

The Tiberian Pronunciation Tradition of Biblical Hebrew

Volume I

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I.0. INTRODUCTION

I.0.1. PRONUNCIATION TRADITIONS OF BIBLICAL HEBREW

Hebrew is generally thought to have ceased to be a spoken vernacular around the beginning of the third century C.E., after the destruction of the final remaining Hebrew-speaking settlements in Judaea by the Romans following the Bar-Kochba revolt. This coincides with the end of the Tannaitic period in Rabbinic tradition.¹ The surviving Hebrew texts that are datable to before this date would, therefore, have been written when Hebrew was still spoken. This includes the books of the Hebrew Bible, Qumran literature, Tannaitic Rabbinic literature, documents and epigraphy. There are references to the use of Hebrew as a vernacular in the second century C.E., for example the anecdote of the maid-servant of Rabbi Yehudah ha-Nasi, who is said to have known the meanings of some Hebrew words with which the scholars of the time were not familiar (Babylonian Talmud, *Megilla* 18a, Palestinian Talmud, *Megilla* 2.2, 73a). The Bar Kochba documents in the first half of the second century C.E. contain a number of features that appear to reflect the spoken language (Mor 2013a; 2015).

Although Hebrew is thought to have ceased to be a vernacular language by the third century C.E., it remained alive in later

¹ Kutscher (1982, 115–16), Saenz-Badillos (1996, 171–72), Schniedewind (2013, 191), Y. Breuer (2013).

periods in oral as well as written form. The oral recitation of the Hebrew Bible continued in a variety of traditions down to modern times. The Hebrew Rabbinic material of not only the Tannaitic period but also of the Amoraic period (220-500 C.E.) was composed orally. Furthermore, after Rabbinic literature was committed to writing, the oral dimension continued in reading traditions that have survived down to the present. There is a reference also to the use of Hebrew for ‘spoken discourse’ (לדיבור) in a saying attributed to Rabbi Yonatan of Bet-Guvrin (Palestine, third century C.E.):

Rabbi Yonatan from Bet-Guvrin said there are four languages that are pleasant for use: Greek for singing, Latin for combat, Syriac for lamentation, and Hebrew for spoken discourse.²

Even as late as the tenth century one finds in a Masoretic treatise attributed to ‘Eli ben Yehudah ha-Nazir (ed. Allony 1973) a description of how the author undertook fieldwork in the streets of Tiberias to verify his analysis of the *resh* in the Tiberian biblical reading, on the grounds that the Hebrew *resh* could still be heard in the local speech of the (Jewish) inhabitants of Tiberias. These references are unlikely to refer to vernacular speech. Hebrew continued to be used as a form of learned discourse among scholars in the Rabbinic period after it had ceased to be a vernacular (Smelik 2013, 109–16). It was, moreover, promoted as a language of everyday speech by the

² Palestinian Talmud, *Megilla* 1.11(8), 71b: אמ' ר' יונתן דבית-גוברין ארבעה: גרמקא לזמור, לדיבור, לשונות נאים שישתמש בהן העולם ואילו הן לעז לזמור רומי לקרב סורסי לאיליא עברי לדיבור.

Karaite scholar Benjamin al-Nahāwendi (mid-ninth century C.E.) on ideological grounds (al-Qirqisānī 1939, VI 25.3; Khan 1992b, 157). Hebrew words and phrases, as well as Biblical Hebrew quotations, continued in the so-called ‘Hebrew component’ of the vernacular languages spoken by the Jews down to modern times, which, it seems, is what ‘Eli ben Yehudah ha-Nazir was listening to on the streets of medieval Tiberias. A particularly large Hebrew component existed in Jewish secret languages, used mainly by merchants.³

When Hebrew was a spoken vernacular language before the third century C.E., it existed in a diversity of dialects, which differed on various linguistic levels (Rendsburg 2013a). This dialectal diversity existed synchronically at particular periods and there was also diachronic change in the various spoken forms of the language. Both of the synchronic and the diachronic differences in the spoken language were disguised to a large extent by the written form of the language, which was considerably standardized in its orthography and linguistic form (Rendsburg 1990; 2013b). Several differences are, nevertheless, identifiable from the surviving written evidence, some of which relate to pronunciation. We know from epigraphic evidence from the biblical period that diphthongs tended to be contracted in the northern (Israelian) dialects whereas they tended to be preserved uncontracted in the southern (Judahite) form of Hebrew, which is the basis of the standardized Biblical Hebrew language. In the Samaria ostraca, for example, one finds the orthography יר ‘wine’,

³ See the entries on the Hebrew component of secret languages in the *Encyclopedia of Hebrew Language and Linguistics* (vol. 3, 511-520).

reflecting the pronunciation *yēn*, whereas the Arad ostraca from the south have the orthography יִן corresponding to Masoretic Hebrew form יִן (Bruck 2013). The shibboleth incident described in Jud. 12.1-6 is clear evidence of differences in pronunciation between the dialects of Transjordan and Cisjordan (Rendsburg 2013c). In the Second Temple Period, there were differences in dialects of Hebrew regarding the pronunciation of the guttural consonants (laryngeals and pharyngeals). In many of the Dead Sea Scrolls from Qumran datable to this period, including those containing biblical texts, and Judaeen inscriptions there is evidence of the weakening of the gutturals. This is shown by the fact that they are often either omitted or interchanged in the orthography. Such weakening was presumably due to Greek influence, which was spoken in Palestine during this period, especially in the educated or urban classes, since Greek did not contain pharyngeals in its sound inventory. The Bar Kochba documents, on the other hand, exhibit remarkably little weakening of the gutturals, despite the fact that they otherwise deviate quite radically from the standard language and orthography and appear to be close reflections of the spoken language. These documents are likely, therefore, to reflect a spoken dialect that had preserved the gutturals to a large extent.⁴ The biblical scrolls from Qumran which exhibit weakening of the gutturals, such as the Isaiah Scroll 1QIsa^a, therefore, reflect a particular dialectal variety of pronunciation, which was not general throughout Palestine.

⁴ See Mor (2013b; 2013a), Fassberg (2013), Morgenstern (2013, 505–6).

Some of the biblical scrolls from Qumran have an orthography close to that of the Tiberian Masoretic Text without omission or interchange of gutturals. This may be due to conservatism of orthography, but it is necessary to assume that some traditions of Biblical Hebrew at this period did preserve the gutturals and were the source of later traditions that preserved them. In the Second Temple Period there is further evidence of variation in the pronunciation of the gutturals in the Greek transcriptions of Hebrew words in the Septuagint (late first millennium B.C.E.), which reflect the preservation of the Proto-Semitic velar fricatives **k* and **g*, e.g. Αχζ ‘Ahaz’ (cf. Arabic *ʾakhadha* ‘he took’ = אָחַז), Γαζα ‘Gaza’ (cf. Arabic *Ghazza*, = גָּזָה). The Hebrew orthography represents the merger of the original velar fricatives with the pharyngeal fricatives ח and ע. This orthography, which was derived from Phoenician, may have concealed a distinction that was preserved in some Hebrew dialects, but it is clear that there must have been a merger in some dialects by the Second Temple Period. This is due to the fact that some sources from Qumran that are roughly contemporary with the Septuagint exhibit weakening of the pharyngeals irrespective of their historical origin.⁵

There were a number of differences in morphology across the various dialects of Hebrew when it was a spoken language. Of particular significance for the later reading traditions of Biblical Hebrew are the differences in pronouns and pronominal suffixes. In the Second Temple Period there is evidence from the

⁵ For a discussion of the chronology of merger of velar fricatives with pharyngeals see Steiner (2005a).

Dead Sea Scrolls for variation between vocalic and consonantal endings of pronominal forms, e.g. in the second person forms:

2ms suffixes: תה-/ת, כה-/ך

2mpl forms: כמה/כם, אתמה-/תם, אתם/אתם

Another case of variation is found in the 3ms pronominal suffix on plural nouns, which has the forms וי-, ו- or ויהי- (Qimron 1986, 58–59; 2018, 269–78; Reymond 2014, 153–64).

I.0.2. THE BIBLE IN THE SECOND TEMPLE PERIOD

The text of the Hebrew Bible that is reflected by the Qumran manuscripts and other sources from the Second Temple Period was pluriform and dynamically growing (Ulrich 2015, 18). There were variant literary editions of many of the biblical books, these being particularly numerous in the Pentateuch (Tov 2016). A sizeable proportion of the Qumran biblical manuscripts, however, exhibit a text that is close to that of the medieval Masoretic Text. These have been termed by Emanuel Tov ‘proto-Masoretic’ or, in his more recent work (Tov 2012, 107–9) as ‘Masoretic-like’ texts. These show us that great efforts were made in some circles, apparently the Temple authorities, to preserve a stable text. In Talmudic literature, there are reports of three scrolls of the Pentateuch that were found in the Temple court. These differed from one another in small details. They were carefully collated and differences were corrected towards the majority reading.⁶ These activities were motivated, it seems, by a desire to preserve

⁶ The sources are discussed in detail by Talmon (1962). See also Ofer (2019, 88).

and level variants in one particular type of text, but not necessarily to standardize and eliminate rival texts (Tov 2014; van der Kooij 2014). This is clearly shown by the fact that such Masoretic-like texts exist alongside other types of biblical texts in the Qumran corpus that exhibit a variety of substantial differences from the Masoretic Text. Furthermore, the Masoretic-like texts from Qumran themselves exhibit some degree of diversity, since minor textual differences are found from one manuscript to another. Some hold the view that the Masoretic-like texts did not represent a central authoritative type of a text but rather one of several forms of text that were of equal status. Doubts are cast on the existence of sufficient cohesion in Judaism in the late Second Temple Period or of a sufficiently acknowledged leadership to make it conceivable that a majority of Jews recognized a single authoritative text (Ulrich 2015, 19). Lim (2013, 126) draws attention to the fact that different types of text are sometimes cited side-by-side, which he presents as evidence that there was no preference for one particular type of text. A further issue is the selection of the text of the Masoretic-like manuscripts. It is now generally agreed that this text was selected largely by chance rather than due to the archaic nature of the text or its perceived accuracy.

Despite the pluriformity of the biblical text that is reflected by the Qumran manuscripts, after the destruction of the Temple in 70 C.E. the Masoretic type of text was the only text tradition that continued to be transmitted in Jewish communities. Fragments of biblical scrolls discovered in sites outside Qumran datable to the first two centuries C.E. contain a consonantal text

that is identical with that of the medieval Masoretic manuscripts, even in the smallest details of orthography and cancellation dots above letters. These include fragments found in Masada (first century C.E.) and the somewhat later sites of Wadi Sdeir (Naḥal David), Naḥal Hever, Wādī Murabba‘āt and Naḥal Şe’elim (early second century C.E.). The same applies to the recently published charred fragments of a scroll of Leviticus from En Gedi, which have been dated to roughly the same period (M. Segal et al. 2016). According to Tov (2008, 150), these texts from communities outside Qumran constitute an ‘inner circle’ of proto-Masoretic texts that derive directly from Temple circles and were copied from the master copy in the Temple court. The proto-Masoretic texts of Qumran, on the other hand, formed a second transmission circle copied from the inner circle, and so exhibits small differences.

The exclusive transmission of the proto-Masoretic tradition in Judaism is nowadays generally thought to be the consequence of historical events. Power and influence were gradually transferred from the priestly Sadducees to the Pharisees (Schiffman 1991, 112). The Pharisees, who as part of this process espoused the proto-Masoretic text from the priestly authorities, constituted the only organized Jewish group that survived the destruction of the Temple (Albrektson 1978; Tov 2012).

Several scholars have drawn attention to the interaction and interdependence of oral and written tradition in the formation and transmission of the Hebrew Bible through the first millennium B.C.E. down to the destruction of the Second Temple, for example Nyberg (1934), Niditch (1996), Person (1998; 2010)

and Carr (2005). Carr, in particular, stresses the fact that even after the textualization of Scripture in written form in the first millennium B.C.E., the written text remained combined with a tradition of oral reading. The oral tradition of reading was memorized and the texts were learnt as part of an educational process, which has parallels in other ancient Near Eastern cultures. Such a tradition of transmission relied not only on written texts but also on teachers to pass on the oral traditions to pupils. Such was the importance and self-sufficiency of the oral tradition of the text, claims Carr, that at times of crisis, such as the Babylonian exile, it may have been used to regenerate lost written forms of the text. Raymond Person argues that the oral mind-set of ancient Hebrew scribes influenced the way they copied texts, in that they did not feel obliged to replicate the texts word by word, but preserved the texts' meaning as a dynamic tradition like performers of oral epics, with numerous small adaptations. This resulted in a pluriformity of texts, which were nevertheless understood as faithful representations of the tradition.

I.0.3. THE BIBLE IN THE MIDDLE AGES

After the destruction of the Second Temple, the Hebrew Bible continued to be transmitted in a process similar to that attributed by Carr to the earlier period, i.e. there was an intertwining of written text and oral reading tradition. The written text was copied by scribes and the memory of the oral reading tradition was passed on from generation to generation by teachers. The fact that the Hebrew Bible lost its pluriformity in its surviving written consonantal text after the Second Temple Period does not

mean it lost pluriformity also in its oral transmission. The aforementioned fragments of biblical scrolls from the period after the destruction of the Temple must have been recited with an oral reading tradition. Just as the consonantal text (*ketiv*) of the medieval Masoretic manuscripts corresponded to the written consonantal text of these early scrolls, it is likely that the medieval oral reading of the Middle Ages, which is represented by the Masoretic vocalization signs, also had a close correspondence to what was being recited orally at the beginning of the first millennium C.E. There is, indeed, evidence that the medieval reading tradition had its roots in the Second Temple Period (§I.0.8.).

The reading traditions of Biblical Hebrew that were transmitted after Hebrew ceased to be a spoken vernacular language exhibit diversity in phonology and morphology, some of which is likely to have had its roots in the dialectal diversity of spoken Hebrew at earlier periods.

We can distinguish broadly three stages of attestation of the later reading traditions:

(i) The pre-Masoretic Greek and Latin transcriptions datable to the first half of the first millennium C.E. The most important sources from this period are the Greek transcriptions found in the second column of the Hexapla of Origen (c. 185–254 C.E.) and the Latin transcriptions in the Vulgate and writings of Jerome (346–420 C.E.). In addition to these, transcriptions are sporadically found in late Greek translations, such as Aquila, Symmachus and Theodotion, and in the writings of the Church fathers.

(ii) The medieval traditions reflected by vocalized manuscripts and other sources. In addition to the Tiberian vocalization system, medieval manuscripts are extant that contain other vocalization sign systems, which reflect different reading traditions.

(iii) The reading traditions that have survived in Jewish communities in modern times.

The reading traditions of the Bible in Palestine reflected by the Greek transcriptions of Origen and the Latin works of Jerome exhibit a number of features that can be correlated with some of the dialectal features mention in §I.0.1. They appear to have preserved the gutturals, although they are not directly represented by the Greek and Latin script, and so have their roots in dialectal pronunciations in which these consonants were not weakened. The 2ms pronominal suffixes are generally transcribed without a following vowel and so correspond to the variants ending in consonants reflected by the orthographies γ - and η - in Qumran sources, e.g., $\sigma\epsilon\delta\alpha\chi$ (Tiberian: צִדְקָה) ‘your righteousness’ (Origen, Psa. 35.28), $\phi\alpha\rho\alpha\sigma\theta$ (Tiberian: פָּרַצְתָּ) ‘you have breached’ (Origen, Psa. 89.41); *phalach* vs. פְּעֻלָּה , ‘your work’ (Jerome, Hab. 3.2), *calloth* (Tiberian: קָלוֹת) ‘you are vile’ (Jerome, Nah. 1.14).⁷

The reading traditions of the Hebrew Bible that are reflected by the medieval systems of vocalization signs were transmitted orally for many generations during the first millennium C.E. Their commitment to written form by means of

⁷ See Sperber (1937), Brønno (1943; 1970), Sutcliffe (1948), Janssens (1982), Yuditsky (2013; 2017), Kantor (2017).

vocalization sign systems was a textualization of oral traditions. This was no doubt stimulated by the general increasing shift from oral to written transmission of knowledge in the early Islamic period.⁸ This is a phenomenon that affected the whole of society in the Middle East at this period. It is likely to have been brought about, in part at least, by the archival documentary culture of the Abbasid bureaucracy, which developed in the eighth century C.E., and the spread in the production of paper at that period.⁹

The systems of vocalization signs that were developed in the Middle Ages reflect three major traditions of pronunciation, which are normally referred to as the Tiberian, Babylonian and Palestinian traditions. The Palestinian pronunciation is reflected also by some manuscripts vocalized with Tiberian vowel signs. This latter type of vocalization will be referred to as Non-Standard Tiberian vocalization (§I.0.13.6.). Although the sign systems were a creation of the Middle Ages, the pronunciation traditions that they reflect had their roots in an earlier period and had been transmitted orally for many generations. There is some

⁸ For a detailed discussion see Schoeler (2006) and Bloom (2010).

⁹ For the documentary culture of the Abbasid administration see Sijpesteijn (2007), van Berkel (2014), Khan (2007, 13–65) and for the spread of paper at this period see Bloom (2001). An analogy can be identified in the increase of written culture in the kingdom of the Judean king Hezekiah in the eighth century B.C.E. According to Schniedewind (2004; 2013) this was stimulated by the increase in administrative bureaucracy and urbanization. The role of bureaucracy and documentary culture appears to have been a catalyst to written culture also in medieval Europe; cf. Clanchy (2013).

evidence that they originated in the Second Temple Period (§I.0.8.). They share more features among themselves than they do with the Samaritan pronunciation tradition, which was transmitted orally by the Samaritan community through the Middle Ages down to modern times. This suggests that they were more closely related, due to a common origin and/or due to convergence through communal contact. They nevertheless diverged from one another in a number of ways in phonology and morphology. The distinctness of the Samaritan tradition of reading reflects the fact that it split from the Jewish traditions with the separation of the Samaritan community from Judaism at an early period.

The various Jewish reading traditions had distinctive vowel systems. The Tiberian pronunciation tradition distinguished the vowel qualities [a] (*pataḥ*), [ɔ] (*qameṣ*), [e] (*šere*) and [ɛ] (*segol*). The Babylonian vocalization system lacked a sign for *segol* and generally used a *pataḥ* sign where Tiberian had *segol*, suggesting that Babylonian pronunciation did not distinguish between the qualities [a] and [ɛ], but only had the quality [a].¹⁰ The Palestinian pronunciation tradition did not distinguish between *pataḥ* and *qameṣ*, on the one hand, and between *šere* and *segol*, on the

¹⁰ The Babylonian tradition has been exhaustively described by Yeivin (1985), which is the most authoritative scholarly source. Important earlier studies of manuscripts with Babylonian vocalization were made by Kahle (1902; 1913; 1928). For an overview of the distinctive features of Babylonian vocalization and the reading traditions it reflects see Khan (2013f) and Heijmans (2016).

other, but rather had only one ‘a’ vowel and one ‘e’ vowel.¹¹ There was, however, internal diversity within these traditions of pronunciation. This applied in particular to the Babylonian and the Palestinian traditions, which exhibit a considerable amount of variation both in the sign systems and the pronunciation these systems reflect in the medieval manuscripts. The Tiberian vocalization system and the pronunciation it reflects are more uniform and standardized than the other traditions, but, nevertheless, there is some internal diversity (§I.0.10).

I.0.4. THE TIBERIAN MASORETIC TRADITION

The textualization of the orally transmitted Tiberian reading tradition was carried out by a circle of scholars in Tiberias known as Masoretes. The Masoretes (known in Hebrew as *בְּעָלֵי מִסֵּרָה*) were scholars who devoted themselves to preserving the traditions of writing and reading the Bible. Their name derives from the Hebrew term *masora* or *masoret*, the meaning of which is generally thought to be ‘transmission of traditions’.¹² The

¹¹ The most important scholarly studies of the Palestinian vocalization include Kahle (1930), Dietrich (1968), Revell (1970a; 1970b; 1977), Chiesa (1978) and Yahalom (1997). For overviews of the system see Heijmans (2013b) and Yahalom (2016).

¹² There is no complete consensus concerning the original meaning or etymology of the term. It seems to be connected with the Rabbinic Hebrew verb *מָסַר* ‘to hand over’, though this may be a denominal form. The noun *מִסֵּרָה* occurs in Ezek. 20.37, which is generally understood today as ‘bond’ (< *אסר*). One of its ancient interpretations, however, was ‘number’ (cf. Septuagint *ἀριθμῶ*). As we shall see, counting letters

Tiberian Masoretes were active over a period of several centuries in the second half of the first millennium C.E. The medieval sources refer to several generations of Masoretes, some of them belonging to the same family. The most famous of these families is that of Aharon ben Asher (tenth century), whose forebears were engaged in Masoretic activities over five generations.¹³ The Masoretes continued the work of the *soferim* ('scribes') of the Talmudic and Second Temple periods, who were also occupied with the correct transmission of the biblical text.¹⁴

and words to ensure the correct preservation of the text was one of the activities of the Masoretes. The word occurs also in Mishnah *Avot* 3.14 in a statement attributed to Rabbi Aqiva (c. 50-135 C.E.) מסרת סיג לתורה 'The *masoret* is a fence for the Torah', where it may have been originally used with the same sense (i.e. 'counting' of letters/words). Ben-Hayyim (1957b) has suggested that the verb מסר in Hebrew actually had the meaning of 'to count', as did its cognate in Samaritan Aramaic. The form מסרה is a variant feminine pattern of the noun. The form מסרה or מסרת, which is reflected in the English spelling 'Massorah', has no textual basis but is a modern reconstruction on the analogy of the pattern found in nouns such as כפרת 'mercy seat' and בערת 'dearth'.

¹³ Asher 'the elder', the great-great-grandfather of Aharon, probably lived in the second half of the eighth century C.E.; cf. Kahle (1959, 75–82; 1927, vol. 1, 39).

¹⁴ According to the Babylonian Talmud (*Qiddushin* 30a) the *soferim* acquired their name from the fact that they counted (Hebrew ספר) all the letters of the Pentateuch. As we have seen above the term מסרה was probably originally understood in the sense of 'counting'. This connection with the Talmudic interpretation of the term *soferim* may be more than coincidental, in that מסרה may have been intended originally

The Tiberian Masoretes developed what can be termed the Tiberian Masoretic tradition. This was a body of tradition that gradually took shape over two or three centuries and continued to grow until it was finally fixed, and the activities of the Masoretes ceased, at the beginning of the second millennium. During the same period, circles of Masoretes are known to have existed also in Iraq. It is the tradition of the Tiberian Masoretes, however, that had become virtually the exclusive Masoretic tradition in Judaism by the late Middle Ages and has been followed by all printed editions of the Hebrew Bible.

The Tiberian Masoretic tradition is recorded in numerous medieval manuscripts. The majority of these were written after 1100 C.E. and are copies of older manuscripts that were made in various Jewish communities. The early printed editions are based on these late medieval manuscripts. The most authoritative of these early editions was the so-called second Rabbinic Bible (i.e. the Bible text combined with commentaries and translations, known as *Miqra'ot Gedolot*) edited by Jacob ben Ḥayyim ben Adoniyahu and printed at the press of Daniel Bomberg in Venice between 1524 and 1525. These early Rabbinic Bibles appear to have been based on more than one manuscript (Penkower 1983). This came to be regarded as a *textus receptus* and was used as the basis for many subsequent editions of the Hebrew Bible.

to refer to the activity of the *soferim*. In the Middle Ages the term *sofer* acquired the narrower sense of 'copyist'. According to a medieval list of Masoretes published by Mann (1935, 2:44) the chain of Masoretes began with Ezra the scribe.

A small number of surviving manuscripts are first-hand records of the Tiberian Masoretic tradition. These were written in the Middle East before 1100 C.E., when the Masoretes were still active in the tenth century or in the period immediately after the cessation of their activities in the eleventh century. They are, therefore, the most reliable witnesses of the Tiberian Masoretic tradition. They all come from the end, or near the end, of the Masoretic period, when the Masoretic tradition had become fixed in most of its details. After 1100 C.E. the fixed tradition was transmitted by generations of scribes. Some of the modern editions of the Bible are based on these early manuscripts, e.g. the *Biblia Hebraica* from the third edition (1929–1937) onwards (the latest edition of which is the *Biblia Hebraica Quinta*, 2004–), *The Hebrew University Bible* (1975–), the editions by Aron Dotan (1973; revised 2001) and Mordechai Breuer (1977–1982) and the modern edition of the Rabbinic Bible by Menachem Cohen (known as *Ha-Keter*, Ramat-Gan, 1992–).

The Tiberian Masoretic tradition can be divided into the following components:

1. The consonantal text of the Hebrew Bible.
2. The layout of the text and codicological form of the manuscripts.
3. The indications of divisions of paragraphs (known in Hebrew as *pisqa'ot* or *parashiyyot*).
4. The accent signs, which indicated the musical cantillation of the text and also the position of the main stress in a word.

5. The vocalization, which indicated the pronunciation of the vowels and some details of the pronunciation of the consonants in the reading of the text.
6. Notes on the text, written in the margins of the manuscript.
7. Masoretic treatises. Some manuscripts have appendices at the end of the biblical text containing various treatises on aspects of the teachings of the Masoretes.
8. Orally transmitted reading tradition.

The first seven of these components are written, whereas the eighth existed only orally. The orally transmitted Tiberian reading tradition was passed on from one generation to the next. The reading tradition is only partially represented in graphic form by the vocalization and accent signs. These written components were created during the Masoretic period in the last third of the first millennium C.E. The most famous Masorete, Aharon ben Asher, who lived in the tenth century, represented the last generation. At the close of the Masoretic period at the beginning of the second millennium, the written components of the Tiberian Masoretic tradition had become fixed and were transmitted in this fixed form by later scribes. By contrast, the oral component, i.e. the Tiberian reading tradition, was soon forgotten and appears not to have been transmitted much beyond the twelfth century. As a result, the Tiberian vocalization signs came to be read according to the various local traditions of Hebrew pronunciation, most of them influenced by the vernacular languages of the communities concerned. The vocalization and accents were no longer direct representations of the way in which

the biblical text was recited and they became fossilized written components of the text. Since the Tiberian oral tradition of reading did not survive down to modern times, the letters, vocalization and accent signs are symbols that require interpretation. This interpretation is little more than speculation unless we examine extant sources that were written by medieval scholars and scribes who had direct access to the Tiberian pronunciation when it was still a living oral tradition. The description of the Tiberian pronunciation that is presented in this book is based on such medieval sources. Our main concern will be with the pronunciation of the vowels and consonants.

The Tiberian Masoretic manuscripts are codices, i.e. books consisting of collections of double-leaves that were stitched together. A Bible codex was referred to in medieval Hebrew sources as a *maḥzor* מחזור, as opposed to a scroll, which was referred to as a *sefer* ספר. The term *maḥzor* later came to designate specifically a codex containing a prayer-book for festivals. Another term that was used for a Bible codex in the Middle Ages was *miṣḥaf* מצחף, which is an Arabic loanword (< Arabic *muṣḥaf*).¹⁵ The Hebrew Bible began to be produced in codex form during the Islamic period. The earliest surviving codices with explicitly dated colophons were written in the tenth century C.E. All of these originate from the Jewish communities in the Middle East. There is indirect evidence from some Rabbinic sources that

¹⁵ The Arabic word *muṣḥaf* is itself a loanword from Ethiopic *maṣḥaf*, which means ‘book’, or specifically ‘Scripture’, see Leslau (1987, s.v. *ṣahafa*).

the codex had been adopted for Hebrew Bibles already in the eighth century C.E.¹⁶

Previously, the Hebrew Bible was always written in a scroll. After the introduction of the codex, scrolls continued to be used for writing the Hebrew Bible. Each type of manuscript, however, had a different function. The scrolls were used for public liturgical reading in the synagogues, whereas the codices were used for study purposes and non-liturgical reading. The scroll was the ancient form of manuscript that was hallowed by liturgical tradition and it was regarded as unacceptable by the Masoretes to change the custom of writing the scroll by adding the various written components of the Masoretic tradition that they developed, such as vocalization, accents and marginal notes. The codex had no such tradition behind it in Judaism and so the Masoretes felt free to introduce into this type of manuscripts the newly developed written Masoretic components.¹⁷ The desire to commit to writing in the Middle Ages many components of the Masoretic tradition that had been previously transmitted orally was, no doubt, one of the main motivations for the adoption of the codex at this period. It had been available as a format of book production since the Roman period. It started to be used for the writing of Christian Bibles as early as the second century C.E. The earliest extant datable codices of the Qurʾān pre-date the dated codices of the Hebrew Bible by about two centuries. The fact that

¹⁶ See Beit-Arié et al. (1997), Glatzer (1989, 260–63), Outhwaite (2018, 323).

¹⁷ For the association of the scribal innovations with changes in the physical form of manuscripts see Khan (1990b).

one of the medieval Hebrew terms for Bible codex, *miṣḥaf*, is a loanword from Arabic (*muṣḥaf*) suggests, indeed, that the Jews borrowed the format from the Muslims. We may say that the liturgical scroll remained the core of the biblical tradition, whereas the Masoretic codex was conceived as auxiliary to this. This distinction of function between liturgical scrolls with no vocalization, accents or Masoretic notes, on the one hand, and Masoretic codices, on the other, has continued in Jewish communities down to the present day. Occasionally in the Middle Ages, Masoretic additions were made to scrolls if they had, for some reason, become unfit for liturgical use. The fact that the leaves of a codex were written on both sides, unlike biblical scrolls, and its overall practical format meant that the entire twenty-four books of the Bible could be bound together in a single volume. The less practical scroll format meant that the books of the Bible had to be divided up into a series of separate scrolls. In many cases, however, codices consisted of only sections of the Bible, such as the major divisions of Pentateuch (*Torah*), Prophets (*Nevi'im*) and Writings (*Ketuvim*), or smaller units.

The scrolls generally differed from Masoretic codices not only in the lack of vocalization, accents and Masoretic notes, but also in the addition of ornamental strokes called *tagin* ('crowns') to the Hebrew letters *shin*, *ayin*, *ṭet*, *nun*, *zayin*, *gimel* and *ṣade*.

In the Masoretic period, the task of writing codices was generally divided between two specialist scribes. The copying of the consonantal text was entrusted to a scribe known as a *sofer*, who also wrote scrolls. The vocalization, accents and Masoretic

notes, on the other hand, were generally added by a scribe known as a *naqdan* ('pointer', i.e. vocalizer) or by a Masorete. This reflects the fact that the tradition of transmitting the consonantal text and the tradition of transmitting the Masoretic components were not completely integrated. According to the colophon of the Aleppo Codex, for example, the text was copied by the scribe Shlomo ben Buyā'ā and its vocalization and Masora were supplied by Aharon ben Asher.¹⁸ For the scribe who wrote the consonantal text the base of authority was constituted by an existing authoritative exemplar manuscript.¹⁹ For the *naqdan* the base of authority was a master teacher of the oral reading tradition. In the case of the Aleppo Codex, the *naqdan* and the master teacher were one and the same person. By contrast, the Codex Leningradensis, which was produced in the early eleventh century after the close of Masoretic period and the death of the last authorities of the Tiberian oral tradition, was written and vocalized by the same scribe, Samuel ben Jacob.²⁰

¹⁸ The original inscriptions are now lost and survive only in copies (Kahle 1930, 7–12; Ofer 1989). The scribe Shlomo ben Buyā'ā also wrote the manuscript I Firkovitch II.17 (L¹ according to the abbreviation of Yeivin 1980, 22–23), but the *naqdan* was different from that of A and so the vocalization and accentuation.

¹⁹ In one extant Judaeo-Arabic document from the Genizah the Persian loanword *namūdhaj* 'model, exemplar' is used to refer to such a model manuscript (Outhwaite 2018, 331).

²⁰ There is evidence from colophons that other Masoretic codices, also apparently from the post-Masoretic period, were produced entirely by a single scribe (Outhwaite 2018, 329).

So far we have made a distinction between manuscripts of the Hebrew Bible written in scrolls and those written in Masoretic codices and also between the early Tiberian codices datable to before 1100 and later ones. In the early period, coinciding with or close to the time when the Masoretes were active, we can distinguish between various types of Hebrew Bible codices. The type of codex that has been referred to in the preceding discussion is what can be termed a ‘model’ codex, which was carefully written and accurately preserved the written components of the Tiberian Masoretic tradition. Such manuscripts were generally in the possession of a community, as is shown by their colophons, and were kept in a public place of study and worship for consultation and copying (to produce both codices and scrolls). References to various model codices and their readings are found in the Masoretic notes, e.g. Codex Muggah, Codex Hilleli, Codex Zambuqi and Codex Yerushalmi (Ginsburg 1897, 429–33). Sometimes accurately written manuscripts also contain the text of an Aramaic Targum.

In addition to these model Masoretic codices, there existed numerous so-called ‘popular’ Bible codices, which were generally in the possession of private individuals. These were not written with such precision as the model codices and usually did not include all the written components of the Tiberian Masoretic tradition. Often they contain no accents or Masoretic notes but only vocalization, and this may deviate from the standard Tiberian system of vocalization in a number of details. Some

popular Bible manuscripts were accompanied by an Aramaic Targum or an Arabic translation and commentary.²¹

All popular manuscripts were not necessarily written carelessly. The crucial feature of their production was that the scribes felt less bound by tradition than in the copying of the model manuscripts. Many of them are distinguished from the model manuscripts also in their smaller dimensions and their different page-layout (Arrant 2020).

There were, therefore, three classes of Hebrew Bible manuscript in the early Middle Ages: (i) scrolls used for public reading in the liturgy; (ii) model Masoretic codices, the purpose of which was to preserve the full biblical tradition, both the written tradition and the reading tradition; (iii) popular manuscripts that aided individuals in the reading of the text.

We describe here briefly some of the surviving model Tiberian Masoretic codices that have come to be regarded as among the most important and are referred to in various places in this book. All of these manuscripts originate from the Middle East, as do the vast majority of the early codices. The early eastern manuscripts began to come to the attention of scholars in the nineteenth century, mainly due to the collection of eastern manuscripts assembled by Abraham Firkovitch (1787–1874), the majority of which were donated to what is now the National

²¹ For this type of medieval manuscript see Goshen-Gottstein (1962, 36–44), Díez Macho (1971, 22), Sirat (2002, 42–50), Stern (2017, 88–90), Arrant (2020) and Outhwaite (2020). These scholars use different terms to refer to such Bible manuscripts. Sirat, for example, refers to them as ‘common Bibles’, a term that is adopted by Outhwaite (2020).

Library of Russia in St. Petersburg. An important breakthrough was also the discovery of the Cairo Genizah in the late nineteenth century, which contained many fragments of early eastern Bible manuscripts, the majority of which are now in the possession of Cambridge University Library. The earliest surviving codices that were written in Europe are datable to the twelfth century (Beit-Arié et al. 1997). The early medieval model codices with standard Tiberian vocalization all reflect a basically uniform Masoretic tradition, though no two manuscripts are completely identical. The differences are sometimes the result of scribal errors and other times due to a slightly different reading tradition or system of marking vocalization and accents that is followed by the *naqdan*.

1. The Aleppo Codex (referred to henceforth as A)

In the colophon of this manuscript, it is stated that it was written by Shlomo ben Buyā'ā and the Masorete Aharon ben Asher (tenth century C.E.) added the vocalization, accents and Masoretic notes. This is confirmed by comparison with the statements concerning the traditions of Ben Asher and Ben Naftali in the Masoretic treatise known as 'The Book of Differences' (*Kitāb al-Khilaf*) of Misha'el ben 'Uzzi'el (§I.0.13.1.). The Aleppo Codex agrees with Ben Asher against Ben Naftali in 94% of the cases of differences between the two Masoretes recorded in this work. It is indeed thought to be the manuscript that Maimonides examined when he pronounced that Ben Asher's tradition was superior to that of other Masoretes. It should be regarded, therefore, as the authorized edition in Jewish tradition after the

time of Maimonides (Penkower 1981). When Maimonides saw the manuscript, it was kept in Egypt, possibly in the Ben-Ezra synagogue in Fustāt, which later became famous for its ‘Genizah’. From the later Middle Ages, however, it was kept in Aleppo. In 1948 the synagogue in which it was kept in Aleppo was set on fire and only about three-quarters of the original manuscript were preserved. The surviving portions are now kept in Jerusalem in the library of the Ben-Zvi Institute (Shamosh 1987; Friedman 2012; Goshen-Gottstein 1960; Yeivin 1968). It has been published in a facsimile edition by Moshe Goshen-Gottstein (1976) and images are available online.²² This manuscript forms the basis of a number of Israeli editions of the Hebrew Bible, including the *Hebrew University Bible* (Goshen-Gottstein 1975), the edition of Mordechai Breuer (Jerusalem 1977–1982, re-edited in 1996–1998 with inclusion of new information on the *parasha* divisions) and the modern Rabbinic Bible (*ha-Keter*) edited by Menachem Cohen (1992–).

2. Codex Leningradensis, St. Petersburg (Leningrad), National Library of Russia, I Firkovitch Evr. I B 19a (referred to henceforth as L).

This codex is still widely known as Codex Leningradensis. One of the colophons of the manuscript states that it was written in Fustāt, Egypt, and subsequently checked and corrected ‘according to the most exact texts of Ben Asher’.²³ Its date is given in the colophon according to five different systems of reckoning,

²² <http://www.aleppocodex.org>.

²³ לפי הספרים המדויקים של בן אשר.

which do not completely coincide, but a date in the region of 1008-1009 C.E. seems to be intended. It was, therefore, written after the close of the Masoretic period and was not the original work of a Masoretic authority, unlike the Aleppo Codex, which was vocalized by the Masorete Aharon ben Asher. It is, nevertheless, very similar to A and agrees with Ben Asher against Ben Naftali in 90% of the cases of differences between them that are recorded in the ‘The Book of Differences’. The commissioner and first owner of the manuscript was a wealthy Karaite merchant known as Joseph ibn Yazdād.²⁴ The Codex Leningradensis differs slightly from the Aleppo Codex in a few minor details. There is a lesser degree of marking of *ḥaṭef* signs on non-guttural consonants than in A (§I.2.5.3.) and a slightly greater degree of marking of *ga‘ya* on open syllables. Some of the original vocalization and accentuation has clearly been changed during the correction process referred to in the colophon and the corrections, in general, correspond to what is found in A. These consist of erasures, mainly of *ga‘ya* signs, and additions, mainly of *ḥaṭef* signs under non-guttural consonants. The manuscript has been preserved in its entirety and it contains the complete text of the Bible. Paul Kahle made this the basis of the third edition of *Biblia Hebraica* (Stuttgart 1929–1937) and it has been used for all subsequent editions. For practical reasons, unless otherwise indicated, manuscript L is cited according to the edition in the fourth edition of *Biblia Hebraica* (*Biblia Hebraica Stuttgartensia*, abbreviated as

²⁴ For the background of the manuscript and the interpretation of its colophon see Outhwaite (2018).

BHS). In places where there are problems with the reading reflected by BHS (see, e.g. §I.3.1.14.) the manuscript is cited directly. Manuscript L is also the basis of the edition of the Hebrew Bible by Aron Dotan (Tel-Aviv 1973, revised 2001).²⁵

3. British Library, London, Or. 4445 (referred to henceforth as B)

This manuscript contains leaves from different periods. The ones of greatest interest for the study of the Tiberian Masoretic tradition are the oldest leaves, which constitute most of the Pentateuch. These are generally thought to have been written at the same period as A in the first half of the tenth century, or possibly slightly earlier. This older section agrees with Ben Asher against Ben Naftali in 80% of the recorded cases of differences. It marks *ḥatef* signs on non-guttural consonants slightly more frequently than in the corresponding portions of L, in accordance the principles found in A. The marking of *ga'ya* in open syllables is, however, less frequent than in A. The *rafe* sign, furthermore, is used on non-בגדכפת consonants less often than in A (§I.3.2.). It appears, therefore, to represent a slightly less developed tradition than A.²⁶

²⁵ A facsimile edition of the manuscript was published by Loewinger (1970).

²⁶ Yeivin (1968, 359–60), Ginsburg (1897, 469–74), Lyons (1983), Dotan (1993).

4. The Cairo Codex of the Prophets (referred to henceforth as C)

This manuscript, which contains all of the books of the Prophets, was preserved down to modern times in the Karaite synagogue in Cairo. It has a colophon attributing it to the Masorete Moshe ben Asher, the father of Aharon ben Asher, with the date 895 C.E. There is now a consensus that the manuscript was written later, most likely in the eleventh century, and this is a later copy of an earlier colophon.²⁷ The manuscript reflects a tradition that is closer to that of Ben Naftali than to that of Ben Asher. In places where a difference is recorded between Ben Asher and Ben Naftali, it agrees with Ben Asher in 33% of cases and with Ben Naftali in 64% of cases. C also reflects some features of vocalization that are attributed to Ben Naftali in the Masoretic sources. These include forms such as לִישָׁרָא instead of לִישָׁרָאֵל, the latter being the tradition of Ben Asher, which is found in A and L (§I.2.5.1.). Another case is the marking of *dagesh* in the *qof* of the verb יַעֲקֹב 'he supplants' (Jer. 9.3) (§I.3.1.11.2.). It does not, however, correspond to the tradition attributed to Ben Naftali in all features. In general, it exhibits a more developed tradition than A and L. It marks, for example, *ga'ya* in open syllables (§I.2.8.2.1) and *dagesh* in consonantal 'alef (§I.1.1.) more frequently than is the case in A and L.²⁸ A facsimile of C was published by Loewinger (1971). A Spanish team directed by Pérez Castro (1979–

²⁷ For the arguments regarding its dating, see Menachem Cohen (1982b), Glatzer (1989, 250–59), Lipschütz (1964, 6–7).

²⁸ Yeivin (1968, 360–61).

1992) produced an edition of the manuscript together with its Masora.

5. Jerusalem National and University Library, Heb. 24, 5702 (formerly MS Sassoon 507) (henceforth referred to as S)

This is likely to have been written in the tenth century. The surviving sections contain most of the Pentateuch. It does not exhibit a predominant correspondence to either Ben Asher or Ben Naftali, in that it agrees with Ben Asher against Ben Naftali in 52% of the recorded cases of differences. The vocalization exhibits some features that are attributed to Ben Naftali, e.g. בִּישָׁרָאֵל (§I.2.5.1.). In some features it is more developed than A and L, such as the greater marking of *rafe* and the greater marking of *ga'ya* in open syllables. Unlike A and L, however, it does not mark *ḥatef* signs on non-guttural consonants.²⁹

Towards the end of the Masoretic period in the second half of the tenth century and the eleventh century, many Karaite scholars became involved with the Tiberian Masoretic tradition. Some studies have shown that the Masoretic notes in some Tiberian Bible codices, including the Aleppo Codex, contain some elements that appear to reflect Karaite rather than Rabbanite theology.³⁰ Does this mean that the whole circle of Tiberian Masoretes were Karaites? There are several problems with such a simple assessment. The medieval sources refer to several

²⁹ Yeivin (1968, 361-362), Shashar (1983).

³⁰ For example, the gradual revelation of *mišvot* to generations before Moses; cf. Zer (2003).

generations of Masoretes, some of them belonging to the same family. They indicate that the family of the famous Masorete Aharon Ben Asher had been involved in Masoretic activities over five generations. Aharon Ben Asher lived in the tenth century, and so Asher ‘the elder’, who is stated to be the great-great-grandfather of Aharon, is likely to have lived in the second half of the eighth century C.E., before the emergence of Karaism on the historical scene. There is no evidence of a Karaite community in Tiberias during the Masoretic period. The immigration of Karaites to Palestine evidently began in the second half of the ninth century and was directed towards Jerusalem (Gil 1992, 182). Some of the Masoretes, furthermore, were closely associated with the Rabbanite Jewish authorities, e.g. Pinḥas Rosh ha-Yeshiva (‘head of the Academy’), who lived in the ninth century. The ‘Academy’ (*Yeshiva*) was the central body of Rabbanite Jewish communal authority in Palestine. Some close parallels to the format and phraseology of the Masoretic notes can, in fact, be found in Midrashic literature composed before the Islamic period (Martín Contreras 1999; 2002; 2003). It is likely that these Midrashim were redacted by Jewish sages in Tiberias, which was a thriving centre of Rabbinic scholarship in the Byzantine period (Rozenfeld 2010, 120–26). All this suggests that Karaite scholars joined forces with an existing stream of tradition of ‘Bible scholarship’ in Rabbanite Judaism, enhancing it and developing it.

The Karaites contributed to the Tiberian Masoretic tradition in various ways. They sponsored the safekeeping of the model Masoretic codices produced by the Masoretes. This is

shown by the fact that colophons of many of the surviving codices indicate that they had come into the possession of Karaite public institutions, such as study houses and synagogues. The Karaites also become involved in the production of accurate copies of Masoretic biblical codices, particularly in the eleventh century, after the cessation of the activities of the Tiberian Masoretes. In the late tenth and early eleventh century, they produced several Masoretic treatises (§I.0.13.1.) and developed the para-Masoretic philological activity of grammar (§I.0.13.4.).

Several of the colophons of the model Tiberian also indicate that the codices were used for liturgical reading by the Karaite communities on Sabbaths and festivals, e.g.

The Aleppo Codex (A):

‘in order that they bring it [the codex] out to the settlements and communities in the holy city on the three pilgrimage festivals, the festival of Passover, the festival of Weeks and the festival Tabernacles to read in it’.³¹

The Cairo Codex of the Prophets (C):

‘This is the codex, the Eight Prophets, which Ya‘beš ben Shlomo consecrated in Jerusalem ... for the Karaites who celebrate the feasts at seeing the moon, for them all to read on Sabbath days, at new moons and at the feasts’.³²

³¹ Kahle (1930, 3): כדי שיוציאוהו אל המושבות והקהלות שבעיר הקודש בשלשה רגלים חג המצות חג השבועות וחג הסוכות לקרות בו.

³² Kahle (1959, 93): זה הדפטר שמנה נביאים שהקדיש אותו יעבץ בן שלמה בירושלים ... לקראין העושים המועדים על ראות הירח יקראו בו כלם בשבתות ובחדשים ובמועדים.

II Firkovitch Evr. II B 34:

‘This Bible should be taken to one of the settlements in which there are Karaite communities on Sabbaths and festivals in the city of Cairo so that the congregation can read it each Sabbath and blessed festival’.³³

The use of Masoretic codices for liturgical reading distinguished the Karaites from the Rabbanites, who continued to use scrolls for this purpose (Allony 1979).

I.0.5. *QERE AND KETIV*

The medieval Tiberian Bible codices record the reading tradition not only in the vocalization sign system but also in marginal notes. These are known as *qere* notes. The term *qere* is the Aramaic passive participle קָרַי ‘read’. The notes were marked when there was a conflict between the orthography of the text, known as the *ketiv* (from the Aramaic passive participle כָּתִיב ‘written’), and the oral reading. The usual practice in the manuscripts was to write the vocalization of the *qere* on the orthography of the *ketiv* and then write in the margin the appropriate orthography of the *qere* without vocalization. The *qere* note in the margin is generally flagged by the word קרי (*qere*) under it or the abbreviation ק, e.g.

2 Kings 20.4

| | | | |
|----------|---------|-----|---|
| L: קָרַי | Margin: | חצר | i.e. read the <i>ketiv</i> קָרַי as חָצַר |
| | | ק | |

³³ Kahle (1930, 74–77): יאסוף זה המקרא אל אחת המושבות שיהיה בה קהלות הקראיין בשבתות ובמועדים במדינת מצרים לקראת הקהל בו בכל שבת ומועד ברוך.

In some places in the manuscripts, the *qere* note is accompanied by a sign that resembles a final *nun* ן. This was evidently a device to draw the attention of the reader (Ofer 2019, 89–91).

Qere notes are unevenly distributed across the Hebrew Bible. They are less frequent in the Pentateuch than in the Prophets and Writings.³⁴

When there is a regular conflict between the orthography of the reading in frequently occurring words and forms, as is the case, for example, with the Tetragrammaton (*ketiv* יהוה, *qere* אֲדֹנָי or אֱלֹהִים), the place name ‘Jerusalem’ (*ketiv* ירושלם, *qere* יְרוּשָׁלַיִם) and some morphological suffixes (see below), the vocalization of the word reflects the *qere* but there are no *qere* notes in the margins with the appropriate orthography.

It is important to distinguish between the *qere* notes and the *qere*. The term *qere* should properly refer to the entire reading tradition, reflected by the vocalization, whereas the *qere* notes concern selected cases where the reading tradition differs sufficiently from the orthography to lead to errors in reading. Errors in reading included not only errors in pronunciation but also errors in the understanding and parsing of a word.

As remarked, the transmission of the Hebrew Bible involved the intertwining of written text and oral reading tradition. The written text was copied by scribes and the memory of the oral reading tradition was passed on from generation to generation by teachers. The scribes and the teachers constituted two distinct groups and their activities were distinct. This is one of the reasons why discrepancies arose between the two channels

³⁴ Barr (1981), Tov (2015, 157).

of transmission. To understand further the phenomenon of a reading tradition (*qere*) of the Hebrew Bible that does not always correspond to the orthography of the written text (*ktiv*), it is helpful to compare the *qere* to the oral reading traditions of the Qurʾān, known as *qirāʾāt*.

According to early Islamic sources, immediately after the death of the prophet Muḥammad, Qurʾānic verses were preserved in both written and oral form. They were recorded in writing on small fragmentary objects, such as palm stalks and thin stones, and were transmitted in human memory ‘in the hearts of men’ (*ṣudūr al-rijāl*).³⁵ The implication is that oral traditions accompanied written traditions from the very beginning of the process of transmission. After the written text of the Qurʾān had been officially stabilized and had undergone a process of standardization in the form of the edition of the caliph ʿUthmān (seventh century C.E.), considerable diversity still remained in the various traditions of orally reciting the text, despite the fact that ʿUthmān had commanded the written texts that did not conform to the new ʿUthmānic recension to be destroyed. These oral reading traditions exhibited different linguistic features, reflecting differences between the spoken Arabic dialects of the period, and also textual differences. Some of the differences were also due to grammatical errors by reciters. For approximately two centuries after the introduction of the ʿUthmānic standard written text, some textual differences in the reading traditions still deviated from the or-

³⁵ See *ḥadīth* 4986 in the collection of al-Bukhārī (*Ṣaḥīḥ al-Bukhārī*) ed. Muḥammad M. Khan (1997).

thography of this standard text. The textual differences, therefore, were not only different interpretations of the written orthography but also, it seems, different readings that arose in oral transmission. By the third century A.H./ninth century C.E., however, the permitted forms of reading were strictly brought into line with the orthography of the text and with standardized rules of Arabic grammar. This was largely due to the activities of Ibn Mujāhid (d. 324 A.H./936 C.E.), who had the official backing of the government authorities. Ibn Mujāhid also reduced the number of authorized reading traditions to seven canonical ones, which were transmitted from a recognized authority and had a large number of tradents. The principle of conformity with the orthography of the ʿUthmānic text did not necessarily require correspondence to the reading originally intended by the orthography, but rather it was required that the reading could be accommodated by the orthography. The potential for variation was increased by the fact that what was fixed was the orthography without diacritical dots on the Arabic letters (known as the *rasm*). This is likely to have been intentional in order to accommodate a diversity of reading traditions. The text, therefore, could not serve as a stand-alone document but rather functioned as an *aide-mémoire* for the oral reading (Graham and Kermani 2007, 116; Roxburgh 2008, 8). Various different dialectal forms of Arabic were permitted in the reading traditions, so long as they could be supported by the *rasm*. The orthography originally represented the western Arabian dialect of the Ḥijāz in which a glottal stop was elided. The word for ‘well, spring’, for example, was pronounced as *bīr* in the dialect of Ḥijāz (i.e. بئر) and this is what

was originally intended by the orthography *سر*. This was how it was pronounced also in some of the canonical reading traditions. Other canonical reading traditions, however, read the *rasm* with a glottal stop, viz. *biʾr*, in accordance with the phonology of the eastern Arabian dialect (i.e. *بئر*). Some of the most widely followed canonical readings in later centuries, in fact, followed the eastern type of pronunciation, which deviated from what the orthography was originally intended to represent.³⁶

The *qere* of the Hebrew Bible was most likely analogous to the Qurʾānic reading traditions, especially those of the early Islamic period, which sometimes differed textually from the orthography.³⁷ As with the Qurʾānic reading traditions, the *qere* reflects an orally transmitted reading tradition of the written text, i.e. a memorized tradition of oral recitation. It need not be assumed that it is derived from a variant written tradition that had its origin in written manuscripts.³⁸ Indeed allusions to Jewish education in the Second Temple Period refer to learning the Torah

³⁶ For a good overview of Qurʾānic reading traditions see Leemhuis (2017). See also Nasser (2013) and Graham and Kermani (2007).

³⁷ Cf. Crowther (2018), who draws analogies between the diversity of Qurʾānic oral reading traditions with the pluriformity of biblical texts from Qumran.

³⁸ We take the view here of scholars who have stressed the oral dimension of the text reflected by the vocalization; cf. especially Barr (1968, 194–222; 1981), Morag (1974), M. Breuer (1997) and Ofer (2019, 87–89). A discrepancy between a reading tradition and the written text similar to the one found in the transmission of the Hebrew Bible is found

by hearing the recitation of texts, which would be memorized and repeated orally. This acquired knowledge of the text would stand independently of the written text. Josephus (d. 100 C.E.) describes such a process of education as follows:

Let the high priest stand upon a high desk, whence he may be heard, and let him read the laws to all the people; and let neither the women nor the children be hindered from hearing.³⁹

Such memorized oral traditions could potentially survive punctuations such as the physical destruction of written texts, as is likely to have happened after the destruction of the First Temple in the sixth century B.C.E.⁴⁰ and as is reported to have happened during the reign of Antiochus IV Epiphanes, who, according to 1 Macc. 1.56-57, ordered the destruction of books in the Temple in 168–167 B.C.E. In a similar manner oral traditions of the Qurʾān maintained textual traditions that were eliminated by the physical destruction of written non-ʿUthmānic versions (Zbrzezny 2019).

The *qere* notes in the medieval Masoretic codices are unlikely to have originated as written marginal corrections of specific words in the written text, as advocated, for example, by scholars such as Ginsburg (1897, 183–87) and Gordis (1971).

also in the tradition of reciting the Talmud in the Yemenite Jewish community; Morag (1988).

³⁹ *Antiquities* (4.214). The passage is discussed by Schniedewind (2013, 196). Josephus refers elsewhere also to the memorization of Psalms by the Levites (*Antiquities* 20.218).

⁴⁰ Cf. Carr (2005, 161–73).

Rather they constitute a system that was developed before the vocalization signs were created to alert the reader to places where the oral reading deviates from what is represented by the written orthography.

In the early Islamic tradition, the Qurʾān was typically recited only from memory during congregational prayers. In an attempt to bring the oral traditions more into line with the written text, Ḥajjāj ibn Yūsuf (d. 95 A.H./714 C.E.), the governor of Iraq, ordered the recitation to be made from a book rather from memory alone (Hamdan 2006, 172). Such an attempt to bring the recitation of oral tradition more closely together with the text is likely to have occurred also in Judaism in the process of fixing the text after the destruction of the Temple. The oral and written traditions of both the Hebrew Bible and the Qurʾān, nevertheless, continued to be separate levels of transmission. The oral reading was the oral performance of the written text, whereby the two levels were intertwined.

As is the case with Qurʾānic reading traditions, the *qere* reflected linguistic differences from the *ketiv*, textual differences and sporadic errors in reading.

The linguistic differences often appear to reflect dialectal divergences. The *qere* of the pronominal suffixes ךְ [-χɔ:], ךְ [-tʰɔ:] and ם [-ɔ:ɔv], for instance, reflect different morphological forms from those reflected by the *ketiv*. The *ketiv* of the second person suffixes ךְ, ךְ- reflect forms without a final vowel and the 3ms suffix ם- appears to reflect a suffix containing a front vowel, such as *-ēw* or the like. The forms of the *qere* are reflected in Qumran manuscripts and Hebrew epigraphic texts from the first

millennium B.C.E. by spellings such as כה-, תה- and ו- (Cross and Freedman 1952, 53, 66–67; Qimron 1986, 58–60). The spelling of these suffixes with the normal Masoretic type of orthography is also found in Qumran and epigraphic texts.⁴¹ The *qere* of the suffixes תי-, תי- and וי-, moreover, is reflected by the orthography of the consonantal text in a few sporadic cases, e.g. יְדָכָה ‘your hand’ (Exod. 13.16), גִּרְתָּה ‘you have sojourned’ (Gen. 21.23), חֲצָיו ‘his arrows’ (Psa. 58.8). It is not necessarily the case, therefore, that the linguistic differences between the *qere* and the *ketiv* always reflect later stages of development of the Hebrew language, but rather in many cases these may have been contemporary dialectal differences. Exceptional pronominal forms that appear in the *ketiv* but not in the *qere* and have been considered archaic are often attested in the orthography of Qumran manuscripts. This applies, for example, to 2fs pronominal forms with final *yod*:

ketiv אַתָּי, *qere* אַתָּ 1 Kings 14.2 ‘you (fs)’

ketiv הִלַכְתִּי, *qere* הִלַכְתָּ Jer. 31.21 ‘you (fs) went’

ketiv לְכִי, *qere* לְךָ 2 Kings 4.2 ‘to you’

The *yod* occurs on these pronominal forms in Qumran manuscripts where they do not occur in the *ketiv* of the Masoretic Text, suggesting that it was still a living linguistic feature in the late Second Temple period. Examples are particularly numerous in the scroll 1QIsa^a, e.g.⁴²

⁴¹ For a detailed discussion of the attested forms of the suffix see Hornkohl (2020).

⁴² Material incorporated from the Gesenius grammar project contributed by Aaron Hornkohl.

אתי היאה (1QIsa^a 42.24 | BHS אַתְּ־הִיא Isa. 51.9 ‘[are] you [not] she’)

לבכי (1QIsa^a 39.26 | BHS לִבִּיךָ Isa. 47.7 ‘your [fs] heart’)

עליתי (1QIsa^a 17.4 | BHS עָלִית Isa. 22.1 ‘you [fs] have gone up’)

In fact, the forms with *yod* occasionally occur in the *qere* of the Masoretic text, e.g. חַיִּיִּךְ ‘your (fs) life’ (Psa. 103.4).

There are other less frequently occurring instances where there appear to be differences in morphology between the form represented by the orthography of the *ketiv* and the *qere* without it being felt necessary to write a *qere* note, e.g.

Cant. 3.4. עַד־שֶׁהֵבִיאָתִי ‘until I had brought him’

Gen. 24.47. וָאָשָׁם ‘and I placed’

Lev. 20.26. וָאֲבָדֵל ‘and I have separated’

Here the *ketiv* orthography is likely to reflect the forms וָאָשָׁם and וָאֲבָדֵל respectively. Evidently, the orthography of the *ketiv* was considered to be acceptable as a representation of the *qere* due to analogy with orthography in other contexts, e.g. הֵבִיא ‘bring!’ (1 Sam. 20.40), and defective spellings such as וְשָׁלְשָׁם ‘officers’ (Exod. 14.7).⁴³

With regard to textual differences between the *qere* and the *ketiv*, sometimes there is a difference in the whole word, e.g. 2 Kings 20.4, written העיר ‘the town’, read הֶחָצֵר ‘the court’ or the

⁴³ The linguistic differences between the *qere* and the *ketiv* are particularly prominent in Biblical Aramaic, where in many cases each of these layers clearly reflects different dialects of Aramaic.

division of words, e.g. Ezek. 42.9, written ומתחתה לשכות האלה, read מִתַּחַת הַלְשָׁכוֹת הָאֵלֶּה ‘below these chambers’. In some isolated cases the discrepancy amounts to omissions or additions of words or phrases, e.g. Jer. 31.38, written והנה ימים באים, read הִנֵּה יָמִים בָּאִים ‘behold the days are coming’.

In a few cases, a textual difference in the *qere* does not differ in its phonetic form from the reading offered by the *ketiv*. This applies, for example, to several instances where the *ketiv* is לו ‘to him’ and the *qere* is לא ‘not’ and vice versa, e.g.

וְיָקָם הַבַּיִת אֲשֶׁר־בְּעִיר אֲשֶׁר־לֹא חֹמָה לְצִמְיֹתָהּ לְקִנָּהּ אֵתָּו

qere: אֲשֶׁר־לוֹ חֹמָה

‘The house that is in a city with a wall (*ketiv*: a city that is not a wall) shall be made sure in perpetuity to him who bought it’ (Lev. 25.30).

וַאֲמַר | לוֹ כִּי עַתָּה תִּתֵּן

qere: וַאֲמַר | לֹא

‘He would say “No, you must give it now”’ (*ketiv*: ‘He would say to him “You must give it now”’ (1 Sam. 2.16).

In such cases, the conflict between the oral *qere* and the orthography of the *ketiv* is only a difference in its interpretation, which shows that the oral reading was transmitted together with an associated semantic content. So the note in the margins of medieval Masoretic manuscripts stating that the *qere* is לו where the *ketiv* has לא indicates that in the reading tradition this word *lō* has the meaning ‘to it’ and offers an orthography that is more appropriate for this than the orthography of the *ketiv* (לא), which

reflects a different meaning of *lō*, namely the meaning of the negative particle. In late antiquity, this semantic content was expressed by the Targums (Onqelos and Jonathan), which frequently reflect an interpretation of the *qere* and not the *ketiv* (e.g. Onqelos to Lev. 25.30: ביתא דבקריתא דליה שורא ‘a house that is in town that has a wall’). In a number of cases, however, the Targums reflect the semantic content reflected by the orthography of the *ketiv*. This applies, for example, to the Targum to 1 Sam. 2.16, which reflects the *ketiv* לו ‘to him’: ואמר ליה ‘and he said to him’. This reflects a diversity of interpretative traditions.

Another case where the *ketiv* and *qere* have the same phonetic form is 2 Sam 5.2: *ketiv* והמבי את, *qere* note המביא את ‘the one bringing in + object marker’ (והמביא את־). The *ketiv* seems to have arisen by haplography of an *’alef*. The *qere* note need not be taken as evidence that it has its origin in a written manuscript with the correct orthography, but rather indicates that in the reading tradition the *ketiv* המבי is interpreted as meaning המביא. The purpose of the note was to ensure that readers parsed the anomalous orthography המבי correctly. Similar cases of *qere* notes that do not reflect a different pronunciation but rather offer help in parsing words with an unusual orthography include Jer. 18.3 *ketiv* והנהו, *qere* note והנה־הוא ‘and behold he’ (והנה־הוא) and Exod. 4.2 *ketiv* מזה, *qere* note מה זה ‘what is that?’ (מה־זה). In these last two cases, the orthography of the *ketiv* has the purpose of reflecting the prosodic bonding of the words. Although this prosodic bonding indeed exists also in the *qere*, the *qere* note was

considered necessary since such combinations of words are normally not represented in this way in the orthography.

Another case of the *qere* note apparently differing only in orthography from the *ketiv* is

1 Chron. 11.17. L: וַיִּתְאַוּ 'and he desired', *qere* note: וַיִּתְאַוּ, i.e. the *qere* is וַיִּתְאַוּ.

Here the spelling of the *qere* note with final י (imitating the orthography of the 3ms pronominal suffix on plural nouns יָ-י) is likely to be a device to ensure that the ending of the word is read as a final diphthong. Similar *qere* notes for this verb are found in Prov. 23.6 and Prov. 24.1. An analogous type of note is found in Jer. 17.11: *ketiv* יָמֹ, *qere* יָמָיו 'his days' (יָמָיו). The orthographies וַיִּתְאַוּ and יָמֹ would, in principle, be possible for the representation of a final diphthong consisting of *qameš* and consonantal *vav* [כ:כַּו]. The point is that the *vav* in orthographic sequences such as וַ- and יָ- at the ends of words would normally be read in the biblical corpus as a vowel. The *qere* note warns against following the normal practice, which would result in an error of reading.

In a few cases, the *qere* has a *qameš ḥaṭuf* or *ḥaṭef qameš* where the *ketiv* has a vowel letter *vav*, e.g.

Neh. 4.9. L: וַנָּשׁוּב 'and we returned', *qere* note: וְנָשׁוּב, i.e. the *qere* is וְנָשׁוּב.

The purpose of the *qere* note is to supply a more appropriate orthography for the short vowel of the reading tradition since the orthography of the *ketiv* with *vav* could cause an error in reading.

In some cases falling into the category of those just discussed, in which the *qere* note presents a more frequent variation of orthography rather than the orthography of a completely different word, there is a Masoretic note relating to orthography rather than a *qere* note, which serves the same purpose, e.g.

Neh. 13.23. L: אֲשֶׁדּוּדִיּוֹת עַמּוֹנִיּוֹת ‘Ashdodite, Ammonite women’, note יתיר ו (‘the *vav* is redundant’), i.e. the *qere* is אֲשֶׁדּוּדִיּוֹת עַמּוֹנִיּוֹת.

In these types of cases the manuscripts occasionally differ, some having a *qere* note and others a Masoretic note relating to orthography (Ofer 2019, 92), e.g.

2 Sam. 16.8. תִּחְתִּי:

L: תִּחְתִּי תחתיו ‘the *qere* is תחתיו’

A: חס ך ‘one of four cases in which the orthography (of this suffix) lacks (*yod*)’

Notes such as those just described, in which the *qere* is pronounced the same or similarly to the *ktiv*, suggest that the *qere* notes were originally compiled before the creation of the vocalization signs, since the vocalization would have ensured that such an error of reading was not made. References to differences between *qere* and *ktiv* are, in fact, already mentioned in Rabbinic literature (Yeivin 1980, §105; Ofer 2008; 2009).

In a large proportion of cases where the *qere* differs from the *ktiv*, the *qere* represents an easier reading than the *ktiv*. The reading may be textually easier. The *qere*, for example,

sometimes has a *vav* where the *ketiv* has a *yod* that is textually difficult and has evidently arisen through scribal error, as in:

Jer. 13.20. L: שָׂאֵי עֵינֶיכֶם 'lift up your (pl) eyes' (where the *ketiv* reflects שָׂאֵי 'lift up (fs)'), *qere* note שאו, i.e. the *qere* is שָׂאוּ

In some places, the *qere* inverts the letters of a *ketiv* of an obscure form to produce a familiar form, e.g.

2 Sam. 20:14. L: וַיִּקְלְהוּ 'and they assembled', *qere* note ויקהלו, i.e. the *qere* is וַיִּקְהְלוּ.

In such cases in the Aleppo Codex the vocalization signs are not marked in the order required by the *qere* but rather are marked on the letters of the *ketiv* in a different order from the form of the *qere* that they are intended to represent, i.e. וַיִּקְלְהוּ (Yeivin 1962). Here each individual letter has the vocalization required by the *qere* but the sequence of vowels is still according to the order of the letters in the *ketiv*. This may reflect the notion that the *qere* here is correcting a mistaken orthography, which is scrambled in the *ketiv*.

The *qere* may be socially easier, in that it supplies a euphemism in place of a less socially polite *ketiv*, e.g.

Deut. 28.30. L: יִשְׁכְּבֶנָּה 'he will ravish her', *qere* note ישכבנה, i.e. the *qere* is יִשְׁכַּבְנָה 'he will lie with her'.

It may be theologically easier by, for example, supplying a substitution for the sacred Tetragrammaton or avoiding an anthropomorphism, as in

Deut. 16.16. L: בְּשָׁנָה יִרְאֶה כָּל־זָכוֹרְךָ אֶת־פָּנַי | יְהוָה | שְׁלוֹשׁ פְּעָמִים | אֵלֶיךָ ‘Three times a year all your males shall appear before the Lord, your God’.

Here the verb יִרְאֶה is read as a *nif'al*, but the *ketiv* יראה appears to have originally represented a transitive *qal* verb ‘he will see (the face of the Lord)’. The reading tradition was less anthropomorphic and so theologically more acceptable.

In a few cases, however, the *qere* contains textual differences that appear to be more difficult than that of the *ketiv* and have arisen by an error, e.g.

2 Sam. 16.12. L: בְּעֵינַי, *qere* note בעיני, i.e. the *qere* is בְּעֵינַי ‘upon my eye’.

The *ketiv* reflects the word עֲוֹנִי ‘my punishment’, and this would seem from the context to be the original reading here (C. McCarthy 1981, 81–83) and the reading ‘my eye’ has arisen by an erroneous reading of the word: אֲוִלִי יִרְאֶה יְהוָה בְּעֵינַי (קרי בעיני) ‘It may be that the Lord will look upon my punishment (*qere* my eye) and that the Lord will repay me with good for this cursing of me today.’ The Septuagint translates ἐν τῇ ταπεινώσει μου ‘in my humiliation’, which is clearly a rendering of the *ketiv*. The interpretation of Targum Jonathan, however, reflects the reading of the *qere*: מא אם גליא קדם יי דמעת ‘what if the tear of my eye is revealed before the Lord?’. Another example is

Gen. 8.17. L: הוֹצֵא ‘bring out’, *qere* note הוצא, i.e. the *qere* is הוֹצֵא.

The *qere* here is the morphologically difficult form הִי־צֹא , whereas the *ketiv* reflects the expected form הוֹצֵא . Here again, the *qere* seems to have arisen by an erroneous reading of a *yod* instead of a *vav*. The letters *vav* and *yod* were often difficult to distinguish in the Hebrew square script used in the Second Temple Period (Tov 2012, 228–32).

Difficult *qere* readings such as בָּעֵינִי and הִי־צֹא , which apparently arose from a confusion of written letters, do not necessarily originate in scribal errors in written texts but rather could have been due to misreadings of a written text in the oral recitation. This would imply that the oral reading tradition, although memorized and potentially independent of the written text, in practice had some degree of dependence on it. As remarked, it is best characterized as an oral performance of the visible written text. The tradition of this oral performance was evidently less fixed in antiquity and could adjust to the visible written text, even when this was misread. At a later period, the Tiberian reading tradition was fixed in its textual form, but it nevertheless continued to have the status of an oral performance of the written text and so have some degree of dependence on it. This is reflected, in particular, in the phenomenon of orthoepy in the Tiberian reading tradition, i.e. the effort to ensure that the distinct elements of the written text are given their optimal realization (§I.0.11.).

The intertwined nature of the oral reading tradition and the written text is reflected also in the interpretation exhibited by the early versions and by the interpretation traditions that existed during the first millennium C.E. when the Tiberian reading was still a living oral tradition. In the ancient versions, such as the

Septuagint, the Peshitta and the Vulgate, the renderings of passages with *qere* and *ktiv* differences in the Masoretic tradition in some cases reflect the Tiberian *qere* and in other cases reflect the *ktiv*.⁴⁴ Even Greek transcriptions of Hebrew proper names in the Septuagint in some cases reflect the *ktiv* rather than the *qere*.⁴⁵ It is possible that in the source text and source reading tradition of the Septuagint in the Second Temple Period the *qere* and *ktiv* variations were distributed differently from what came to be fixed in the Masoretic tradition. This is less likely, however, in later versions such as the Peshitta and Vulgate, and it appears that the translators were basing themselves on either the *qere* or the *ktiv*. In the Talmudic period, indeed, the Rabbis based their interpretations of Scripture on both the *qere* and the *ktiv*, and traces of this practice continued into the Middle Ages.⁴⁶

I.0.6. THE ACCENTS

The *qere* became canonical and fixed. After the canonization of the *qere*, another level of oral reading was superimposed on the *qere* in the form of the divisions of the *qere* text expressed by cantillation. These divisions, which came to be represented graphically by the medieval accent signs, expressed a particular

⁴⁴ According to Gordis (1971, 66) the Peshitta and Vulgate versions reflect approximately 70% *qere* readings and the Septuagint approximately 60%.

⁴⁵ Myers (2019, 285–86).

⁴⁶ Goldberg (1990), Naeh (1992; 1993).

interpretation of the text.⁴⁷ Occasionally the accent divisions do not correspond to the tradition of the written text. This applies to some cases where there is a conflict between the accents and the paragraph divisions, known as *parashiyyot*, in the Tiberian Masoretic text. These paragraph divisions in the layout of the written text are found in the manuscripts from Qumran, both biblical and non-biblical. There is a large degree of agreement between the paragraphing of the Qumran biblical scrolls and that of the medieval manuscripts, which indicates that the tradition can be traced back to the Second Temple period. In a number of places, however, the paragraph divisions in the medieval manuscripts do not coincide with the end of a verse according to the accents. This is known as פסקה באמצע פסוק ‘a paragraph division within a verse’, e.g. Gen. 35.22, 1 Sam. 16.2. The reason for this appears to be that the paragraph division of the written text and the division expressed by the cantillation are two different layers of exegetical tradition, which occasionally do not correspond with one another. In a number of cases, the cantillation divisions conflicted with the *qere*, as is seen by the fact that in a number of verses a division in the *qere* represented by a pausal form in the vocalization has a conjunctive accent in the cantillation.⁴⁸

⁴⁷ There is evidence that the written accent signs were introduced before the vocalization signs in the various traditions of notation of reading traditions (Dotan 1981).

⁴⁸ For this phenomenon see Revell (1980; 2015), I. Ben-David (1995) and Khan (2013a, 59–60). According to Drescher (1994) and DeCaen and Drescher (2020) this phenomenon is motivated by the system of prosodic division, which obliges conjunctives to be used in long verses in

The cantillation is a layer of reading that has roots in late antiquity. There are references to the teaching of biblical cantillation in Talmudic literature. One passage (Babylonian Talmud, *Berakhot* 62a) mentions the use of the right hand by the teacher or leader of the congregation to indicate the accents of the reading. The term פסקי טעמים ‘stops of the accents’, which is found in Talmudic literature, reflects the function of the accents to mark syntactic division. The association of the chant with the interpretation of the meaning of the text was recognized, as is shown by the Talmudic interpretation of Neh. 8.8 ‘[And they read from the book, from the law of God, clearly;] they gave the sense and (the people) understood the reading’ (וַיִּשְׁזוּם שִׁפְטָל וַיִּבְיִנוּ בַּמִּקְרָא), which is said to refer to the reading with accents.

Evidence for the division of the biblical text by accents in the Second Temple period is found in a Septuagint manuscript from the second century B.C.E. that has spaces corresponding to the major pausal accents of the Tiberian tradition (Revell 1971). In addition to the Tiberian accent signs, there was also a tradition of marking cantillation divisions by accents in manuscripts with Babylonian vocalization. Divisions of the Babylonian cantillation in most cases coincide with those of the Tiberian tradition (Shoshany 2003; 2013). This can be interpreted as reflecting that they had a common origin in antiquity.

There is evidence that in the Second Temple period the exegesis of the syntax of the biblical text did not always

some places where they are not expected. This would imply that the prosodic accent system was imposed on an earlier inherited reading tradition.

correspond to that of the Tiberian accents. This is seen in the Septuagint translation, which often reflects a different syntactic division of the verse. From the Peshar commentaries found in Qumran, moreover, it appears that the delimitation of biblical verses did not always correspond to the placement of the final pausal accent (*silluq*) in the Tiberian tradition. It should be taken into account, however, that, just as there was a large range of consonantal textual traditions at this period, it is likely that there were a variety of exegetical traditions regarding the syntax of the text.

This is seen in the case of Isa. 40.3. In the New Testament, ‘the voice of one crying in the wilderness’ of Matt. 3.3 reflects an interpretation that is different from the one reflected by the Tiberian accents. In the *Manual of Discipline* from Qumran (1QS 8.13-14), however, the introit ‘a voice calls’ is omitted and the teacher uses the verse to exhort the sectarians ‘to prepare a way in the wilderness’, i.e. establish a community there. This shows that the Masoretic interpretation of the syntax was also current at that period. The version found in Matt. 3.3 is apparently an exegetical reworking to support the call of John from the wilderness (Fishbane 1988, 367–68). Another case is Deut. 26.5. The interpretation in conformity with the accents ‘An Aramaean was seeking to destroy my father’ can be traced to the Second Temple period. Midrashic literature, however, indicates that there was also an ancient tradition of interpreting it ‘My father is an Aramaean about to perish’ (Goldschmidt 1960, 34ff.).⁴⁹ It is likely

⁴⁹ The Septuagint translation (συρίαν ἀπέβαλεν ὁ πατήρ μου ‘my father abandoned Syria’) seems to reflect a slightly different consonantal text.

that the exegetical tradition of the Masoretic accents has its origin in the teachings of mainstream Pharisaic Judaism. Within the accent system itself one can sometimes identify different layers of tradition. One example of this is the decalogue in Exod. 20.13-16. The accentuation of this passage is unusual in that most words have two different accents. The explanation of this double accentuation is apparently that it reflects two layers of tradition. According to one layer of tradition, the four commandments are presented in four separate verses, whereas in another they form together one accentual unit.⁵⁰

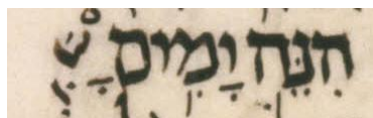
The Targums frequently reflect an interpretation of the text that corresponds to the divisions of the cantillation. In Deut. 26.5, for instance, the disjunctive accent on the first word of the clause אֶרְמִי אֲבִד אֲבִי indicates that it is syntactically separated from the following word and so the two should be interpreted as subject and predicate rather than a noun and attributive adjective. The sense reflected by the accents, therefore, is 'An Aramaean (i.e. Laban) was seeking to destroy my father'. This is a Midrashic interpretation, which is reflected by Targum Onqelos (לְבָן אֲרַמְאָה (בַּעַל לְאוּבְדָא יִתְ אַבָּא).

We may say, therefore, that three layers of textual tradition became fixed and canonized, one written, i.e. the *ketiv*, and two oral, i.e. the *qere* and the cantillation tradition. It is not known whether there was a difference in the historical depth of the two oral layers of tradition. The accents, however, clearly relate more closely to the *qere* than the *ketiv*. When, for example, the *qere*

⁵⁰ For the existence of different layers of accent systems see Menahem Cohen (1987).

contains words that are not written in the *ketiv*, these words have accents and, vice versa, words that are written but not read have no accents. When a word that occurs in the *qere* is omitted in the *ketiv*, some manuscripts write the accents, e.g. in Jer. 31.38, where the *ketiv* is הנה ימים and the *qere* is הנה ימים באים 'behold the days are coming', L writes the accents of the *qere* באים on a filler sign:

L:



This phenomenon of two oral traditions may be compared to the toleration of pluriformity in the oral reading traditions (*qirā'āt*) of the Qur'ān. As we have seen above, attempts were made to restrain this pluriformity, but it was not eliminated altogether and a limited diversity of reading traditions were legitimated. The most direct analogy to the different Qur'ānic *qirā'āt* is the existence of reading traditions that were distinct from the Tiberian one, namely the Babylonian, Palestinian and various non-standard Tiberian traditions. One could, however, also regard the existence of distinct oral layers within the Tiberian tradition as a manifestation of the legitimation of a pluriformity of reading traditions.

I.0.7. THE REPRESENTATION OF THE *QERE* IN WRITTEN FORM

As is well known, the Targums sometimes go beyond the oral reading reflected by the medieval Masoretic tradition and make further adjustments for purposes of exegesis or the resolution of perceived textual difficulties. One may regard them, therefore, as a further layer of tradition, refining the oral cantillated *qere*. It is of interest that some features of the oral *qere* and the adjustments of the Targums actually appear in the written text of some Qumran Hebrew Bible manuscripts.⁵¹ This may be compared to the situation in the early years of the transmission of the Qurʾān. There are references to the existence of early codices of the Qurʾān that deviated from the ʿUthmānic text. Some of the readings attributed to these codices that differed from the ʿUthmānic text survived as oral reading traditions after the ʿUthmānic recension had become the standard written form of the text.⁵² Even in some medieval manuscripts of the Hebrew Bible, the reading of the *qere* was written in the text in place of the reading of the *ketiv*. These were predominantly manuscripts written for private use. Such manuscripts, which are mainly preserved in the Genizah in fragmentary form, often deviate from the traditional Masoretic tradition in other respects. Many, for

⁵¹ For the reflection of the *qere* in the *ketiv* of 1QIsa^a from Qumran see Kutscher (1979, 519–21). The correspondences between the adjustments of the Targum and the *ketiv* of Qumran manuscripts have been discussed by Gottlieb (2016).

⁵² See Leemhuis (2017).

example, exhibit features of Non-Standard Tiberian vocalization or lack accents. An extreme case of such private medieval manuscripts is a corpus of Hebrew Bible manuscripts written by Karaite scribes in Arabic transcription (§I.0.13.3.). These regularly represent the *qere* in the transcription rather than the *ketiv*. By contrast, monumental manuscripts, which were typically deposited in public institutions, preserved the traditional distinction between the *ketiv* and the *qere*.

Biblical manuscripts with Palestinian vocalization, which in general should be considered to be private texts, frequently have the *qere* form written in place of the *ketiv* (Revell 1977, 164–65). Manuscripts with Babylonian vocalization, most of which can be assumed to have been written in Iraq, correspond to the Tiberian consonantal text very closely and differ only in a few details. These differences are generally related to orthography and include, in some cases, the harmonization of the *ketiv* with the *qere*. Such small divergences between the ‘Easterners’ (*Madin-ḥa’e*) and the ‘Westerners’ (*Ma’arba’e*) are mentioned in the Tiberian Masoretic notes and also in lists appended to Tiberian manuscripts.

I.0.8. THE HISTORICAL DEPTH OF THE TIBERIAN READING TRADITION

There are a number of indications that the Tiberian reading tradition, i.e. the *qere* of the Tiberian Masoretic Text, which came to be represented by the Tiberian vocalization sign system, had its roots in the Second Temple Period.

As has been remarked, the textual differences between the reading and the written text are referred to in Rabbinic literature. Furthermore, some of the Qumran scrolls from the Second Temple period have in a number of places the text of the Tiberian *qere*.⁵³ One may trace back the text of *qere* forms even further, into the period of literary growth of the biblical books. There is internal evidence for this in the distribution of *qere* and *ketiv* within the Masoretic text. This is found, for example, in the fact that the *ketiv* of the text of Chronicles often corresponds to the *qere* of its earlier biblical source. An example of this is the word מְגִרְשֵׁיהָ ‘surrounding pasture-lands’, which is used in association with the lists of Levitical cities in Josh. 21 and 1 Chron. 6. The Chronicler is clearly using the text of Josh. 21 as his literary source. In the original text in Joshua, the word is always written as a singular form but it is read in the reading tradition as a plural: מְגִרְשֵׁי. This reflects a later interpretation of an originally singular form as a plural (Barr 1984). This ‘later’ interpretation, however, is no later than the consonantal text of Chronicles, where it is written as a plural. Even if we do not attribute this interpretation to the author of the Chronicles passage, there are good grounds for arguing that the text of the reading tradition of Josh. 21 is as old as the consonantal text of 1 Chron. 6.⁵⁴

⁵³ This is found particularly in ‘popular’ texts such as 1QIsa^a; cf. Kutscher (1979, 519–21).

⁵⁴ For the antiquity of the reading tradition see the discussion in Barr (1968, 207–22) and Grabbe (1977, 179–97). Maimon Cohen (2007) argues that the *qere* variants listed in the Masoretic notes are linguistic

In Late Biblical Hebrew, certain verbs with a reflexive or non-agentive meaning appear as *nif^{al}* in the past suffix conjugation form (perfect) whereas they appear as *qal* in Classical Biblical Hebrew. The intransitive form of the verb ‘to stumble’ (כָּשַׁל), for example, appears in the *nif^{al}* כָּשַׁל in the book of Daniel (כָּשַׁל, and he will stumble’ Dan. 11.19) but in the *qal* form כָּשַׁל elsewhere. In the prefix conjugation (imperfect), however, the verb is vocalized as a *nif^{al}* throughout the Bible. This is because the *ketiv* of the prefix conjugation (יִכְשַׁל) is ambiguous as to the verbal conjugation and could, in principle, be read as *qal* or *nif^{al}*. The Tiberian reading tradition treats the verbal forms as *nif^{al}* where this would be compatible with the consonantal text, but the occurrence of the *qal* form in the suffix conjugation in Classical Biblical Hebrew suggests that the verb was originally read as *qal* in all forms. This is clearly the case in the infinitive form of this verb וּכְשַׁל (Prov. 24.17), where the consonant text lacks the initial *he* of the *nif^{al}* (הִכְשַׁל) and so must have represented the *qal*, but it is nevertheless read as a *nif^{al}*. The crucial point is that the replacement of the *qal* by the *nif^{al}* is reflected by the consonantal text itself in Late Biblical Hebrew in the book of Daniel. In some cases, the evidence for the development of an original *qal* verb into a *nif^{al}* form that is independent of the vocalization is found in the Qumran manuscripts from the Second Temple period many centuries before the creation of the vocalization sign system. This applies, for example, to the verb גָּשׁ ‘to approach’. On account of the assimilation of the initial *nun* in this

variants that date back to the time of the composition of the biblical books.

verb when in contact with the following consonant, the orthography of the prefix conjugation can only be read as *qal* (יָגַשׁ), since a *nif'al* reading would require the insertion of a *nun* in the consonantal text (יִגְשׁוּ). The orthography of the suffix conjugation form (נִגַּשׁ), however, could be read as either *qal* or *nif'al*, and it is the *nif'al* reading that was adopted in the reading tradition (נִגַּשׁ). In the Qumran text 4Q512 (40–41, 2) the infinitive of this verb appears in the form בְּהִנְגִּשׁוּ, which is unambiguously a *nif'al* (בְּהִנְגִּשׁוּ) (Ariel 2013, 947). Similar distinctions between the suffix conjugation and prefix conjugation of passive forms are found, whereby the former is vocalized as *pu'al* whereas the latter is vocalized as *nif'al* (e.g. טָרַף 'was torn apart' vs. יִטָּרַף). Furthermore, the vocalization interprets certain verbs as *pi'el*, which are likely to have been originally *qal*. The verb גָּרַשׁ 'to drive out', for example, is normally vocalized as *pi'el* in the prefix and suffix conjugations (תִּגְרֹשׁ, גִּרְשָׁה), in which the orthography is ambiguous between a *qal* or *pi'el* reading. In the participles, however, where the orthography of *qal* and *pi'el* would be distinct, the original *qal* is preserved (גֹּרֵשׁה, גֹּרֵשׁ). The shifts of *pu'al* to *nif'al* and *qal* to *pi'el* are developments that are attested in Post-biblical Hebrew already in Second Temple sources.⁵⁵

Another case of correspondence of the *ketiv* of late books with that of the *qere* of earlier books is the word 'Jerusalem'. The

⁵⁵ For these issues relating to the vocalization of verbal forms see Ginsberg (1934), Ben-Hayyim (1958, 237), Qimron (1986) and Fassberg (2001). For further re-interpretations of the Masoretic orthography in the Samaritan reading tradition see Ben-Hayyim (2000, 338–339) and Schorch (2004).

regular *ketiv* or this word in the earlier books is יְרוּשָׁלַם, whereas the *qere* is יְרוּשָׁלַיִם [jaɾu:ʃɔ:'la:jim] with the final syllable broken by a glide. In some of the late books, there are a few examples of the *ketiv* of this word spelt with a *yod* before the final *mem*, e.g. מִירוּשָׁלַיִם (Esther 2.6).

External evidence for the antiquity of the *qere* includes the fact that in many cases where there is a semantic difference between the *qere* and the *ketiv*, the meaning of the *qere* is reflected by the Greek Septuagint. A clear example of this is the exegetical alteration in the reading tradition whereby an original expression of ‘seeing the face of God’ is changed into the theologically more acceptable ‘appearing before God’ by reading the verb as a *nif^{al}* rather than as a *qal*, e.g. Deut. 16.16 בְּשָׁנָה יִרְאֶה כָּל־ שְׁלוֹשׁ פְּעָמִים | זְכוּרְךָ אֶת־פָּנַי | יְהוָה אֱלֹהֶיךָ ‘Three times a year all your males shall appear before the Lord, your God’. This change is clear where the verb is an infinitive and it lacks the expected initial *he* of the *nif^{al}* form in the consonantal text, e.g. Exod. 34.24 בְּעֹלְתְךָ לִרְאוֹת אֶת־פָּנַי | יְהוָה אֱלֹהֶיךָ ‘When you go up to appear before the Lord, your God’. This change in the reading tradition is reflected not only in the Targums but also already in the Septuagint (C. McCarthy 1981, 197–202), the Pentateuch section of which is normally dated to the third century B.C.E.

One example that demonstrates the conservative nature of the phonology of the Tiberian reading is the pronunciation of the *pe* in the word אֶפְדָּנוֹ ‘his palace’ (Dan. 11.45). According to medieval sources, this was pronounced as an emphatic unaspirated stop, whereas the letter *pe* with *dagesh* in all other places in the reading tradition was pronounced as an aspirated

stop, i.e. a stop followed by a short flow of air before the onset of the voicing for the ensuing vowel (§I.1.17.). The hard pronunciation of the *pe* is also mentioned by Jerome, who states that it is the only ‘Latin’ *p* in the entire Bible (*p* in Latin was regularly pronounced as an unaspirated stop).⁵⁶ The hard pronunciation is also reflected by the Greek transcription *Απαδανω* by the Church father Theodoretus (fifth century CE). Here the Hebrew letter is with Greek *pi*, which, like Latin *p*, was pronounced as unaspirated [p].⁵⁷ The word is in origin a loan from Old Persian. The unaspirated pronunciation of the *pe*, which is uncharacteristic of Hebrew, evidently preserves a feature that existed in the pronunciation of the source language.⁵⁸ The fact that this feature, which conflicted with normal Hebrew pronunciation, should have been preserved from the original

⁵⁶ Notandum autem quod cum *pe* littera hebraeus sermo non habeat, sed pro ipsa utatur *phe* cuius uim graecum φ sonat—in isto tantum loco apud Hebraeos scribatur quidem *phe* sed legatur *pe*. ‘But it should be noted that while Hebrew speech does not have the letter *pe* (i.e., Latin *p* [p]), but instead of it uses *phe*, the force of which is approximated by the sound of Greek φ (i.e., [ph])—in that particular place (i.e., Dan. 11.45) among the Hebrews *phe* (i.e., פ [ph]) indeed is written but it is read as *pe* (i.e., Latin *p* [p])’. Translation by Ben Kantor. Cf. Sutcliffe (1948, 124–25).

⁵⁷ Some Greek transcriptions represent the Hebrew *pe* with Greek *phi* (i.e. aspirated [p^h]), e.g. *εφαδανω* (Theodotion, second century C.E.), *εφαδανω* / *αφαδανω* (Polychronios, fifth century C.E.). These could be interpreted as reflecting variant reading traditions. The Greek data were supplied by Ben Kantor.

⁵⁸ Steiner (1993).

period of composition right down to the period of the Masoretes, centuries after contact of the transmitters of the tradition with the source language had ceased, demonstrates great conservatism in the Tiberian reading tradition.

Another relevant issue in this context is the pronunciation of the letter ψ , which is read in the Tiberian reading tradition in two ways, distinguished in the vocalization by points, namely either as [ʃ] (*shin*) or as [s] (*sin*), the latter being equivalent to the sound of the letter ϑ (*samekh*). It is clear that the reading tradition of ψ differed from the original pronunciation of the letter in the pre-exilic period when Hebrew was first committed to writing, otherwise the letter ϑ would regularly appear in the orthography where the reading tradition pronounces the sound [s].⁵⁹ It is noteworthy, however, that roots and words that were

⁵⁹ This orthographic phenomenon can be interpreted in two ways. The pre-exilic ψ may have been pronounced as a single sound, presumably [ʃ], in all contexts. Possible evidence for this is the fact that in the Samaritan reading tradition the letter is always pronounced [ʃ], including where the Tiberian tradition has *sin*. This feature of the Samaritan reading tradition may have its roots in a type of pronunciation that existed side by side with the Tiberian type in the Second Temple Period. Alternatively, the letter ψ in the pre-exilic orthography may have been intended to represent two sounds, which, according to this interpretation, are normally thought to have been [ʃ] and a lateral sibilant resembling the lateral *s* [ɬ] of Modern South Arabian languages. In the Second Temple Period the lateral sibilant would have shifted to [s]. It should be taken into account, furthermore, that both of these alternative types of pronunciation of ψ may have existed in the pre-exilic period. The necessity to use a single letter to

regularly spelt with *sin* in pre-exilic books are occasionally spelt interchangeably with *sin* and *samekh* in later books, e.g.

Ezra 4.5: וְסָכְרִים 'and they hire' vs. 2 Chron. 24.12 שְׂכָרִים

The letters *sin* and *samekh* occasionally interchange in proper names in the late books, e.g.

Ezra 4.11: אֲרִתְחֶשְׁתָּא 'Artaxerxes' vs. Ezra 7.1 אֲרִתְחֶשְׁתָּא

Such cases of interchange between the written letters *sin* and *samekh* are sporadic and most likely unintentional deviations from the standard orthography that reflect the interference of contemporary pronunciation.

In Rabbinic literature, the *qere* of *sin* is sometimes referred to as *samekh* and its *ketiv* as *shin*.⁶⁰ In these sources, the reading (*qere*) of the letter *sin* is identified with that of *samekh*. Interchanges of orthography such as וְסָכְרִים and שְׂכָרִים, therefore, constitute another case of the *qere* being datable to the Second Temple Period by orthographic variations internal to the consonantal text.

In some manuscripts with Palestinian and Babylonian vocalization, the letter *sin* is distinguished from *shin* by writing over *sin* a miniature ס (*samekh*) and over *shin* a miniature ש (*shin*) (Revell 1970a, 87; Kahle 1902, 11). In some manuscripts with Palestinian vocalization written in abbreviated form (known as

represent two sounds arose from the fact the alphabet used to write Hebrew was in origin the one that was developed to represent Phoenician, in which the two sibilant sounds in question were not distinguished.

⁶⁰ Steiner (1996).

serugin) a letter *samekh* is written in place of *sin* (Revell 1977, 66).

There is some evidence that the placement of *samekh* over the letter *ש* as a diacritical sign for *sin* was an ancient practice with roots in the period in which the *ketiv* was being stabilized, i.e. the Second Temple period. One persuasive case is the variant spellings of the following proper name in the books of Nehemiah and Ezra:

Neh. 7.52. L: נְפוּשָׁסִים, *qere* note: גְּפִישִׁים, i.e. the *qere* is גְּפִישָׁסִים.

Ezra 2.50. L: גְּפִישִׁים, *qere* note: נְפוּסִים, i.e. the *qere* is גְּפִישָׁסִים.

If we leave aside the difference between the *ketiv* and the *qere* regarding the medial vowel in this name, the spelling with the added *shin* in Neh. 7.52 נְפוּשָׁסִים could be explained as the result of the fact that the spelling was originally גְּפִישִׁים with a superscribed *samekh* over the *ש* to indicate that it should be read as *sin*. The *samekh* was subsequently incorporated into the line of the text by scribal error.⁶¹ The reading of the first letter of the sequence *שש* as *shin* is likely to have been a later orthoepic measure to ensure that the two letters were read distinctly (§I.0.11.). The form גְּפִישָׁסִים in Ezra 2.50 with *samekh* is presumably an orthographic variant of the original form גְּפִישִׁים with *sin*. If this is the correct explanation, then this is further evidence for the equivalence of *samekh* and *sin* at an early period.

It should be pointed out that in *qere* notes in the medieval manuscripts a *sin* of the *ketiv* is spelt *ש* and not *ס*, e.g.

⁶¹ Cf. Honeyman (1944).

Ezra 4.23. L: אֲרַחֵשׁ שָׁתָא, *qere* note: שָׁתָא, i.e. the *qere* is אֲרַחֵשׁ שָׁתָא.

Ezra 10.37: L: וַיֵּעָשׂוּ, *qere* note: וַיֵּעָשׂוּ, i.e. the *qere* is וַיֵּעָשׂוּ.

Ezra 10.44. L: וַיֵּשְׂאוּ, *qere* note: וַיֵּשְׂאוּ, i.e. the *qere* is וַיֵּשְׂאוּ.

In such cases, the focus of the *qere* note is not on the *sin* but rather on other letters in the *ketiv*. It may be for this reason that it has not been replaced by *samekh* in the note. Moreover, the purpose of the *qere* notes was to supply an appropriate orthography of the *qere*. Within the norms of the biblical orthography, ש was an appropriate orthography of [s] and so there was no need to alter it.

Another indicator that the roots of the Tiberian reading tradition were in the Second Temple period is its close relationship with the Babylonian reading tradition, which is reflected by manuscripts with Babylonian vocalization. This close relationship between two branches of tradition transmitted in different geographical locations is most easily explained through the comparative method of historical linguistics as the result of a common genetic connection in a single location at an earlier period. The most obvious place of origin would be Second Temple Palestine. Just as the written text of both the Babylonian tradition and the Tiberian tradition has its origins in a proto-Masoretic text of the Second Temple Period,⁶² it is likely that there was a proto-Masoretic reading tradition, which likewise split into an eastern and western branch. This proto-Masoretic

⁶² For the phenomenon of the proto-Masoretic text-type in the Second Temple sources see Tov (2012).

reading tradition was clearly distinct from the Samaritan reading tradition, which itself exhibits some features that can be correlated with Second Temple sources, such as the long pronominal forms (*attimma*, *-kimma*).⁶³

As remarked, there is evidence of great conservatism in some elements of the Tiberian reading tradition, such as the *pe* of אֶפְדָּנוּ (Dan. 11.45), but a comparison of the Tiberian and Babylonian branches of the biblical reading tradition shows that in some features the Babylonian reading appears to be more linguistically conservative. This is shown by the fact the Babylonian tradition sometimes has parallels with earlier sources that are lacking in the Tiberian tradition. For example, the preservation of an /a/ vowel in unstressed closed syllables that is found in the transcriptions of the Septuagint, Origen and Jerome is a feature of Babylonian pronunciation, whereas this vowel is more widely attenuated to /i/ in the Tiberian tradition, e.g. Septuagint Μαβσαρ ‘Mabsar’ (Tiberian: מִבְּצָר, 1 Chron. 1.53),⁶⁴ Origen’s Hexapla λαμαλαμα ‘for the battle’ (Tiberian: לְמִלְחָמָה Psalms 18.40),⁶⁵ Jerome: *macne* ‘cattle’ (Tiberian: מִקְנֵה),⁶⁶ Babylonian מִבְּצָר [mav¹sʕa:r].⁶⁷ Babylonian corresponds to Origen and Jerome and also to some Qumran texts in preserving the unstressed /o/ vowel

⁶³ Morag (1971), Ben-Hayyim (2000).

⁶⁴ Sperber (1937, 191).

⁶⁵ Brønno (1943, 387).

⁶⁶ Siegfried (1884, 50), Sperber (1937, 192).

⁶⁷ Yeivin (1985, para. 41.46).

in prefix conjugation verbs where it is reduced to *shewa* in Tiberian, e.g. תִּטְבֹּלֵנִי [tiṭbo'le:ni:] (Job 9.31, Tiberian: תִּטְבֹּלֵנִי 'you will plunge me');⁶⁸ cf. Origen εφφολου (= יִפְּלוּ Psalms 18.39),⁶⁹ Jerome *iezbuleni* 'he will honour me' (Tiberian: יִזְבִּילֵנִי Gen. 30.20),⁷⁰ and the frequent occurrence of *vav* in the Qumran manuscripts after the second radical of prefix conjugation verbs where Tiberian has *shewa*, e.g. יקטולו, אקטולה, יקטולהו.⁷¹

Some features of the Tiberian reading that differ from Babylonian may have developed under the influence of the vernacular Aramaic of the Jews of Palestine. It is not clear whether this applies to the aforementioned features, but we can identify a possible case of influence in the pronunciation of consonantal *vav*. We know from medieval sources that in the Tiberian reading tradition of Biblical Hebrew the default pronunciation of this letter was a labio-dental [v] (§I.1.6.). In Jewish Palestinian Aramaic, *vav* appears to have had the same labio-dental pronunciation. This is shown by the interchange of *vav* and fricative *bet* in Jewish Palestinian Aramaic texts and Rabbinic Hebrew of sources of Palestinian provenance. The fact that fricative *bet* in these texts also sometimes shifts to *pe* due to devoicing shows that it must have

⁶⁸ Yeivin (1985, para. 16.36).

⁶⁹ Janssens (1982, 92).

⁷⁰ Siegfried (1884, 48), Sperber (1937, 158).

⁷¹ Qimron (1986, 50; 2018, 195-196), Reymond (2014, 209-21). For the parallels between these Qumran forms and the medieval Babylonian tradition see Yeivin (1972).

been labio-dental and this implies that *vav* also was labio-dental.⁷² There is also evidence of the pronunciation of *vav* as a labio-dental in Mishnaic Hebrew, in that *vav* in some words corresponds to *bet* in Biblical Hebrew and *vav* and *bet* interchange in the orthography of some manuscripts, e.g.

נָוֹלָה 'he has disfigured her' (*Soṭah* 1.7); cf. Biblical Hebrew נָבֹל (M. H. Segal 1927, 34–35)

אָוֹזִים ~ אָבִיזִים 'geese' (Bar-Asher 2015, 61–62)

The shift in the pronunciation of *vav* to a labio-dental in Aramaic and Hebrew in late antique Palestine is likely to be due to convergence with a shift of [w] to [v] in Greek at this period (Kantor and Khan forthcoming).⁷³

The Babylonian tradition itself appears to have undergone some change due to the influence of the local vernacular, which resulted in a number of features that differed from Tiberian due to their being innovative rather than conservative. One such feature that is characteristic of the Babylonian pronunciation tradition is the shift of *holem* to *šere*, which is reflected in the vocalized

⁷² A. Ben-David (1960, 255), Kutscher (1976, 16–17), Sokoloff (1968, 30), Epstein (1964, 1223–26). This pronunciation of *vav* can also be reconstructed in the Samaritan tradition of Hebrew (Ben-Ḥayyim 2000, 33).

⁷³ Possible evidence for the embryonic merging of *vav* and fricative *bet* in Palestine is found already in some Qumran manuscripts, see Qimron (2018, 122) (I am grateful to Noam Mizrahi for drawing my attention to this).

manuscripts by an interchange of these two vowels.⁷⁴ The Karaite scholar al-Qirqisānī writing in the tenth century C.E. attributes this feature to influence from the language of the ‘Nabat’, i.e. the Aramaic speaking population of Iraq.⁷⁵ The fronting of back vowels is still a feature of modern vernacular Iranian dialects in western Iran, including those spoken by Jews (Borjian 2012, 9, §D14).

One aspect of Tiberian vocalization that several scholars have identified as an indicator of the antiquity of the reading tradition is the apparent historical layering of variant types of vocalization of words with the same orthography across different Biblical books. These are differences in vocalization between words in late biblical books and corresponding words in earlier biblical books. In such cases, the vocalization found in the later books often corresponds to a type of vocalization that is characteristic of Rabbinic Hebrew or Aramaic, i.e. languages associated with the language situation in the Second Temple Period rather than the pre-exilic period. In two cases in Chronicles, for example, the *nifʿal* of the verb יָלַד is vocalized in an unusual way, with *shureq* rather than *holem* and *dagesh* in the middle radical: נוֹלְדוּ ‘they were born’ (1 Chron. 3.5, 20.8). This morphological feature is not found in the vocalization of the earlier books but is found in some traditions of Rabbinic Hebrew.⁷⁶ The vocalization of these forms apparently reflects a dialectal form of morphology

⁷⁴ Yeivin (1985, para. 11.6).

⁷⁵ Cf. al-Qirqisānī (*Kitāb al-ʿAnwār w-al-Marāqib*, ed. Nemoy 1939, vol. 2: 140).

⁷⁶ Cf. Yalon (1964, 152–57) and the references cited in Morag (1974, 310).

that was current in the time of the Chronicler. By implication, the vocalization of the earlier books must reflect a different, presumably slightly earlier tradition (Morag 1974). A further example is the difference in vocalization between אָמַל 'feeble' (Psa. 6.3) and הָאֲמָלִים 'the feeble' (Neh. 3.34). The vocalization הָאֲמָלִים in the late biblical book reflects the one that is used in Rabbinic sources (Boyarin 1988, 63–64). The dual of the noun קָרָן is vocalized קָרְנִים in Hab. 3.4, with the normal pattern of the dual, but קָרְנִים in Dan. 8 (verses 3, 6, 20), with the pattern of the stem of plural nouns, as is found in early vocalized manuscripts of the Mishnah (Kister 1992, 47, n.9; 1998, 246, n.9). The form עֲרָבִי 'Arab(ian)' occurs in pre-exilic sources, whereas the word has the vocalization עֲרָבִי, corresponding to that of Aramaic, in post-exilic sources (Nehemiah and Chronicles) (Steiner 2016, 313). There is a difference in vocalization between הִילָוִים (1 Chron. 14.4) and הִילָדִים in the parallel passage in 2 Sam 5.14. The word חָבַל in the phrase חָבַל חֲבָלָנוּ 'we have acted corruptly' (Neh. 1.7) is vocalized with the vocalic pattern of an infinitive construct in a context where the vocalic pattern of an infinitive absolute may have been expected in earlier books. In Dan. 11.20 the construct of the noun הָדָר 'glory' is vocalized הָדָר, rather than הִדָּר, which is the vocalic pattern of the construct in earlier books.⁷⁷

Such differences in vocalization across pre-exilic and post-exilic books constitute strong evidence for the argument that

⁷⁷ These last three cases are noted by Jan Joosten, paper delivered at the conference *The exegetical value of the Masora: Pointing and accentuation in historical perspective* (Oxford, 7-8 November, 2016).

there is historical layering in the reading tradition reflected by the medieval vocalization. The variant types of morphophonology in the late books, which often correspond in form to Rabbinic Hebrew or Aramaic, would have become incorporated into the reading tradition of the late books at some point in the Second Temple Period, whereas the variants found in the earlier books must reflect an earlier stage in the development of the biblical reading tradition. Crucially the later types of morphophonology were not extended to the reading tradition of the earlier books.

I would like to explore in greater detail the last point, i.e. the fact that the late morphophonology in the forms in question was not applied uniformly across the reading of all books. We have, in fact, already seen some counterexamples to this phenomenon. Attention was drawn above to the phenomenon whereby innovations in verbal patterns that are characteristic of the Second Temple Period (i.e. shifts of intransitive *qal* to *nif'al* and transitive *qal* to *pi'el*) were extended to the vocalism of the earlier books. There are also cases of exegetical harmonization whereby the vocalism of words in late books is extended to parallel phrases in earlier books that have an orthography reflecting a different meaning. An example of this is the word מְגִרְשֵׁיהָ 'surrounding pasture-lands' in 1 Chron. 6. As remarked, the Chronicler is clearly using as his literary source the text of Josh. 21, in which the word is written as a singular form but it is read in the reading tradition as a plural: מְגִרְשֵׁהָ. This reflects a later interpretation of an originally singular form as a plural. This 'later' interpretation is reflected also by the consonantal text of

Chronicles, where it is written as a plural. The later interpretation has been extended to the reading tradition of the earlier book.

It should be taken into account that there are a number of other variations in Tiberian vocalization within the biblical corpus that cannot easily be correlated with chronological layering.⁷⁸ These include, for example:

- (1) Variations in the use of *dagesh* in the same lexeme such as יָסֹבּ ‘let it go round’ (1 Sam 5.8) vs. יָסֹבּ ‘it goes round’ (1 Kings 7.15); חֲבַרְתּוֹ ‘his wound’ (Isa. 53.5) vs. חֲבַרְתִּי ‘my wound’ (Gen. 4.23)
- (2) Variations in *ḥatef* vowels in the same lexeme, such as יִחְשְׁבוּ ‘they consider’ (Isa. 13:17) vs. יִחְשְׁבוּן ‘they conceive’ (Psa. 35:20)
- (3) Variation between *hireq* and *segol* in the same lexeme, as in וְהִגְלָה ‘and he carried into exile’ (2 Kings 24.14) vs. הִגְלָה ‘he carried into exile’ (Jer. 52.28), or at least in the same morpheme, as in וְאֶכְבֹּד ‘and I will be honoured’ (Isa. 49.5) vs. אֶדְרֹשׁ ‘I will be asked’ (Ezek. 36.37).
- (4) Variations between *qibbuṣ* and short *qameṣ* as the reflex of a historical short **u* in the same lexeme or in similar contexts, e.g. גְּדֻלּוֹ (Psa. 150.2) vs. גְּדֻלָּתוֹ ‘his greatness’ (Deut. 11.2).
- (5) Occasionally a *ḥatef qameṣ* occurs in a prefix conjugation verb (imperfect) before a pronominal suffix or a cohortative suffix rather than the normal vocalization with *shewa*

⁷⁸ Several of these were noted by Nöldeke (1912).

in such contexts. This reflects the lack of complete reduction of the vowel that occurs after the second radical in forms without suffixes, e.g. אֶשְׁתַּלֵּנּוּ 'I will plant it (m)' (Ezek. 17.23), וְאֶשְׁקוּלָהּ 'and I weighed' (Ezra 8.25), אֶלְקָטָהּ 'let me glean' (Ruth 2.7).

- (6) Variations between *šere* and *pataḥ* in the stem of *pi'el* verbal forms, e.g. מִיָּלַד 'who] has brought up?' (Isa. 49.21) vs. גָּדַל 'he made great' (Josh. 4.14).
- (7) Variations between *hireq* and *šere* before gutturals in *pi'el* verbs, e.g. נָאָר (Lam. 2.7, 'he has spurned') vs. מָאָץ 'he has refused' (Num. 22.13).

The key question is whether the types of variation in Tiberian vocalization discussed above, diachronic and synchronic, have any semantic or exegetical significance.

Some morphophonemic variations are exploited to express distinctions in meaning in various reading traditions of the Hebrew Bible. There are many examples of this in the Samaritan tradition of reading. Typically the pairs of variant patterns of a word in the Samaritan tradition consist of one member that is conservative and another member that is innovative by a process of analogy or assimilation to an Aramaic form, or two members that are originally morphophonemic alternants that have now become distinct in meaning.⁷⁹ Many of these distinctions are between different grammatical categories of lexical items.

⁷⁹ See in particular Florentin (1996) for examples of this phenomenon.

Internal differences in vocalism have developed, for example, between *wayyiqtol* past forms and *yiqtol* non-past forms, e.g.⁸⁰

wtārād ‘and she went down’ (Tiberian וַתֵּרָד), by analogy with the pattern qāṭāl vs. térād ‘she goes down’ (non-past, Tiberian תֵּרָד, תִּרָד)

A morphophonemic distinction is made in the Samaritan tradition between verbal and nominal participles, e.g.

q-w-m ‘to rise’: qā’əm (verbal, based on Aramaic) vs. qam (nominal)

nif'al form: niqqāṭāl (past verbal, by analogy with imperfect *yiqqāṭəl*) vs. niqṭāl (nominal)

There are a number of cases of variants of a single lexeme with and without gemination of one of the consonants to express distinctions in meaning, e.g.

ādāni ‘Lord’ (divine) vs. ādanni ‘master’ (human)⁸¹

ā:sidā ‘the stork’ (animal) (Tiberian אֶסִידָא Lev. 11.19) vs. assidāk ‘your pious one’ (human) (Tiberian אֶסִידָא Deut. 33.8)⁸²

yamən ‘Yamin’ (proper name) (Tiberian יָמִין Gen. 46.10) vs. yammən ‘right hand’ (Tiberian יָמִין).⁸³

⁸⁰ The transcription system of Ben-Ḥayyim and Florentin is adopted here.

⁸¹ Ben-Ḥayyim (1957a-77, vol. 4, 8-9, vol. 5, 194; 2000, 260).

⁸² Florentin (1996, 231).

⁸³ Florentin (1996, 234).

wyābāḏ ‘and he perished (past)’ (< *ya’abad, Tiberian וַיִּאָבֵד) vs. yābbāḏ ‘he perishes (non-past)’ (< *ya’bad with assimilation of the /ʔ/ to the /b/, Tiberian יֵאָבֵד), i.e. a pair of alternants such as Tiberian יְהִשָּׁבוּ (Isa. 13:17) vs. יְהִשָּׁבוֹן (Psa. 35:20) has come to express a difference in meaning.⁸⁴

‘ā:rām ‘the cities’ (Tiberian עָרַיִם) vs. ‘arrām ‘cities’ (Tiberian עָרִים)⁸⁵

wāmā ‘and the cubit’ (Tiberian וְאַמָּה) vs. wāmmā ‘and a cubit’ (Tiberian וְאַמָּה)⁸⁶

Most of the cases of synchronic variation listed in (1)–(7) above do not appear to have semantic or exegetical significance. Many of these types of variation in the Tiberian vocalization are not found, or only very marginally found, in the Babylonian tradition of vocalization, i.e. the other descendant of what I propose to identify as the proto-Masoretic reading tradition. This is either because the Babylonian tradition is more conservative of the proto-Masoretic reading of the particular feature in question whereas the Tiberian variation is a later development or the Babylonian tradition has levelled variation that has been preserved by the Tiberian tradition. In the list of features (1)–(7)

⁸⁴ 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. wyābāḏu וַיִּאָבֵדוּ ‘and they perished’ (Num. 16:33) vs. tābbāḏ תֵּאָבֵד ‘it becomes lost’ (Deut. 22:3).

⁸⁵ Ben-Hayyim (2000, 92).

⁸⁶ Ben-Hayyim (2000, 92).

above the Babylonian tradition lacks variation in features (3)–(7). In features (3)–(5) it is more conservative and in features (6)–(7) it has levelled earlier variation. These are presented as (3a)–(7a) below:

(3a) הָגִלָּה 'and he carried into exile' (2 Kings 24.14): הָגִלָּה
[hiɣ^h'la:]⁸⁷

הָגִלָּה 'he carried into exile' (Jer. 52.28): הָגִלָּה [hiɣ^h'la:]⁸⁸

וְאֶכְבֹּד 'and I will be honoured' (Isa. 49.5): וְאֶכְבֹּד
[wʔikkɔ:^hva:ð]⁸⁹

אֶדְרֹשׁ 'I will be asked' (Ezek. 36.37): אֶדְרֹשׁ [ʔiddɔ:^hra:]⁹⁰

(4a) The Babylonian reading tradition normally preserves a historical short **u* where in Tiberian it shifts to short /*ɔ*/ (*qameṣ*), e.g.

גְּדֻלָּתוֹ 'his greatness' (Deut. 11.2): גְּדֻלָּתוֹ [guð^h'lo:]⁹¹

חִכְמָה 'wisdom' (Jer. 49.7): חִכְמָה [ħuɣ^h'ma:]⁹²

⁸⁷ Yeivin (1985, 302). The transcriptions of the examples with Babylonian vocalization are in some cases approximations, since there is uncertainty regarding the precise realization of some of the phonetic segments in the Babylonian pronunciation.

⁸⁸ Yeivin (1985, 144).

⁸⁹ Yeivin (1985, 505).

⁹⁰ Yeivin (1985, 505).

⁹¹ Yeivin (1985, §37.12).

⁹² Yeivin (1985, §37.18).

הַשְׁלַכְתִּי ‘I was cast’ (Psa. 22.11): הַשְׁלַכְתִּי [huʃˈla:χtʰi:]⁹³

- (5a) In the Babylonian reading tradition, it is the norm for the vowel of the prefix conjugation verbal stem to be preserved before suffixes,⁹⁴ e.g.

אֶזְכְּרֶנּוּ ‘I will remember him’ (Jer. 31.20): אֶזְכְּרֶנּוּ [ʔizkoˈra:nu:]

תִּטְבֹּלֵנִי ‘you will plunge me’ (Job 9.31): תִּטְבֹּלֵנִי [tiṭboˈle:ni:]

וְנִדְרְשָׁה ‘and we will inquire’ (2 Chron. 18.6): וְנִדְרְשָׁה [wniðroˈʃa:]

אֶזְכְּרָה ‘I will remember’ (Psa. 77.4): אֶזְכְּרָה [ʔizkoˈle:ʔa:]

- (6a) In the Babylonian reading tradition it is the norm for the vowel of the final syllable of the 3ms *piʿel* to be *pataḥ*,⁹⁵ e.g.

גָּדַל Isa. 49.21 ‘he brought up’ OB גָּדַל [gidˈda:l]

בָּקַשׁ Isa. 1.12 ‘he asked’ OB בָּקַשׁ [viqˈqa:ʃ]

- (7a) The Babylonian vocalization reflects a tradition in which it is the norm for the vowel to be *šere* before a guttural in the *piʿel*,⁹⁶ e.g.

וְכַחַשׁ ‘it will deny’ (Job 8.18): וְכַחַשׁ [wχeˈħa:ʃ]

וְכַהֵן ‘and he will serve as a priest’ (Exod. 40.13): וְכַהֵן [wχeˈħa:n]

⁹³ Yeivin (1985, §24.1).

⁹⁴ Yeivin (1985, §16.36, §16.45).

⁹⁵ Yeivin (1985, §20.01).

⁹⁶ Yeivin (1985, §20.06).

וּבָעָר 'and it will graze' (Exod. 22.4): וּבָעָר [wve:'ʕa:r]

נָאָר 'he has spurned' (Lam. 2.7): נָאָר [ne:'ʔa:r]

נִאָץ 'he renounced' (Psa. 10.3): נִאָץ [ne:'ʔa:sʕ]

It is unlikely, therefore, that synchronic variations such as those listed in (3)–(7) had any semantic or exegetical significance in the proto-Masoretic reading tradition, since they are either a later development in the Tiberian tradition without clear semantic significance or were early features but were eliminated in the Babylonian tradition. They were simply cases of internal morphophonemic variation that is common across languages.

The variations in the use of *dagesh* in the same lexeme in the specific examples cited under (1) above do not appear to have any semantic or exegetical significance. It should be noted, however, that several examples of *dagesh* distinguishing the meaning of doublets of the same lexeme or homophonous words can be found in the Tiberian tradition and this has been developed further in the Babylonian tradition. There are, for example, a number of homophonous pairs of words in the Tiberian tradition that are distinguished by *dagesh*. These include cases such as אֲבִיר 'powerful' referring to God, used in the construct state 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 (for further details see §I.3.1.3.).

With regard to pairs of forms from the same lexeme exhibiting a variation between a *ḥatef* vowel and silent *shewa* (as in יִחְשְׁבוּ vs. יִחְשְׁבוּן), in many such cases there appears to be a metrical motivation for the variation, which will be discussed in

§I.2.5.4. We have seen, however, that in the Samaritan tradition such a variation has been exploited to distinguish meaning in pairs such as *wyābād* ‘and he perished (past)’ (< **ya’abad*) vs. *yābbād* ‘he perishes (non-past)’ (< **ya’bad*). There is, indeed, one isolated example of the exploitation of such variation to express a semantic distinction in the Tiberian tradition, namely the difference in vocalization between the verb *יַעֲקֹב* ‘he supplants’ (Jer. 9.3) and the proper name *יַעֲקֹב*.

Returning now to the list of variant vocalizations from the late books, we should examine whether these had any semantic or exegetical significance. I should like to argue that there are indeed grounds for hypothesizing that many of the examples of such variations were motivated by an attempt to express a semantic distinction. It is relevant to note that these distinctions appear also in biblical manuscripts with Babylonian vocalization,⁹⁷ so they must be attributed to the proto-Masoretic reading tradition. Some examples of semantic distinctions are as follows:

אֶמְלֵל vs. *הָאֶמְלֵלִים* (Neh. 3.34)

All cases of *אֶמְלֵל* and its inflections are predicative, most with clear verbal inflection. *הָאֶמְלֵלִים* is the only nominal form with nominal inflection (functioning as an attributive adjective): *וּפְרִשִׁי מִכְמֶרֶת עַל-פְּנֵי-מַיִם אֶמְלֵל* ‘and those who spread a net upon the water will languish’ (Isa. 19.8), *אֶמְלֵל אֲנִי* ‘I am languishing’ (Psa. 6.3), vs. *הַיְּהוּדִים הָאֶמְלֵלִים* ‘the feeble Jews’ (Neh. 3:34). This distinction in vocalism can be compared to the development of a

⁹⁷ Examples of such forms that are attested in the manuscripts can be found in Yeivin (1985, 608, 843, 956, 1050).

distinction in vocalism between verbal and nominal participles in the Samaritan tradition.

נולד/נולד vs. נולדו

Here again, the formal distinction appears to reflect a distinction between verbal and nominal categories. The form נולדו is the only inflection of the *nif'al* of ילד that has transparent verbal inflection in the biblical corpus: וְאֵלֶּה נִוְלְדוּ־לּוֹ בִּירוּשָׁלַם 'and these were born to him in Jerusalem' (1 Chron. 3.5). Other attestations of the *nif'al* of this verb are either in the singular form נולד, which is explicitly adjectival, or נולד with *pataḥ* but often used impersonally without agreement with a plural subject, so both may have been interpreted as adjectival, e.g. הִנֵּה־בֵן נֹלֵד לְבֵית־דָּוִד. 'behold a son is born' (1 Kings 13.2), וְאֵלֶּה הָיוּ בְנֵי דָוִד אֲשֶׁר נִוְלְדוּ־לּוֹ 'These are the sons of David that were born to him in Hebron' (1 Chron. 3.1).

ילוד vs. ילוד

There may be a distinction also here between nominal and verbal participles. Targum Jonathan to וְאֵלֶּה שְׁמוֹת הַיְלָדִים לּוֹ בִּירוּשָׁלַם (2 Sam 5.14) clearly interprets ילוד as a verbal participle: וְאֵלֶּין שְׁמֵהֶת 'These are the names of the ones who were born to him in Jerusalem'. The form ילוד is clearly used as a noun in some contexts, e.g. הַיְלֹד הַחַי 'the living child' (noun) (1 Kings 3:26); cf. Targum Jonathan: רַבִּיא חַיָּא. Targum Jonathan to וְאֵלֶּה שְׁמוֹת הַיְלָדִים אֲשֶׁר הָיוּ־לּוֹ בִּירוּשָׁלַם (1 Chron. 14.4), the parallel to 2 Sam 5.14, is וְאֵלֶּין שְׁמֵהֶת דַּאֲתִילִידוֹ דְּהוּן מִתְרַבִּין בִּירוּשָׁלַם 'and these are the names of the ones who were born who were being

raised/were adolescents in Jerusalem'. This Targumic rendering of 1 Chron. 14.4 seems to reflect a nominal interpretation of the participle, presumably motivated by the added relative modifier phrase *אֲשֶׁר הָיָה*, which would typically take a nominal antecedent.

הַדָּר vs. הֶדָּר

The two forms of these apparently synonymous construct forms in the biblical corpus express a distinction between 'divine glory' (הַדָּר) and 'human glory' (הֶדָּר), e.g. הַדָּר מַלְכוּתוֹ 'the glory of His kingdom' (God's glory) (Psa. 145.12) vs. הֶדָּר מַלְכוּת 'glory of the kingdom (human glory)' (Dan. 11.20). As we have seen above, the practice of using gemination to express semantic distinction is often applied to separate the usage of the same lexeme in divine and human contexts, e.g. אֱבִיר (divine) vs. אָבִיר (human) and examples cited above from the Samaritan and Babylonian traditions.

עֲרָבִי vs. עֶרְבִי

There is a distinction in meaning here between 'desert nomad' (עֲרָבִי) and 'a gentile term of an ethnic group' (עֶרְבִי): וְלֹא-יִהְיֶה שָׁם 'and no desert nomad/Arab will pitch his tent there' (Isa. 13.20) vs. וְגֶשֶׁם הָעֲרָבִי 'Geshem the Arab' (Neh. 2.19). One may compare this to the formal distinction in Arabic between *'a'rābī* 'nomad of the desert' vs. *'arabī* 'Arab, Arabian' (ethnic term)'.

קַרְנִים vs. קָרְנִים

The dual form קַרְנִים in Daniel chapter 8, which has a characteristically Rabbinic type of vocalization, has the meaning 'horns'.

The form קִרְנִים in Hab. 3.4, which has the normal dual vocalic pattern, has the meaning ‘rays (of light)’. This is the only other place where the word occurs in the biblical corpus as a common noun without a suffix or not in construct. The difference in vocalization, therefore, is likely to express a distinction in meaning between the two forms.⁹⁸

חָבַל vs. חֲבַל

The infinitive absolute form חֲבַל immediately preceding the cognate verb occurs in Exod. 22.25 as an internal object with the meaning of ‘taking in pledge’: אִם-חֲבַל תְּחַבֵּל שְׁלֵמַת רֵעֶךָ ‘If ever you take your neighbour’s garment in pledge’ (Exod. 22.25). Here the infinitive absolute is an inner object of the verb. It is connected to the verb by a conjunctive accent, which is typical for infinitive absolute internal objects; cf. שׁוּב אָשׁוּב literally: ‘I shall return a returning’ (Gen. 18.10). The construction חֲבַל חֲבַלְנוּ לָנוּ (Neh. 1.7) differs prosodically from חֲבַל תְּחַבֵּל (Exod. 22.25) in that the initial form חֲבַל is separated from what follows by a disjunctive accent. The word חֲבַל differs from חָבַל semantically, in that it is from a different, albeit homophonous, lexical root. Finally it differs from it syntactically according to the interpretation reflected by the early versions, which treat it as an adverbial noun rather than an inner object: LXX διαλύσει διελύσαμεν ‘we have broken with a breaking [covenant]’, Vulgate: *vanitate seducti sumus* ‘we have been seduced by vanity’, rather than nominative active participles, which are the common translation technique of Greek and

⁹⁸ See the remarks of Yeivin (1985, 844, n.74).

Latin for inner objects, e.g. $\text{קָנִיתִי לִי} : \text{LXX } \kappa\acute{\tau}\acute{\omega}\mu\epsilon\nu\omicron\varsigma \kappa\acute{\tau}\eta\sigma\omicron\mu\alpha\iota$ ‘buying I shall buy’ (2 Sam 24.24).

We may summarize the hypothesis developed above regarding the formation of the reading tradition as follows. The variations in vocalization in the late biblical books are very likely to have had their origin in the language situation of the Second Temple Period. The proto-Masoretic reading tradition of the late books was fixed in the Second Temple Period and the distinctive late forms of vocalization discussed above are likely to reflect features of contemporary vernacular speech. At the time when the proto-Masoretic reading was fixed for the late books, a reading tradition was already in existence for the earlier books. During the Second Temple period, some of the innovative features of the reading of the late books were extended to the earlier books (e.g. the reading of intransitive *qal* verbs as *nif^cal* and the transitive *qal* as *pi^cel*). Some of the innovative features of the later period, however, were not retroverted into the reading of the same lexemes in the earlier books, but rather the corresponding earlier forms were retained. One factor, perhaps the key factor, that motivated this retention of some of these distinct forms in the reading of the biblical corpus was the desire to distinguish different aspects of meaning or the distinction between homophonous lexemes. There were other cases of variation across the proto-Masoretic reading tradition as a whole, some most likely the result of synchronic language variation. Some of these variations were exploited to distinguish meaning (in particular, gemination). A large proportion of the synchronic

variation, however, did not have any semantic or exegetical significance. Some of this type of variation that survived in the Tiberian tradition was eliminated by levelling in the Babylonian tradition. Moreover, some new variation with no semantic significance developed in the Tiberian and Babylonian reading traditions after the two branches split from the proto-Masoretic tradition. The use of gemination to distinguish meaning within lexemes and between homophonous lexemes was extended further after the Tiberian and Babylonian branches had divided, especially in the Babylonian branch (§I.3.1.3.).

The exploitation of diachronic or synchronic morphophonemic variation to express distinctions in meaning was a form of inner-biblical exegesis. It should be pointed out, however, that similar processes occur in living spoken languages.⁹⁹ One phenomenon that is directly analogous to the issue of diachronic variants discussed here is the phenomenon of doublets, which are found in many languages by a process of retaining older forms alongside new forms of the same lexeme with different meanings. An example from Neo-Aramaic is as follows. In the North-Eastern Neo-Aramaic dialects, a historical *ġ develops into /ʔ/ or zero /Ø/. So in the Barwar dialect¹⁰⁰ *šāġəš ‘to trouble; to dandle (a child)’ developed into šaØəš, which is pronounced šayəš with a glide. The new form šayəš means specifically ‘to dandle, to rock (a child)’. The old form šāġəš, however, is retained in the dialect with the meaning of ‘to trouble’. This is a strategy for reducing

⁹⁹ I have described some cases from Neo-Aramaic dialects in Khan (2018a).

¹⁰⁰ Khan (2008, 51–52, 207).

ambiguity in the meaning of a lexeme. Such a development is directly analogous to the hypothesized process described above whereby older forms were retained alongside new forms in the biblical reading tradition during the Second Temple as a strategy to reduce ambiguity and elucidate meaning in the biblical corpus.

I.0.9. THE PRESTIGE OF THE TIBERIAN TRADITION

Despite the fact that there are indications that the Tiberian pronunciation tradition had undergone linguistic change in the course of its transmission since splitting from the proto-Masoretic reading, in the Middle Ages the Tiberian reading tradition was regarded as the most prestigious and authoritative. The medieval sources justify this by the claim that the transmitters of the Tiberian tradition were able to preserve the original reading more accurately since they never left Palestine, unlike the diaspora communities.¹⁰¹ In reality, as we have seen, the Tiberian reading did undergo change and was, in many cases, less conservative than the Babylonian tradition. It is likely that the authoritative-ness of the Tiberian tradition had its roots primarily in its association with the Palestinian *Yeshiva* ‘Academy’, the central body of Jewish communal authority in Palestine, which was based in Tiberias from late antiquity until the Middle Ages.

After the Bar-Kochba revolt in the second century C.E., rabbinic leadership moved to the Galilee. Rabbi Joḥanan (d. 279 C.E.) established an academy in Tiberias. Subsequently, the

¹⁰¹ Cf. the passages from al-Qirqisānī discussed in Khan (1990c) and the introduction of the long version of the Masoretic treatise *Hidāyat al-Qāriʾ* (§II.L.0.3. in the edition in this volume).

Jewish patriarch (*nasī*) relocated from Sepphoris to Tiberias, which transformed Tiberias into the Jewish capital of Palestine. A large number of Jewish sages who were active in Palestine in the Talmudic period studied in Tiberias. The Palestinian Talmud and most of the Aggadic Midrashim were redacted in the city (Rozenfeld 2010, 120–26). After the Islamic conquest of the city in 636, it became the capital of the administrative district known as Jund al-Urdunn. The city flourished between the eighth and tenth centuries, as is witnessed by archaeological records of its urban expansion, incorporating the neighbouring town of Hammat (Avni 2014, 72–78). During the ninth and tenth centuries, Tiberias was a thriving centre also of Muslim scholarship (Gil 1992, 329–30).

The association of the Masoretes with the Palestinian *Yeshiva* is reflected by the fact some of the Masoretes had direct connections to this academy. One of the known Masoretes was indeed the ‘head of the Academy’, namely Pinḥas Rosh ha-Yeshiva (‘head of the Academy’), who lived in the ninth century. We also know of a certain Ḥaḥiyyahu ha-Kohen he-Ḥaver, whose epithet *ḥaver* indicates that he was a ‘member of the Academy’.¹⁰²

¹⁰² See the *Treatise on the Shewa* edited by Levy (1936, 9), the document published by Mann (1969, 2:43–44) and Gil (1992, 179). The passage in the *Treatise on the Shewa* refers to the Tiberian pronunciation as a tradition that was received from ‘the men of the Great Assembly’ (אנשי כנסת הגדולה), which was the supreme legislative body in Palestine during the Second Temple Period.

The medieval sources describe how teachers from Tiberias would travel to various communities of the diaspora to give instruction in the Tiberian reading and how people from the diaspora communities would travel to Tiberias. We read, for example, in the introduction of the long version of the Masoretic treatise *Hidāyat al-Qārī*:¹⁰³

‘The people in the communities of the exile would press any teacher who travelled (from Tiberias) to these distant lands to teach their children the reading of the Land of Israel and eagerly imbibed that from him, making him sit down so that they could assiduously learn it from him. Whoever came from the exile to the Land of Israel had a desire for the teaching of the reading of the Land of Israel that was equally ardent as that of those absent [i.e. those just mentioned who received teachers in diaspora lands] and for abstaining from his own (tradition of reading)’.

Similarly, we read in a medieval Karaite commentary on Genesis in a passage concerning Gen. 49.21:

The fact that he compared Naftali to ‘a hind let loose’ (אַיִלָּה נְשֻׁלָּה, Gen. 49.21) is on account of what he foresaw by the help of prophecy, namely that he would be beautiful of voice, excellent in reading, excellent in speaking Hebrew. This is because from the inheritance of Naftali teachers and masters will go forth, such as Ben Asher and Ben Naftali. The Jews of the world follow the reading of these two teachers. This is the reading of Palestine, which has been disseminated throughout the corners of the world. The teachers of it have gone forth to the land of Iraq and other

¹⁰³ Edition in vol. 2 of this book, §II.L.0.4.

places. They have taught people and written many copies (of manuscripts). He compared it (the inheritance of Naftali) here to a 'hind let loose', which is beloved and brought up in dwellings that bring ease to the heart, just as is the case with the teachers who were sent from the inheritance of Naftali to the lands of the exile to teach people the reading of Palestine. For that reason, he said 'a hind let loose'. ... The superbly beautiful reading has its origin in the inheritance of Naftali, namely the town of Tiberias, which is uniquely renowned for this. For this reason, he said 'which gives words of beauty' (הִנֵּתָן אִמְרֵי־שֹׁפָר, Gen. 49.21), since the reading (of Tiberias) is the original one.¹⁰⁴

The prestige and authoritative nature of the Tiberian reading are reflected in various ways.

Many manuscripts with Babylonian vocalization exhibit convergence with the Tiberian tradition of reading, eliminating thereby distinctly Babylonian features. In some manuscripts with Babylonian signs, there is almost total convergence with the

¹⁰⁴ II Firk. Evr. Arab. II 4633, fol. 241r-241v: ותמתילה לנפתלי באילה שלו הו' למא נטרה בעון אלנבוה ואנה יכון חסן אלקול גיד אלקראה גיד אלללגה פי כלאם אלעבראני דלך אן מנחלת נפתלי יכרג אלמעלמין ואלאסתאדין מתל בן אשר ובן נפתלי אלדי אהל אלעאלם מן אליהוד יתבעון קראן הדין אלמעלמין והי קראה אלשאם אלתי אנבסטת פי {אד} אפאק אלעאלם ואן אלמעלמין מנהא כרגו אלי בלדאן אלעראק וגירהא ועלמו אלנאס וכתבו אלנסך אלכתיר ומתלהא פי הדא כאילה שלוחה אלמחבובה אלמרבאה פי אלביות אלתי להא אנס פי אלקלב כמא כאן ללמעלמין אלדי בעתם {צ"ל בעתו} מן נחלת נפתלי אלי כל בלדאן אלגלות ליעלמו אלנאס קראה אלשאם לדלך קאל אילה שלוחה ... ואלקראן אלפאכר אלחסן אצלה מן נחלת נפתלי והו' מדינת טבריה אלמערופה בהדא דון סואה לדלך קאל הנתן אמרי ש' אד אלקראן הו' אלאצל This extract was published by Mann (1935, 2:104–5) with some mistakes in reading. The text above is the correct reading of the manuscript.

Tiberian pronunciation tradition and additional signs were even created to ensure a maximally close correspondence.¹⁰⁵

The same applied to Biblical manuscripts with Palestinian vocalization. Many of these represent a reading tradition that is very close to the Tiberian one. This is almost certainly due to convergence, which involved the creation of signs to express vowel quality distinctions that did not occur in the Palestinian pronunciation.¹⁰⁶ It should be noted that the background and status of the Palestinian tradition of pronouncing the Hebrew Bible were different from the Tiberian and Babylonian. When the author of *Hidāyat al-Qāri'* refers to the reading of 'the Land of Israel', he is clearly referring to the Tiberian tradition, not the tradition of reading with Palestinian pronunciation. The term 'the reading of Palestine' (*al-Shām*) in the passage from the Karaite commentary on Genesis is likewise referring to the Tiberian tradition. The Karaite scholar al-Qirqisānī (tenth century Iraq) discusses in his *Kitāb al-'Anwār* the relative merits of the reading of Babylonia (*Irāq*) and the reading of Palestine (*al-Shām*).¹⁰⁷ Here also what is intended is the Tiberian tradition. For al-Qirqisānī the Palestinian tradition of reading was not relevant in his discussion of authority. This appears to reflect the fact that the Palestinian pronunciation was a popular tradition of reading, which had no authoritative roots. Al-Qirqisānī's focus on the Babylonian and Tiberian traditions reflects the fact that only these two traditions had claims to authority. It is likely that this

¹⁰⁵ Yeivin (1985, 77–87).

¹⁰⁶ Revell (1977), Chiesa (1978).

¹⁰⁷ See the passages from al-Qirqisānī discussed in Khan (1990c).

was due to the fact they were both descendants of the original proto-Masoretic reading. Al-Qirqisānī maintains that of these two, the Tiberian is the most authoritative.

The distinctive features of Palestinian pronunciation, which are particularly discernible in the non-biblical manuscripts with Palestinian pronunciation, have close parallels with what is known about the vowel system of Jewish Palestinian Aramaic.¹⁰⁸ Unlike Tiberian and Babylonian, the Palestinian biblical reading is unlikely to be a direct descendant of the proto-Masoretic reading, but rather it has its roots in other traditions of reading that were current in Palestine in antiquity. The Greek transcription in Origen's Hexapla (the middle of the third century C.E.) reflects a reading that has even more evidence of influence from the Aramaic vernacular, especially in the pronominal suffixes, such as the 2ms suffix *-akh*, e.g. *σεμαχ* 'your name' (Tiberian *שְׁמַחְךָ* Psa. 31.4).¹⁰⁹ This is also a feature of the Samaritan tradition, e.g. *yēdāk* 'your hand' (Tiberian: *יְדְךָ*).¹¹⁰ Some of these features, such as the Aramaic type of pronominal suffixes, appear in medieval non-biblical texts with Palestinian vocalization. In the second half of the first millennium, however, it appears that the popular biblical reading converged to a greater extent with the prestigious Tiberian tradition. As a result, the Aramaic type of suffixes were eliminated in the biblical reading.¹¹¹

¹⁰⁸ Fassberg (1991, 28–57).

¹⁰⁹ Brønno (1943, 110, 196–200).

¹¹⁰ Ben-Ḥayyim (2000, 228).

¹¹¹ Yahalom (1997, Introduction).

Various features deviating from the Tiberian reading tradition that are found in the earlier biblical traditions are rarely attested in the medieval biblical traditions but are found in non-biblical Hebrew texts. This applies, for example, to the forms of the 2ms suffixes without a final vowel in Origen and Jerome, and indeed in the consonantal text that is found already in the proto-Masoretic biblical manuscripts from Qumran (𐤂-, 𐤃-), which is a feature that surfaces in some traditions of post-biblical Hebrew (Ben-Hayyim 1954, 27–32, 63; Kutscher 1979, 442–43; Fassberg 1989), including biblical quotations within non-biblical Hebrew texts (Yahalom 1997, 24). The gutturals are clearly weakened in some biblical texts from Qumran and are omitted or interchanged in the orthography (Fassberg 2013, 665), but in the medieval biblical texts one does not find evidence of such systematic breakdown of distinctions. In non-biblical texts, on the other hand, there is evidence of such a weakening. In *piyyuṭim*, for example, ʕ often rhymes with ʁ, and likewise 𐤒 rhymes with 𐤓, reflecting a weakening of the pharyngeals to laryngeals (Yahalom 1985, 173). In *piyyuṭ* manuscripts with Palestinian vocalization segolate nouns ending in a guttural often have an ‘e’ vowel in the last syllable without a furtive *pataḥ* (e.g. מֶלֶח *meleḥ* ‘salt’, Tiberian: מֶלֶךְ) (Yahalom 1997, 25), again reflecting the weakening of the guttural.

Another indicator of the prestigious nature of the Tiberian reading tradition is the fact that the early traditions of Hebrew grammar that emerged in the tenth century, i.e. those of Saadya Gaon and the Karaite grammarians, were based on the Tiberian

reading.¹¹² The grammarian Ibn Janāḥ (eleventh century Spain) states that the Tiberians were ‘the most eloquent of the Hebrews in language and the most lucid’.¹¹³

Finally, there is evidence in some sources of hypercorrections in the production of the Tiberian reading. These reflect situations in which a reader’s pronunciation of Hebrew differs from the standard Tiberian pronunciation, due to it belonging to a different tradition¹¹⁴ or being influenced by a vernacular language, but the reader nevertheless attempts to pronounce words with the Tiberian pronunciation due to its prestige. In some cases, this results in producing distinctive features of Tiberian pronunciation that are used in the incorrect context (see chapter 4 for details).

I.0.10. THE INTERNAL DIVERSITY OF THE TIBERIAN TRADITION

There was not complete uniformity in any of the traditions of reading reflected by the vocalization systems. This applied also to the Tiberian school. We have seen (§I.0.8.) that there are inconsistencies in the Tiberian vocalization across different parts of

¹¹² Dotan (1997), Khan (2000b; 2000a). Some features of Babylonian pronunciation sporadically appear in the works of the eastern grammarians such as Saadya (Dotan 1997, 39) and the Karaites (Vidro 2011, 131–36).

¹¹³ *Kitāb al-Lumaʿ* (ed. Derenbourg 1886, 29): הם אפצח אלעבראניין לסאנא ואכתרהם ביאנא.

¹¹⁴ For examples of such hypercorrections in manuscripts reflecting a Tiberianized Babylonian tradition see Yeivin (1985, 185).

the Hebrew Bible. There were also various streams of tradition in the Tiberian Masoretic school that differed from one another in the reading and vocalization of particular words. The monumental Hebrew Bible manuscript codices with Standard Tiberian vocalization that have survived from the Middle Ages exhibit minor differences in vocalization of this nature. This applies even to manuscripts that were written by the same scribe.¹¹⁵ Minor differences between vocalization practices of Masoretes and differences in the vocalization of codices are referred to also in Masoretic notes and Masoretic treatises. The tradition of vocalization reflected in the Standard Tiberian manuscripts was, however, far more uniform than other non-Tiberian traditions. This was the result of greater efforts of standardization of the Tiberian tradition due to its greater authoritative status. The standardization process is reflected in particular by Masoretic treatises collating differences between Masoretes, the best known being the ‘Book of Differences’ (*Kitāb al-Khilaf*) of Misha’el ben ‘Uzzi’el, who was active in Jerusalem at the end of the tenth or early eleventh century.¹¹⁶ This work concerned differences between the two

¹¹⁵ Examples of this are manuscripts written by the scribe of L, Samuel ben Jacob, who has been identified as the scribe of several other early Bible manuscripts. These manuscripts exhibit minor differences in vocalization among themselves. See Phillips (2016; 2017; 2020).

¹¹⁶ Lipschütz (1964; 1965). A manuscript preserved in the Karaite synagogue in Cairo (known as C3) contains the inscription *אני מישאל בן עזיאל* *I Misha’el ben ‘Uzz’iel* *ben Yoseph ben Hillel checked this holy Torah in the enclosure of ben Bakhtavaih, may God have mercy on him’* (Gottheil 1905

foremost Masoretic authorities at the end of the Masoretic period in the first half of the tenth century, Aharon ben Asher and Moshe ben Naftali. This lists disagreements between Ben Asher and Ben Naftali in 867 specific places and agreements of Ben Asher and Ben Naftali against another, usually unnamed, authority in 406 places. Most of these relate to differences in very small details. The majority of the disagreements concern the minor *gaʿya* (i.e. *gaʿya* on a short vowel in a closed syllable) and *shewa gaʿya* (i.e. *gaʿya* written on *shewa*) (§I.2.8.2.2., §I.2.9.). A few relate to spellings, divisions of words, and vocalization. Several of these are listed by Mishaʿel in the introduction as general differences rather than relating to specific passages. Ben Asher, for example, vocalized a preposition ל or ב with *shewa* when it was followed by *yod* with *hireq* (e.g. לְיִשְׂרָאֵל ‘for Israel’), Ben Naftali, on the other hand, vocalized the first letter with *hireq* with no vowel on the *yod* (לְיִשְׂרָאֵל). Whereas Ben Asher vocalized יִשְׂשַׁכָּר ‘Issachar’, Ben Naftali vocalized this name יִשְׂשֻׁכָּר. Another Masorete, Moshe Moḥe, vocalized it יִשְׂשֻׁכָּר. Ben Asher vocalized the *kaf* in all forms of the verb אכל ‘to eat’ before *segol* with *ḥaṭef pataḥ*, e.g., תֹּאכְלֶנָּה ‘you will eat it’ (Ezek. 4.12), reflecting the reading of the *shewa* as mobile, whereas Ben Naftali read the *shewa* in all such cases as silent (§I.2.5.7.5.). The purpose of the collation of differences

no. 18; Penkower 1989). This is likely to be the Mishaʿel who was the author of *Kitāb al-Khilaf*. The scholarly institution known as the enclosure of ben Bakhtavaiḥ was founded by Yūsuf ibn Bakhtavaiḥ (also known as Yūsuf ibn Nūḥ) in Jerusalem at the end of the tenth century and was the hub of Karaite scholarship there in the first half of the eleventh century.

was to impose a degree of standardization on the Tiberian Masoretic tradition, which had developed into a number of heterogeneous sub-schools by the tenth century, of which those of Ben Asher and Ben Naftali were regarded as the most authoritative. The readings of Ben Asher in *Kitāb al-Khilaf* conform very closely to the readings of the manuscript A, which was produced by Ben Asher, and also to L, which contains many erasures and corrections that made the correspondence closer than was originally the case. The Ben Naftali readings conform closely to C.¹¹⁷

At the close of the Masoretic period in the tenth century and the early eleventh century, the traditions of Ben Asher and Ben Naftali were considered to be equally authoritative. Misha'el ben 'Uzzi'el does not give priority to Ben Asher or Ben Naftali in *Kitāb al-Khilaf*. In his Masoretic treatise *Hidāyat al-Qāri'*, 'Abū al-Faraj Hārūn, likewise, does not give priority to either one of these two authorities. It is significant, however, that according to one passage in this treatise a reader should not mix the traditions according to personal assessment of correctness of the reading of individual words in each tradition. One should adopt either the tradition of Ben Asher in its entirety or that of Ben Naftali in its entirety:

‘The reader, therefore, has two options. Either to read with the reading of Ben Naftali, in which case he must read all good and difficult forms that he (Ben Naftali) reads, or to

¹¹⁷ For differences between other Tiberian Masoretes see *Diqduqe ha-Te'amim* (ed. Dotan 1967, 139–40), Levy (1936, 17–18), Mann (1969, 2:43–44), Lipschütz (1965, 5), Yeivin (1981).

read with the reading of Ben Asher, which also is authoritative. If somebody reads what he deems to be the best reading of this one and of that one, he would (read) without any rule, because he deviates from the rationale of each of them.¹¹⁸

The lack of ranking of these Masoretic authorities was the practice among Masoretic scholars until the time of Maimonides, who declared Ben Asher to be the most reliable authority. David Qimḥi (d. 1235), it seems, was the first who decided in favour of Ben Asher in the context of reported differences between Ben Asher and Ben Naftali (Lipschütz 1965, 4).

The fact that the *Kitāb al-Khilaf* rarely mentions vowels and accents implies that their reading was virtually entirely fixed in a tradition over which there was consensus among Masoretic authorities. A passage in an anonymous Masoretic treatise discussing the cantillation of the Tiberian accents indicates that the way the accents are read has been transmitted ‘from the hearts of the two masters (*ʿal-ʾustādhayin*)’, i.e. Ben Asher and Ben Naftali, and they cannot be explained, i.e. their form is fixed by tradition and readers cannot exercise any personal initiative with regard to them:

‘As for all the other accents, every one of them has a single melody that does not change for any reason, either lengthening or shortening, as is the case with pronouncing a vowel and shortening it. It is not possible to explain how

¹¹⁸ Long version of *Hidāyat al-Qārī*, edition in vol. 2 of this book, §II.L.1.7.11.

they are read, because they are melodies transmitted from the hearts of the two masters.¹¹⁹

This passage makes it clear that the ultimate bases of authority of the reading were Ben Asher and Ben Naftali. This can be compared to the way reading traditions of the Qurʾān (*qirāʾāt*) were anchored to the authority of particular scholars.

Although readers had to adhere to the traditions of Ben Asher and Ben Naftali in most details of their reading without personal initiative, the masters themselves did, it seems, take some degree of personal initiative in fixing their traditions. This applies in particular to Ben Naftali, whose reading tradition exhibits more consistency in various features than the more conservative tradition of Ben Asher. In some places, for example, Ben Naftali has introduced pausal forms where they are not found in the Ben Asher tradition, with the result that their distribution in his reading is more consistent than they are in that of Ben Asher (A. Ben-David 1957b). Ben Naftali, moreover, introduced various orthoepic measures into his tradition to ensure a greater accuracy of reading (§I.0.11.).

The focus on minor *gaʿya* and *shewa gaʿya* in the lists of *Kitāb al-Khilaf* indicates that these details also formed part of the fixed sub-traditions of Ben Asher and Ben Naftali. The fixing of the vowels, accents, minor *gaʿya* and *shewa gaʿya* is reflected by the fact that there is only minimal variation in these features across the model Masoretic Tiberian Bible manuscripts. By the

¹¹⁹ CUL T-S NS 301.21: ואמא באקי אלטעמים גמיעהא כל ואחד מנהא לה לחן
 וחדה לא יתגיר מן סבב שי אמא תטויל או תקציר וכדלך פי אלתחריר ופי אלכטף ולא
 ימכן שררחהא כיף תקרא לאנהא אלחאן תנקל מן צדור אלאסתאדין

end of the Masoretic period, however, not every detail had been completely fixed and there was some permitted variation in the sign system and also some variation in the oral reading. This applied in particular to the writing of *ḥaṭef* signs on non-guttural consonants and the pronunciation of major *ga‘ya* (i.e. *ga‘ya* on long vowels) in the oral reading, as expressed by the following passages from *Hidāyat al-Qāri’*:

The people responsible for this matter have agreed on the rule of combining *shewa* and a vowel (i.e. writing *ḥaṭef* signs) only under the four (guttural) letters. It is said, however, that some scribes wanted to remove uncertainty from places that may lead to error and have combined a vowel with *shewa* (under a non-guttural letter) ... because they thought that people would err in the reading ... This is an exception to their customary practice. What supports the claim that this is the view of only some of them with regard to letters not belonging to the group of the four (guttural letters) is that in most codices one does not find what has been presented as counterevidence (i.e. the combination *shewa* with a vowel under non-guttural letters), but all codices are uniform in the combination of *shewa* with a vowel under the four (guttural letters) letters.¹²⁰

¹²⁰ Long version of *Hidāyat al-Qāri’*, edition in vol. 2 of this book, §II.L.2.12.6. Differences between scribes regarding the writing of *ḥaṭef* signs under non-guttural consonants is referred to also in the earlier Masoretic treatise *Diqduqe ha-Ṭe‘amim*, which is attributed to Aharon ben Asher (ed. Dotan 1967, sec. 19).

The *ga'ya* does not have a definite status in the reading of Scripture. One reader may omit it and another reader may sustain it.¹²¹

This is also reflected by the model Tiberian Masoretic Bible codices, which exhibit a greater degree of variation in the writing of *ḥatef* signs on non-guttural consonants (§I.2.5.5.) and the marking of major *ga'ya* than in features that had been fixed, such as vowels, accents, minor *ga'ya* and *shewa ga'ya*.

I.0.11. ORTHOEPY

The variation in the marking of *ḥatef* signs on non-guttural consonants reflects the continual efforts that were made to refine the vocalization system to ensure accurate reading towards the end of the Masoretic period. By combining a vowel sign with a *shewa* sign, the *shewa* was unambiguously marked as vocalic, which removed potential ambiguity of the sign in the vocalization system and so reduced the risk of inaccurate reading (§I.2.5.5.). Another measure to ensure correct reading of vowel length that is occasionally found in standard Tiberian manuscripts is the use of *ḥatef* signs in unstressed closed syllables to mark explicitly that the vowel is short. A few examples of this are found in L, e.g. בְּחַרְטָּמִם 'on the magicians' (Exod. 9.11), הָעֶרְבָּיִם 'the evening' (Exod. 30.8), חֲזָקוֹ 'they are strong' (2 Sam. 10.11), יַעֲבִרְךָ 'he brings trouble on you' (Josh. 7.25) (§I.2.5.1.).¹²²

¹²¹ Long version of *Hidāyat al-Qāri'*, edition in this vol. 2 of this book, §II.L.3.1.

¹²² The phenomenon in L is described by Dotan (1985).

It is important to distinguish these differences in notation with regard to the clarity of representation of the reading from the existence of genuine differences in the reading between Masoretes that are reflected in works such as Misha'el ben 'Uzzi'el's *Kitāb al-Khilaf*.

I would like to focus here in particular on another development that took place within the Tiberian tradition, namely an increasing effort to pronounce the reading with maximal clarity, a phenomenon that I shall call orthoepy. Such orthoepic measures are sometimes not discernible from the vocalized text and can only be reconstructed from external sources, in particular transcriptions and Masoretic treatises.

The basic principle of orthoepy is to ensure that the distinct elements of the text are given their optimal realization, keeping them maximally distinct and avoiding slurring over them. These elements include letters, vowels, syllables and words.¹²³

One orthoepic measure was to minimize the number of separate orthographic words that had no accent and so were at risk of being slurred over. The Tiberian tradition, in general, is more orthoepic in this respect than the Babylonian tradition through the Tiberian practice of placing conjunctive accents on orthographic words between disjunctive accents. In the Babylonian tradition, there are only disjunctive accents and the words between these are left without any accent (Shoshany 2003; 2013). The vocalization of some words that have acquired conjunctive accents in the Tiberian tradition reflects their

¹²³ This phenomenon corresponds closely to the careful recitation of the Arabic Qur'ān known as *tajwīd* (Nelson 2001).

originally unstressed status. This applies to stressed construct forms such as דְּבַר הַשְּׁמִטָּה 'the matter of the release' (Deut. 15.2), and cases such as אֶת גִּאְוֹן יַעֲקֹב 'the pride of Jacob' (Psa. 47.5), כָּל אֶחָיו 'all the brothers of a poor man' (Prov. 19.7), where the object marker and the quantifier have the vocalization characteristic of their unstressed form (אֶת- and כָּל-) rather than of their stressed form (את and כל).¹²⁴

There are still, however, a sizeable number of orthographic words in the Tiberian tradition that have no accent and are connected to the following word by the *maqfef* sign. The lists of differences in *Kitāb al-Khilaf*, however, show that Ben Naftali in a number cases read a word with a conjunctive accent where Ben Asher read it with *maqfef* (A. Ben-David 1957b, 391–92), e.g.

Lev. 24.16

Ben Asher: בְּנִקְבוֹ-שֵׁם, Ben Naftali: בְּנִקְבוֹ שֵׁם 'when he blasphemes the Name'

Gen. 39.6

Ben Asher: יָפֵה-תֹּאֵר, Ben Naftali: יָפֵה תֹאֵר 'beautiful in form'

Job 12.3

Ben Asher: וְאֶת-מִי-אֵין, Ben Naftali: וְאֶת-מִי אֵין 'with whom is not?'

This and other features of Ben Naftali's tradition, some of which are discussed below, indicates that he introduced more

¹²⁴ Cf. the long version of *Hidāyat al-Qāri'*, edition in vol. 2 of this book, §II.L.3.2.

orthoepic innovations in the reading than Ben Asher, who was, in general, more conservative.

The orthoepic measures taken to separate prosodically words connected by *maqfef* sometimes resulted in reading a word as prosodically separated even when the *maqfef* sign continued to be written. One clear example of this is the reading of the word מֵה־ vocalized with *pataḥ* and connected by *maqfef* to the following word, the first letter of which has *dagesh*, e.g. וּמֵה־דִּבֶּר ‘and what did he say’ (Jer. 23.35). It is clear that the *pataḥ* in this particle originally developed due to its prosodic and syllabic bonding with the following word, and this is reflected by the *maqfef*. It continued, however, to be written as an orthographically separate word. In order to ensure that the orthographic distinctness was expressed clearly in pronunciation one of two orthoepic strategies were followed, both of which are reflected by transcriptions of the Tiberian reading into Arabic script. The most common strategy was to lengthen the *pataḥ*, e.g. מֵה־תִּצְעַק [ma·tt^his^lʕa:aq] ‘Why do you cry?’ (Exod. 14.15). Another strategy was to glottalize the *pataḥ* vowel by pronouncing an [h] after the vowel, which separated syllabically from what followed, e.g. מֵה־שְׁמוֹ [mah·[ʃa^lmo:] ‘What is his name?’ (Exod. 3.13) (for further details see §I.2.8.1.2., §I.2.11.).

Various orthoepic measures were taken to ensure that adjacent letters in contact were enunciated clearly and not slurred together. Here again, these measures were more developed in the tradition of Ben Naftali than in that of Ben Asher. According to *Kitāb al-Khilaf*, Ben Naftali placed a *dagesh* in the first *nun* of the name נון in the combination בֶּן־נוֹן (ed.

Ben Naftali marked a *dagesh* in the *qof* of the verb יִעֲקֹב ‘he supplants’ (Jer. 9.3) (ed. Lipschütz 1965, לָב) as a orthoepic strategy to ensure that the *shewa* on the preceding guttural was read as silent, and therefore not confused with the more common proper name יַעֲקֹב ‘Jacob’. A related orthoepic measure that developed in the Tiberian tradition, which is not attributable to any specific subtradition, is what I call the extended *dagesh forte*

¹²⁵ See for example Skinner (1994, ad loc.).

reading. This involved pronouncing the *dagesh lene* of בגדכפת letters at the beginning of syllables as *dagesh forte* (§I.3.1.11.3.). The extended *dagesh forte* reading arose by giving the *dagesh* sign its full value in all contexts. The primary motivation for this was most likely an attempt to make a maximally clear distinction between fricative and plosive forms of the בגדכפת letters. Another effect of strengthening the pronunciation of the *dagesh* was to mark a clear separation between syllables.

The orthoepic features of the Tiberian reading have a variety of different historical depths. The orthoepic practices that we have examined so far appear to be developments that took place in the later stages of the transmission of the Tiberian reading, probably around the end of the Masoretic period in the tenth century. It is possible to identify some orthoepic measures, however, that have a greater time depth. One such case is the lengthening of the vowel of prefixes of the verbs הָיָה and חָיָה (§I.2.10.), e.g. תְּהִיָּה [tʰi·hje:] ‘it will be’ (Jer. 7:34), יְחִיָּה [ji·hje:] ‘let him live’ (Neh 2:3). The lengthening of the vowel of the prefixes in the verbs הָיָה and חָיָה is likely to have been an orthoepic measure taken to ensure that the initial guttural consonants were not weakened. If these consonants were weakened, the two verbs would not be formally distinguished. There is evidence that this particular orthoepic feature has deep historical roots that can be traced to the proto-Masoretic reading in Second Temple Palestine before the split of the Tiberian and Babylonian branches (see §I.2.10. for details). It arose as a measure to ensure that the gutturals were not weakened in these verbs at a period when gutturals were vulnerable to weakening under the influence of

Greek. It would appear, therefore, that orthoepy was already a feature of the ancient reading and that care over the oral reading of the text went hand in hand with care over the copying of the written text at an ancient period, presumably within Temple circles during the Second Temple period.

I.0.12. THE CLOSE OF THE TIBERIAN MASORETIC PERIOD

The activities of the Tiberian Masoretes came to an end in the tenth century after the generation of Aharon ben Asher and Moshe ben Naftali. The archaeological record shows that Tiberias was almost deserted in the second half of the eleventh century. This seems to have been due to the combined effect of devastating earthquakes in 1033 and 1068 and the political instability caused by the Seljuk raids into Palestine in the middle of the eleventh century. When the Crusaders invaded Palestine in 1099, Tiberias was a half-ruined city (Avni 2014, 87–88; Gil 1992, 397–418). The cessation of the activities of the Masoretes, however, occurred before this decline of the city in the tenth century, when, it seems, the city was still thriving. The key factor that brought about the end of the Masoretic school is likely to have been the removal of the Palestinian *Yeshiva* to Jerusalem, which can be dated to the middle of the tenth century.¹²⁶

The knowledge of the Tiberian reading tradition, which was the most prestigious form of pronunciation, rapidly fell into oblivion after this period. During the period in which the Tiberian Masoretes were active, the oral tradition of Tiberian reading was transmitted alongside the vocalization sign system.

¹²⁶ Gil (1992, 499–500), Wechsler (2013).

As we have seen, the sign system, indeed, was constantly being refined to represent the reading with maximal accuracy. This is clear, for example, in the many added *ḥatef* signs under non-guttural consonants in A, which was vocalized by Aharon ben Asher in the Masoretic period. The oral reading tradition was primary and the sign system was a mechanism of graphic notation.

Bible codices, of course, also had the consonantal text (*ketiv*). In the Talmudic period, a practice developed of interpreting Scripture on two levels, one according to the consonantal text (*ketiv*) and one according to the way it was read (*qere*). It is reflected by the Talmudic dictum יש אם למקרא ויש אם למסורה 'The reading has authority and the traditional text has authority.'¹²⁷ Traces of this type of exegesis are found in medieval sources. It was a practice that was condemned by many medieval Karaites, who recognized the authority of only the reading tradition.¹²⁸ This is reflected not only in their rejection of exegesis on the basis of the *ketiv*. They used vocalized codices rather than scrolls for liturgical reading.¹²⁹ Moreover, in many cases they dispensed with the Hebrew *ketiv* altogether and wrote biblical

¹²⁷ Naeh (1992; 1993), who argues that this exegetical technique was not practiced in the Rabbinic tradition before the Amoraic period.

¹²⁸ A vocal exponent of this was the Karaite al-Qirqisānī, see Khan (1990c) and §I.0.13.3. Some medieval Karaite scholars did, however, accept the possibility of interpreting according to the *ketiv* where it conflicted with the *qere*, see al-Fāsi, *Kitāb Jāmi' al-'Alfāz* (ed. Skoss 1936, vol. 1, 12-13), Hadassi (Bacher 1895a, 113) and Habib (2020).

¹²⁹ Allony (1979).

manuscripts that consisted of Arabic transcriptions of the reading tradition.¹³⁰

The Karaite grammarian ʿAbū al-Faraj Hārūn, who wrote his works in Jerusalem in the first half of the eleventh century, states in the introduction to his Masoretic treatise *Hidāyat al-Qārī* that his sources were earlier Masoretic treatises and the pupils of the writers of these earlier treatises.¹³¹ This indicates that he had access to an oral tradition of instruction in the Tiberian reading that was still alive in his time in Jerusalem. Karaite scholars in Jerusalem in the eleventh century were, in many respects, the heirs of the Masoretic school. It was in Jerusalem in the early eleventh century that Mishaʿel ben ʿUzziʿel, who was also a Karaite, composed his work *Kitāb al-Khilaf*, which recorded differences between the Masoretes Aharon ben Asher and Moshe ben Naftali (Penkower 1989).

Already at this period, however, Hebrew grammarians outside of Palestine were not able to gain direct access to the oral tradition of Tiberian reading. Ibn Janāḥ writing in the first half of the eleventh century in Spain, for example, laments the fact that he was not able to verify the length of particular occurrences of *qameṣ* vowels in the Tiberian tradition:

‘In such places [i.e. in the reading of the biblical text] and others like them, a person needs readers and teachers [of

¹³⁰ Khan (1992b).

¹³¹ Edition in vol. 2 of this book, §II.L.0.9.

the Tiberian tradition], which we lack in this country of ours.¹³²

After the close of the Masoretic period and the death of the primary Masoretic authorities Ben Asher and Ben Naftali, the anchoring of the written vocalization signs to authoritative oral traditions was broken. The primary base of authority began to shift to the vocalization sign system, which was the textualization of these oral traditions. Only the oral reading of Masoretic authorities such as Ben Asher and Ben Naftali was independent of the vocalization vowel system. This is the import of the following passage in *Hidāyat al-Qārī*:

Indeed there is no doubt that when somebody takes a simple codex without accents or pointing, he stumbles in the reading ... apart from a few exceptional people that are found in some generations, such as Ben Asher and Ben Naftali in their time and those like them.¹³³

As the orally transmitted Tiberian reading was lost and the primacy of its authority was transferred to the written sign system, the signs were read with reading traditions that differed from the Tiberian tradition. The incipient signs of this are found

¹³² פפי הדה אלמואצ'ע וגיררהא מתלהא יצטר אלמנסאן אלי אלרואה ואצחאב אלתלקין *Kitāb al-Luma'*, ed. Derenbourg (1886, 322–23). Ibn Ezra states that 'scholars of Egypt and [North] Africa' (חכמי מצרים ואפריקייא) knew how to pronounce the Tiberian *qameṣ* correctly; cf. *Sefer Ṣaḥot* (ed. Lippmann 1827, 3b). This was presumably referring to his own time, i.e. the twelfth century.

¹³³ Long version of *Hidāyat al-Qārī*, edition in vol. 2 of this book, §II.L.3.0.

in a variety of medieval manuscripts in which standard Tiberian vocalization is written under words with another vocalization system.¹³⁴ These can be interpreted as reflecting the tolerance of two traditions of written vocalization alongside each other in a way that can be compared to the apparent tolerance of different written textual traditions alongside each other in some Qumran manuscripts, which has been alluded to above (§I.0.2.).¹³⁵ It is clear from the medieval sources that one of the traditions in such manuscripts, viz. the Tiberian, was more prestigious.

One of the consequences of the shift of authority to the written vocalization and accent sign systems after the loss of the Masoretic authorities who were guarantors of the oral tradition was the increasing production and reliance on Bible codices that recorded the authoritative sign systems.¹³⁶

In most communities other than Yemen the oral traditions that came to be used to read the standard Tiberian vocalization were derived ultimately from the Palestinian pronunciation of Hebrew, with a five vowel system (without distinctions between *qameš* and *pataḥ*, on the one hand, and *šere* and *segol*, on the other) that was based on that of Jewish Palestinian Aramaic. As we have seen, the Palestinian pronunciation tradition had no

¹³⁴ In the Genizah Bible manuscript T-S A38.10, for example, the scribe has vocalized the text with both Babylonian and Tiberian signs.

¹³⁵ A similar situation is found in some early Qurʾān manuscripts in which the vocalization records different reading traditions, distinguishing them with different colours of ink (Dutton 1999; 2000).

¹³⁶ See Outhwaite (2018) for discussion of the commissioning and production of codices.

authoritative roots, but this was not relevant after the transition of the authority of the Tiberian tradition from the oral reading to the written sign system. It was the written sign system that now preserved the authoritative standard. This meant that the process whereby the Palestinian pronunciation was adapted to converge with the standard Tiberian pronunciation, which is reflected in manuscripts with Palestinian vocalization signs, now no longer took place.

It is unlikely that the removal of the Palestinian *Yeshiva* from Tiberias was the only factor that brought about the loss of the oral Tiberian reading tradition. Another factor is likely to have been that it was transmitted by a very small number of elite practitioners. A related issue was that the conservative Tiberian tradition and its highly careful orthoepic features deviated in various ways from the spoken vernacular languages of the Jewish communities. The Palestinian pronunciation of Hebrew, by contrast, was very widely used and was closer to the vernacular. As remarked, the vowel system of the Palestinian pronunciation had its roots in that of Jewish Palestinian Aramaic, which was the vernacular of the Jews in the early Islamic period. When the Jews of the region adopted Arabic as their vernacular, this rapidly had an impact on the Palestinian pronunciation tradition. In regions where the Arabic dialects did not have interdental fricatives (θ and δ), for example, there is evidence that already in the Middle Ages the Hebrew consonants *tav* and *dalet* came to be pronounced as stops (*t* and *d*) in all contexts (§I.4.2.) (Khan 1997).

Developments in the transmission of the Qurʾān in the tenth century may also have had an impact on the fate of the Tiberian reading tradition. At this period an official policy, endorsed by the ruling ʿAbbāsīd régime, was instigated by the scholar Ibn Mujāhid (d. 324 A.H./936 C.E.) to reduce the number of reading traditions of the Qurʾān.¹³⁷ Before the time of Ibn Mujāhid, a very large number of reading traditions of the Qurʾān existed. Many of these were transmitted by only a small number of readers. As a result of the activity of Ibn Mujāhid, the traditions with restricted numbers of transmitters were eliminated in favour of seven canonical traditions that had wide levels of transmission. Some of the smaller traditions that were lost exhibited unusual features that deviated from normal Arabic usage. One example of such non-canonical readings (*shawādh*) that is of particular interest in light of the discussion above concerning the orthoepic extension of *dagesh forte* to all contexts in Tiberian Hebrew (§I.0.11.) is the practice of some Qurʾān readers to geminate a consonant after a preceding vowelless consonant, e.g. يَخْطِفُ *yakhṭṭifu* ‘it takes away’ (Q 2.20).¹³⁸ This process of obsolescence of traditions with small numbers of transmitters and with features that deviated from normal Arabic usage, which took place in the Islamic world in the tenth century, could have influenced the transmission of the Hebrew Bible at that period,

¹³⁷ Ibn Mujāhid, *Kitāb al-Sabʿa fī al-Qirāʾāt* (ed. Cairo, 1972), Nöldeke et al. (1938, 155–56).

¹³⁸ This is recorded in the collection of *shawādh* by Ibn Khālawayh (d. 370/980), *Mukhtaṣar fī Shawādh al-Qurʾān min Kitāb al-Badīʿ* (ed. Bergsträsser, 1934, 3).

whereby the continuation of the Tiberian oral reading was disfavoured due to the small number of readers.

After the loss of the orally transmitted Tiberian pronunciation and its textualization as a historical relic in the written signs, readers and teachers of the Hebrew Bible were obliged to interpret the sign system as it was received. Many features of the Tiberian pronunciation that are not discernible in the sign system fell into complete oblivion. These include the orthoepic features I have described above, such as the extended *dagesh forte* reading. In the later Middle Ages, the standard Tiberian sign system was a graphic fossil that reflected an extinct tradition that was different from the pronunciation traditions of the various communities. In some cases, however, the reading was adapted to the sign system. A conspicuous example of this is the development of Biblical reading in late medieval Ashkenaz.

The distribution of vowel signs in manuscripts from medieval Ashkenaz dating to the twelfth and thirteenth centuries reflects a five-vowel system, in which no distinction is made between *qameš* and *pataḥ*, nor between *šere* and *segol*.¹³⁹ This indicates that at that period the pronunciation of the Ashkenazi communities still had the original Palestinian five vowel system. By the middle of the fourteenth century, a new vowel system evolved in the Ashkenazi tradition of Hebrew, in which there was a distinction in pronunciation between *qameš* and *pataḥ* and between *šere* and *segol*. One of the main causes of this change in the vowel system was the occurrence of vowel shifts in the dialects of German that were spoken by the Jews. In the twelfth

¹³⁹ Eldar (1978).

century, a number of German dialects, including Yiddish, developed a labio-velar pronunciation (in some [o] and in others [u]) of Middle High German [a:] as well as of [a] in an open syllable. This shift found its way into the Hebrew component of Yiddish. Since, however, words of Hebrew origin were assimilated into Yiddish at an earlier period, in which there were no quantitative distinctions (between long and short *a*), this shift only affected cases of [a] in an open syllable. In Hebrew words that met the criteria for the shift to [o] or [u], a lengthened [a] in open syllables mostly corresponded to historical *qameṣ*, e.g., [poter] (= פְּטוֹר) ‘released’, [boro] (= בְּרָא) ‘he created’, [dvorim] (= דְּבָרִים) ‘words’, and in a few cases also to historical *pataḥ*, as in [noxem] (= נָחוּם) ‘Nahum’, [kadoxes] (= קְדַחַת) ‘fever’. In the thirteenth and fourteenth centuries, Yiddish began to develop a diphthongized articulation of long [e:] in an open syllable. The shift [e:] > [ei] or [ai] entered the Hebrew component of Yiddish as a reflection of *ṣere* (in an open syllable), as in [eyme] (= אֵימָה) ‘terror’, [breyšis] (= בְּרֵאשִׁית) ‘in the beginning’ and also as a reflection of *segol* (in an open syllable) in a small group of words that were pronounced in Yiddish as if they were vocalized with *ṣere*, e.g., [meylex] (= מֶלֶךְ) ‘king’, [keyver] (= קֶבֶר) ‘grave’, etc. The variations between [o] and [u], on the one hand, and [ei] and [ai], on the other, in Ashkenazi Hebrew were reflections of the local dialects of Yiddish. At approximately the same period as these vowel shifts took place in the vernacular dialects, the scribes in Ashkenaz began to make an association between the newly developed vowel distinctions and the Tiberian vowel signs.

What is of particular interest is that in the biblical reading tradition mismatches between the sign system and the pronunciation were adjusted, e.g. *pataḥ* was always read with the [a] quality, even where it was pronounced as [o] or [u] due to the sound shift of [a] in stressed open syllables in the Hebrew component of Yiddish, e.g. [kadoxes] (= קָדֹחַס). The written sign system, therefore, had an impact on the biblical reading tradition, in that there was an attempt to assign a particular phonetic value to each sign.¹⁴⁰

This development of the Ashkenazi reading in the late Middle Ages reflects the primacy of the authority of the written sign system over the oral reading tradition. Such a phenomenon should be contrasted with the situation in the Masoretic period, when the oral Tiberian reading tradition of particular Masoretes had primary authority and the sign system underwent a constant adaptation to reflect it.

We may identify a typological parallel here between the developments after the destruction of the Second Temple and those that occurred after the demise of the Tiberian Masoretic school. Before the destruction of the Temple, there was a stabilized proto-Masoretic text within a pluriformity of other textual traditions. After the destruction of the Temple the prestigious proto-Masoretic text gained general acceptance. The diversity reflected by the pluriform biblical manuscripts from Qumran was replaced by a uniform prestigious text that was read with a pluriformity of oral reading traditions, of which one, the Tiberian tradition, was regarded as the most prestigious. After the dispersal of the Tiberian school, the pluriform written

¹⁴⁰ Weinreich (1965), Eldar (2013).

vocalization sign systems reflecting the different oral reading traditions were gradually replaced by a uniform prestigious vocalization system that was read with a pluriformity of oral reading traditions. In both cases, there was a punctuation in Jewish society involving the loss of a central prestigious body that was responsible for the stabilization of the transmission of the Hebrew Bible. In the first century C.E., this was the destruction of Temple. In the tenth century C.E., it was the loss of the Tiberian Masoretic school. In both cases, after the ongoing activity of stabilization ceased, the tradition reached completion and became fossilized. In both cases, the written tradition, of the text or of the vocalization system respectively, gained general acceptance.

I.0.13. SOURCES FOR THE TIBERIAN PRONUNCIATION TRADITION

The early model Tiberian Bible codices are an important starting point for the reconstruction of the Tiberian pronunciation tradition. Various additional sources, however, are crucial for establishing many aspects of pronunciation that are not discernible in these codices. In this section, we shall review these additional sources.

I.0.13.1. Masoretic Treatises

A number of important details relating to pronunciation can be found in a variety of treatises written by Tiberian Masoretes or by scholars close to their circle who had direct access to the Tiberian Masoretic tradition.

A number of early Masoretic treatises that are written in rhymed Hebrew and preserved mainly at the end of the medieval Tiberian Bible codices contain material relating to pronunciation. Many of these were published by Baer and Strack (1879). They relate to selected issues concerning vocalization and accents, particularly the *shewa* and *ga'ya*. In some cases, they go beyond description and offer explanatory rules for differences based on their context of occurrence. Some of the Hebrew texts gathered by Baer and Strack, furthermore, concern topics relating to grammatical theory, such as the classification of consonants according to their points of articulation, or according to whether they are 'radical' or 'servile' letters, the distinction between construct and absolute forms, the distinction between contextual and pausal forms, and verbal tenses.

Baer and Strack attributed the majority of the texts in their corpus to a Masoretic treatise known as *Diqduqe ha-Te'amim* (see below for meaning) by the Masorete Aharon ben Asher (tenth century), although they did not clearly delineate the scope of the treatise. Dotan (1967) made a thorough study of such texts and concluded that the original treatise of Ben Asher contained twenty-six sections, which are reproduced in a fixed order in some manuscripts. Other sections, of unknown authorship, were subsequently added to these in various manuscripts. The work was not intended as a systematic collection of rules relating to the accents, but only as a treatment of selected details that were regarded as potentially problematic. This is reflected by the name of the work *Diqduqe ha-Te'amim*, which can be rendered 'The Fine Details of the Accents'. The work also includes discussions of

some aspects of vocalization, in particular of the *shewa*. Dotan argues that Aharon ben Asher incorporated some of the material of *Diqduqe ha-Ṭe'amim* from earlier Masoretic collections. This probably explains why the work is in Hebrew, since in the tenth century Masoretic treatises were generally written in Arabic. The source material for the work is likely to have been composed in the ninth century.

A number of Arabic Masoretic treatises are extant that are datable to the tenth century. Most of these concern the biblical reading tradition and its phonological principles. In some cases, a number of the technical terms and even sections of the text itself are in Hebrew. These Hebrew elements may be regarded as vestiges from the earlier Hebrew tradition of Masoretic treatises. Some of the texts datable to the tenth century include treatises on vowels and the *shewa*, such as those identified by Allony as *Kitāb al-Muṣawwītāt* 'The Book of Vowels' (Allony 1963) and *Seder ha-Simanim* 'The Order of Signs' (Allony 1965). These two treatises offer explanations for the distinction between vowels based on factors such context and placement of stress, and develop many of the topics that are found in the *Diqduqe ha-Ṭe'amim*. In some cases, the explanations for distinctions in vowels is correlated with semantic distinctions, which is a level of functional explanation not found in earlier texts. The functional concern of the work is also clear in the title of one of the extant sections of the text *ʿilal al-muṣawwītāt* 'the reasons for the vowels' (Morag 2003, 251–52). An Arabic treatise devoted to the *shewa* that is datable to the tenth century was published by Levy (1936). This develops an analysis of the *shewa* based on a

theory of syllable structure. The treatise warns that mistakes in reading *shewa* can lead to the corruption of the form of words and, in general, has a pedagogical tone. This reflects the fact that the correct transmission of the Tiberian reading still depended on a tradition of teaching even after the details of the Tiberian Masora had been committed to writing (Eldar 1994, 3–8; Khan 2012, 3–4).

Allony (1973) published a fragment of an Arabic treatise on consonants, which he attributed to ‘Eli ben Yehudah ha-Nazir. This also appears to be datable to the tenth century. The extant text is concerned mainly with the pronunciation of the letter *resh*. A remarkable feature of this text is the reference by the author to the fact that he undertook fieldwork in the streets of Tiberias to verify his analysis of the *resh* in Tiberian reading, on the grounds that *resh* had the same pronunciation in the local speech of the (Jewish) inhabitants of Tiberias: “I spent a long time sitting in the squares of Tiberias and its streets listening to the speech of the common people, investigating the language and its principles, seeing whether anything that I had established was overturned or any of my opinions proved to be false, in what was uttered with regard to Hebrew and Aramaic etc., that is the language of the Targum, for it resembles Hebrew ... and it turned out to be correct and accurate”. The interpretation of this is not completely clear. The Aramaic mentioned by the author could have been vernacular Aramaic that was still spoken in Tiberias at the time. The Hebrew must have been the recitation of Hebrew liturgy or the occurrence of a ‘Hebrew component’ (Hebrew words and

phrases) within vernacular speech. Drory (1988, 33–35) suggested that this report of fieldwork may have been an imitation of the topos in the medieval Arabic grammatical literature of verifying grammatical phenomena by carrying out fieldwork among the Bedouin Arabs, who were deemed to be speakers of ‘pure Arabic’, the inhabitants of Tiberias being the corresponding tradents of pure Hebrew. A Hebrew treatise concerning the *resh* is found also in the corpus published by Baer and Strack (1879, §7), in which it is likewise stated that this pronunciation existed in the conversational speech of the common people (והוא קשור (בלשונם אם יקראו במקרא ואם ישיחו בשיחתם והוא בפי האנשים והנשים ובפי הטה ‘it is on their tongues, whether they read the Bible or converse in their conversation, in the mouths of men, women, and children’).

The authorship of these works on Tiberian pronunciation cannot be established with certainty, although Allony, who published many of them, attributed them to various medieval scholars who are known from other sources. In most cases, there is no decisive evidence for these attributions and they should be treated with caution (Eldar 1986). It has been argued by Eldar (1988) that the treatise on the *shewa* published by Levy (1936) and *Kitāb al-Muṣawwītāt* ‘The Book of Vowels’ published by Allony (1963) are parts of the same work.

An important work composed in the eleventh century was the *Hidāyat al-Qārī* ‘The Guide for the Reader’. This work was studied in detail by Eldar, who published sections of it (see, in particular, Eldar 1994 and the references cited there). It can be classified as a Masoretic treatise, although, unlike the treatises

discussed above, the *Hidāyat al-Qāri'* was composed several decades after the time in which the final Tiberian Masoretic authorities, Ben Asher and Ben Naftali, were active. Its author was the Karaite grammarian 'Abū al-Faraj Hārūn, who was based in Jerusalem in the first half of the eleventh century (Khan 2003). Although he did not have direct contact with the Masoretes of the tenth century, he did have access to teachers of the Tiberian reading tradition, who could still be found in Palestine in the eleventh century, in addition to the Masoretic treatises of earlier generations. 'Abū al-Faraj produced the work in a long and a short version. The long version, which was composed first, contains more expansive theoretical discussions. The short version became more popular, as is reflected by the greater number of extant manuscripts. The work presents a systematic description of the consonants, vowels (including *shewa*), and accents. It was divided into three parts, part one being devoted to the consonants, part two to the vowels, and part three to the accents. The *Hidāyat al-Qāri'* was conveyed beyond the confines of Palestine to Yemen and to Europe. The long version was transmitted to Yemen, probably in the thirteenth century. Two abridgements were made of this in Yemen, one in Arabic (ed. Neubauer 1891) and one in Hebrew (ed. Derenbourg 1871). Each of these was known as *Maḥberet ha-Tījān* 'The Composition of the Crowns', since they were copied at the beginning of Bible codices known as 'crowns' (Arabic *tījān*) (Eldar 1994, 15–16).¹⁴¹ The short version of *Hidāyat al-Qāri'* found its way to central Europe

¹⁴¹ Another derivative Arabic version was published in Ginsburg's (1885, 43–51) corpus of Masoretic material.

and two full Hebrew translations were made of it. One was made in Mainz and was given the title *Horayat ha-Qore* ‘Guide for the Reader’ in the manuscripts, the earliest being datable to the thirteenth century. The other translation was given the title *Tokhen ‘Ezra* ‘The Ruling of Ezra’ in a manuscript dated 1145 and the title *Ṭa‘ame ha-Miqra* ‘The Accents of the Bible’ in a manuscript dated 1285–1287. Both copies were made in Italy. In the version entitled *Ṭa‘ame ha-Miqra* the work is erroneously attributed to the Spanish grammarian Yehudah ibn Bal‘am (Busi 1984; Eldar 1994, 16–18).

The sections on the consonants and vowels in *Hidāyat al-Qāri*’ are of great importance for the reconstruction of the Tiberian pronunciation tradition. This applies in particular to the original Arabic long and short versions. So far, no full edition of these is available. I have, therefore, included a critical edition of the sections on consonants and vowels of the Arabic versions of *Hidāyat al-Qāri*’ together with a facing English translation as a supplementary volume to this book. Eldar (2018) has recently published the section on the accents from the Arabic versions.

I.0.13.2. Masoretic Notes

The Masoretic notes in the margins of Bible codices occasionally contain information about the pronunciation of the reading tradition that supplements what is encoded in the vocalization sign system. This applies in particular to notes that relate to vowel length. The Masoretic note קצר ‘short’, for example, occurs in places where there may be some doubt as to whether a vowel is long or short, as in:

- L: זָכֹרָה ‘remember!’ (2 Chron. 6.42). Masoretic note: לַ חֹטֵף בְּסִיפֹ ‘the only form in the book in which the vowel is short’, i.e. it is an imperative with a short *qameṣ* and not a 3fs. past verbal form, which would have had a long *qameṣ*.
- A: רַבְבוֹת ‘ten thousands of’ (Deut. 33.17). Masoretic note: חֹטֵף ‘short’, i.e. the *hireq* is short here, in contrast to cases with *ga‘ya*, such as רַבְבוֹתָ (Num. 10.36), in which the *hireq* is long.

I.0.13.3. Karaite Transcriptions of the Hebrew Bible into Arabic Script

In the tenth and eleventh centuries C.E., many Karaite scribes in the Middle East used Arabic script not only to write the Arabic language but also to transcribe Hebrew. Such Hebrew texts in Arabic transcription were predominantly Hebrew Bible texts. These were sometimes written as separate manuscripts containing continuous Bible texts. Some manuscripts in Arabic script contain collections of Biblical verses for liturgical purposes. Arabic transcriptions of verses from the Hebrew Bible or individual Biblical Hebrew words were, in many cases, embedded within Karaite Arabic works, mainly of an exegetical nature, but also in works of other intellectual genres. Several Karaite Arabic works also contain Arabic transcriptions of extracts from Rabbinic Hebrew texts (Tirosh-Becker 2011). The Karaites transcribed into Arabic script only texts with an oral reading tradition, as was the case with the Hebrew Bible and Rabbinic texts in the Middle Ages. The transcriptions reflect, in principle, these oral traditions. It is for this reason that the transcription of the Hebrew Bible

represents the *qere* (the orally transmitted reading tradition of the text) rather than the *ketiv* (the written tradition) (Khan 1992b).

Most of the known manuscripts containing Karaite transcriptions of Hebrew into Arabic script are found in the British Library (Khan 1993), the Firkovitch collections of the National Library of Russia in St. Petersburg (Harvainen 1993a), and in the Cairo Genizah collections (Khan 1990a). These manuscripts emanate from Palestinian circles of Karaites or Karaites in Egypt who had migrated to Egypt from Palestine after the capture of Jerusalem by the Crusaders in 1099. The majority of them were written in the tenth and eleventh centuries. Most of the transcriptions of Biblical Hebrew reflect the Tiberian reading tradition. The transcriptions, therefore, are an important source for the reconstruction of this reading tradition. The Karaites represented a movement within Judaism and were closely associated with the Tiberian Masoretes (§I.0.4.). The tradition of Biblical Hebrew reflected by their texts is not a separate communal tradition comparable, for example, to that of the Samaritans.

The Karaite Hebrew grammarians of the tenth and eleventh centuries were, in general, concerned with the reading tradition (*qere*) reflected by the Tiberian vocalization signs and showed little concern for the orthography of the written text (*ketiv*) (Khan 2000b; 2003; 2013b). The Karaite al-Qirqisānī, in his discussions of the bases of authority for the Hebrew Bible, contended that the ultimate authoritative source was the reading tradition of the people of Palestine (by which he meant Tiberias), rather than the written form of the text with orthographic inconsistencies. One

of his justifications was that the reading tradition had been transmitted by the whole community (*ʿumma*) since the time of the prophets whereas the written orthography had been transmitted on the authority of small circles of scribes, which is, therefore, more liable to corruption or wilful change (Khan 1990c). The Arabic transcription texts can be understood most easily as a reflection of the priority that the Karaites gave to the reading tradition.

I.0.13.4. Grammatical and Lexicographical Texts

Some of the early works on Hebrew grammar were written by scholars who had knowledge of the pronunciation of Hebrew in the Tiberian reading tradition. All these were written in the Middle East in the tenth and eleventh centuries at the end of the Masoretic period. As has been remarked, the grammarians of Spain did not have direct access to the Tiberian reading tradition, despite their extensive discussion of vocalization and phonology in a number of their works.

The grammatical works written by grammarians with a knowledge of the Tiberian reading tradition can be classified into the works of Saadya Gaon and the works of Karaites.

The grammatical writings of Saadya contain elements taken from the Masoretic tradition (Dotan 1997). After leaving Egypt, Saadya spent a few years in Tiberias studying with the Masoretes. According to Dotan, he composed his main grammar book (*Kitāb Faṣīḥ Luġhat al-ʿIbrāniyyīn* ‘The Book of the Eloquence of the Language of the Hebrews, also known as *Kutub al-Luġha*

‘Books of the Language’) while he was in Tiberias during the second decade of the tenth century. The surviving sections of the work include not only treatments of grammatical inflection and word structure, but also several chapters relating to the Tiberian reading tradition. The material for some of these has clearly been incorporated from the Masoretic tradition and direct parallels can be found in the extant Masoretic treatises, such as *Diqduqe ha-Te’amim* (Dotan 1997, 34–36). Dotan, indeed, suggests that one of the missing chapters may have been concerned specifically with accents. We may say that Saadya’s grammar book is not a product of collaboration with the Masoretes or a complementary expansion of the scope of Masoretic teaching, but rather was intended to stand apart from the Masoretic tradition.

The grammatical texts written by the Karaites, on the other hand, reflect a closer association with Masoretic activities, in that they were intended to complement the Masoretic treatises rather than incorporate elements from them. Several grammatical works have come down to us that were written by Karaite scholars who had direct access to the Tiberian reading tradition. These can be divided into works reflecting the early Karaite grammatical tradition and those written by the grammarian ʿAbū al-Faraj Hārūn together with texts dependent on ʿAbū al-Faraj’s works. The main source for the early Karaite grammatical tradition is the grammatical commentary on the Bible of ʿAbū Yaʿqūb Yūsuf ibn Nūḥ, known as the *Diqduq*, which was composed in Jerusalem the second half of the tenth century. ʿAbū al-Faraj’s works are datable to the first half the eleventh century and were, likewise, written in Jerusalem (Khan 2003). The *Diqduq* of Ibn Nūḥ

contains some discussion of pronunciation and accents, but this is usually related to some issue regarding linguistic form. The *Diqduq* was intended, it seems, to complement such treatises as *Diqduqe ha-Te'amim*, the exclusive concern of which was pronunciation and accents.

ʾAbū al-Faraj Hārūn ibn Faraj wrote several works on the Hebrew language. The largest of these is a comprehensive work on Hebrew morphology and syntax consisting of eight parts entitled *al-Kitāb al-Mushtamil ʿalā al-ʾUṣūl wa-l-Fuṣūl fī al-Lughā al-ʾIbrāniyya* ‘The Comprehensive Book of General Principles and Particular Rules of the Hebrew Language’ (Bacher 1895b; Khan 2003). ʾAbū al-Faraj subsequently wrote a short version of this entitled *al-Kitāb al-Kāfi fī al-Lughā al-ʾIbrāniyya* ‘The Sufficient Book concerning the Hebrew Language’, the entire text of which has been edited with an English translation (Khan, Gallego, and Olszowy-Schlanger 2003). The works of ʾAbū al-Faraj were radically different from the *Diqduq* of Ibn Nūḥ in their approach. There was, nevertheless, a certain degree of continuity of grammatical thought from the teachings of the earlier Karaite grammarians in the works of ʾAbū al-Faraj, which can be found especially in some of his theories of morphological structure. This continuity can be identified also in the scope of his grammatical works and their complementarity to the Masoretic treatises. The subject matter of *al-Kitāb al-Mushtamil* and his other grammatical works includes mainly the description of morphology and syntax. There is no systematic description of pronunciation or the accents. As we have seen, ʾAbū al-Faraj devoted a separate work to this topic, viz. the *Hidāyat al-Qāriʾ* ‘The Guide for the Reader’.

This was intended by him to complement his work on grammar. It was conceived as a continuity of earlier Masoretic treatises on pronunciation and accents, which were among his sources, as ʾAbū al-Faraj states in his introduction to the work. Thus the composition of *Hidāyat al-Qāri* by ʾAbū al-Faraj separately from his grammatical works may be explained as a continuation of the complementarity between grammatical and Masoretic treatises that existed among the Karaite grammarians of the previous generation (Khan 2014).

A number of valuable observations about the Tiberian pronunciation tradition are found in the extensive lexicographical work written in Palestine in the tenth century by the Karaite scholar David ben Abraham al-Fāṣī known as *Kitāb Jāmiʿ al-ʾAlfāẓ* ‘Book of the collection of words’ (ed. Skoss 1936).

I.0.13.5. Commentaries on *Sefer Yešira*

Sefer Yešira is a mystical work of cosmology and cosmogony that came to form part of the literature of the Qabbalah. It describes God’s creation of the world by means of the ten cosmic numbers (*sefirot*) and the twenty-two letters of the Hebrew alphabet (Gruenwald 1971). Scholars differ widely regarding the date of its composition. Gershom Scholem (1965, 158–204) believed it was written in Palestine in the Tannaitic period (second to third centuries C.E.) with some post-Talmudic additions, whereas Bravmann (1934, 29) and Allony (1972; 1982b; 1982a) argued that it was composed in the eighth or ninth century, due to the fact that it contains features that he identified as the result of influence from Arabic grammatical thought in the Islamic period.

The fact that *Sefer Yešira* is already referred to in the *Baraita d-Shmuel* and the poems of Eleazar ha-Kallir (c. sixth century) (Scholem 2007, 330) suggests that such passages are later additions to the original work. Weinstock (1972) argues that a variety of historical layers can be identified in the text, ranging from the Tannaitic period until the tenth century C.E. Hayman (2004, 5) also identifies layers in the text, but is reluctant to accept the early dating of Weinstock.

The work is extant in two main versions, one short and one long, without major divergences in ideas between them. On account of its focus on letters of the Hebrew alphabet, the work is of some importance for the history of the Hebrew language. It contains, for example, a classification of the letters according to their places of articulation in the mouth. It is not accurate, however, to identify the work as the first composition on Hebrew grammar and orthography, as was proposed by Mordell (1914). The inclusion of the letter *resh* together with בגדכפת in a list of the letters that have hard and soft realizations has been interpreted as reflecting a Babylonian rather than Tiberian tradition of pronunciation (Morag 1960). Numerous commentaries were written on work from the tenth century onwards, which made expositions of its laconic and enigmatic text. It is in some of these commentaries that one can find information about the Tiberian reading tradition. The two extant commentaries that are relevant in this respect are those of Saadya Gaon and Dunash ibn Tamīm, both written in the tenth century in Arabic. Saadya wrote a philosophical commentary on the long version of *Sefer Yešira* in 931

when he was Gaon in Iraq (ed. Lambert 1891). As has been remarked, Saadya was familiar with the Tiberian reading tradition and makes reference to it in several places in this commentary. ʾAbū Sahl Dunash ibn Tamīm made a commentary on the short version in 955/6 in Kairouan. Fragments of the Arabic original have been discovered in the Genizah (Vajda 1954; 1963). Several later revisions were made, mainly in Hebrew (e.g. ed. Grossberg 1902). The commentary is apparently based on the lectures of Dunash's teacher, Isaac Israeli, who is said to have known the Tiberian reading tradition.

I.0.13.6. Non-Standard Tiberian Systems of Vocalization

There are a variety of extant medieval manuscripts of the Hebrew Bible that are vocalized with Tiberian signs but do not follow the standard Tiberian system of vocalization. These manuscripts exhibit numerous differences among themselves, though certain tendencies are observable. Some of the differences from the standard Tiberian vocalization can be interpreted as reflecting stages of development different from the one exhibited by the standard system, some more primitive and some more advanced, in particular in the use of the *dagesh*, *rafe*, *shewa* and *ḥatef* signs.¹⁴² Other differences from standard Tiberian reflect a different pronunciation tradition, the most conspicuous feature being the interchange of *segol* and *ṣere*, on the one hand, and *pataḥ* and *qameṣ*, on the other. Manuscripts exhibiting such interchanges have been interpreted as reflecting the Palestinian

¹⁴² See Khan (1991, 856; 2017b).

pronunciation tradition, since similar interchanges are found in manuscripts with Palestinian vocalization. The interchanges are, however, inconsistent across the extant manuscripts and they appear to reflect a variety of types of pronunciation with minor differences.

The Non-Standard Tiberian type of vocalization has been found in biblical manuscripts written in medieval Europe, in both Ashkenaz and Italy.¹⁴³ The best known European biblical manuscript of this type is Codex Reuchlinianus, written in Karlsruhe in 1105 CE.¹⁴⁴ A range of manuscripts with Non-Standard Tiberian vocalization that were written in the Middle East were discovered in the Cairo Genizah by Kahle (1930, vol. 2), who published descriptions of some of them. Descriptions of other Genizah fragments were subsequently made by other scholars, in particular Díez Macho (1956; 1963; 1971), Murtonen (1961) and Revell (1969). Further work has been carried out by Blapp (2017; 2018) and Arrant (2020) on the Bible fragments with Non-Standard Tiberian vocalization from the Genizah at the University of Cambridge.

The wide distribution of the non-standard type of Tiberian vocalization in many medieval manuscripts written in Europe led Kahle to believe that it must have been associated with a major

¹⁴³ See Sperber (1956-1959). Additional manuscripts of this type from Italy are described by Pilocene (2004).

¹⁴⁴ Cod. Reuchlin 3 of the Badische Landesbibliothek in Karlsruhe; cf. Sperber (1956-1959), Morag (1959). This type of vocalization is also found in liturgical manuscripts from medieval Ashkenaz (Eldar 1978) and some manuscripts of the Mishnah (Heijmans 2013b).

stream of Masoretic tradition that is traceable in the Masoretic sources. A common feature of the manuscripts is the vocalization with *hireq* before *yod* in contexts such as לִישָׁרָאֵל where standard Tiberian generally has *shewa* followed by *yod* with *hireq* (לִישָׁרָאֵל). As we have seen, this is recorded in Masoretic treatises as a distinctive practice of Ben Naftali. For this reason, Kahle held that this vocalization type was associated with the tradition of Ben Naftali.¹⁴⁵ In reality, however, the manuscripts with Non-Standard Tiberian vocalization contain numerous features that are not attributed to Ben Naftali or Ben Asher in the Masoretic lists, such as the extended use of *dagesh* and *rafe* and the interchange of *qameṣ* and *pataḥ*, on the one hand, and *segol* and *ṣere*, on the other. The attribution of the system to the Ben Naftali school was subsequently followed by Prijs (1957). Díez Macho (1956; 1963) maintained that the vocalization had its roots in the Ben Naftali school but had undergone further development, and so he terms it ‘Pseudo-Ben Naftali’. Morag (1959) argues against the attribution of the system to the Ben Naftali school and terms it ‘Fuller Palestinian’. Dotan (2007, 645) believed that the vocalization was a continuation of the Palestinian vocalization. Allony (1964) termed the vocalization ‘Palestino-Tiberian’ on account of the fact that in many cases, as remarked, they reflect a Palestinian type of pronunciation. It is known that this type of pronunciation existed in medieval Ashkenaz before the fourteenth century. The term Palestino-Tiberian has been widely accepted (Eldar 1978;

¹⁴⁵ He was following in this respect the identification by Delitzsch of the non-standard features of the Codex Reuchlinianus with the Ben Naftali tradition; see Baer and Delitzsch (1890, ix) and Ginsburg (1897, 640).

Heijmans 2013b). Yeivin (1980; 1983), however, preferred the term ‘Extended Tiberian,’ on account of the fact that the vocalization system in many of the manuscripts extends some of the principles found in the standard Tiberian vocalization, such as the use of the *dagesh*, *rafe* and *ḥatef* signs. It is this development of principles of standard Tiberian vocalization as well as the reflection of these principles in a less advanced stage of development in the corpus of Non-Standard Tiberian manuscripts that will be of particular interest to us in this book. I shall refer to the various vocalization systems of this type by the generic term Non-Standard Tiberian, following Blapp (2017, 2018) and Arrant (2020).

Despite the wide attestation of the Non-Standard Tiberian system of vocalization in manuscripts written in the Middle East that are preserved in the Genizah and in manuscripts written Europe in the High Middle Ages, in both Ashkenaz and Italy,¹⁴⁶ it never had the same status as the standard Tiberian system and it eventually fell into disuse. The existence of large numbers of manuscripts with Non-Standard Tiberian vocalization indicates that during the Masoretic period and for a period of time immediately following it, a pluriformity of Tiberian vocalization existed. Within this pluriformity the standard Tiberian system was regarded as the most prestigious, due to its association with the oral traditions of the Masoretic authorities, but there was no systematic attempt to replace the Non-Standard Tiberian sign systems. Indeed many of the manuscripts with Non-Standard

¹⁴⁶ See Sperber (1956-1959). Additional manuscripts of this type from Italy are described by Pilocene (2004).

Tiberian vocalization have a monumental codicological form (Arrant 2020). It was only after the primary base of authority passed from the oral traditions of the Masoretes to the written vocalization that textualized these traditions that the standard Tiberian vocalization gradually began to replace the Non-Standard Tiberian sign systems, and indeed also other non-Tiberian sign systems.

I.0.13.7. The Tiberian Reading Tradition in Babylonian Vocalization

As remarked (§I.0.9.), due to the prestige of the Tiberian reading tradition, there was a tendency for other reading traditions to converge with it. As a result, non-Tiberian systems of vocalization were sometimes used in manuscripts to represent the Tiberian tradition. The vocalization in such manuscripts cast light on several aspects of Tiberian pronunciation. Of particular importance are manuscripts that represent the Tiberian tradition with a system of Babylonian signs known as ‘compound Babylonian vocalization’. The ‘compound system’ of Babylonian vocalization distinguished between long and short vowels, in that it marked short vowels in open and closed syllables by the use of different signs from those used to indicate long vowels. This system, therefore, is helpful for the reconstruction of vowel length. The longest and best known extant manuscript that represents the Tiberian reading with this compound system of Babylonian signs is the manuscript I Firkovitch Evr. I B 3 of the National Library of Russia, which is generally known as *Codex Babylonicus Petropolitanus*. This was published in facsimile by Strack

(1876) and is a major source for the reconstruction of Tiberian pronunciation (see, for example, A. Ben-David 1957a).

I.0.13.8. Tiberian Signs Used to Represent Other Languages

In the Middle Ages, Tiberian vocalization signs were used in manuscripts written in a variety of Jewish languages other than the canonical biblical languages of Hebrew and Aramaic. Those emanating from the medieval Middle East include manuscripts in Judaeo-Arabic (Blau and Hopkins 1985; Khan 1992a; 2010; 2017a), Judaeo-Persian (Shaked 1985, 35–37) and Judaeo-Greek (de Lange 1996). Of particular importance in this context are the medieval vocalized Judaeo-Arabic manuscripts, since many of these reflect the use of the vocalization signs with the phonetic and syllabic value that they had in the Tiberian reading tradition. This indicates that they were written when the Tiberian pronunciation was still a living tradition. Many of these vocalized Judaeo-Arabic manuscripts have been preserved in the Cairo Genizah. The vowel signs in vocalized Judaeo-Arabic manuscripts from the later Middle Ages, by contrast, do not reflect the Tiberian pronunciation, since by that period it had fallen into oblivion.