$ includes constructions with the interrogative word מה such as the following in the category of dehiq:

מה־זְאת 'what is this?' (Exod. 13.14)

In all cases in the Tiberian tradition the final vowel of the word before the geminated consonant was pronounced long but with reduced duration. In other traditions of Hebrew, there is evidence that the final vowel was pronounced short (see §I.2.8.1.2. for details). The dagesh exhibits properties of the dagesh in forms such as מַּמְלֵּים 'in what?', in which it marks the boundary between morphemes, and the dagesh in forms such as 'נְמֵלְיִם 'camels', where it substitutes for the lengthening of the preceding vowel. Also in words such as גְּמֵלְיִם 'camels', as remarked above, the dagesh coincides with a morpheme boundary. The dagesh of deḥiq can, therefore, be identified as primarily a marker of a boundary between two words that were closely connected prosodically. In the Tiberian tradition, efforts were made to make a clear prosodic division between the words also by maintaining some degree of vowel length in the final vowel or, in the case of

constructions with מָה־, by introducing length in a fully shortened vowel.

I.3.1.10. The Distribution of the Fricative and Stop Variants of the Letters

For the distribution of the fricative and stop variants of בגדכפת consonants within words, see §I.1.25.

When a בגדכפת consonant occurs at the beginning of a word and the preceding word ends in a vowel, the general rule is that the consonant is fricative if the accent of the preceding word is conjunctive or if the preceding word is connected by *maqqef*, but is plosive if the accent of the preceding word is disjunctive, e.g.

בְנֵים (Gen. 6.10) שׁלֹשֵׁה בְנֵים (Jalo:ˈʃɔː vɔːˈniːim] 'three sons'

יַבֶר וּנְקֵבֶה בְּרָאֵם [zɔːˈxɔːɔʀ wunqeːˈvɔː baʀɔːˈʔɔːɔm] 'male and female he created them' (Gen. 5.2)

נְמְצְאוּ־בְּׁם [nimsˁuʔu:-ˈvɔːɔm] 'they were found among them' (Jer. 41.8)

There are several exceptions to this principle. These are mentioned in the Masoretic treatises¹⁹ and include the following.

(i) When a *paseq* occurs after a word with a conjunctive accent, e.g.

עשוּן כֵּלָה 'They have done completely' (Gen. 18.21)

¹⁹ Cf. *Hidāyat al-Qāri*⁷, long version, edition in volume 2 of this book, §II.L.1.7., short version, edition in volume 2 of this book, §II.S.2.0. A version of these exceptions appears also in the Hebrew Masoretic treatise published by Ginsburg (1885, 36-37).

יוֹסֵף יְהוְּה עַל־עַמְּוֹו בְּהֵם 'May the Lord add to his people (a hundred times as many) as them' (1 Chron. 21.3)

(ii) When the first word ends in a consonantal *vav*, the בגדכפת letter at the beginning of the next word is normally a plosive, as it is after words ending in other consonants, e.g.

```
יְחֲצֵרֹתְיו בְּתְהְלֵה '(enter) his courts with praise' (Psa. 100.4)
אֵלֵיו פְּי־קְרֵאתִי 'I cried aloud to him' (Psa. 66.17)
```

There are, however, two cases where the בגדכפת consonant is fricative after consonantal *vav*:

ין נְטֶלְיהָ אָלֶיהָ 'He will stretch the line of confusion over it' (Isa. 34.11)

ֿיְקְוֹל הָמוֹן שָׁלֵּו בָה 'The sound of a carefree multitude was with her' (Ezek. 23.42)

(iii) When the first word ends in a consonantal consonant *yod*, the בגדכפת letter at the beginning of the next word is normally a plosive, e.g.

אָדֹנֵי בְׁם 'the Lord in them' (Psa. 68.18)

(iv) If two *bet*s or *kaf*s follow one another and under the first of them there is a vocalic *shewa*, then the first of the pair is plosive even when the preceding word ends in a vowel and has a conjunctive accent, e.g.

```
יַוְהֶי בְּבוֹאָה 'and when she came' (Josh. 15.18)
וַתְּתְפְּשְׂהוּ בְּבִגְּדֶו 'and she caught him by his garment' (Gen. 39.12)
```

יהלא כברבמיש 'Is it not like Carchemish?' (Isa. 10.9)

If a vowel occurs under the first of the two consonants rather than *shewa*, the first remains fricative according to the usual rule, e.g.

```
יְהוֹא אִשְּׁה בִּבְתוּלֶּיהָ 'And he (shall take) a wife in her virginity' (Lev. 21.13)
```

```
יְאַנְשֵׁי בְּבֶּׁל 'men of Babylon' (2 Kings 17.30)
```

We can generalize and say two fricative *bet*s or *kaf*s are avoided in syllable onsets in the same foot (feet indicated below by round brackets, extrametrical syllables are in angled brackets):

```
בְּבְגְדֶּוֹ (do:)] בְּבִגְּדֶּוֹ [(viv.:(la.:)]] בְּבֶּל
[(viv.)(la.:)
```

A further factor is that the initial *bet* and *kaf* in constructions such as בְּבִרְבְּמִישׁ and בְּבִרְבְּמִישׁ are prepositional affixes. Other consonants that are not prepositions under the same conditions remain fricative, e.g.

```
י וּבְגֵי דְּדְׂן 'and the sons of Dedan' (Gen. 25.3)
י לְאִ־תְּתֵעֵב 'you shall not abhor' (Deut. 23.8)
```

The plosive pronunciation of the *bet* and *kaf*, therefore, is made further optimal by the fact that it clearly demarcates a morpheme boundary. This factor can be identified in a variety of other features of the reading tradition (§I.3.1.8.).

(v) Likewise, when the preposition *bet* has *shewa* and is followed by *pe*, the *bet* is plosive even when preceded by a word with a conjunctive accent ending in vowel, e.g.

יְאַכְּבְדֶה בְּפַרְעֹה 'and I will get glory over Pharaoh' (Exod. 14.4)

ּ וֹדְבָרֵי אֲשֶׁר־שַׂמְתִּי בְּפֵּיף 'and my words which I have put in your mouth' (Isa. 59.21)

When the *bet* has a vowel, it is fricative in these conditions, e.g.

אַל־יֵרֶא בְּפְלַגְּוֹת 'He will not look upon the rivers' (Job 20.17)

A *pe* is closely related to *bet* in its articulation. A preposition *bet* or *kaf* that is followed by a fricative בגדכפת consonant that is not of similar articulation is not made plosive under the conditions in question, e.g.

יַיַּנְחֵהוּ בְגַן־עֵּׁדֶן 'and he put him in the garden of Eden' (Gen. 2.15)

קלוֹא בְנַעַת בְּׁה 'surely when [the east wind] strikes it' (Ezek. 17.10)

(vi) Seven cases do not fit into the previous categories, over which there was no disagreement by the Masoretes. Four of these are in the Song of the Sea (Exod. 15):

גאָה גָאָה 'he has triumphed gloriously' (Exod. 15.1, 21)

מִי בַּמְבָה 'Who is like you?' (Exod. 15.11)

יַדְמוּ כַּאָבֶן 'they are as still as a stone' (Exod. 15.16)

יְשַּׁמְתֵּי כַּדְכֹד 'and I shall make (your pinnacles) of agate' (Isa. 54.12)

יוגלאיתי בּלבל 'and I am weary of holding it in' (Jer. 20.9)

יְחָכְמֵה בְּחָכְמֵה (and wisdom like wisdom of the gods' (Aramaic, Dan. 5.11)

Some of these appear to have been motivated by an effort to avoid a series of identical fricative consonants in contiguous syllables or words.²⁰

Cases over which there is said to be disagreement between Ben Asher and Ben Naftali include the following. L in some cases follows Ben Asher and in others Ben Naftali:

Ben Asher (L): עַם־זָּוּ נְּאֱלְהָּ 'the people whom you have redeemed' (Exod. 15.13); Ben Naftali: נָאֵלָת

Ben Asher: בְּחְבֶשׁה־עָשְׂה' יֹנְי בַחֲמְשֵׁה-עָשָׂה' in the eighth month on the fifteenth (day)' (1 Kings 12.32); Ben Naftali (L): בַּחֵמִשֵּׁה.

Ben Asher (L): אֲדִרְגָּזְרִיָּא זְּלְבְרֵיָּא זְּלְבְרֵיָּא יֹthe counsellors, the treasurers, the justices' (Aramaic, Dan. 3.2, 3); Ben Naftali: גּּיָבְרֵיָא.

 $^{^{20}}$ According to the Hebrew Masoretic treatise published by Ginsburg (1885, 37) the kaf in בְּחָבְמַת (Dan. 5.11) was made a plosive since het and fricative kaf were difficult to combine due to the fact that they were similar in articulation (קרובים במוצא הבטוי).

Ben Asher: סַבְּבֶא פְּסַוְתֵּרִין 'trigon, harp' (Aramaic, Dan. 3.5); Ben Naftali (L): פְּסֵנְתֵּרִין.

On balance, Ben Naftali prefers clearer separation by reading *dagesh* in the majority of these case.

(vii) Ben Naftali read the preposition kaf as plosive after יַּיְהָי with a conjunctive accent in seven cases where Ben Asher read the kaf as fricative according to the usual rule. L follows Ben Asher in this respect:

Ben Asher (L) Ben Naftali וַיְהִי בּשְׁמֵּע אֲדֹּנְיו 'when his master heard' (Gen. 39.19) ווָהִי בַּשַּׁמִעוֹ

'and when he heard' (Gen. 39.15)

וַיְהִי בְּרְאֹוֹת וַיְהִי בְּרְאׁוֹת נַיְהִי בְּרְאׁוֹת

'and when (the king) saw' (Esther 5.2)

וַיְהִי בְּרְאוֹתוֹ נַיְהִי בְרְאוֹתוֹ נַיְהִי בְרְאוֹתוֹ

'and when he saw' (Jud. 11.35)

וַיְהֵלْ בְּהוֹצִיאָם וַיְהַלּ בְהוֹצִיאָם

'and when they brought out' (Gen. 18.17)

וַיָהֵי בְּמַלְבוֹ נַיָהֵי בְמַלְבוֹ

'when he became king' (1 Kings 15.29)

וַיָּהִי בַּאֲשֶׁר־תִּמוּ וַיָּהִי בַאֲשֶׁר־תִּמוּ

'and when they had perished' (Deut. 2.16)

²¹ Kitāb al-Khilaf (ed. Lipschütz, 1965, 18-19).

I.3.1.11. Orthoepic Uses of Dagesh

In a number of circumstances, gemination marked by *dagesh* has been introduced into the reading for orthoepic purposes to ensure that letters are clearly articulated and not slurred over. The cases in question fall into various categories.

I.3.1.11.1. Splitting Weak Consonants by *Shewa*

When two weak consonants are in contact across a syllable boundary, the first is sometimes geminated and marked with dagesh. This has the effect of introducing a vowel in the form of vocalic shewa between the two consonants, which increases their distinctness and reduces the risk of elision. This is found in particular in syllable contact involving sonorants (למגר), gutturals and qof, e.g.

מְקְרֵה־לֵּיְלָה [miqqaṇe:-ˈlɔ:ɔjlɔ:] 'accident of the night' (Deut. 23.11)

מְמְרְרֵים [mammaʀo:ˈʀiːim] 'bitterness' (Job 9.18)

ן ְּנְתַקְּנֶּׁהוּ [ˌwu·nθaqqaˈnu:hu:] 'and we shall draw him away' (Jud. 20.32)

יְקְתַּת [jiqqaˈha:a0] 'obedience of' (Gen. 49.10)

הַרְּעָמֶה [haṣṇiʕiː mɔːh] 'to irritate her' (1 Sam. 1.6)²²

²² According to Melamed (1948, 1) the purpose of the *dagesh* in הַּרְעֵמֶה (1 Sam. 1.6) is to disinguish this human activity ('to irritate her') from the meaning of the verb in אֵל־הַכְּבְוֹד הִרְעֵים 'the God of glory thundered' (Psa. 29.3), which refers to an action of God. This is a possible interpre-

In some cases, this strategy is applied when only one of the consonants in contact belong to this group, and occasionally also elsewhere, e.g.

```
עּקְבְּוֹת [נְיִּמְמְּ'vo:oθ] 'footprints of' (Psa. 89.52) מִקְבְּוֹת [miqqa'ðɔ:oʃ] 'sanctuary' (Exod. 15.17) מְקְּדְּשׁ [mitt²ɔhɔ:ˈ¤̞oː] 'his lustre' (Psa. 89.45) מְשְּׁהְרֵוֹ [miss²iśi:ˈ¤̞ɔː] 'small' (Dan. 8.9)²³ [hass²afiːˈnoː] 'to hide him' (Exod. 2.3)
```

As can be seen from the list of examples above, the letter before the geminated consonant is frequently *mem*, especially when the *mem* has a *ḥireq*. Such forms may have been facilitated by the fact that similar sequences occur when the preposition preposition assimilates to a word. The same may apply to examples with initial *he* with *pataḥ*, which resemble the prefixed definite article (Ariel 2020, 142).

This orthoepic strategy achieves a similar result as the strategies of lengthening the preceding vowel to induce reading of the *shewa* as vocalic, e.g. סֵלְעֵי [sa:liˈʕi:] 'my rock' (2 Sam. 22.2, Psa. 18.3) (§I.2.5.8.5.), and the lengthening of the preceding vowel to

tation, especially since in such pairs of homophones the *dagesh* is typically put in forms relating to a human (see §I.3.1.3.). Ariel (2020), however, has argued that the motivation is phonetic rather than semantic, and I follow his view here.

 $^{^{23}}$ For the case for interpreting the dagesh in the forms מְשְׁעִירֶה and מִשְּׁעִירֶה as orthoepic see Ariel (2020).

introduce metrical epenthesis between the two consonants, e.g. [jaˌ[aːʕ \varnothing 'jɔːhuː] 'Isaiah' (Isa. 1.1) (§I.2.10.).

A variant type of orthoepic strategy is to insert a vowel after the first of the two consonants in contact and geminate the second consonant, i.e. CC > CVCC rather than CC > CCVC. This is found in:

יַרְדְּרְ [jiːraddo:of] 'let him pursue' (Psa. 7.6)

This may have been applied to avoid geminating *resh*. Parallels to such restructuring of the syllable structure of words are found in the Samaritan reading tradition, e.g.

tēšåbbəṣ < *tašbeṣ (Ben Ḥayyim 2000, 59 | L [BHS]: תַּשְׁבֵּץ Exod. 28.4 'checkered work')

I.3.1.11.2. *Dagesh* to Strengthen Syllable Onsets

In the standard Tiberian manuscript codices there are a few cases of the marking of the *dagesh* sign on letters other than בגדכפת on the second of two consonants in contact at the boundary of syllables for the purpose of ensuring that the consonants and syllables are kept distinct. This ensured a clear division of syllables and words. In L, for example, a *dagesh* is sometimes placed on an initial *lamed* of the second word of a phrase connected with *maqqef* when the first word ends in *nun*, e.g. לַּיָּקוֹרְלָּוֹ 'and he gave him' (Gen. 24.36) (Yeivin 1980, 294–95). This can be regarded as a measure to separate the two words clearly and prevent the coalescence and slurring of weak sonorant consonants. The *dagesh* would mark the articulation of the *lamed* with increased muscular pressure to ensure it maintains its correct articulation.

According to *Kitāb al-Khilaf*, Ben Naftali placed a *dagesh* in the first *nun* of the name נון in the combination לבן־נון 'the son of Nun' (ed. Lipschütz 1965, כד). This was a measure to prevent the coalescence of two identical weak sonorant letters across a word-boundary.²⁴ An alternative strategy to separate the two letters was to place a *paseq* between the words, e.g.

L: לְהַגְּרִּיל | לְמַׁעְלָה 'to make exceedingly great' (1 Chron. 22.5)

L: וּבַרְזֵל ו 'tiron in abundance' (1 Chron. 22.3).

According to Kitāb al-Khilaf, Ben Naftali marked a dagesh in the qof of the verb יַטְלֶּב 'he supplants' (Jer. 9.3, L: יַטְלֶּב (ed. Lipschütz 1965, לֹג) and this is found in C and in a number of other Tiberian Masoretic manuscripts (Yeivin 1968, 51). This ensured a clear syllable division and also, by implication, indicated that the 'ayin had a silent shewa. This, moreover, alerted the reader to the fact that the syllable division was different from that of the more frequent form 'שַׁלֶּב 'Jacob'. Qof falls into the category of weak letters, which is demonstrated, for example, by the fact that it often loses dagesh when in a metrically weak syllable with shewa (§I.2.5.2.). The practice of the Masorete Ben Naftali to use dagesh in this way reflects his general tendency to introduce innovative measures to ensure a careful reading to a greater extent than Ben Asher, who was more conservative (A. Ben-David 1957b).

 $^{^{24}}$ For the need to avoid coalescence in such contexts see the discussion in $Hid\bar{a}yat\ al\text{-}Q\bar{a}ri^{3}$, long version, edition in vol. 2 of this book, §II.L.1.4.10.

The phenomenon of marking dagesh 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). According to this principle, strength is equated with the degree of sonority or the quality of being vowel-like. This optimality principle can influence how a sequence of phonological segments is syllabified.²⁵ 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. The sonority of a consonant can be decreased by a process of fortition. Gemination is a clear process of fortition (Bybee 2015, 45), so it follows that gemination of a consonant is a natural way to mark a clearer syllable division. This also indicates that the dagesh in such forms as יַעַּלְּב should indeed be interpreted as having the phonetic realization of gemination and is not purely an abstract symbol of syllable division.

The practice attributed to Ben Naftali to mark dagesh in a weak letter after a guttural with silent shewa (יַשְּלֶּב) and in the second word in phrases such as and בֵּן־נוּן to mark a clear division of syllables occurs in a number of later Bible manuscripts, e.g. 'and he harnessed' (Exod. 14.6), יַשְמֶּר 'Jazer' (Num. 32.35), 'מָבֶּל־לֵּלֶחֶם 'to eat bread' (Gen. 31:54), לְהֶם מִּיְגוֹן 'to them from sorrow' (Esther 9.22) (Ginsburg 1897, 114–36; Luzzatto 2005, 169–

²⁵ Alvestad and Edzard (2009) have demonstrated how this principle can explain the distribution of the insertion of *ḥaṭef* vowels in verbs with initial *het* in Tiberian Hebrew.

72). These can be interpreted as reflecting a tradition of marking syllable divisions that is descended, directly or indirectly, from the practice attributed to Ben Naftali.

There is a reference in some early Masoretic sources to the practice of marking *dagesh* in the *yod* of the word יְטִיָּרֶם 'and male donkeys' (Gen. 32.16, L: וְטִיָּרֶם), which is attributed to either Ben Asher or Moshe Moḥe (Baer and Strack 1879, xxxviii–xxxix). This would be a use of *dagesh* on a weak letter after a vowelless guttural analogous to יִּעִיקֹיב.

I.3.1.11.3. Extended Dagesh Forte

There is evidence that the practice of strengthening syllable onsets for orthoepic purposes by geminating a syllable-initial consonant was more widespread than is apparent from the vocalized Tiberian manuscripts. The process in question involved the reading of the *dagesh lene* in the stop variants of the letters as *dagesh forte*, i.e. as geminate.

This is seen by examining in particular the Karaite transcriptions and passages in *Hidāyat al-Qāri*'.

In several of the extant manuscripts of the Karaite transcriptions, the scribes marked the Arabic *shadda* sign where the Tiberian reading tradition had *dagesh*. In some manuscripts, the *shadda* is written only where the *dagesh* is *dagesh forte* according to the conventional interpretation of the distribution of *dagesh forte* and *dagesh lene*. In some manuscripts, however, the *shadda* sign is written both on letters with *dagesh forte* and on letters with *dagesh forte* and on letters with what is conventionally interpreted as being *dagesh lene*. Some examples are given below.

Manuscripts that mark shadda corresponding to only dagesh forte

BL Or 2539, fols. 56-114

Dagesh forte

שבוּדְּוֹרֵ (BL Or 2539 MS A, fol. 63r, 8 | L [BHS]: הַדְּבֶּר Gen.

21.11 'the word')

אַה (BL Or 2539 MS A, fol. 64r, 1 | L [BHS]: הַאָּיִם Gen.

21.15 'the water')

Dagesh lene

בְּוְרֵשֵׁ (BL Or 2539 MS A, fol. 84r, 1 | L [BHS]: דְבָרֵגִי Deut.

4.10 'my words')

אביליבב (BL Or 2539 MS A, fol. 67v, 1 | L [BHS]: הַמִּיְבֶּׁב Gen.

22.9 'the altar')

BL Or 2544 + Or 2545 + Or 2546

Dagesh forte

פַוֹיֵבְץְׁנֹפָ (BL Or 2546, fol. 3r, 7 | L [BHS]: אַרָּתְּוּם Num. 14.45

'and they beat them into pieces')

يجّاليل (BL Or 2545, fol. 207v, 5 | L [BHS]: יְגָאֵל Lev. 27.33

'it will be redeemed')

(BL Or 2544 fol. 74v, 2 | L [BHS]: הַמַּרְאֵה Exod. 3.3 הַמַרְאֵה 'the sight')

Dagesh lene

بِاأْيِس (BL Or 2544 fol. 74r, 10 | L [BHS]: بِاأْيِس Exod. 3.2 'with the fire')

(BL Or 2544 fol. 75r, 6 | L [BHS]: פָּנְּיו Exod. 3.6 'his face')

מַמְשְּׁפְּחָת (BL Or 2546, fol. 132r, 11 | L [BHS]: מְמִשְּׁפְּחָ Num. 36.1 'from the family of')

Manuscripts that mark *shadda* corresponding to both *dagesh forte* and *dagesh lene*

BL Or 2540

Dagesh forte

בּבּבֿאָם (BL Or 2540, fol. 4r, 4 | L [BHS]: נְתְּחַכְּמֶה Exod.

1.10 'let us deal wisely')

באסלו (BL Or 2540, fol. 5v, 4 | L [BHS]: וַתִּצְפְּנֵהוּ Exod.

2.2 'and she hid him')

Dagesh lene

יַרְבֶּה (BL Or 2540, fol. 4v, 1 | L [BHS]: יַרְבֶּה Exod. 1.12 'He increases')

אָב (BL Or 2540, fol. 3v, 4 | L [BHS]: בֶּד Exod. 1.4 'Gad')

(BL Or 2540, fol. 3v, 3 | L [BHS]: چّان Exod. 1.4 'Dan') دّان

 $^{\circ}$ באַר (BL Or 2540, fol. 7r, 5 | L [BHS]: מָהַרְתָּן Exod. 2.18 (you hurried')

BL Or 2548 fols. 1-185

Dagesh forte

مدّوع (BL Or 2548 fol. 3r, 10 | L [BHS]: מַדְּוֹעַ Isa. 5.4 'why?')

كَمَّالَخ (BL Or 2548 fol. 13r, 9 | L [BHS]: הַמֶּלֶדְ Isa. 37.5 'the king')

Dagesh lene

אַמְדֵּי־בֶּׂרֶם (BL Or 2548 fol. 6r, 10 | L [BHS]: צִּמְדֵּי־בֶּׂרֶם Isa. 5.10 'acres of the vineyard')

عذ دّور (BL Or 2548 fol. 10r, 5 | L [BHS]: עֵד־דָּוֹר Isa. 13.20 'until generation')

ישׁמְׁעְהָּ (BL Or 2548 fol. 14r, 10 | L [BHS]: שָׁמֵּעְהָּ Isa. 37.6 'you (ms) heard')

يَشَاعْياْهُوُ كُو (BL Or 2548 fol. 14r, 9 | L [BHS]: بْظِيرِائِهِ، ﴿ Isa. 37.6 'Isaiah, thus')

In Arabic orthography, the shadda sign represents the application of greater muscular pressure to a consonant in order to lengthen it. In medieval manuals concerning the correct reading (tajwīd) of the Arabic Qur'ān, descriptions are given of various degrees of lengthening expressed by shadda, but it was never used like dagesh lene to mark a non-geminated plosive consonant. The Karaite transcriptions that mark the *shadda* sign are essentially phonetic representations of the Hebrew reading with an Arabic orthography and so one can assume that when the shadda is marked, it was intended to represent lengthening of the consonant. What the data above reflect, therefore, are two varieties of reading. In one variety the dagesh is given its expected pronunciation, with dagesh forte strengthened but not dagesh lene. In the other variety, however, both dagesh forte and dagesh lene are strengthened and so are given the same phonetic realization. We may call this latter type of reading the 'extended dagesh forte' reading. The reading without this extension of dagesh forte will be referred to as the 'dagesh forte—dagesh lene reading.'

A passage from *Hidāyat al-Qāri*³ also reflects a type of reading that does not conform to the traditional classification of *dagesh* into *dagesh forte* expressing gemination and *dagesh lene*

expressing a non-geminated stop realization of a בגדכפת consonant.

The passage in question concerns the consonant *tav*, which is said to differ from other letters in having three grades of strength. The form of the passage from the long version of this work is as follows:²⁶

Chapter concerning letters that occur in three grades

Take note that just as there are among the letters those that when they are adjacent to another letter, this latter makes them light with *rafe*, 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 *tav*.

Take note that the tav, unlike the other letters, may occur rafe, as in וְּהָאֵׁי הַשְּׁעֵר 'and rooms of the gate' (Ezek. 40.10); it may occur with dagesh, as in תַּחַת הַּנְּחֹשֶׁת 'instead of bronze' (Isa. 60.17), אוֹבֵי יְהָבֹ 'ornaments of gold' (Cant. 1.11); and it may occur with major dagesh. The latter includes three tavs: וַיִשִּׁימֵהְ תֵּלֹ־עוֹלְם 'He made it an eternal heap of ruins' (Josh. 8.28), וַיִּשִּׁימֵהְ יִּהְלַּהָהוֹן 'and its houses and its treasuries' (1 Chron. 28.11), וְאַתְּרָבְּיֵא אֵלֵדְ תְּלֶחֵהוֹן 'and these three men' (Dan. 3.23). I do not know anybody who differs (in reading) with regard to these three tavs. As for the form בָּתִּים here were differences (of reading) with regard to it. Take note that the Tiberians said that they have a resh that is not read (in the same way) by anybody else. It is likely that the climate of their town caused this.

²⁶ Edition in vol. 2 of this book, §II.L.1.9.2.

It has the same status as the *tav* in the word בְּתִּים according to the view of Ben Naftali, who gives it a grade in between two grades.

The short version of $Hid\bar{a}yat~al$ - $Q\bar{a}ri$ supplies more details about the differences in the reading of בּתִים 27

Take note that tav in three places is strengthened with dagesh to a greater degree than (other) cases of tav with dagesh. These are וְשִׁימֵהְ תֵּלֹ־עוֹלְם שְׁמְלֵּה 'He made it an eternal heap of ruins' (Josh. 8.28), וְשָׁרָבֶּי וְנְנִוּבְי 'and its houses and its treasuries' (1 Chron. 28.11), תְּלֵחֵה הֹוֹן 'and these three men' (Dan. 3.23). Note that there is disagreement concerning every tav in the form בָּתִּים וְנִנְּבְיִי וְנִנְוּבְיִי וְנִנְוּבְיִי וְנִנְוּבְיִי (1 Chron. 28.11). Whoever wishes to pronounce it with the normal dagesh of tav, may do so and whoever wishes to pronounced it with with the heaviness of the tav of וְאֶת־בְּהִיִּי וְנְנִוְכֵי (1 Chron. 28.11), may do so, on condition that this is when there are a conjunctive accent and a disjunctive accent in the word without an intervening letter.

Since in these passages it is stated that there are only three tavs that all readers agree should be given a major dagesh, this major dagesh must be something different from normal dagesh forte. Both what is traditionally regarded as dagesh lene and also what is traditionally regarded as dagesh forte would, therefore, have to be considered to belong to the second grade, the 'normal dagesh'. The examples cited for the 'normal dagesh' include only words that contain what is traditionally identified as dagesh lene,

²⁷ Edition in vol. 2 of this book, §II.S.3.0.

viz. חחת and חורי. It does not follow, however, that 'normal dagesh' must be identified as dagesh lene. Rather the author makes no distinction between dagesh lene and dagesh forte. This could have been because the 'normal dagesh' was considered to include a range of phonetic realizations and degrees of muscular pressure that included an ungeminated stop and a geminated stop. This is the usual interpretation of the function of the dagesh sign. Alternatively the passage could be interpreted as meaning that there was no phonetic distinction between what we call dagesh lene and dagesh forte. Rather tav with dagesh was normally realized with a similar degree of muscular pressure and duration, whether in contexts where it is traditionally interpreted as dagesh lene or in contexts where it is traditionally interpreted as dagesh forte. This, in fact, is the more straightforward interpretation of the passage, especially since the point of the passage is the division into 'grades' based on differences in degrees of 'heaviness' (thigal), i.e. muscular pressure, and one grade would not be expected to contain a range of different pressures. The third grade would, therefore, involve an exceptionally high degree of muscular pressure and, one can infer, duration, which are found only in a few isolated words. What we seem to have here, therefore, is a description of an 'extended dagesh forte' type of reading with the addition of three cases of extra-long dagesh.

According to Misha'el ben 'Uzzi'el in his *Kitāb al-Khilaf*, the Masorete Ben Naftali read all cases of בָּתִּים that had two accents by applying more muscular force than in cases without two

accents (Lipschütz 1965, 4; Eldar 1994, 77). ²⁸ Ben Asher, however, is said to have disagreed with Ben Naftali and read only יַּרָּיִּבְיׁ (I Chron. 28.11) and בְּיִּבִּיׁ (Deut. 6.11) with strong pressure. The second example is not mentioned in Hidāyat al-Qāri' but has the same accents ('azla and geresh). Ben Asher did not read any other cases of יַמzla and geresh). Ben Asher did not read any other cases of עַּבְּיִּבִי with the same degree of pressure. ²⁹ Misha'el ben 'Uzzi'el (Lipschütz ibid.) cites a Masoretic statement that is attributed to Ben Asher: 'because he (Ben Asher) mentioned in his Masora saying that in the Bible are four cases with intense dagesh. '30 These statements in Kitāb al-Khilaf indicate that the pronunciation of tav as extra-long in some cases was a feature of the reading of Ben Asher and Ben Naftali.

At the end of the passage from the long version of the $Hid\bar{a}ya$ it is stated that in the Tiberian reading there is a realization of resh that is not found in any other reading and that this 'has the same status as the tav in the word בְּתִּים according to the opinion of Ben Naftali,' who pronounced the tav of this word with 'a grade in between two grades' (manzila bayna manzilatayn). The author of $Hid\bar{a}yat$ al- $Q\bar{a}ri$ ' applies a

 $^{^{28}}$ כל לשון בתים מא כאן מנה בלחנין כאן בן־נפתלי ידגשה אעני ישד פיה זאיד עלי גירה 'Every case of בְּתִּים with two accents was given dagesh by Ben Naftali, I mean he pronounced it with force more than other cases (of the word without two accents)'.

 $^{^{29}}$ ומא לשד 'He did not pronounce other cases with the similar strength' (Lipschütz 1965, 4; Eldar 1994, 77).

³⁰ Ed. Lipschütz (1965, 4): לאנה דׄכר פי מאסרתה וקאל אן פי אלקראן ארבעה בלשון מרובה דגשין.

classification based on grades (manāzil) to three variant articulations of resh. These were non-emphatic advanced uvular [R], emphatic alveolar $[r^{\varsigma}]$ and geminate respectively, which can, likewise, be correlated with three degrees of muscular pressure. The non-emphatic advanced uvular realization of *resh* is referred to in the *Hidāya* as the 'light' (khafīf) grade, the geminate resh, marked by a *dagesh*, is the 'major' (*kabīr*) grade, and the emphatic alveolar is 'the grade between grades' (manzila bayna manzilatayn) (Khan 1995, 2013c). Unlike the classification of the three variants of tay, the classification of three variants of resh is presented as two basic grades, with a third variant that is between two grades. The term *manzila bayna manzilatayn* is likely to originate in the Mu^ctazilite theological tradition. ³¹ It is used in Arabic grammatical literature to refer to cases of intermediate grammatical status. Al-Jurjānī (d. 471/1078), for example, states that the Arabic negator laysa has an intermediate position (manzila bayna manzilatayn) between the verb kāna and the negative particle $m\bar{a}$ with regard to the extent of its inflection.³² Misha'el ben 'Uzzi'el states that the distinctive feature of Ben Naftali's reading of בתים was that he regularly pronounced the tay in it with more force when it had two accents than when it lacked a secondary accent. The term manzila bayna manzilatayn,

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³¹ It was one of the principles of Mu^ctazilite doctrine that the term 'unbeliever' could not be applied to a Muslim believer who had committed a grave sin. The latter, therefore, could be neither a believer nor an unbeliever, but in an intermediate state (*manzila bayna manzilatayn*); cf. Gimaret (2015).

³² See Baalbakki (2008, 132).

therefore, must be referring to a degree of strength that was greater than a normal dagesh. In the passage on the tav in the $Hid\bar{a}ya$, the normal dagesh was read as a geminate so the intermediate position of Ben Naftali is presumably referring to a degree of strength that was greater than normal gemination but less than the extra-long pronunciation in the specified cases. The practice of pronouncing the dagesh of tav with a strength greater than normal gemination was, according to the $Hid\bar{a}ya$, unique to the Tiberian tradition.³³

The passage cited above from the original Arabic versions of *Hidāyat al-Qāri*⁷ underwent an adaptation in the Hebrew versions of the work that were produced in medieval Europe, such as *Horayat ha-Qore* (twelfth century) and *Sefer Ṭaʿame ha-Miqra* (thirteenth century) (Eldar 1994, 16–18). In *Horayat ha-Qore* the passage has the following form:³⁴

 $^{^{33}}$ The Masorah Parva to I Chron. 28.11 contains the note: ה' תוין דגשיי 'There are five tavs that have strong dagesh'. It is not clear in which words these tavs occur apart from the tav in בְּּחָיִי in the 1 Chron. 28.11 (Dotan 1967, 15).

שער התי״ו. בג׳ מקומות נדגשת התי״ו, מכל התוי״ן הנדגשות :(1984, 60 שון מדה, והם וישימה תל עולם, ובתיו וגנזכיו, וגובריא אלך תלתיהון. וכל בתים, שהן לשון מדה, אבל, בתים כגון: ויין בתים עשרים אלף ושמן בתים עשרים אלף, דכותהון פתח ודגש. ובתים מלאים כל טוב, הניס את עבדיו ואת מקנהו אל הבתים, שהן לשון דירה, כגון: ואת בתיו וגנזכיו, שאע״פ שהוא לשון דירה כולהון קמצין, ואין ידגיש בחוזק. מבלעדי: הוא מדגיש בחוזק ובקמץ, מפני שיש בו משרת וטעם, ונראה כאילו הוא שני תיבות. ויש ובתים מליאים טוב, הואיל שהמשרת והטעם יחד שמוסיפין עליהן, להדגיש בחוזק:

Chapter on the tay. In three places tay has a (stronger) dagesh than all (other) tavs with dagesh, namely : יישימה תל־ שוֹלָם 'He made it an eternal heap of ruins' (Josh. 8.28), ואת־ יגווביי (1 Chron. בַּּתִּיי וְגְּנִוְבֵּיי 'and its houses and its treasuries' 28.11), וגבריא אלך תלתהון 'and these three men' (Dan. 3.23), and all cases of בתים that denote measurement, such as ויין יand twenty thousand בתים אלף ושמן בתים עשרים אלף baths of wine, and twenty thousand baths of oil' (2 Chron. 2.9) and the like with patah and dagesh. But (cases of) בתים that denote habitation, like ובֹתִים מלאים כּל-טוב 'and houses full of all good things' (Deut. 6.11), הניס את־עבדיו ואת־מקנהו 'he made his slaves and his cattle flee into the houses' (Exod. 9.20), all have games and are not given strong dagesh (i.e. they have dagesh lene), with the exception of וֵאַת־בַּּתִין וְגָּוְבֵין (1 Chron. 28.11), which, although it denotes habitation, it has strong dagesh and games, because it contains a conjunctive accent and main accent, and it is as if it is two words. Some add to the ones (i.e. these examples) that should be given strong dagesh וֹבַתִּים מִלְאֵים כָּל־ שוב" (Deut. 6.11), because the conjunctive accent and main accent are together in the word.'

Here a section has been added to the original passage referring to the plural form בַּתִּים 'baths'. This version of the passage conveys the sense that there are two types of dagesh, viz. dagesh forte and dagesh lene. The three cases of dagesh in the tav after qames in וְאָת־בְּּלְּיִיוֹ וְגַנְוַבְּיִי (Josh. 8.28), וְיְשִׁימֶהְ תֵּלֹ־עוֹלְם (1 Chron. 28.11) and וְגָבְרֵיֵא אִלֵּךְ תְּלְתֵהֹוֹן (Dan. 3.23), and some also include the dagesh after the qames in וְּבָּרִיִי מְלֵאִים בְּלֹ־טוֹב (Deut. 6.11), are equated with the dagesh of בָּתִּים the dagesh is dagesh forte. In all other cases of the passage referring to the dagesh is dagesh referring to the plural passage 'baths'. This version of the passage referring to the plural passage 'baths'. This version of the passage referring to the plural passage 'baths'. This version of the passage 'baths'. This version of the passage referring to the plural passage 'baths'. This version of the passage referring to the passage referring to the passage and the passage referring to the passage referring the passage referring the passage referring to the passage referring to the passage referring the passage referring the passage referring the passage referring to the passage referring the passag

lene. There is no reference here at all to an extra-long grade of dagesh. Evidently the author of Horayat ha-Qore was not familiar with the version of the Tiberian reading tradition in which the extra-long dagesh existed. For this reason, he misunderstood the point of the original passage that the dagesh in the tav after qames in the specified cases was exceptional in the degree of its strength and was not like the normal dagesh forte of words such as בַּחִים. The author of Horayat ha-Qore was also unfamiliar with the extended dagesh forte reading, since he alludes to a dagesh lene in most cases of בַּחִים. 35

One may infer from this that extra-long *dagesh* was a phenomenon of the extended *dagesh forte* reading and was not known in the *dagesh forte*—*dagesh lene* reading. It would appear that only the latter was transmitted to Europe, or at least in the circles where the European recensions of *Hidāyat al-Qāri* were produced. If this is the case, then the reference to the Masoretes Ben Asher and Ben Naftali having extra-long *dagesh* in their

³⁵ The passage has the same adapted form also in Sefer Ṭaʿame ha-Miqra. Eldar (1984, 28) used this adapted version of the passage on the tav in his interpretation of the original Arabic version of Hidāyat al-Qāri' and this, therefore, led him to misinterpret the original. According to Eldar the al-dagesh al-kabīr 'major dagesh' of tav was not a fully geminated tav, but only a half-geminated one [t¹]. The fully geminated tav [tt] is found in the word בַּתִּים. This argument is based on the assumption that the passage is excluding consideration of dagesh forte used to express gemination. In the passage on the grades of resh, however, the 'major' (kabīr) grade of the letter is said to be geminate resh with dagesh, as in tip the passage of the letter is evidence that the classification of the grades of strength of tav includes the full range of the realization of tav.

reading of *tav* in specific words would imply that their reading was of the extended *dagesh forte* type.

Another section of *Hidāyat al-Qāri*² that could be interpreted as evidence for the extended *dagesh forte* reading is one that concerns the reading of word-initial בגדכפת letters with *dagesh* after a preceding word with a conjunctive accent in contexts where a fricative reading may be expected. Most of the constructions in this section contain word-initial בגדכפת consonants with what is normally interpreted as *dagesh lene*. The section, however, also includes word-initial בגדכפת consonants in *deḥiq* constructions. There is no doubt that the *dagesh* of *deḥiq* constructions was *dagesh forte* (§I.2.8.1.2.). It appears that *Hidāyat al-Qāri*² considered these to have the same type of בגדכפת stop as the other constructions, which would imply that the word-initial בגדכפת in the other constructions would have been pronounced with *dagesh forte*.

The extended *dagesh forte* reading arose by giving the *dagesh* sign its full value in all contexts. One motivation for this was an attempt to make a maximally clear distinction between fricative and plosive forms of the בגדכפת letters. Another motivation for strengthening the pronunciation of the *dagesh* in this way was to mark a clear separation between syllables. This enhanced accuracy of reading words with בגדכפת consonants was achieved without deviating from the standard Tiberian notation system.

³⁶ Long version, edition in vol. 2 of this book, §II.L.1.7; short version, edition in vol. 2 of this book, §II.S.2.0.

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Without doubt, there was a distinction historically between geminate and non-geminate בגדכפת stops (i.e. between dagesh forte and dagesh lene). 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:

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βοκρ = בְּקֶר, ερδοφ = אָבְדּף, vs. ιδαββερ = יְדַבֵּר, σαδδικιμ = צַּדִיקִים (Brønno 1943, 357, 383) 
iegdal = יֵגְדַל (Sperber 1937, 158), marphe = מַרְפַּא
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(Sperber 1937, 192), baddim = בַּדִּים (Sperber 1937, 211), thephphol = מָּל (Sperber 1937, 159)

The evidence we have of the extended *dagesh forte* reading is datable to the tenth and early eleventh centuries in the use of the *shadda* in a certain group of the Karaite transcriptions and in *Hidāyat al-Qāri*. This can be interpreted as reflecting the fact that it was in the late Masoretic period that the extended *dagesh forte* reading began to be used by some readers. Since the orthoepic work *Hidāyat al-Qāri* seems to be assuming that the extended system is the correct Tiberian reading, it can be hypothesized that the extended system was regarded as the preferred system among the surviving teachers of the Tiberian reading at that period. Indeed, we have argued above that the sources can be interpreted as indicating that this was a feature of the reading of Ben Asher and Ben Naftali, who belonged to the last generation of Tiberian Masoretes.

As the Karaite transcriptions suggest, the extended dagesh forte reading appears to have existed alongside the more conservative dagesh forte—dagesh lene reading. Fragments of anonymous Masoretic treatises datable to the tenth or eleventh centuries reflect this variation. In one such treatise (ed. Allony and Yeivin 1985, 101), there is a reference to a distinction between 'heavy dagesh' (dagesh thaqīl) and 'light dagesh' (dagesh khafīf) that corresponds to the normally accepted distinction between dagesh forte and dagesh lene. In another treatise, on the other hand, cases that are traditionally regarded as dagesh lene are referred to by the Arabic term for gemination tashdīd (II Firkovitch Evr.-Arab II 365, fols. 6r, 21r).

The orthoepic development of the orally transmitted Tiberian reading tradition appears not to have been known outside of Palestine and in the later Middle Ages it fell into complete oblivion. This lack of knowledge of the latest stages of the Tiberian reading arose because the tradition was disseminated outside Palestine and to later generations only in the form of the written vocalization. The vocalization in its standard form did not reflect these orthoepic developments. There is, therefore, a scholarly amnesia with regard to the final form of the Tiberian reading tradition, which can only be reconstructed in sources such as the Karaite transcriptions and the original Arabic versions of the orthoepic treatise *Hidāyat al-Qāri*.

This extended *dagesh forte* reading is likely to have been the stimulus for the use of *dagesh forte* on other consonants at the onset of syllables to mark clear syllable division in forms such as the verb ישקלב 'he supplants' (Jer. 9.3), which is attributed to Ben

Naftali in $Kit\bar{a}b$ al-Khilaf (ed. Lipschütz 1965, d), and the extended use of dagesh in non-Standard Tiberian manuscripts (see §I.3.3. below).

I.3.1.12. Dagesh in the Word בָּתִים

According to the passage on the *tav* in *Hidāyat al-Qāri*' that was discussed in the previous section, the *dagesh* in the word שְׁבְּּמִּים was pronounced in two ways. When the word had a secondary accent, it was pronounced extra-long, with the third grade of muscular force, greater than cases of without a secondary accent. Ben Naftali pronounced all cases of the word with a secondary accent in this way, whereas Ben Asher read it as extra-long only in one (or according to the *Kitāb al-Khilaf* two) specific verse(s). The *tav* of the word was pronounced as a 'normal' *dagesh* (second grade *tav*) when the word did not have a secondary accent and also, in the case of the reading of Ben Asher, in cases where it had a secondary accent outside of the one (or two) specific verse(s). As discussed, the term 'normal' *dagesh* in this passage referred to a 'normal' geminate *dagesh forte*, since *Hidāyat al-Qāri*' is describing an extended *dagesh forte* type of reading.

The extra-long duration of the *dagesh* is possibly the result of a prosodic epenthesis between stress prominences. When there was a secondary accent in the word, the *tav* was given an added duration to ensure a clearer separation between the stresses for the sake of rendering the reading eurhythmic to a maximal extent. The same applies to the other two words in which, according to *Hidāyat al-Qāri*, the *tav* was pronounced extra-long, viz. These are יְּיִשִּׁימֵהְ הֵּלֹ־עִוֹלְם שֶׁמְהָּה ' He made it an eternal heap of

ruins' (Josh. 8.28, וְגַּבְרֵיֵּא אֵלֵךְ הְּלְחֵהֹוֹן 'and these three men' (Dan. 3.23). In both cases the tav occurs in between two stress prominences that are close to each other. In וַיְשִׁימֵהְ תֵּל־עוֹלְם one could assume that the word תֵּל־ had a secondary stress, although it is not marked by an accent or a ga'ya. The word has a short /e/vowel, without inherent length (cf. הַלֹּה , like לָבוֹ , לָב , יָלָב), so it would be expected to be segol if not lengthened by some kind of stress (see §I.2.11.).

In the group of Karaite transcriptions that reflect an extended *dagesh forte* reading a *shadda* sign is marked on the $t\bar{a}^{7}$ representing the Hebrew *tav* in all cases, e.g.

يَباتّي (BL Or 2550 fol. 18v, 5 | L [BHS]: چچڙرי Zeph. 2.7 'in the houses of').

In the group of Karaite transcriptions that reflect a *dagesh forte*—*dagesh lene* reading, however, a *shadda* is not marked on the $t\bar{a}^{3}$, indicating that in this type of reading the word was read as a non-geminated stop, e.g.

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אַן (BL Or 2544, fol. 189r, 13 | L [BHS]: הַבְּתִּים Exod. 9.20 'the houses')

מן־הַבְּתִּים (BL Or 2544, fol. 159r, 8 | L [BHS]: מִן־הַבְּתִּים Exod. 8.9 'from the houses')

בער (BL Or 2544, fol. 181v, 4 | L [BHS]: יוّד בער (BL Or 2544, fol. 181v, 4 | L [BHS]: יוֹד בּעַר (BL Or 2544, fol. 181v, 4 | L [BHS]: יוֹד בּעַר (BL Or 2544, fol. 181v, 4 | L [BHS]: יוֹד בּעַר (BL Or 2544, fol. 181v, 4 | L [BHS]: יוֹד בּעַר (BL Or 2544, fol. 181v, 4 | L [BHS]: יוֹד בּעַר (BL Or 2544, fol. 181v, 4 | L [BHS]: יוֹד בּעַר (BL Or 2544, fol. 181v, 4 | L [BHS]: יוֹד בּעַר (BL Or 2544, fol. 181v, 4 | L [BHS]: יוֹד בּעַר (BL Or 2544, fol. 181v, 4 | L [BHS]: יוֹד בּעַר (BL Or 2544, fol. 181v, 4 | L [BHS]: יוֹד בּעַר (BL Or 2544, fol. 181v, 4 | L [BHS]: יוֹד בּעַר (BL Or 2544, fol. 181v, 4 | L [BHS]: יוֹד בּעַר (BL Or 2544, fol. 181v, 4 | L [BHS]: יוֹד בּעַר (BL Or 2544, fol. 181v, 4 | L [BHS]: יוֹד בּעַר (BL Or 2544, fol. 181v, 4 | L [BHS]: יוֹד בּעַר (BL Or 2544, fol. 181v, 4 | L [BHS]: יוֹד בּעַר (BL Or 2544, fol. 181v, 4 | L [BHS]: יוֹד בּעַר (BL Or 2544, fol. 181v, 4 | L [BHS]: יוֹד בּעָר (BL Or 2544, fol. 181v, 4 | L [BHS]: יוֹד בּעָר (BL Or 2544, fol. 181v, 4 | L [BHS]: יוֹד בּעָר (BL Or 2544, fol. 181v, 4 | L [BHS]: יוֹד בּעָר (BL Or 2544, fol. 181v, 4 | L [BHS]: יוֹד בּעָר (BL Or 2544, fol. 181v, 4 | L [BHS]: יוֹד בּעָר (BL Or 2544, fol. 181v, 4 | L [BHS]: יוֹד בּעָר (BL Or 2544, fol. 181v, 4 | L [BHS]: יוֹד בּעָר (BL Or 2544, fol. 181v, 4 | L [BHS]: יוֹד בּעָר (BL Or 2544, fol. 181v, 4 | L [BHS]: יוֹד בּעָר (BL Or 2544, fol. 181v, 4 | L [BHS]: יוֹד בּעָר (BL Or 2544, fol. 181v, 4 | L [BHS]: יוֹד בּעָר (BL Or 2544, fol. 181v, 4 | L [BHS]: יוֹד בּעָר (BL Or 2544, fol. 181v, 4 | L [BHS]: יוֹד בּעָר (BL Or 2544, fol. 181v, 4 | L [BHS]: יוֹד בּעָר (BL Or 2544, fol. 181v, 4 | L [BHS]: יוֹד בּעָר (BL Or 2544, fol. 181v, 4 | L [BHS]: יוֹד בעַר (BL Or 2544, fol. 181v, 4 | L [BHS]: יוֹד בעַר (BL Or 2544, fol. 181v, 4 | L [BHS]: יוֹד בעַר (BL Or 2544, fol. 181v, 4 | L [BHS]: יוֹד בעַר (BL Or 2544, fol. 181v, 4 | L [BHS]: יוֹד בעַר (
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'בְּתֵּיהֶם (BL Or 2549, fol. 40v, 8 | L [BHS]: בְּתֵּיהֶם Jer. 6.12 (their houses')

פּמְּדֶּוֹן בֹּּ (BL Or 2544, fol. 158r, 13 | L [BHS]: מִּבֶּתֵּיִדְּ Exod. פּמְדֶּוֹן בֹּּלּ 8.5 'and from your houses')

Also where there is a secondary accent in the word, the transcriptions of this group do not mark a *shadda* sign, reflecting a pronunciation with an ungeminated *tav*. This applies even to 1 Chron. 28.11, which is the form in which, according to the Masoretic treatises, both Ben Asher and Ben Naftali read the *tav* as extra-long:

ومباتًا خا (BL Or 2544, fol. 158v, 10 | L [BHS]: اِشِدِيْة Exod.

8.7 'and from your houses')

(BL Or 2442, fol. 213v, 13 | L [BHS]: וּבְּׂחִים Deut. 6.11 (and houses')

ياتًاو (BL Or 2556, fol. 122r, 7 | L [BHS]: بِاتَاو 'its houses')

We have seen that the author of *Horayat ha-Qore* in medieval Europe states that the *tav* of the word has *dagesh lene*, except in וְּבֶּׁתִים מְלֵאִים כְּלֹ-טוּב (1 Chron. 28.11) and וּבָּׁתִים מְלֵאִים כְּלֹ-טוּב (Deut. 6.11).

Ḥayyūj, writing in Spain at the end of the tenth century, considered that the tav in all instances of בָּתִּים was pronounced

as an ungeminated stop. This is implied by the following passage from his *Kitāb al-'Af'āl Dhawāt Ḥurūf al-Līn*:³⁷

'As for the "light" (type of בגדכפת), this is like בְּרֵאשִׁית בְּרָא יֹח in the beginning God created' (Gen. 1:1) ... and like הָּמִידְ וּבְתַּי כָּל־יְעַבְדֶידְ 'and they shall fill your houses and the houses of your servants' (Exod. 10.6). ³⁸

Yequti³el ha-Naqdan, who was active in medieval Ashkenaz in the second half of the thirteenth century, writes in his work *En ha-Qore* that the *tav* in the word בָּתִּים should be read with *dagesh lene* following Ḥayyūj:³⁹

'I have found that Rabbi Yehudah Ḥayyūj, of blessed memory, said that there is a dagesh lene in the tavs of בֶּמֶים, and the like. Be careful not to pronounce the dagesh strongly.'

 $^{^{37}}$ Ed. Jastrow (1897, 12–13): פֿוֹל ומלאו בּרָא אַלהים בּרָא אַלהים בּרָא אַלהים בּמָל ומלאו בּרָא אַלהים בּרָא אַלהים בּרָא אַלהים בּמָי ומלאו בּרָא.

³⁸ The plosive pronunciation of the *tav* after long *qameṣ* was regarded as anomalous by Ḥayyūj and he is quoted by Ibn Ezra in his *Sefer Ṣaḥot* (ed. del Valle Rodríguez 1977, 1:289) to the effect that the *qameṣ* occurs to differentiate the word in meaning from בְּתִּים 'baths' (measure of capacity); cf. Charlap (1999, 121–22). The source of such a statement about the differentiating function of the *qameṣ* cannot be identified in the extant corpus of Ḥayyūj's writings. It may be based on Ibn Ezra's misinterpreation of the passage concerning the בַּגִּדְּכָּפַּת in *Kitāb al-ʾAfʿāl Dhawāt Ḥurūf al-Līn* (ed. Jastrow 1897, 12–13) (José Martínez Delgado, personal communication).

³⁹ Ed. Gumpertz (1958, 46): מצאתי שאמר ר' יהודה חיוג ז"ל בֶּתֶּידְּ בֶּתְּים ודומיי (שאמר ר' יהודה חיוג ז"ל בָּתָּידְ בַּתִּים ... השמר לד שלא תדגיש את התי"ו בחזק.

The reading traditions of the Jewish communities in Arabic-speaking countries in modern times preserved the gemination of dagesh forte according to the distribution of the dagesh forte—dagesh lene system of reading. There is no trace of an extended dagesh forte type of reading. Nor is there any trace of an extra-long gemination of tav. The plural form בְּבָּתִיכֶם is regularly read with dagesh lene, e.g. Yemen: bavo:the:xäm (בְּבָתִיכֶם 'in your houses' Isa. 3.14) (Morag 1963, 38; Ya'akov 2015, 72 n.134). This applied even to cases where the word has a secondary accent.

It appears, therefore, that the extended *dagesh forte* reading, which included the reading of the *tav* of בְּתִּים as geminate and as extra-long in some cases where it had two accents, fell into oblivion in Jewish communities outside of medieval Palestine.

I.3.1.13. Loss of Gemination

Gemination has been lost in the Tiberian tradition in the following circumstances.

I.3.1.13.1. Guttural Consonants

Guttural consonants, and frequently also *resh*, lost their gemination in the pre-Masoretic period due to their weakness. In such cases the preceding vowel was lengthened by way of compensation:

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יָּאָּדְּׁם [hɔ:ʔɔːˈðɔ:ɔm] 'the man' < *ha''adam [hɔ:ʔɛ:es^{\varsigma}] 'the tree' < *ha''eṣ הּתֹּינִיץ [hɔːˈħoːðɛʃ] 'the month' < *hahhodeš
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הַהְּוֹא [haːˈhuː] 'that' < *hahh \bar{u} [hɔːˈʀɛːmɛ(] 'the creeping creature' < *harrɛmɛš

I.3.1.13.2. Weak Consonants with *Shewa*

Gemination is occasionally lost in a consonant that has vocalic *shewa*. This applies in particular to sibilants, sonorants (*yod*, *lamed*, *mem*, *nun*) and *qof*, which are weak consonants. The loss of gemination in such cases has two causes, viz. the articulatory weakness of the consonants and the prosodic weakness of the syllable of the *shewa* (§I.2.5.2.). There is some variation across the manuscripts with regard to the loss of gemination in such forms. In some cases, there is no compensatory lengthening of the preceding vowel, and the consonant that loses the gemination is syllabified as the coda of the preceding syllable, e.g.

- L: הַשְּׁלַבֵּים 'the frames' (1 Kings 7.28 < הַשָּׁלַבֵּים)
- L: הַלְּוַיֵּם 'the Levites' (Exod. 6.25, etc. < הַלְּוַיֵּם)
- L: וַיִדְבֵּר 'and he spoke (Gen. 8.15, etc. < וַיִּדְבֵּר)

In some cases, the preceding vowel is lengthened, generally indicated by a ga'ya, and the consonant that has lost the gemination is read with vocalic *shewa*. This applies most commonly to a *mem* after the definite article (§I.2.5.8.1.) and a sequence of two identical consonants (§I.2.5.8.3.):

- L: הְמְדַבֵּר 'the one speaking' (Gen. 45.12, etc. < הַמְּדַבֵּר 'the one speaking')
- L: בַּקַלְלָוֹ 'when he cursed' (A: בָּקַלְלָוֹ, 2 Sam. 16.7 < בָּקַלְלָוֹ

I.3.1.13.3. Loss of Gemination when Adjacent to another Geminated Consonant

Dotan (1983) has shown that in L a *dagesh* marking gemination is sometimes omitted in a consonant with a full vowel when it is immediately followed by another geminated consonant. The omission of *dagesh* in this context is too systematic to be regarded as simply a scribal error, but rather it must be considered to reflect a phenomenon of the reading tradition. It is attested most commonly in weak consonants of the type that tend to omit *dagesh* when they are pronounced with *shewa*, i.e. sibilants, sonorants and *qof*. The majority of examples occur after the interrogative and, the preposition proposition and the preposition proposition and the preposition proposition to the preposition the definite article or the preposition of the dagesh is printed in BHS, although it does not appear in the manuscript L, e.g.

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מָה־מַשֶּׁא (What is the burden' (Jer. 23.33) א מָה־מַשֶּׁא מָה־מַשֶּׁא (from the Almighty' (BHS מָשָׁבִּי , Isa. 13.6) אין מְשַׁבִּי (the monument' (BHS הַצִּיוֹן, 2 Kings 23.17) הַצְיִוֹן (and the covering' (BHS הַבְּמַבֶּה, Isa. 28.20) הַמַּבֶּה (the ears of corn' (Gen. 41.24, BHS mistranscribes the first vowel as a qameṣ due to erroneously interpreting a fleck on the parchment as the lower dot of a qameṣ (הַשָּׁבֵּלִים from the fought' (BHS הַשָּׁבְלִים, ) עוֹיְלֶחֶם (מִּשְׁבָּלִים and he fought' (BHS מִילֶּחֶם, Jud. 11.20)
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עויה 'Uzziah' (2 Kings 15.30) < עויה

אָמֵיָא 'nations' (Aramaic, Dan. 3.7) < אָמֵיָא

This kind of omission of *dagesh* occurs in the onset of unstressed syllables and the following geminated consonant typically, though not invariably, forms the onset of a stressed syllable. The consonant that has lost the gemination is, therefore, generally prosodically weaker. The condition that the omission of the gemination occurs adjacent to other gemination could reflect a rhythmic phenomenon, whereby the clash of two strengthened, and so prosodically prominent, consonants is avoided.

I.3.1.14. Erroneous Printing of Dagesh in BHS

Golinets (2013), in an important study of the manuscript L, has drawn attention to a number of errors in the diplomatic edition of L that is printed in BHS and its derivative digital editions in the reading of vocalization signs. This is due to various reasons, including confusion of natural specks on the parchment for pen marks, the concealment of vocalization signs by the strokes of letters and the overwriting or erasure of vocalization signs by a later hand.

Many of the errors in reading relate to the *dagesh* sign. Several *dagesh* signs that appear in unusual places in various words in BHS and are not found in other manuscripts have been demonstrated by Golinets (2013, 250–51) to be specks on the parchment of L. These include the following cases:⁴⁰

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⁴⁰ There are a few additional places where the printed version of BHS is correct, but some of the digital versions and BHQ have an erroneously marked *dagesh*; see Golinets (2013, 250-251) for details.

	L	BHS	
Gen. 26.1	אֲבִימֶּלֶדְ	אָבימֶּלֶדְ	'Abimelech'
Gen. 34.28	חֲמֹרֵיהֶם	קַמֹרֵיהֶם	'their asses'
Gen. 39.19	עְשָׂה	אָשָׂה	'he has done'
Deut. 12.9	לא־בָאֿתֶם	לא־בָּאתֶם	'you have not come'
Jud. 14.2	קְחוּ־אוֹתֶהּ לֶי	קְחוּ־אוֹתֶהּ לִּי	'take her for me'
Jud. 19.5	ָחֶרְפָּתְ <i>ּ</i> י	חֶרְפָּתְי	'insult of me'
Cant. 6.8	מְלְבֿוֹת	מְּלְבׁוֹת	'queens'

I.3.2. RAFE

The *rafe* sign is a horizontal line written over a letter. As with several other Masoretic terms, it appears to be an Aramaic participle in origin בְּמַה. In Judaeo-Arabic Masoretic treatises it is sometimes Arabicized as an Arabic participle, e.g. the anonymous treatise preserved in the Genizah CUL T-S NS 157.52: ראפיה *rawāfī*.

The main use of the sign is to mark בגדכפת consonants as fricative. It is not, however, marked consistently in manuscripts. The marking of the sign was not standardized in the Tiberian tradition to the same extent as the marking of *dagesh* and it differs from one manuscript to another. Some of the model Tiberian manuscripts mark it more frequently than others. *Rafe* signs are, for example, more abundant in C and S than in L and A. It is marked only rarely in B. If two letters together both require *rafe*, the sign is generally only marked once over the space between them.

 $\it Rafe$ is not represented in most printed editions, including BHS and BHQ, which are based on L.⁴¹

The inconsistent marking of *rafe* on fricative בגדכפת consonants in L can be seen in the two sample verses below:

L: Gen. 30.1-2

וַתַּרֶא רָחֵל כִּי לָא יֱלְדָּה לְיַעֲקֶׁב וַתְּקַנֵּא רָחֵל בַּאֲחֹתֵה וַתְּאמֶר אֱל־יַעַקֹב הַבְּה־ לֵּי בְּנִים וְאִם־אַיִן מֵתָּה אָנְבִי: וַיְּחַר־אַף יַעֲקֹב בְּרְחֵל וַיֹּאמֶר הְתַחַת אֱלֹהִים אַנִּכִי אֵשֶׁר־מַנַע מִמֵּהַ פְּרִי־בַּטְן:

When Rachel saw that she bore Jacob no children, she envied her sister; and she said to Jacob, "Give me children, or I shall die!" Jacob's anger was kindled against Rachel, and he said, "Am I in the place of God, who has withheld from you the fruit of the womb?"

In most manuscripts, the *rafe* sign is generally, but not always, marked also on non-consonantal *he* and *'alef*, e.g. מֵלְכָּה 'queen', בָּאֹ 'he came.' A few manuscripts, especially C and S, often mark a *rafe* on the *'alef* in יִשְׂרָאֵּל 'Israel', possibly reflecting its elision in this frequently occurring word.

The *rafe* sign is used sporadically on other letters in the manuscripts.⁴² This is found mainly in contexts in which *dagesh* would be expected according to normal morphological patterns and prosodic processes, e.g.

Weak letters that have lost dagesh when pointed with shewa:

A: וַיְּבַקְשׁׁוּ 'and they inquired' (Jud. 6.29)

⁴¹ Rafe signs are marked in Ginsburg's Massoretico-Critical Text of the Hebrew Bible (1894).

⁴² Yeivin (1980, 286-7), Blapp (2017, 17-19).

A: שָׁלְּחָוּ 'send' (Psa. 74.7)

Omission of *dagesh* in word-initial position where it would normally occur according to the rules of *deḥiq* (§I.2.8.1.2.):

A: שֵׁיחָה לֵּי 'a meditation for me' (Psa. 119.99)

After an accent in words where gemination would normally occur:

A: לֶמְה 'why' (Job 7.20)

The *rafe* sign is sometimes marked in contexts that closely resemble contexts where *dagesh* would be expected, e.g. on a prefix of a verbal form that is preceded by *vav* with *shewa* to distinguish it clearly from a geminated prefix of a *wayyiqtol* form:

A: וְיַשְׁמֵע 'and will listen' (Isa. 42.23)

A: וְּיֶבְאׁ 'that he may come' (1 Sam. 4.3)

After a prefixed preposition with *shewa* to distinguish the construction from constructions with a preposition combined with a definite article:

C: בְּמַעֵלֵה 'on he the hill of' (1 Sam. 9.11)

On the *nun* of first person and third person feminine verbal suffixes to distinguish them from verbal suffixes with geminate *nun*:

A: פֶּדֵנִי 'redeem me' (Psa. 119.134)

A: שֵׁמְתֵּנִי 'you have made me' (Job 7.20)

L: תְּצְלֵינַה 'they will tingle' (1 Sam. 3.11)

*Hidāyat al-Qāri*² uses the term *rafe* for an ungeminated consonant in such contexts, e.g.

When a rafe (letter) follows it, it has segol, as in מֶה לִידִידִי (L: מֶה לְיִדִידִּי , A: מֱה לְיִדִידִּי Jer. 11.15 'what has my beloved?').⁴³

The letters with rafe in the contexts just described typically belong the set of weak sonorant letters 1, α , β . Rafe is sometimes marked on these letters in the manuscripts, no doubt by a process of analogical extension, when they are ungeminated in other contexts, where there is no risk of confusion with geminated letters, e.g.

C: גְּמַלֵּנוּ 'he has granted us' (Isa. 63.7)

C: תְּמַצְתָּוּ 'its leavening' (Hos. 7.4)

S: יַדָּענֵּי 'wizard' (Lev. 20.27)

S: יְלִשְׁנִּיגֵּה 'and into a byword' (Deut. 28.37).⁴⁴

In some manuscripts, *rafe* is occasionally marked on *vav* to indicate its consonantal value. This is found before a expressing [u:] and also in other contexts (§I.1.6.), e.g.⁴⁵

C: וְתַשְׁוֹּוִי 'and you make equal' (Isa. 46.5)

L: זִּיהֵי 'and let it be' (Psa. 90.17)

 $^{^{43}}$ Long version, edition in vol. 2 of this book, §II.L.3.2.2.: יפא ומא תבעה ומא כל מה לידידי

⁴⁴ Yeivin (1980, 286–87).

⁴⁵ Yeivin (1980, 286).

I.3.3. DAGESH AND RAFE IN MANUSCRIPTS WITH NON-STANDARD TIBERIAN VOCALIZATION

There is a considerable degree of variation in the use of the *dagesh* sign in manuscripts with Non-Standard Tiberian vocalization, but there is a clear tendency in many manuscripts for the sign to be used more frequently than in the standard Tiberian vocalization. Concomitantly there is also a wider use of the *rafe* sign.

The distribution of *dagesh* and *rafe* in Codex Reuchlinianus, the best known biblical manuscript with this system of vocalization, has been studied by Morag (1959). The use of dagesh and rafe in numerous other manuscripts of this type written in Europe, both biblical and non-biblical, has been described by Eldar (1978, 125-43). He shows that many of the manuscripts follow a basic principle of marking of dagesh similar to that of Codex Reuchlinianus, although there is a considerable amount of diversity in points of detail. Yeivin (1986) has described the distribution of dagesh in Vatican Urbinati 2, which was also written in Europe and exhibits a somewhat different distribution from the aforementioned manuscripts. The investigation by Blapp (2017, 2018) of Genizah fragments with Non-Standard Tiberian vocalization of a predominantly eastern origin from an earlier period (tenth-thirteenth centuries) has revealed a basic distribution similar to Codex Reuchlinianus and the material surveyed by Eldar, although each fragment exhibits some variant features.

In the Non-Standard Tiberian manuscripts, the rules of the marking of *dagesh* and *rafe* on the בגדכפת letters in the Standard Tiberian system are, in principle, applied to all letters, except the

pharyngeals (π, ψ) , π and those that function as both *matres lectionis* and consonants (\aleph, π, ψ) . The *dagesh* sign, therefore, is marked on the majority of letters at the beginning of a word and within a word after a silent *shewa*.

Genizah manuscripts

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אַדִּיקֿים (T-S A12.1, Blapp 2018, 138 | L [BHS]: תּוֹעֲבַת אֲדִיקִים Prov. 29.27 'abomination of the righteous')
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קבְנֵי (T-S A13.35, Blapp 2018, 139 | L [BHS]: וְכָל־קַרְנֵי Psa. 75.11 'all the horns of')

מְחְסֵּוֹר (T-S A12.1, Blapp 2018, 141 | L [BHS]: מַחְסֵּוֹר Prov. 28.27 'lack')

אַלְקַת (T-S A12.1, Blapp 2018, 141 | L [BHS]: הֶלְקַת Ruth 4.3 (portion of)

European manuscripts

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מְּסְּבֶּר (Codex Reuchlinianus, Morag 1959, 217 | L [BHS]: מְסְבֵּר Isa. 10.19 'number')
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מְּמְּלְּבֵּהֿ (Codex Reuchlinianus, Morag 1959, 225 | L [BHS]: מַמְלְבֵּה Jer. 18.9 'kingdom')

בַּרְמִּי (Codex Reuchlinianus, Morag 1959, 217 | L [BHS]: בַּרְמִי בַּרְמִי Isa. 5.3 'my vineyard')

נֿסֵּט (Codex Reuchlinianus, Morag 1959, 217 | L [BHS]: נֹסֵט Isa. 10.18 'sick')

Another aspect of the extension of *dagesh* in the Non-Standard Tiberian system is the use in some manuscripts of *dagesh* on

word-initial בגדכפת consonants after a preceding word with a final vowel and conjunctive accent, where a fricative form of the letter would be expected in Standard Tiberian. In these manuscripts, *dagesh* is used also on other consonants in this context. Examples:

ּ יְאֹבְדְוּ כָּל־אוֹיְבֶּׁיף (Vatican Urbinati 2, Yeivin 1986, 495 | L [BHS]: יאבְדְוּ כָּל־אוֹיְבֶּיף Jud. 5.31 'may all your enemies perish')

כֵי וְגְפוּ (Vatican Urbinati 2, Yeivin 1986, 495 | L [BHS]: בָּי Jud. 20.36 'that they were defeated')

According to Morag (1959, 226–28), the *dagesh* sign at the beginning of a word and after silent *shewa* in this system of vocalization did not have a phonetic realization of gemination but only had the function of indicating a syllable boundary. Eldar (1978, 125–43) likewise takes the view that this *dagesh* did not have a phonetic realization but rather was a 'separative *dagesh*'.

Yeivin (1983, 1986) agrees with Morag and Eldar that the function of the *dagesh* in the Non-standard Tiberian manuscripts was to express the division of syllables. He argues, however, that it was not simply an abstract sign but rather had the phonetic value of a *dagesh forte*. This would explain why it is not marked on consonants that do not in principle take *dagesh forte*, in particular the pharyngeal consonants.

I should like to argue that the distribution of the *dagesh* in manuscripts with Non-Standard Tiberian vocalization reflects a type of reading that arose by an analogical extension of the extended *dagesh forte* reading (§I.3.1.11.3.). The analogical process involved extending the gemination marking strengthened

syllable onsets from בגדכפת consonants to all consonants in syllable onsets that could be geminated. Since gemination was a potential feature also of a range of other consonants, this distribution of gemination of the בגדכפת consonants in the extended dagesh forte reading was extended further to include these other consonants. This took place by a process of regularization, which resulted in a more consistent distribution of the orthoepic use of dagesh to mark clear syllable divisions, e.g.

Extended dagesh forte		Non-S	Non-Standard Tiberian	
reading		Ti	Tiberian reading	
תִּשְׁבֹּר	[ttʰiʃ.ˈbboːoʀ̩]	תִּשְׁבַּר	[ttʰiʃ.ˈbboːoʀ̩]	
תִּשְׁמֹר	[ttʰiʃ.ˈmoːo̞ʀ]	הִּשְׁמֹר	[ttʰiʃ.ˈmmoːoʀ̩]	
נִשְׁמֹר	[ni∫.ˈmoːoʀ̩]	נְּשְׁמִר	[nniʃ.ˈmmoːoʀ̩]	

The incipient extension of *dagesh* to strengthen the onsets of syllables is found in forms such as יֵישֶׁלְּב' 'and he gave him' (L, Gen. 24.36) and forms attributed to Ben Naftali such as בִּוֹשׁנִי 'the son of Nun' and יֵשֶׁלֶּב 'the supplants' (Jer. 9.3).

The orthoepic marking of *dagesh* on the second of two identical letters across word-boundaries, such as בָּן־נּוּץ, and on a letter after a vowelless guttural, such as יֵעָקֹיב, is found also in some manuscripts with Palestinian pronunciation (Fassberg 1987), e.g.

[לְּבַךְ] (T-S A43.1, Revell 1970a, 76 | L [BHS]: עַל־לִבֵּדְ Isa. 57.11 'on your heart')

[וֹק[ים] מֿ[צדקה] (Bod. Heb. e 30 ff. 48-49, Revell 1970a, 76 | L [BHS]: הָרְחוֹקִים מִּצְּדָקָה Isa. 46.12 'who are far from righteousness')

[בח]שٌ[בו] (Bod. Heb. e 30 ff. 48-49, Revell 1970a, 77 | L [BHS]: נֵחְשָּׁבוּ Isa. 5.28 'they seemed'

[ק]מٌ[ק] (Bod. Heb. e 30 ff. 48-49, Revell 1970a, 77 | L [BHS]: הַּעָמֵק Isa. 7.11 'let it be deep')

The use of the *rafe* sign is likewise extended in some Palestinian manuscripts analogously to its extension in Non-Standard Tiberian manuscripts. It is found in particular on consonants following *ḥet* and *'ayin* that do not close a syllable, thus contrasting with *dagesh* that marks syllable closure after these consonants as we have just seen, e.g.

פּעמֿן (T-S A43.1, Revell 1970a, 77 | L [BHS]: פַּעֶמָן Exod. 28.34 'bell')

[ח]שׂُ[ח]שׁُ (T-S A43.1, Revell 1970a, 77 | L [BHS]: אֶּחֱשֶּׂה Isa. 62.1 'I will not keep silent')

קֿיְכּוֹתֶּידְּ (T-S A13.20, Blapp 2018, 144 | L [BHS]: הֲלִיכוֹתֶידְ Psa. 68.25 'your processions')

יִמְחַץ" (T-S A13.20, Blapp 2018, 144 | L [BHS]: יָמְחַץ" Psa. 68.22 'he will shatter')

עָבֶּי (T-S A13.20, Blapp 2018, 144 | L [BHS]: עָבָי Psa. 70.6 'poor')

קֿבַּקְשֶׁידְ (T-S A13.20, Blapp 2018, 144 | L [BHS]: מְבַּקְשֶּׁידְ Psa. 70.5 'those who seek you')

אָשֶׁיב (T-S A13.20, Blapp 2018, 144 | L [BHS]: אָשֵׁיב Psa. 68.23 'I will bring back')

יָגֹדֶלְ (T-S A13.20, Blapp 2018, 144 | L [BHS]: יְגִדֶל Psa. 70.5 'he is great')

קבל (T-S A13.20, Blapp 2018, 144 | L [BHS]: בָּל Psa. 69.20 'all of')

בְּהֵּם (T-S A13.20, Blapp 2018, 144 | L [BHS]: בְּהָם Psa. 68.24 'in blood')

These letters exhibit features of weakness in the standard Tiberian tradition, such as the loss of *dagesh* when they have *shewa* (§I.2.5.2.). It is likely, therefore, that the *dagesh* that is added to them in these contexts after open syllables was primarily intended as an orthoepic measure to guard against their weak articulation and to ensure that they were pronounced distinctly.

Another consonant that is sometimes marked with *dagesh* after a vowel in such manuscripts is *tet*, e.g.

וּתְּפַּלְּטֵנִי (T-S A13.20, Blapp 2018, 144 | L [BHS]: וְּתְּפַּלְטֵנִי Psa. 71.2 'and you rescue me')

The manuscript T-S A13.20, where Blapp has identified many examples of this feature, also exhibits the marking of *dagesh* on word-initial consonants that do not usually take word-initial *dagesh* in Non-Standard Tiberian manuscripts, such as *ḥet*, *vav* and *yod*:

קייֵם (T-S A13.20, Blapp 2018, 143 | L [BHS]: מָפֶּבֶּר חַיָּיִם Psa. 69.29 'of the living')

יָּאֶבֶיץ (T-S A13.20, Blapp 2018, 143 | L [BHS]: יָּאֶבֶיץ Psa. 69.35 'and earth')

יֵבֿשׁוּ (T-S A13.20, Blapp 2017, 163 | L [BHS]: יֵבְּשׁוּ Psa. 70.3 'let them be put to shame')

There are numerous Non-Standard Tiberian manuscripts with the extended use of *dagesh* in the Genizah, which are datable to the Masoretic period or shortly after, i.e. tenth–thirteenth centuries (Díez Macho 1963; Blapp 2017, 2018). Arrant (2020) has shown that many of these manuscripts were written in a monumental format with three columns similar to the model Tiberian manuscripts. This suggests that the marking of *dagesh* in such manuscripts reflected a living reading tradition in the Middle East at the time when such manuscripts were written.⁴⁶

Manuscripts with Non-Standard Tiberian extended *dagesh* were widely distributed in medieval Ashkenaz. Yequti'el ha-Naqdan, who was writing in medieval Ashkenaz in the second half of the thirteenth century, is aware of the existence of such manuscripts. He and readers in his community, however, thought that the *dagesh* was a *dagesh lene* and so, understandably, the *dagesh* had no phonetic realization in consonants that did not

⁴⁶ Some medieval Arabic sources report marginal cases of *tashdid* (i.e. gemination) of consonants at the beginning of syllables in the recitation of the Qurʾān, e.g. يَخْطِفُ yakhṭṭṭfu 'it takes away' (Q 2.20) (ed. Bergsträsser, 1934, 3). This would, presumably, reflect a similar orthoepic measure to ensure clear syllable division.

belong to the בגדכפת group. This is expressed in the following passage from his *En ha-Qore* (ed. Yarqoni 1985, 105):

'Now you should understand that the letters בגדכפת with dagesh are heard in all words (marked with them). Their being pronounced with dagesh or rafe is known in the language and fixed in the mouth, in the place of articulation, whether it be dagesh forte or dagesh lene. But as for the letters אולטמנסצקש, the dagesh lene is not heard in them in most places ... most people of our land do not know how to pronounce the dagesh lene that occurs in these letters.'47

Yequti'el then gives a number of examples of dagesh lene in the letters מלפים both after guttural letters, e.g. בְּעְלֶּה, and after non-guttural letters, e.g. נְבְּקְעוּ (Yarqoni 1985, 107). Although the tradition of marking this dagesh continued in medieval Ashkenaz, Yequti'el's remarks indicate that the reading of the dagesh as dagesh forte had largely fallen into oblivion. He qualifies his remarks with the phrase 'in most places ... most people of our land', which may indicate that he was aware of some vestiges of the type of pronunciation that was originally reflected by the extended dagesh of the Non-Standard Tiberian vocalization. Indeed a statement by David Qimḥi, writing in southern France at roughly the same period as Yequti'el, could

הקל הבא בותיות האלה.

יועתה הבן לך כי אותיות בֹגדֹכֹפֹת נשמעים בכל מלה בדגש ודיגושם ורפיונם ניכר בלשון ועתה הבן לך כי אותיות בֹגדֹכֹפֹת נשמעים בכל מלה בין שהוא דגש חזק אבל וֹזֹלטֹמֹנֹסֹצִקֹשׁ ותקוע בפה במוצא הדיבור בין שהוא דגש קל בין שהוא דגש הדגש הקל לא נשמע בהם ברוב מקומות ... ורוב אנשי ארצנו לא ידעו להשמיע את הדגש

be interpreted as indicating that there were still memories of this original pronunciation. In his *Mikhlol* he states:

יWhenever mobile shewa is followed by one of the letters בגדכפת, the letter from the בגדכפת (letters) is soft ... The same applies to the other letters with regard to their strength and lightness, for example in לָמָה 'why' the reading of the lamed is strong and in יְלָמָה 'and why?' the reading of the lamed is light because of the mobile shewa in it. In שָׁאֵל יְנִי 'the man questioned us carefully' (Gen. 43.7) the reading of the shin is strong; in יְשָׁאַל יְנִי and he shall ask for him' (Num. 27.21) the reading of the shin is light. In יְּבָּלְי בְּנִיךְ (why) has your countenance fallen?' (Gen. 4.6) the reading of the nun is strong; in יְנִפְלִי וְלֵא־יָקוֹמוּ (Gen. 4.6) the reading of the nun is strong; in יְנִפְלִי וְלֹא־יָקוֹמוּ 'they will fall and not rise again' (Amos 8.14) the reading of the nun is light. Likewise, the other letters (are read) in this way, except for yod, which is always light unless it has dagesh.'48

In this passage, Qimḥi refers to strong and weak variants of consonants. He states that this variation is found not only in the consonants בגדכפת, but also in other consonants. The distribution of the variation in the other consonants is the same as is found with the בגדכפת consonants, i.e. the weak variant occurs after a vowel. This appears, therefore, to be an allusion to the type of

⁴⁸ Ed. Rittenberg (1862, 140a): ב"ד כפ"ת בג"ד כפ"ת לה אחת מאותיות בפי חזקתם וכפי קלותם האות ההיא אשר הוא מבג"ד כפ"ת תרפה ... וכן בשאר האותיות כפי חזקתם וכפי קלותם כמו לְמָה קריאת הלמ"ד חזקה, ולְמָה קריאת הלמ"ד קלה מפני שו"א הנע אשר עליה, שָאֹל שאל האיש קריאת השי"ן חזקה וְשָאַל לו קריאת השי"ן קלה, נְפְּלוּ פניך קריאת הנו"ן חזקה, וְנָפְלוּ ולא יקומו עוד קריאת הנו"ן קלה וכן שאר האותיות על זו הדרך זולתי הנו"ן חזקה, וְנָפְלוּ ולא יקומו עוד קריאת הנו"ן היו"ד שהיא קלה לעולם זולתי אם תדגש ...

pronunciation that is reflected by the extended dagesh of Non-Standard Tiberian vocalization, although Qimhi does not refer to the marking of the dagesh sign on the strong variant of the consonants outside the בגדכפת group. His remark at the end of the passage that yod does not have strong and weak variants in the same way as the other consonants 'unless it has dagesh' can also be correlated to the type of pronunciation reflected by Non-Standard Tiberian vocalization. In manuscripts exhibiting this type of vocalization *yod* often lacks *dagesh* in word-initial or postconsonant position and takes *dagesh* only where this occurs in the standard Tiberian vocalization.⁴⁹ In this passage, therefore, we may have evidence that features of the extended dagesh type of Non-Standard Tiberian pronunciation survived in Ashkenaz and were applied to biblical manuscripts with standard Tiberian vocalization. It should be noted, however, that Qimhi makes a distinction between dagesh lene (דגש קל) and dagesh forte (דגש חזק) in the בגדכפת consonants and does not identify the fortition of the other consonants in word-initial position with the gemination of dagesh forte.

As alluded to by Yequti'el ha-Naqdan, the type of pronunciation that made a distinction in pronunciation between consonants outside the בגדכפת group after a vowelless consonant or word-initial position was not widely followed in medieval Ashkenaz. Yequti'el describes a reading tradition in which there was a general tendency to weaken *dagesh forte*, especially when the letter had *shewa* (Yarqoni 1985, 113). There is evidence from

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⁴⁹ Cf. Morag's (1959, 220) description of the distribution of *dagesh* in Codex Reuchlinianus.

transcriptions of Hebrew into Latin script in medieval France that letters with *dagesh forte*, according to the standard Tiberian vocalization, were not pronounced geminated (Gumpertz 1953, 5; Yarqoni 1985, 108–11). The marking of *dagesh forte* is, moreover, frequently omitted in medieval Ashkenazi prayerbooks (Eldar 1978, 115–22), and is completely lost in modern Ashkenazi reading traditions (Glinert 2013, 192). This general weakening of gemination in Ashkenaz that had begun already in the Middle Ages would have eliminated the gemination that was distinctive of the extended Tiberian pronunciation tradition.