

I.3. *DAGESH AND RAPE*

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-š* ‘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 בגדכפת 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 (*dagesh lene*) in his *Mikhlol*. The terms דגש חזק and דגש קל are used also by Yequtiʿel 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 Yequtiʿel borrowed this terminology from Qimḥi (Yarqoni 1985, 105–13).

Dagesh is not marked, however, on the laryngeals and pharyngeals (אֶהָעָח) in the Standard Tiberian tradition, except in a few isolated cases to ensure correct reading (e.g. the *dagesh* in *ʾalef* 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־כָרַת שְׁרִדְךָ ‘your navel string was not cut’ (Ezek. 16.4)

L: מִרְתַּת נַפְשׁוֹ ‘the bitterness of its soul’ (Prov. 14.10)

L: שְׂרָאִשִּׁי ‘because my head’ (Cant. 5.2)

L: מִאֲוִמָּה רָעָה ‘anything bad’ (Jer. 39.12)

L: הִרְעִמָּהּ ‘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.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 ψ *še* and on the medial *resh* of a number of verbal and nominal morphological patterns with a geminated middle radical, e.g. עִרַב ‘he mixed’ (*pi‘el*) and מְעִרְבָתָהּ ‘mixed’ (*pu‘al*), סָרְגִין ‘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 [ʃerraʔa¹ta] (שָׁרְאָתָהּ) ‘who has seen (fs)’ (*Berakhot* 3.6), [ʔər¹re:β] (עָרַב) ‘he created an ‘*eruv*’ (*Eruvin* 2.6), [leharra¹gin] ‘to murderers’ (לְהַרְגִין) (*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 עִרַב 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

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 שָׂרַאֲשִׁי ‘because my head’ (Cant. 5.2) after the particle -שְׁ, 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 -שְׁ 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. בִּקֵּשׁ ‘he sought’, גִּנֵּב ‘thief’, חֲנּוּן ‘gracious’. A possible case of morphological gemination of *resh* in the Tiberian biblical tradition is לֹא־כָרַת שְׁרִדָּךְ ‘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.

עַמִּים ‘peoples’, עַמּוֹ ‘his people’; cf. sing. עַם < **amm*

גַּנָּים ‘gardens’, גַּנּוֹ ‘his garden’; cf. sing. גַּן < **gann*

1.3.1.3. *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 לֹא is juxtaposed with the homophonous prepositional phrase לוֹ a *dagesh* is added to the negator to distinguish the two, e.g.

L: לֹא לוֹ יְהִיָּה הַזֶּרַע [llo: 'lo:] ‘The offspring would not be his’ (Gen. 38.9)

L: עַל-רִיב לֹא-לוֹ [llo:-'lo:] ‘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 as אֲבִיר ‘powerful’ referring to God, used in phrases such as אֲבִיר יַעֲקֹב ‘the Mighty One of Jacob’ (Gen. 49.24, Isa. 49.26, Isa. 60.16, Psa. 132.2, 5) vs. אֲבִיר ‘powerful’, used to refer to humans, עֲצָבִים ‘toils’ vs. עֲצָבִים ‘idols’, יְנַיֵּחַ ‘he gives rest’ vs. יְנַיֵּחַ ‘he places’, תְּלִינוּ ‘you spend the night’ vs. תְּלִינוּ ‘you murmur against’, and the historical gemination

separating the pairs יְהִל 'he begins' (Jud. 10.18) vs. יְהַל 'he profanes' (Num. 30.3).⁷ 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 הַנֶּאֱמָר (also written אֶנְאֶמָר) may have been a device to distinguish it from הַנֶּאֱמָר '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 אֶבִיר vs. אֲבִיר and עֲצָבִים vs. עֲצָבִים. 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 Golinetz (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

אלהים (OB | L [BHS]: אֱלֹהִים אַחֲרַיִם Deut 11.16 ‘other gods’)

אלהי (OB | L [BHS]: אֱלֹהֵי מִצְרַיִם Exod. 12.12 ‘the gods of Egypt’)

The *dagesh* is used also in the cognate word in Biblical Aramaic when it refers to foreign gods, e.g.

לאֱלֹהֵי דְהַבָּא (MB | L [BHS]: לְאֱלֹהֵי דְהַבָּא Dan 5.4 ‘the gods of gold’)

The word כהנים is marked with a *dagesh* when it refers to ‘priests of foreign gods’ (Yeivin 1985, 358), e.g.

הַכֹּהֲנִים (MB | L [BHS]: הַכֹּהֲנִים Zeph 1.4 ‘the priests’)

וַתַּעֲשׂוּ לָכֶם כֹּהֲנִים כְּעַמֵּי הָאָרְצוֹת כֹּהֲנִים (MB | L [BHS]: וַתַּעֲשׂוּ לָכֶם כֹּהֲנִים כְּעַמֵּי הָאָרְצוֹת 2 Chron. 13.9 ‘and you will make for yourselves priests like the peoples of the lands’)

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 לו, for example, to distinguish it from the homophone לא (Yeivin 1985, 1132–33), e.g.

מִי יִשְׁלֹם-לוֹ (OB | L [BHS]: מִי יִשְׁלֹם-לוֹ Job 21.31 ‘who will repay him’)

¹⁰ Data supplied by Shai Heijmans. OB = Old Babylonian, MB = Middle Babylonian.

לֹא־אֹיֵב לוֹ (OB | L [BHS]: לֹא־אֹיֵב לוֹ Job 33.10 ‘as an enemy for him’)

This includes cases where the *qere* is לוֹ but the *ketiv* is לֹא, e.g.

וְלֹא־שֵׁם (OB | *ketiv* וְלֹא־שֵׁם, *qere* וְלוֹ־ 1 Chron. 11.20 ‘and he has a name’)

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

אַל־תֹּאכְלוּ מִמֶּנּוּ נֹא (OB | L [BHS]: אַל־תֹּאכְלוּ מִמֶּנּוּ נֹא Exod. 12.9 ‘do not eat any of it raw’)

עֲרִיכְךָ (OB | L [BHS]: עֲרִיכְךָ 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. עֲרִיכְךָ, עֲמִלְךָ. 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 אֲנִיָּהּ by the marking Arabic *shadda* in the Karaite transcriptions, e.g.

אָנָּה (BL Or 2556, fol. 40r, 9 | L [BHS]: אָנָּה Neh. 1.5. ‘Oh!’)¹¹

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:

חֲתִיבָּה ‘cutting’ vs. חֲתִיבָּה ‘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 *ʾalef* + long *qameṣ*, i.e. [ʔɔ:], is represented by a single Arabic *ʾalif*. In Biblical Aramaic a long vowel is more widely tolerated in an unstressed syllable closed by a geminated consonant, e.g. עָלִין ‘they enter’ (Dan. 4.4 *qere*); cf. also Syriac *ʿallin* (Nöldeke 1869, 457).

גְּבִינָה ‘making cheese’ vs. גְּבִנָּה ‘cheese (noun)’

חַיִּים ‘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.

חַיָּא ‘living’ (referring to God) vs. חַיָּא ‘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.

‘ā:rəm ‘the cities’ (Tiberian הָעָרִים) vs. ‘arrəm ‘cities’ (Tiberian עָרִים)¹³

wāmā ‘and the cubit’ (Tiberian וְהָאֶמָּה) vs. wāmmā ‘and a cubit’ (Tiberian וְאֶמָּה)¹⁴

āḏāni ‘Lord’ (divine) vs. āḏanni ‘master’ (human)¹⁵

ā:sidā ‘the stork’ (animal) (Tiberian הַחֲסִידָה Lev. 11.19) vs. assidāk ‘your pious one’ (human) (Tiberian חֲסִידְךָ 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-Ḥayyim (1957a-77 vol. 4, 8-9, vol. 5, 194, 2000, 260).

¹⁶ Florentin (1996, 231).

yamən ‘Yamin’ (proper name) (Tiberian יָמִין Gen. 46.10) vs.
yammən ‘right hand’ (Tiberian יָמִין)¹⁷

wyābād ‘and he perished (past)’ (Tiberian וַיִּאָבֵד) vs. yābbād
‘he perishes (non-past)’ (Tiberian יִאָבֵד)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.

יָפַל [jip-^lp^ho:ol] ‘he falls’ < *yinp^lol

נָתַתָּ [nɑ:’θɑ:at^h-t^h] ‘you (fs) gave’ < *natant

מִשָּׁם [mi]-^lʃɑ:ʔm] ‘from there’ < mən šəm

יָקַח [jiq-^lqɑ:aħ] ‘he takes’ < *yilqah

וַתִּבְּנֶה (Num. 21.7) [vaθik^h-k^ho:’ne:en] ‘and let it be established’ < vətibne

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. wyābbādu וַיִּאָבְדוּ ‘and they perished’ (Num. 16.33) vs. tābbād תֵּאָבֵד ‘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 *qibbuṣ*

עַמְקִים, עַמְקָה ‘deep (fs, mpl)’; cf. ms. עֶמוֹק **‘amuq*

אֶדְמִים, אֶדְמָה ‘red (fs, mpl)’; cf. ms. אֶדוּם **‘adūm*

עִרְמָם (Gen. 3.7) ‘naked’ (mpl); cf. ms. עִירוּם **‘ērum*

קֶרְדָּמוֹ (1 Sam. 13.20) ‘his axe’; cf. sing. קֶרְדוּם **‘qardum*

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

אֶכְלוּ ‘they have been eaten’ (Neh. 2.3) < **‘ukalū*

לָקַח ‘he was taken’ (Gen. 3.23) < **‘luqah*

וְשָׁפַךְ ‘and it will be poured’ (Zeph. 1.17) < **‘šupak*

I.3.1.5.2. After *hireq*

אֶסָר ‘bond’ < **‘isār*

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.

גְּמָלִים ‘camels’; cf. sing. גָּמַל

קָטָנִים ‘small (mpl)’; cf. ms. קָטָן

מְעַט ‘few’; cf. ms. מַעַט

אֲגָמִים ‘marshes’; cf. sing. אָגַם

הַדְּסִים ‘myrtles’; cf. sing. הֶדֶס

עֲקָרְבִים; cf. sing. עֶקְרָב ‘scorpion’

נִכְבְּדִי (Isa. 23.8) ‘honoured of’; cf. ms. נִכְבֵּד

מִשְׁגָּבִי (Psa. 18.3) ‘my stronghold’; cf. sing. מִשְׁגָּב

מִמְמָקֵי (Isaiah 51.10) ‘the depths of’

בְּפִלְגֹת (Jud. 5.15) ‘among the clans’

מִטְעָמִים (Gen. 27.4) ‘tasty foods’

מִחֲמֻדִים (Cant. 5.16) ‘desirable things’

In the following the **a* vowel undergoes attenuation to a *hireq*:

וְהַמְרָגִים (2 Sam. 24.22) ‘and the threshing-sledges’; cf. sing.

לְמוֹרָג (Isa. 41.15)

Historical gemination of this nature can be reconstructed for *het* in various forms where this letter is now preceded by *pataḥ*, e.g.

בְּחוּרִים (< **baḥhūrīm*) ‘young men’; cf. sing. בָּחוּר (< **bāhūr*)

מִבְּטָחִים (< **mibṭaḥhīm*) ‘confidences’; cf. sing. מִבְּטָח (< **mibṭāḥ*)

אֶחָיו (< **aḥhīm*) ‘brothers’; cf. sing. אָח (< **āḥ*)

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.

וַיִּסְתַּחֲוּ (Jud. 5.7) ‘they ceased’

וַיִּחַלּוּ (Job 29.21) ‘and they waited’

וַיִּרְמוּ (Job 29.12) ‘they are lofty’

וַיִּתְּנוּ (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.

בַּמָּה ‘in what?’ < **ba + mā*

כַּמָּה ‘how much?’ < **ka + mā*

עַד שֶׁקָּמַתִּי (Jud. 5.7) ‘until you (fs) arose’ < **ša + stem*

שְׂרָאִשִּׁי ‘because my head’ (Cant. 5.2) < **šɛ + stem*

We can include here לָמָּה ‘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.

לָמָה (Exod. 5.22). Gemination, however, still occurs when the word has *maqfep* and so is unstressed, e.g. לָמָה (Prov. 17.16).

Another possible case of this type of gemination is the *dagesh* that occurs after the prefixed conjunction *vav* in the וַיִּקְטֹל [vaʔijiq'tʰo: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 וַיִּקְטֹל (§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.

הוּא הַכֹּרֶן־נָא הַבְּתוּנָת בְּנֵךְ הוּא [hakk^ha^hθo:nεθ] ‘acknowledge now whether it is your son's robe’ (Gen. 37.32)

הֲרָאִיתָם [harr̥iʔi:^hθe:εm] ‘Have you seen?’ (1 Sam. 10.24)

הַכְּצַעֲקָתָהּ [hakk^has^hɑ:^hʔɑq:^hθɔ:h] ‘Is it according to its outcry’ (Gen. 18.21)

הַבְּמַחֲנֵים [habbama:^hħa^hni:im] ‘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.

הֲעוֹד [ħa:^hʔo:θð] ‘is here still’ (Gen. 31.14)

הֲאֵלֶךְ [ħa:^hʔe:^hle:εχ] ‘shall I go’ (Exod. 2.7)

הֲאֵינִי [ħe:^hʔno:^hχi:] ‘Is (it the case that) I ...’ (Job 21.4)

I.3.1.9. Gemination at Word Boundaries (*Deḥiq*)

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.

וְאֶעֱיֶדָהּ אֲנִי ‘I shall cause to witness against them’ (Deut. 31.28)

תַּעֲשֶׂה לְךָ ‘you make for yourself’ (Prov. 24.6)

Hidāyat al-Qāri’ includes constructions with the interrogative word מה such as the following in the category of *deḥiq*:

מַה זֶה ‘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 בְּמַה ‘in what?’, in which it marks the boundary between morphemes, and the *dagesh* in forms such as גַּמְלִים ‘camels’, where it substitutes for the lengthening of the preceding vowel. Also in words such as גַּמְלִים ‘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 *מה*, by introducing length in a fully shortened vowel.

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

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 *maqṣef*, but is plosive if the accent of the preceding word is disjunctive, e.g.

בְּנֵי־יִשְׂרָאֵל [ʃalo:ʔni:im] ‘three sons’ (Gen. 6.10)

זָכָר וּנְקֵבָה בָּרָאם [zək: wunqɛ: bax:] ‘male and female he created them’ (Gen. 5.2)

נִמְצְאוּ־בָּם [nimsʔu: bəm] ‘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.

עָשׂוּ׀ כְּלָהּ ‘They have done completely’ (Gen. 18.21)

¹⁹ Cf. *Hidāyat al-Qārī*, 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).

יֹסֶף יְהוָה עַל-עַמּוֹ | כָּהֶם ‘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.

חֲצִרְתִּיו בְּתֵהֵלָה ‘(enter) his courts with praise’ (Psa. 100.4)

אֶלְיוֹ פִּי-קָרָאתִי ‘I cried aloud to him’ (Psa. 66.17)

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

וְנָטָה עֲלֶיהָ קוֹתָהּ ‘He will stretch the line of confusion over it’ (Isa. 34.11)

וְקוֹל הַמּוֹן שָׁלוֹן בָּהּ ‘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.

אוּלִי תִעְרוֹצִי ‘perhaps you may inspire terror’ (Isa. 47.12)

כִּי מִי-גּוֹי גָדוֹל ‘for what great nation’ (Deut. 4.7)

לְגוֹי-גָדוֹל וְעָצוּם ‘into a great and mighty nation’ (Num. 14.12)

There is one exception to this:

אֲדַנִּי בָּם ‘the Lord in them’ (Psa. 68.18)

(iv) If two *bets* or *kafs* 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.

וַיְהִי בְּבוֹאָהּ ‘and when she came’ (Josh. 15.18)

וַתִּתְפָּשֶׂהוּ בְּבִגְדוֹ ‘and she caught him by his garment’ (Gen. 39.12)

הֲלֹא כְּכַרְכֶּמֶשׁ ‘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.

וְהָיָה אִשָּׁה בְּתוּלִיהָ ‘And he (shall take) a wife in her virginity’ (Lev. 21.13)

וְאֲנָשֵׁי בָבֶל ‘men of Babylon’ (2 Kings 17.30)

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

בְּבִגְדוֹ [(ba.viʔ.)(^ldo:)]

בְּבָל [(vɔ:.)(^lvɛ:ɛl)]

בְּתוּלִיהָ [(viv.)(θu:.)(^lle:.) <hɔ: >]

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

וּבְנֵי דֶדָן ‘and the sons of Dedan’ (Gen. 25.3)

לֹא־תִתְעַב ‘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.

וְאֶבְרָחָם בְּפָרְעֹה ‘and I will get glory over Pharaoh’ (Exod. 14.4)

וּדְבָרַי אֲשֶׁר־שָׂמַתִּי בְּפִיךָ ‘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.

אֵלֵי־יָרֵא בְּפִלְגֹזוֹ ‘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.

וַיִּנְתְּהוּ בְּגַן־עֵדֶן ‘and he put him in the garden of Eden’ (Gen. 2.15)

הֲלוֹא כְּגַעַת בָּהּ ‘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):

גָּאָה גָּאָה ‘he has triumphed gloriously’ (Exod. 15.1, 21)

מִי כְּמִכָּה ‘Who is like you?’ (Exod. 15.11)

יְדָמוּ כְּאֶבֶן ‘they are as still as a stone’ (Exod. 15.16)

וְשִׁמְתִי כְּדָבָר ‘and I shall make (your pinnacles) of agate’ (Isa. 54.12)

וְנִלְאֵיתִי כְּלֶכֶל ‘and I am weary of holding it in’ (Jer. 20.9)

וְחָכְמָה כְּחָכְמַת-אֱלֹהִין ‘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): עִמּוֹן גְּאֻלֹּתַי ‘the people whom you have redeemed’ (Exod. 15.13); Ben Naftali: גְּאֻלֹּתַי

Ben Asher: בְּחֹדֶשׁ הַשְּׁמִינִי בְּחֹמֶשֶׁת-עָשָׂר ‘in the eighth month on the fifteenth (day)’ (1 Kings 12.32); Ben Naftali (L): בְּחֹמֶשֶׁת.

Ben Asher (L): אֲדָרְגֹזְרִיאַ גְּדָבְרִיאַ דְּתָבְרִיאַ ‘the counsellors, the treasurers, the justices’ (Aramaic, Dan. 3.2, 3); Ben Naftali: גְּדָבְרִיאַ.

²⁰ According to the Hebrew Masoretic treatise published by Ginsburg (1885, 37) the *kaf* in כְּחָכְמַת (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: סַבְכָּא פְּסַנְתְּרִין ‘trigon, harp’ (Aramaic, Dan. 3.5);
Ben Naftali (L): פְּסַנְתְּרִין.

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

(vii) Ben Naftali read the preposition *kaf* as plosive after וַיְהִי with a conjunctive accent in seven cases where Ben Asher read the *kaf* as fricative according to the usual rule.²¹ L follows Ben Asher in this respect:

Ben Asher (L)	Ben Naftali
וַיְהִי כְּשָׁמַע אֲדָנָיו	וַיְהִי כְּשָׁמַע אֲדָנָיו
‘when his master heard’ (Gen. 39.19)	
וַיְהִי כְּשָׁמְעוּ	וַיְהִי כְּשָׁמְעוּ
‘and when he heard’ (Gen. 39.15)	
וַיְהִי כִּרְאוֹת	וַיְהִי כִּרְאוֹת
‘and when (the king) saw’ (Esther 5.2)	
וַיְהִי כִּרְאוֹתוֹ	וַיְהִי כִּרְאוֹתוֹ
‘and when he saw’ (Jud. 11.35)	
וַיְהִי כִּהוֹצִיָּאם	וַיְהִי כִּהוֹצִיָּאם
‘and when they brought out’ (Gen. 18.17)	
וַיְהִי כְּמָלְכוֹ	וַיְהִי כְּמָלְכוֹ
‘when he became king’ (1 Kings 15.29)	
וַיְהִי כְּאֲשֶׁר־תָּמוּ	וַיְהִי כְּאֲשֶׁר־תָּמוּ
‘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 (למנר), gutturals and *qof*, e.g.

מִקְרָה לַיְלָה [miqqaṛeː-ˈlajːlɑː] ‘accident of the night’ (Deut. 23.11)

מִמָּרָרִים [mammaṛoːˈriːim] ‘bitterness’ (Job 9.18)

וְנִתְקַנְהוּ [ˌwɪnˈtʰɑqqaˈnuːhuː] ‘and we shall draw him away’ (Jud. 20.32)

יְקִהת [ˌjɪqqaˈhaːaθ] ‘obedience of’ (Gen. 49.10)

הִרְעִמָה [haṛṛiːiːˈhɑːh] ‘to irritate her’ (1 Sam. 1.6)²²

²² According to Melamed (1948, 1) the purpose of the *dagesh* in הִרְעִמָה (1 Sam. 1.6) is to distinguish this human activity (‘to irritate her’) from the meaning of the verb in אֱלֹהֵהֶבְדֹּד הִרְעִים ‘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.

עִקְוֹת [ʔiqqa¹vo:θ] ‘footprints of’ (Psa. 89.52)

מִקְדָּשׁ [miqqa¹ð:ɔʃ] ‘sanctuary’ (Exod. 15.17)

מִטְהָרָוּ [mitt^ʃħh:ʔo:] ‘his lustre’ (Psa. 89.45)

מִצְעָרָה [miss^ʃiʔi:ʔo:] ‘small’ (Dan. 8.9)²³

הַצְּפִינוּ [hass^ʃafi:ʔno:] ‘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 *hireq*. Such forms may have been facilitated by the fact that similar sequences occur when the preposition *מן* assimilates to a word. The same may apply to examples with initial *he* with *patah*, 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. סֶלֶעַי [sa:liʔi:] ‘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 מִטְהָרָוּ and מִצְעָרָה as orthoepic see Ariel (2020).

introduce metrical epenthesis between the two consonants, e.g. *ישעיהו* [ja,ʃaːʔØʰkɪ:hu:] ‘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:

יִרְדֵּי [ji:raddo: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.

tēšābbəṣ < **tašbeṣ* (Ben Ḥayyim 2000, 59 | L [BHS]: *תִּשְׁבֹּט*
Exod. 28.4 ‘checkered work’)

1.3.1.11.2. *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 *maqṣef* when the first word ends in *nun*, e.g. *וַיִּתֵּן לּוֹ* ‘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 בן-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: לְמַעַלְהָ | לְהַגְדִּיל ‘to make exceedingly great’ (1 Chron. 22.5)

L: לְרַב | וּבְרַגְלֵי ‘iron in abundance’ (1 Chron. 22.3).

According to *Kitāb al-Khilaf*, Ben Naftali marked a *dagesh* in the *qof* of the verb יַעֲקֹב ‘he supplants’ (Jer. 9.3, L: יַעֲקֹב) (ed. Lipschütz 1965, לג) 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 יַעֲקֹב ‘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 *Hidāyat al-Qāri’*, 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 עִקְבֹּב 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* (עִקְבֹּב) and in the second word in phrases such as and בְּגִנֹּן to mark a clear division of syllables occurs in a number of later Bible manuscripts, e.g. וַיִּשְׁסָר 'and he harnessed' (Exod. 14.6), יַעֲזֹר 'Jazer' (Num. 32.35), לֶאֱכֹל-לֶחֶם 'to eat bread' (Gen. 31:54), לָהֶם מִיָּגוֹן '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 *hatef* 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 וְעִירָם 'and male donkeys' (Gen. 32.16, L: וְעִירָם), 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 יֶעֱקֹב.

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 בגדכפת 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 בגדכפת 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

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

21.11 ‘the word’)

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

21.15 ‘the water’)

Dagesh lene

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

4.10 ‘my words’)

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

22.9 ‘the altar’)

BL Or 2544 + Or 2545 + Or 2546

Dagesh forte

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

‘and they beat them into pieces’)

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

‘it will be redeemed’)

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

Dagesh lene

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

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

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

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

BL Or 2540

Dagesh forte

נִיחַכְמָא (BL Or 2540, fol. 4r, 4 | L [BHS]: נִיחַכְמָא Exod.
 1.10 'let us deal wisely')

וַאֲתַצְפְּנָהוּ (BL Or 2540, fol. 5v, 4 | L [BHS]: וַאֲתַצְפְּנָהוּ Exod.
 2.2 'and she hid him')

Dagesh lene

יִרְבָּא (BL Or 2540, fol. 4v, 1 | L [BHS]: יִרְבָּה Exod. 1.12 ‘He increases’)

גָּד (BL Or 2540, fol. 3v, 4 | L [BHS]: גָּד Exod. 1.4 ‘Gad’)

דָּן (BL Or 2540, fol. 3v, 3 | L [BHS]: דָּן Exod. 1.4 ‘Dan’)

מִיְהִירָתָן (BL Or 2540, fol. 7r, 5 | L [BHS]: מִהִרְתָּן Exod. 2.18 ‘you hurried’)

BL Or 2548 fols. 1-185

Dagesh forte

מְדוּעַ (BL Or 2548 fol. 3r, 10 | L [BHS]: מְדוּעַ Isa. 5.4 ‘why?’)

הַמֶּלֶךְ (BL Or 2548 fol. 13r, 9 | L [BHS]: הַמֶּלֶךְ Isa. 37.5 ‘the king’)

Dagesh lene

צִמְדֵי־כַרְם (BL Or 2548 fol. 6r, 10 | L [BHS]: צִמְדֵי־כַרְם Isa. 5.10 ‘acres of the vineyard’)

עַד דּוֹר (BL Or 2548 fol. 10r, 5 | L [BHS]: עַד־דּוֹר Isa. 13.20 ‘until generation’)

شَامَاعْتَا (BL Or 2548 fol. 14r, 10 | L [BHS]: שְׁמַעְתָּ Isa. 37.6

‘you (ms) heard’)

يَشَاعِيَاهُ كَوَّ (BL Or 2548 fol. 14r, 9 | L [BHS]: יִשְׁעִיָהוּ כָה 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 Qurʾān, 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-Qāriʿ* 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 וְהָאֵי הַשְּׁעָרַי 'and rooms of the gate' (Ezek. 40.10); it may occur with *dagesh*, as in תַּחַת הַנְּחֹשֶׁת 'instead of bronze' (Isa. 60.17), תּוֹרֵי זָהָב 'ornaments of gold' (Cant. 1.11); and it may occur with major *dagesh*. The latter includes three *tavs*: וַיְשִׂימָהּ תַּלְעוּלָם 'He made it an eternal heap of ruins' (Josh. 8.28), וְאֶת־בְּתוּי וְגִזְזוֹבָיו 'and its houses and its treasuries' (1 Chron. 28.11), וַגְּבַרְיָא אֱלֹף תַּלְתֵּיהוֹן '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 בְּתִים, there 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 בָּתִּים according to the view of Ben Naftali, who gives it a grade in between two grades.

The short version of *Hidāyat al-Qāri'*²⁷ supplies more details about the differences in the reading of בָּתִּים: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 וַיְשִׂמָהּ תֵּל־עוֹלָם שְׂמָמָה 'He made it an eternal heap of ruins' (Josh. 8.28), וְאֶת־בָּתָּיו וְגִזְזוּבָיו 'and its houses and its treasuries' (1 Chron. 28.11), וַגְּבֵרֵיָא אֵלֶּךָ 'and these three men' (Dan. 3.23). Note that there is disagreement concerning every *tav* in the form בָּתִּים, except in וְאֶת־בָּתָּיו וְגִזְזוּבָיו (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־בָּתָּיו וְגִזְזוּבָיו (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 interven- ing 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. תָּחַת and תּוֹרֵי. 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’ (*thiqal*), 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 תָּתִים 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 **בְּתָיִי** (I Chron. 28.11) and **וּבְתָיִים** (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 **בְּתָיִים** 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 *Hidāya* 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 **בְּתָיִים** 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 *Hidāyat al-Qāri'* applies a

²⁸ כל לשון בתים מא כאן מנה בלחנין כאן בן־נפתלי ידגשה אעני ישד פיה זאיד עלי גירה 'Every case of **בְּתָיִים** 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 כאן גירהא מא כאן ישד פיה אמתאל הדא אלשד' 'He did not pronounce other cases with the similar strength' (Lipschütz 1965, 4; Eldar 1994, 77).

³⁰ Ed. Lipschütz (1965, 4): לאנה דכר 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 [ʀ], emphatic alveolar [r^s] 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 *tav*, 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‘tazilite 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 *mā* 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 םַתִּיַם was that he regularly pronounced the *tav* in it with more force when it had two accents than when it lacked a secondary accent. The term *manzila bayna manzilatayn*,

³¹ It was one of the principles of Mu‘tazilite 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 *Hidāya*, 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 *Hidāya*, unique to the Tiberian tradition.³³

The passage cited above from the original Arabic versions of *Hidāyat al-Qāri'* 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 Ta'ame 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 דגש' בחווק 'There are five *tavs* that have strong *dagesh*'. It is not clear in which words these *tavs* occur apart from the *tav* in בְּתָיִי in the 1 Chron. 28.11 (Dotan 1967, 15).

³⁴ Ed. Busi (1984, 60): שער התי"ו. בג' מקומות נדגשת התי"ו, מכל התו"ן הנדגשות, והם ושימה 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 בחווק. מבלעדיו: הוא מדגיש בחווק ובקמץ, מפני שיש בו משרת וטעם, ונראה כאילו הוא שני תיבות. ויש ובתים מליאים טוב, הואיל שהמשרת והטעם יחד שמוסיפין עליהן, להדגיש בחווק: בתיבה.

Chapter on the *tav*. In three places *tav* has a (stronger) *dagesh* than all (other) *tavs* with *dagesh*, namely : וְיִשְׂמָהּ תֵּל- עוֹלָם ‘He made it an eternal heap of ruins’ (Josh. 8.28), וְאֶת- בְּתֵי וְגִזְזֵי ‘and its houses and its treasuries’ (1 Chron. 28.11), וְגַבְרִיָּא אֵלֶּךָ תִּלְתָּהוֹן, ‘and these three men’ (Dan. 3.23), and all cases of בַּתִּים that denote measurement, such as וַיִּזְן בַּתִּים עֶשְׂרִים אֶלֶף וְשָׁמֹן בַּתִּים עֶשְׂרִים אֶלֶף ‘and twenty thousand baths of wine, and twenty thousand baths of oil’ (2 Chron. 2.9) and the like with *pataḥ* and *dagesh*. But (cases of) בַּתִּים that denote habitation, like וּבְתֵימִים מְלֵאִים כָּל-טוֹב ‘and houses full of all good things’ (Deut. 6.11), הִנְגִּים אֶת-עַבְדָּיו וְאֶת-מִקְנֵהוּ, ‘he made his slaves and his cattle flee into the houses’ (Exod. 9.20), all have *qameṣ* and are not given strong *dagesh* (i.e. they have *dagesh lene*), with the exception of וְאֶת-בְּתֵי וְגִזְזֵי (1 Chron. 28.11), which, although it denotes habitation, it has strong *dagesh* and *qameṣ*, 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* וּבְתֵימִים מְלֵאִים כָּל-טוֹב (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 *qameṣ* in וְיִשְׂמָהּ תֵּל-עוֹלָם (Josh. 8.28), וְאֶת-בְּתֵי וְגִזְזֵי (1 Chron. 28.11) and וְגַבְרִיָּא אֵלֶּךָ תִּלְתָּהוֹן (Dan. 3.23), and some also include the *dagesh* after the *qameṣ* in וּבְתֵימִים מְלֵאִים כָּל-טוֹב (Deut. 6.11), are equated with the *dagesh* of בַּתִּים, i.e. they are interpreted as ‘normal’ *dagesh forte*. In all other cases of בַּתִּים the *dagesh* is *dagesh*

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 *qameṣ* in the specified cases was exceptional in the degree of its strength and was not like the normal *dagesh forte* of words such as בְּתִים. 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 בְּתִים.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 Ṭa'ame 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 [t^h]. The fully geminated *tav* [tt] is found in the word בְּתִים. 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 הֲרֵאִיתִם (1 Sam. 10.24). This 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'* 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.³⁶ 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'* 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.

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:

βοαρ = בִּקָּר, ερδοφ = אֶרְדָּף, vs. δαββερ = יִדְבֵּר, σαδδουιμ = צְדִיקִים (Brønno 1943, 357, 383)

iegdal = יִגְדַּל (Sperber 1937, 158), marphe = מַרְפֵּא (Sperber 1937, 192), baddim = בְּדִים (Sperber 1937, 211), thephhol = תְּפֹל (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 khafif*) 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 *tashdid* (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*².

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 כָּפַּץ ‘he supplants’ (Jer. 9.3), which is attributed to Ben

Naftali in *Kitāb al-Khilaf* (ed. Lipschütz 1965, ל), and the extended use of *dagesh* in non-Standard Tiberian manuscripts (see §I.3.3. below).

I.3.1.12. Dagesh in the Word בְּתִים

According to the passage on the *tav* in *Hidāyat al-Qāri'* that was discussed in the previous section, the *dagesh* in the word בְּתִים 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 בְּתִים 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 וַיְשִׂמָהּ תֵּלְעוּלִים שְׂמָמָה 'He made it an eternal heap of

ruins' (Josh. 8.28, וַגְּבַרְיָא אֵלֶּיךָ תִּלְתָּהוֹן, '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 וַיִּשְׁמְעוּ תִלְעוֹלִים one could assume that the word תִּלְ- 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. תָּלוּ, like לָבוּ, לָב), 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 *tā*² representing the Hebrew *tav* in all cases, e.g.

בְּבַתַּי (BL Or 2550 fol. 18v, 5 | L [BHS]: בְּבַתַּי 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 *tā*², indicating that in this type of reading the word was read as a non-geminated stop, e.g.

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

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

בַּתַּי (BL Or 2544, fol. 181v, 4 | L [BHS]: בַּתַּי Exod. 8.17 'the houses')

בַּתֵּיהֶם (BL Or 2549, fol. 40v, 8 | L [BHS]: בַּתֵּיהֶם Jer. 6.12
 ‘their houses’)

וּמִבָּתֵּיכֶם (BL Or 2544, fol. 158r, 13 | L [BHS]: וּמִבָּתֵּיכֶם Exod.
 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:

וּמִבָּתֵּיכֶם (BL Or 2544, fol. 158v, 10 | L [BHS]: וּמִבָּתֵּיכֶם Exod.
 8.7 ‘and from your houses’)

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

בָּתָּו (BL Or 2556, fol. 122r, 7 | L [BHS]: בָּתָּו 1 Chron. 28.11
 ‘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 וּבָתִּים מִלְאִים כָּל-טוֹב (1 Chron. 28.11) and וּבָתִּים (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-ʿAfʿāl Dhawāt Hurūf al-Līn*:³⁷

‘As for the “light” (type of בגדכפת), this is like בְּרָאִישִׁית בְּרָא ‘in the beginning God created’ (Gen. 1:1) ... and like בְּתִיבֵי וּבְתֵיבֵי כָּל-עַבְדֵי יְיָ ‘and they shall fill your houses and the houses of your servants’ (Exod. 10.6).³⁸

Yeḩutiʿel ha-Naqdan, who was active in medieval Ashkenaz in the second half of the thirteenth century, writes in his work *ʿEn ha-Qore* that the *tav* in the word בְּתִיבֵי 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 בְּתִיבֵי, בְּתִיבֵי and the like. Be careful not to pronounce the *dagesh* strongly.’

³⁷ Ed. Jastrow (1897, 12–13): *فأما الخفيف فمثل بְּרָאִישִׁית בְּרָא אלהים ... ומתל ומלאו ...* בְּתִיבֵי וּבְתֵיבֵי כָּל עַבְדֵי יְיָ.

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 Ṣaḩot* (ed. del Valle Rodríguez 1977, 1:289) to the effect that the *qameṣ* occurs to differentiate the word in meaning from בְּתִיבֵי ‘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 misinterpretation of the passage concerning the בגדכפת consonants and בְּתִיבֵי in *Kitāb al-ʿAfʿāl Dhawāt Hurūf al-Līn* (ed. Jastrow 1897, 12–13) (José Martínez Delgado, personal communication).

³⁹ Ed. Gumpertz (1958, 46): *מצאתי שאמר ר' יהודה חיוג ז"ל בְּתִיבֵי וּבְתֵיבֵי כָּל עַבְדֵי יְיָ ודומי' ... השמר לך שלא תדגיש את התיב 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 בְּתֵיִם is regularly read with *dagesh lene*, e.g. Yemen: bavo:t^he:xäm (בְּתֵיִם) ‘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 בְּתֵיִם 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:

אָדָם [hɑ:ʔɑ:ʔɑ:ʔɑ:m] ‘the man’ < **ha*’*adam*

עֵץ [hɑ:ʕe:esʕ] ‘the tree’ < **ha*’*es*

חֹדֶשׁ [hɑ:ʔhɑ:ʔeʃ] ‘the month’ < **hah*’*hodes*ʕ

ההוא [ha:'hu:] 'that' < *hahhū

הרִמָּשׁ [ħɔ:'rɛ:mɛʃ] 'the creeping creature' < *harremeš

1.3.1.13.2. 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* (§1.2.5.2.). 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: השִׁלְבִים 'the frames' (1 Kings 7.28 < השִׁלְבִים)

L: הַלְוִיִּם 'the Levites' (Exod. 6.25, etc. < הַלְוִיִּם)

L: וַיְדַבֵּר 'and he spoke' (Gen. 8.15, etc. < וַיְדַבֵּר)

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 (§1.2.5.8.1.) and a sequence of two identical consonants (§1.2.5.8.3.):

L: הַמְדַבֵּר 'the one speaking' (Gen. 45.12, etc. < הַמְדַבֵּר 'the one speaking')

L: בְּקִלְלוֹ 'when he cursed' (A: בְּקִלְלוֹ, 2 Sam. 16.7 < בְּקִלְלוֹ)

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 *מה*, the preposition *מן*, the definite article or the *vav* consecutive. In many cases the *dagesh* is printed in BHS, although it does not appear in the manuscript L, e.g.

מה־משא 'What is the burden' (Jer. 23.33) < מה־משא

משדי 'from the Almighty' (BHS משדי, Isa. 13.6) < משדי

הציון 'the monument' (BHS הציון, 2 Kings 23.17) < הציון

והמסכה 'and the covering' (BHS והמסכה, Isa. 28.20) < והמסכה

השבליים 'the ears of corn' (Gen. 41.24, BHS mistranscribes the first vowel as a *qames* due to erroneously interpreting a fleck on the parchment as the lower dot of a *qames*: השבליים; cf. B השבליים)

וילחם 'and he fought' (BHS וילחם, Jud. 11.20) < וילחם

עזיה 'Uzziah' (2 Kings 15.30) < עזיה

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

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

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	אָבִימֶלֶךְ	אָבִימֶלֶךְ	‘Abimelech’
Gen. 34.28	חֲמֹרֵיהֶם	חֲמֹרֵיהֶם	‘their asses’
Gen. 39.19	עָשָׂה	עָשָׂה	‘he has done’
Deut. 12.9	לֹא־בָאתֶם	לֹא־בָאתֶם	‘you have not come’
Jud. 14.2	קַח־אוֹתָהּ לִי	קַח־אוֹתָהּ לִי	‘take her for me’
Jud. 19.5	חֲרַפְתִּי	חֲרַפְתִּי	‘insult of me’
Cant. 6.8	מְלָכוֹת	מְלָכוֹת	‘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 רַפָּה. 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 *rāfiyya*, pl. רואפי *rawāfi*.

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.

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

וַתֵּרָא רָחֵל כִּי לֹא יִלְדֶּהָ לְיַעֲקֹב וַתִּקְנֶה רָחֵל בְּאֲחֵתָהּ וַתֹּאמֶר אֶל־יַעֲקֹב הִבֵּה־
 לִי בָנִים וְאִם־אֵין מִתָּה אֲנֹכִי: וַיַּחַר־אַף יַעֲקֹב בְּרָחֵל וַיֹּאמֶר הֲתַחַת אֱלֹהִים
 אֲנֹכִי אֲשֶׁר־מִנַּע מִמֶּדֶּ פְרִי־בֶטֶן:

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. מִלְּקָה ‘queen’, בָּאָ ‘he came.’ A few manuscripts, especially C and S, often mark a *rafe* on the *’alef* in יִשְׂרָאֵל ‘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: וַיִּבְקְשׂוּ ‘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: שְׁלַחוּ 'send' (Psa. 74.7)

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

A: שִׁיחָה לִי 'a meditation for me' (Psa. 119.99)

After an accent in words where gemination would normally occur:

A: לָמָּה '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: וַיִּשְׁמַע 'and will listen' (Isa. 42.23)

A: וַיָּבֹא '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: בְּמַעְלֵה '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: פִּדְּנִי 'redeem me' (Psa. 119.134)

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

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

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

When a *rafe* (letter) follows it, it has *segol*, as in מָה לִידִידִי (L: מָה לִידִידִי, A: מָה לִידִידִי 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 ג, מ, ל. *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: גָּמְלָנוּ 'he has granted us' (Isa. 63.7)

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

S: יִדְעֵנִי 'wizard' (Lev. 20.27)

S: וְלִשְׁנֵיהָ '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 ו expressing [u:] and also in other contexts (§I.1.6.), e.g.⁴⁵

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

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

⁴³ Long version, edition in vol. 2 of this book, §II.L.3.2.2.: וּמָה תִּבְעָה רַפִּי וּמָה לִידִידִי כַּקְּמָה בְּסִגּוּלָה.

⁴⁴ Yeivin (1980, 286–87).

⁴⁵ Yeivin (1980, 286).

I.3.3. *DAGESH AND RAPE 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 (ח, ע), ר and those that function as both *matres lectionis* and consonants (י, ו, ה, א). 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

צְדִיקִים (T-S A12.1, Blapp 2018, 138 | L [BHS]: תוֹעֲבַת צְדִיקִים Prov. 29.27 ‘abomination of the righteous’)

קַרְנֵי (T-S A13.35, Blapp 2018, 139 | L [BHS]: וְכָל־קַרְנֵי Psa. 75.11 ‘all the horns of’)

מִחְסוֹר (T-S A12.1, Blapp 2018, 141 | L [BHS]: מִחְסוֹר Prov. 28.27 ‘lack’)

חֶלְקָהּ (T-S A12.1, Blapp 2018, 141 | L [BHS]: חֶלְקָהּ Ruth 4.3 ‘portion of’)

European manuscripts

מִסְפָּר (Codex Reuchlinianus, Morag 1959, 217 | L [BHS]: מִסְפָּר Isa. 10.19 ‘number’)

מַמְלָכָהּ (Codex Reuchlinianus, Morag 1959, 225 | L [BHS]: מַמְלָכָהּ Jer. 18.9 ‘kingdom’)

כַּרְמִי (Codex Reuchlinianus, Morag 1959, 217 | L [BHS]: כַּרְמִי Isa. 5.3 ‘my vineyard’)

נָסִיחַ (Codex Reuchlinianus, Morag 1959, 217 | L [BHS]: נָסִיחַ 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:

יִאֲבָדוּ כָּל־אֹיְבֵיךָ (Vatican Urbinati 2, Yeivin 1986, 495 | L [BHS]: יִאֲבָדוּ כָּל־אֹיְבֵיךָ Jud. 5.31 ‘may all your enemies perish’)

כִּי נִגְּפוּ (Vatican Urbinati 2, Yeivin 1986, 495 | L [BHS]: כִּי נִגְּפוּ 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 <i>dagesh forte</i> reading	Non-Standard Tiberian Tiberian reading
תִּשְׁבֵּר [t ^h iʃ.ˈbbɔːoɾ]	תִּשְׁבֵּר [t ^h iʃ.ˈbbɔːoɾ]
תִּשְׁמֹר [t ^h iʃ.ˈmoːoɾ]	תִּשְׁמֹר [t ^h iʃ.ˈmmoːoɾ]
נִשְׁמֹר [niʃ.ˈmoːoɾ]	נִשְׁמֹר [nniʃ.ˈmmoːoɾ]

The incipient extension of *dagesh* to strengthen the onsets of syllables is found in forms such as וַיִּתֵּן־לּוֹ ‘and he gave him’ (L, Gen. 24.36) and forms attributed to Ben Naftali such as בֶּן־נּוּן ‘the son of Nun’ and יַעֲקֹב ‘he supplants’ (Jer. 9.3).

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

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

הַ[ר־]הִ[וּ]קַיִם [מִצְדָּקָה] (Bod. Heb. e 30 ff. 48-49, Revell 1970a, 76 | L [BHS]: הַרְחוּקִים מִצְדָּקָה Isa. 46.12 ‘who are far from righteousness’)

[גח]ש[בו] (Bod. Heb. e 30 ff. 48-49, Revell 1970a, 77 | L
[BHS]: גַּחֲשׁוּבוּ Isa. 5.28 ‘they seemed’)

[הע]מ[ק] (Bod. Heb. e 30 ff. 48-49, Revell 1970a, 77 | L
[BHS]: הֶעֱמַקְּ 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 *het* 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.

פַּעֲמֹן (T-S A43.1, Revell 1970a, 77 | L [BHS]: פֶּעֲמֹן Exod.
28.34 ‘bell’)

אֶחָשֵׁה (T-S A43.1, Revell 1970a, 77 | L [BHS]: אֶחָשֵׁה Isa.
62.1 ‘I will not keep silent’)

In some Non-Standard Tiberian manuscripts, *dagesh* is added to a letter after a vowel, where a *dagesh* is lacking in the standard Tiberian tradition. This is found predominantly on the weak letters ל, מ, נ, ק and the sibilants in word-medial or word-final position, e.g.

הַלִּיכֹתֶיךָ (T-S A13.20, Blapp 2018, 144 | L [BHS]: הַלִּיכֹתֶיךָ
Psa. 68.25 ‘your processions’)

יִמְחֹץ (T-S A13.20, Blapp 2018, 144 | L [BHS]: יִמְחֹץ Psa.
68.22 ‘he will shatter’)

עָנִי (T-S A13.20, Blapp 2018, 144 | L [BHS]: עָנִי Psa. 70.6
‘poor’)

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

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

גָּדוֹל (T-S A13.20, Blapp 2018, 144 | L [BHS]: גָּדוֹל Psa. 70.5 ‘he is great’)

כֻּלָּם (T-S A13.20, Blapp 2018, 144 | L [BHS]: כֻּלָּם Psa. 69.20 ‘all of’)

בְּדָמַי (T-S A13.20, Blapp 2018, 144 | L [BHS]: בְּדָמַי 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.

וְתִפְּלוֹטֵנִי (T-S A13.20, Blapp 2018, 144 | L [BHS]: וְתִפְּלוֹטֵנִי 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 *het*, *vav* and *yod*:

חַיִּים (T-S A13.20, Blapp 2018, 143 | L [BHS]: מִסְפֵּר חַיִּים Psa. 69.29 ‘of the living’)

וְאָרֶץ (T-S A13.20, Blapp 2018, 143 | L [BHS]: שָׁמַיִם וְאָרֶץ Psa. 69.35 ‘and earth’)

יִבְשׁוּ (T-S A13.20, Blapp 2017, 163 | L [BHS]: יִבְשׁוּ 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. Yequiti³el 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 Qur’ān, e.g. يَخْتَفُ *yakhtīfu* ‘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 וזלטמנסצקש, 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

Yequiti’el then gives a number of examples of *dagesh lene* in the letters וזלטמנסצקש both after guttural letters, e.g. בַּעֲלָה, and after non-guttural letters, e.g. נִבְקָעוּ (Yarqoni 1985, 107). Although the tradition of marking this *dagesh* continued in medieval Ashkenaz, Yequiti’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 Yequiti’el, could

⁴⁷ ועתה הבן לך כי אותיות בגדכפת נשמעים בכל מלה בדגש ודיגושם ורפיונם ניכר בלשון ותקוע בפה במוצא הדיבור בין שהוא דגש קל בין שהוא דגש חזק אבל וזלטמנסצקש הדגש הקל לא נשמע בהם ברוב מקומות ... ורוב אנשי ארצנו לא ידעו להשמיע את הדגש הקל הבא בותיות האלה.

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

‘Whenever 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 וְלָמָה ‘and why?’ the reading of the *lamed* is light because of the mobile *shewa* in it. In שָׁאֵל שְׂאֵלֵנוּ שְׂאֵלֵנוּ ‘the man questioned us carefully’ (Gen. 43.7) the reading of the *shin* is strong; in וְשָׁאֵל לוֹ ‘and he shall ask for him’ (Num. 27.21) the reading of the *shin* is light. In נָפְלוּ פְנֵיךָ (‘why) has your countenance fallen?’ (Gen. 4.6) the reading of the *nun* is strong; in וְנָפְלוּ וְלֹא־יָקוּמוּ ‘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): כל שׁו״א נע וסמוך לה אחת מאותיות בג״ד כפ״ת: האות ההיא אשר הוא מבג״ד כפ״ת תרפה ... וכן בשאר האותיות כפי חזקתם וכפי קלותם כמו לָמָה קריאת הלמ״ד חזקה, וְלָמָה קריאת הלמ״ד קלה מפני שׁו״א הנע אשר עליה, שָׁאֵל שאל האיש קריאת השי״ן חזקה וְשָׁאֵל לוֹ קריאת השי״ן קלה, נָפְלוּ פְנֵיךָ קריאת הגו״ן חזקה, וְנָפְלוּ וְלֹא יָקוּמוּ עוד קריאת הגו״ן קלה וכן שאר האותיות על זו הדרך זולתי היו״ד שהיא קלה לעולם זולתי אם תדגש.

pronunciation that is reflected by the extended *dagesh* of Non-Standard Tiberian vocalization, although Qimḥi 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 post-consonant 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 Qimḥi 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 Yequtiʿel 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. Yequtiʿel 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

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 prayer-books (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.