וַאֲנִ֗י לֹ֤א אָחוּס֙ עַל־

הָעִ֣יר הַגְּדוֹלָ֔ה אֲשֶׁ֣ר

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*The System of Masoretic Accentuation:
Some Introductory Issues*

THE SYSTEM OF MASORETIC ACCENTUATION: SOME INTRODUCTORY ISSUES*

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1. INTRODUCTION

This article about the Masoretic accents we will start with an enigmatic verse. Isa 56:9 can be interpreted in different ways. In the discussion about its interpretation, the Masoretic accentuation plays a role.

כֹּל חַיְתוֹ שָׂדָ֑י אֵתָ֥יוּ לֶאֱכֹ֖ל כָּל־חַיְת֥וֹ בַּיָּֽעַר׃

It is beyond doubt that the verse summons "all the wild animals of the field" (כֹּל חַיְתוֹ שָׂדָי) to come in order to eat (אֵתָיוּ לֶאֱכֹל). But what is the function of the final words of the verse? Did the prophet really invite the animals of the field to devour the other animals, namely כָּל־חַיְתוֹ בַּיָּעַר, "all the wild animals in the forest"? This awkward interpretation is found in the Peshitta and occurs also with Rashi, Ibn Ezra and David Kimḥi. Referring to the *atnaḥ* under שָׂדָי, which marks the main division of the verse, David B. Freedman and Miles B. Cohen argued that the Masoretic accentuation expresses the same interpretation (1974: 36–37).

Freedman and Cohen assumed that the accentuation provides additional information about the Masoretic interpretation of this verse. With reference to the "disjunctive" (separating) accent *ṭifḥa* under the second occurrence of חַיְתוֹ, they argued that the Masoretes regarded this word as an absolute form and not as the *nomen regens* in a construct chain (Freedman and Cohen 1974: 37). According to this interpretation, the syntax differs

from the construction כָּל חַיְתוֹ שָׂדָי at the beginning of the verse, where חַיְתוֹ is the *nomen regens* and שָׂדָי is the *nomen rectum*: "wild animals *of* the field." Freedman and Cohen seem to have doubted whether this alleged Masoretic interpretation is correct. They rightly pointed out that David Kimḥi already knew that a *nomen rectum* in a construct chain could begin with a preposition, as in Judg 8:11: הַשְּׁכוּנֵי בָאֳהָלִים, literally: "the dwellers *of in* the tents" (see Freedman and Cohen 1974: 37).

Freedman and Cohen's use of the accentuation raises questions. Was it really the intention of the Masoretes to provide such syntactical information by means of the accents? Or is the purpose of the accents actually quite different (Yeivin 1980: 178, § 212; de Hoop 2009: 457–58)? According to the usual interpretation of Isa 56:9, not only "all the wild animals of the field," but also "all the wild animals in the forest" are summoned to eat: "All you wild animals of the field, come to eat, (and also) all you wild animals in the forest!" (cf. Vulgate; Targum Jonathan [TJ]).[1] Is it still possible that the Masoretes read this verse in a similar fashion?

Obviously, these questions regarding the interpretation of the accentuation of Isa 56:9 concern the interpretation of the accentuation in general. If we assume that the accents were introduced to reveal syntactical structure, we encounter several peculiarities, such as the frequent occurrence of "conjunctive" (non-separating) accents at the end of an introduction to direct speech. A good example occurs in the following text,

| Isa 41:26a | מִי־הִגִּיד מֵרֹאשׁ וְנֵדָעָה |
| | וּמִלְּפָנִים וְנֹאמַר צַדִּיק |

Who declared it from the start, [p] *so that we might know,* [z]
and beforehand, [t] *so that we might say, 'he is right'?* [a].[2]

The word וְנֹאמַר, "so that we might say," has been provided with the conjunctive accent *munaḥ*, not with the disjunctive accent that we might expect.

Scholars who refer to the Masoretic accents tend to do so in very different ways. Therefore, the question of how the accents should be interpreted arises again and again. Which function did the accents originally have? How important and reliable are these accents? Must we not take into account that they were added to the consonantal text only between the eighth and tenth centuries C.E.? If these questions are not adequately answered, the accentuation may give rise to scepticism. Diana Edelman cast doubt on "the ability of the Masoretic accent system to preserve accurately ancient traditions concerning how the text was to be read or sung" (Edelman 1993: 309). Similar sceptical remarks

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[1] Septuagint is uncertain, since πάντα τὰ θηρία τοῦ δρυμοῦ may be understood as nominative but also as accusative.

[2] In the English translation of this verse, we indicate where disjunctive (separating) accents occur by means of letters between square brackets. A list of sigla is provided in the Appendix at the end of this article (p. 53–4 below).

were made by James Kugel (1981: 113–16), Pieter van der Lugt (2001: 340), and Eugene Ulrich (2003). Marjo Korpel went a step further when she called attention to "the circumstance that this sophisticated system was introduced towards the end of the first millennium only and finds no support whatever in the pre-Masoretic manuscripts and the oldest Greek, Syriac and Latin manuscripts" (Korpel 2000: 37).

The goal of this paper is to address these introductory issues concerning the origin, function, and relevance of the Masoretic accentuation. First, we will describe the attitude towards the Masoretic accentuation of the past decades (Section 2). Thereafter, we will clarify some of the terminology involved (Section 3) and show in which texts the Masoretic accents were used in addition to the Hebrew Bible (Section 4). Section 5 offers a discussion of the original purpose and function of the Masoretic accentuation.

Since a set of "accentual phrasing rules" is still missing (Strauss Sherebrin 2013: 300), it is appropriate to continue with an outline of what those rules may imply (Section 6). The historical background of the Tiberian accentuation system is the subject of Section 7, which includes a description of its relationship with the other Masoretic traditions (Babylonian and Palestinian). This is followed by an analysis of how the Tiberian Masoretic system evolved into the twofold system of accents, namely a subsystem in the Three Books (Psalms, Job 3:2–42:6, Proverbs), the so-called "poetic" accents, and a different subsystem in the so-called Twenty-one Books (Samuel, Kings, Chronicles, Ezra-Nehemiah, and the twelve Minor Prophets, are each counted as one Book; cf. Wickes 1887: iii, n. 1), the so-called "prose" accents (Section 8). The article ends with our conclusions (Section 9).

2. LIMITED INTEREST

The text of the Hebrew Bible as we know it from our printed editions is the result of a long history. In the course of this history, a number of elements were added to the consonantal text in order to facilitate the recitation of the text and to prevent interpretations that had been rejected. Crucial in the course of this tradition were the Tiberian Masoretes, who devoted themselves to preserving the ancient traditions of writing and reading the Hebrew Bible (Khan 2013: 1–12; 2020: 14–115; also, Tov 2012: 24–26).

Originally, the text consisted only of consonants and did not contain any vowels, or other signs, or notes. Yet, at the beginning of the common era the division of the text was already a matter of concern. Larger textual units had been delimited by predecessors of the *pᵉtuḥot* and *sᵉtumot*, and during the Middle Ages this tradition was developed further (see Oesch 1979: 4–9, 325–46; Yeivin 1980: 39–42; Olley 1998; Korpel 2000: 2–13). Moreover, especially in poetry smaller textual units were marked by relatively narrow blank spaces. At a later stage, stricter rules were developed as to how certain poetic texts should be written. Part of these later divisions correspond to the division indicated

by the Tiberian accentuation (Sanders 1996: 102–19; 2000; 2002; 2014; Sanders & de Hoop forthcoming).

In the course of transmission of the Biblical text, different "schools" developed different methods for displaying the vocalisation, accentuation, and Masoretic notes. In addition to the school of the Tiberian Masoretes, there were at least two other traditions, namely the Babylonian school and the Palestinian school. The punctuation system developed by the Babylonian Masoretes is the oldest that has survived. Until the tenth century C.E., the Babylonian system was widespread, but then it was gradually replaced by the Tiberian tradition, which has remained the dominant one (Shoshany 2013: 268). The vocalisation, accentuation and Masoretic notes in the Aleppo Codex and Leningrad Codex[3] are the work of the Tiberian Masoretes who step by step developed and inserted their distinctive tradition from the eighth to the tenth centuries C.E. As Aron Dotan (1987: 355) indicated, the Tiberian system is sometimes regarded as a single comprehensive and monolithic whole that was introduced all at once. Rather, the elements appear to have developed gradually (Dotan 1981: 99). This development took place over a period of about a thousand years from the beginning of the common era, continuing until the beginning of the second millennium.

While the most well-known of the secondary additions to the consonantal text are the vocalisation and the other graphemes important for the correct pronunciation (*dageš*, *mappiq*, *maqqef*, etc.), the Masoretic accents receive less attention. The accentuation was foreign to scholars from a Christian or humanistic background, trained as they were in Latin or other scripts. On the other hand, scholars from the Jewish tradition were familiar with the system, which played a role in the recitation of the text in synagogal and private reading. However, they saw no urgent need to investigate the system thoroughly or to study its original purpose. A number of studies were published with regard to the accentual "system," "syntax" or "grammar," but the sum of these studies was meagre. This was aptly observed by Aron Dotan (1970: vii):

> Throughout the ages, the Biblical accentuation system has been, and still is, one of the most neglected fields in the study of Hebrew graphemes. For generations, the signs of the accents have meant to the Hebrew reader no more than a kind of musical notation. Anyone who was not concerned with the musical aspect of the recitation of the Hebrew text took no interest in these accents; this is true not only of recent generations but also of important scholars of the Middle Ages, among whom we may find the founders of Hebrew grammar.[4]

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[3] For these codices, see Lange 2016: 117–18.

[4] A comparable complaint was expressed a few years earlier by David Weisberg in the *Jewish Quarterly Review*: "This study deals with a subject which, though once popular, is now out of vogue. The study of

Unfortunately, most textbooks on biblical Hebrew grammar and textual criticism value only the few "major" accents, notably *silluq*, *atnaḥ*, *ʿole wᵉyored*, *ẓaqef qaṭon*, and sometimes *rᵉviaʿ* (Weingreen 1959: 20–21; Meyer 1966: 74–75, § 15.4; Lambdin 1971: 201–2, § 152; Seow 1995: 64–65; Fischer 2009: 43, 46). Only these accents are regarded as important, since they are supposed to mark the ends of larger units within a verse. Even the more extensive grammars and handbooks on textual criticism do not offer a comprehensive guide to the accentuation system and its background (cf. Tov 2012: 62–65; Joüon & Muraoka 2013: 57–63, § 15). Despite the recent studies on the subject, especially biblical scholars are barely familiar with all the signs, the system as a whole, and its relevance (Trompelt 2010: 334, with n. 4).

Despite the lack of attention and a widespread scepticism, scholars like William LaSor (1979), Duane Christensen (1985) and William Koopmans (1990) have drawn attention to the Tiberian Masoretic accentuation in their exegetical studies. LaSor started apparently from scratch, without knowledge of any literature on the subject (1979: 327). He analysed the use of the disjunctive accents in poetic texts and concluded that they help to gain insight into the poetic structure of these texts. He argued that further analysis would be quite useful (1979: 339). In the case of Lam 1:1–8, the accentuation enabled him to propose a poetic division that differs from the one that we usually find in text editions and see reflected in translations (LaSor 1979: 332–33, 341; cf. also de Hoop 2000c).

In his analysis of Joshua 24 as "poetic narrative," Koopmans (1990: 177–78) divided the Masoretic verses into "cola." He based himself on the study of Korpel and de Moor, who had defined a "colon" (singular of "cola") as a textual unit of one to five stressed word-units, "that could be recited or sung in one breath" (1988: 4).[5] Koopmans deemed it useful to mark the accent which occurs at the end of each colon. Since in his book the Hebrew text had to be transcribed, Koopmans (1990: 178) decided to represent the accents by means of the numbers in the *tabula accentuum* of *BHS*. Thus, he rendered the first colon of Josh 24:2 (colon aA) as follows: *wyʾmr yhwšʿ ʾl-kl-hʿm* [7] (Koopmans 1990: 181). Here, [7] represents the *rᵉviaʿ* that occurs above the final word of this colon: וַיֹּ֤אמֶר יְהוֹשֻׁ֙עַ֙ אֶל־כָּל־הָעָ֔ם, "and Joshua said to all the people." The fact that Koopmans took the accents into account when analysing the structure of the text is noteworthy, but the way in which he used them is somewhat problematic. Since only the disjunctive accents occurring at the end of the alleged cola are represented in the transcription, inconsistencies in the use of the accents may go unnoticed (de

the Masoretic accents was once considered to be of great importance for understanding the text of the Hebrew Bible. Lately, however, it has fallen into disuse. This results in many misunderstandings which knowledge of the accents could have prevented" (Weisberg 1966: 315). Also, more recently the complaint was heard; see Trompelt 2010: 333–34.

[5] A word-unit is defined as one word, or two or more words connected by one or more *maqqefs*.

Hoop 2000a: 52–53). For instance, Koopmans (1990: 182) read the beginning of Josh 24:5 (colon aA) as a colon ending with the accent *pašṭa* (nr. [*10*] in the *tabula accentum*): *wʾšlḥ ʾt-mšh wʾt-ʾhrn* [*10*] ("And I sent Moses and Aaron"; *BHS*: וָאֶשְׁלַ֞ח אֶת־מֹשֶׁ֣ה וְאֶת־ אַהֲרֹ֔ן). On the other hand, he read the following phrase at the beginning of Josh 24:6 also as a colon (colon aA): *wʾwṣyʾ ʾt-ʾbwtykm mmṣrym* [*5*] ("When I had brought your fathers out of Egypt"; *BHS*: וָאוֹצִ֤יא אֶת־אֲבֽוֹתֵיכֶם֙ מִמִּצְרַ֔יִם). This phrase ends with the accent *zaqef qaṭon* (nr. [*5*] in the *tabula accentum*). Unfortunately, the transcription does not show that this phrase contains another occurrence of the accent *pašṭa*, namely with the word *ʾbwtykm* (*BHS*: אֲבֽוֹתֵיכֶם֙). Only the accent at the end (here *zaqef qaṭon*) is represented. This inconsistency in the use of the accents raises questions regarding the delimitation of these and other cola.

Although Koopmans's approach was followed by some scholars in the field (e.g., Korpel & de Moor 1998: 10), it was critically evaluated and modified in other studies, with the suggestion to take all the disjunctive accents in the text into account (de Hoop 1993; 1998: 85 [with n. 18], 93–95; Sanders 1996: 104–5, 137–258). Moreover, further improvements were suggested by pointing out that the weight of individual accents is not absolute but seems to depend on their position among the other accents of the verse (de Hoop 1993; 2000a; 2000b; 2003; Renz 2003; for a critical follow-up of de Hoop and Renz, see Park 2013).

Notwithstanding these critical remarks, Koopmans's initiative to take the Masoretic accentuation into account must be taken seriously. According to several studies, the Masoretic accentuation system shows significant correspondences with text divisions from the beginning of the common era in Hebrew manuscripts (de Moor 1996; Flint 2000: 21–22; de Hoop 2022: 65–69; Sanders & de Hoop forthcoming) as well as in Greek manuscripts (Barthélemy 1963: 166; Revell 1971/72; 1976; Tov 1990: 9–12; Sanders 1996: 121–30). In certain studies, however, the antiquity and reliability of the traditions represented by the accents seem to be exaggerated (Haïk-Vantoura 1991; Burns 2011; Mitchell 2012).

In his survey of the research on the Masoretic accentuation, Dotan argued that the newly discovered evidence necessitated a fresh analysis of the accentuation system (Dotan 1970: xli). He subsequently published studies on the development of the accentuation and vocalisation (Dotan 1981; 1987), while further research was carried out by a new generation of scholars, such as Lea Himmelfarb (1998; 2007; 2014), Ronit Shoshany (2007; 2009; 2011; 2013), and Rachel (Hitin-)Mashiah (2005; 2011). Some of these studies describe the historical developments and relations between the different schools. Shoshany argued that already in the Babylonian tradition the disjunctive accents are not to be studied separately, but that the weight of each individual accent depends on the series of accents in which it occurs (cf. Shoshany 2009; 2013).

Other studies focussed mainly on the contribution of the Masoretic accentuation to exegesis (Cohen 1972; Freedman and Cohen 1974; Kogut 1996), and this interest only seems to increase (see, e.g., Carasik 2001; Himmelfarb 2007; Trompelt 2009; 2010; 2008–11; Kogut 2011; Tomášek 2011: 62–111; 2017; Strauss Sherebrin 2013; Park 2013; 2014; 2020). Of course, this increase of attention to the Masoretic accentuation of the text is more than welcome. However, we may find in some of these studies a misunderstanding of the accentuation. Tobie Strauss Sherebrin writes "that some of those who have sought to spell out the accents' understanding of the text have occasionally made unfounded claims and attributed to the accents exegetically-motivated syntactic analyses that may not have been intended at all" (Strauss Sherebrin 2013: 300). She observes: "Alas, a comprehensive set of accentual phrasing rules—rigorously tested and shown to be highly accurate—remains an elusive goal" (Strauss Sherebrin 2013: 300; cf. also Dotan 1970: xlii).

3. TERMINOLOGY

It seems appropriate to describe and discuss the terminology that is used to denote the Masoretic accents. The terms "accentuation" and "accents" are quite common in literature about the Hebrew Bible. The word "accent" usually designates a mark on a letter or word that indicates pitch, stress or vowel quality. In the case of the Hebrew Bible, the terms "accents" and "accentuation" are, strictly taken, inaccurate, since the signs were not added primarily to indicate stress (see Section 5 below). However, we will apply the terms because their use is widely accepted, also in scholarly literature.

The designation נְגִינוֹת, "melodies," is sometimes applied, first by the later Rabbinic writers (Wickes 1881: 10; 1887: 9; cf. also Kahle 1922: 136, § 9k; Revell 2000: 66).[6] The more common Hebrew designation is טְעָמִים, "tastes, meanings" (Wickes 1881: 3–4; Revell 2000: 66), "indicators of the sense to the text" (Wickes 1887: 9), "Sinnzeichen" (Kahle 1922: 137, § 9m), or signs that "add the inflection that clarifies the meaning of the text" (Jacobson 2002: 3).[7] This sense of the word טְעָמִים may be more appropriate and closer to the original function of the signs than the word "accent" (see Section 5.3).

The word טְעָמִים is applied in different combinations, such as טעמי מקרא as a general term for these signs in the Bible, טעמי אמ״ת to denote the accentuation in the Three Books,[8] and טעמי כ״א ספרים for the accentuation of the Twenty-one Books. In

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[6] נְגִינוֹת is derived from נגן, "to play a stringed instrument" > נְגִינָה, "music played on strings" (*HALOT*, 668). Baer (1894: 835) applied this term especially to the accentuation of the Three Books.

[7] טְעָמִים is derived from the root טעם, "to taste, eat, perceive, learn" > טַעַם, "taste, feeling, sense, order" (*HALOT*, 377).

[8] The word אמ״ת is an acronym for the three books אִיּוֹב, Job, מִשְׁלֵי, Proverbs, and תְּהִלִּים, Psalms. It functions as a mnemonic word (אֱמֶת, "truth"), but is distinguished from this word by means of the abbreviation sign (״) (see Joüon & Muraoka 2013: 57, § 15d).

scholarly literature it is quite common to distinguish the accentuation of the "poetic books" from the accentuation of the "prose books" and to contrast the "poetic system" and the "prose system."[9] This differentiation is inadequate, since some of the Twenty-one Books are written entirely or partially in verse (e.g., Song of Songs, Lamentations, Isaiah, Jeremiah). On the other hand, the Three Books are not completely in verse (especially Job 1–2; 32:1–6a; 42:7–17). Most of these non-poetic parts (with Job 32:1–6a as an exception) are not provided with the accentuation of the "poetic system," but of the "prose system." Since the differentiation between the two subsystems based on the literary classification "poetry" versus "prose" is incorrect, we prefer to differentiate between the two subsystems with the expressions "Three Books" and "Twenty-one Books"—albeit *faute de mieux*.

The accents are also differentiated on the basis of their function, namely as *disjunctive* (or: *distinctive*; Hebrew: מַפְסִיקִים) and *conjunctive* (Hebrew: מְחַבְּרִים) accents (Wickes 1881: 10–11; 1887: 9, n. 2; König 1881: 84; Jacobson 2002: 56; Revell 2007: 61). Disjunctive accents are also designated as מְלָכִים, "kings" (sometimes שָׂרִים, "officials"), because they dominate the verse (Wickes 1881: 11; 1887: 9–10; Kahle 1922: 137, § 9m; Jacobson 2002: 56, n. 1). Conjunctive accents are denoted as מְשָׁרְתִים, "servants," a term which is still applied (Wickes 1887: 9; Kahle 1922: 137, § 9m; Jacobson 2002: 56, n. 2).[10] Sometimes we find the suggestion that *Diqduqe haṭṭeʿamim*, an important mediaeval grammar of the accents, designates only the group of disjunctive accents with the term טְעָמִים, not the conjunctive accents, which are assumed to be designated only as מְשָׁרְתִים, "servants" (Gesenius & Kautzsch 1909: 62, n. 1, § 15f; Kahle 1901: 167–94; 1913: 173–75; Yeivin 1980: 165, § 192; Jacobson 2002: 56, n. 1). However, *Diqduqe haṭṭeʿamim* lists some of the conjunctive accents as טְעָמִים and some of the disjunctive accents as מְשָׁרְתִים. This shows that the word טְעָמִים was not used exclusively for the disjunctive accents (Revell 1973: 138–42).[11]

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[9] The *tabula accentum* in the *BHS* contrasts the "accentus communes (in libris XXI)" and the "accentus poëtici." See also Joüon & Muraoka 2013: 57, § 15d. Baer (1894: 835) and others used the designation "metrical accentuation" when referring to the system found in the Three Books. Wickes (1881: 8, n. 15) objected that the accentuation of the Three Books does not express *metre* and proposed the designation "musical accentuation."

[10] Gesenius 1817: 113, § 26.3 (followed by König 1881: 78, § 11.2b; Korpel & de Moor 1998: 10; Korpel 2000: 30) claimed that some of the minor disjunctive accents (like *ṭifḥa*) function as conjunctives, because they do not mark the end of a textual unit (phrase, etc.). He labeled such disjunctive accents as *servi*, while he used the Hebrew term מְשָׁרְתִים exclusively for the conjunctive accents. Cf. Yeivin 1980: 165, § 192.

[11] Kahle (1901: 174) stuck to the opinion that the disjunctive accents should be called טְעָמִים and considered the heading of the list of טְעָמִים in the *Diqduqe haṭṭeʿamim* as incorrect.

The distinction of disjunctive and conjunctive accents is relevant. While the group of disjunctive accents indicates that there is a pause or rest of some sort in the reading, the conjunctive accents indicate that the reading should continue without such pause. As Joüon & Muraoka put it:

> The accents that mark the caesuras (major, intermediate, or minor pauses) are called *disjunctive*, for in effect they separate a word or phrase from the following word or phrase, like punctuation marks (. ; ,) in Roman script. The other accents, by contrast, unite a word with what follows and are called *conjunctive* (Joüon & Muraoka 2013: 58, § 15e).

Among the relatively weak disjunctive accents are *rᵉviaʿ qaṭon*, *mᵉhuppak lᵉgarmeh* and *azla lᵉgarmeh* in the Three Books, and *tᵉliša gᵉdolah* and *munaḥ lᵉgarmeh* in the Twenty-one Books. Even such relatively weak disjunctive accents cause a certain break in the recitation after the word to which they were added. This can be demonstrated quite easily. If a word starting with a *bᵉgadkᵉfat* consonant is preceded by a word ending with a vowel and provided with a conjunctive accent, the Masoretes usually did not provide the *bᵉgadkᵉfat* consonant with a *dageš lene*. In such a case, the spirantisation of the *bᵉgadkᵉfat* consonant is due to the absence of a break in the recitation after the word with the conjunctive accent. However, if a word starts with one of the *bᵉgadkᵉfat* consonants and the preceding word ends in a vowel, the Masoretes consistently added a *dageš lene* to the *bᵉgadkᵉfat* consonant if the preceding word has a disjunctive accent. This demonstrates that each disjunctive accent indicates a break of some sort in the recitation after the word to which it was added (Sanders 1996: 111–12, with n. 41; Park 2020: 85, 96–97).[12]

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[12] The distinction between disjunctive and conjunctive accents is questioned by Alexander Sperber (1966: 462–69). He points to 1) the many occurrences of a nomen regens with a disjunctive accent that is assumed to separate it from the following nomen rectum, 2) inconspicuous little particles carrying disjunctive accents, and 3) many pairs of words of which the first carries a disjunctive accent while elsewhere in the Hebrew Bible the first word of an identical or similar pair carries a conjunctive accent. This leads him to the conclusion that "any assumption of the accents' use for interpunction does not correspond to the facts" (1966: 465; similarly, Trompelt 2010: 352, n. 35; see also n. 35 below). Sperber's observations are distorted by his supposition that the disjunctive accents should have marked the ends of syntactical units (cf. Section 5). Since the disjunctive accents appear not to delimit syntactical units, he questions their distinction from the conjunctive accents altogether. Remarkably, the evidence adduced by Sperber (1966: esp. 467–69) shows that the distinction between disjunctive and conjunctive accents is indisputable. The examples confirm the rule that a begadkefat consonant at the beginning of a word virtually always lacks a dageš lene if the preceding word ends with a vowel and carries a conjunctive accent, while the consonant always has a dageš lene if the preceding word carries a disjunctive accent, even if the preceding word ends with a vowel.

Suzanne Haïk Vantoura (1978: 55, 169–70, 189–92, 291–93; 1991: 36, 147–49, 167–70, 278– 81) casts doubt on the distinction between

An illustrative example occurs in Judg 20:3: וַיִּשְׁמְעוּ֙ בְּנֵ֣י בִנְיָמִ֔ן כִּֽי־עָל֥וּ בְנֵֽי־יִשְׂרָאֵ֖ל הַמִּצְפָּ֑ה, "The children of Benjamin heard that the children of Israel had gone up to Mizpah." Although וַיִּשְׁמְעוּ֙ ends with a vowel, the ב at the beginning of the following word בְּנֵ֣י has been provided with a *dageš* because of the break between these two words. This break is indicated by the disjunctive accent with וַיִּשְׁמְעוּ֙ (*pašṭa*). However, the ב at the beginning of בִנְיָמִ֔ן and the ב at the beginning of the second בְנֵֽי do not have a *dageš*, since each of these words is preceded by a word ending with a vowel that has been provided with a conjunctive accent (בְּנֵ֣י and עָל֥וּ, with *munaḥ* and *merᵉka*, respectively).

One relatively rare designation for the Masoretic accentuation still deserves to be mentioned. Because of the chanting character of the recitation in the synagogue, the term "neumes" (i.e., musical tones) was sometimes used as a designation of the accents from the beginning of the twentieth century. These "neumes" were assumed to represent an adaptation of the Greek system of accentuation and chanting (Praetorius 1901: 41–53; 1902; Kahle 1901: 167; 1922: 143–44; Gesenius & Kautzsch 1909: 60, § 15b; also, Engberg 1966). Because of the considerable differences from the Greek system of ekphonetic neumes, this theory is not accepted anymore (Spanier 1927: 113–15; Revell 1979). Despite that, the biblical accentuation system is sometimes still designated as a set of "neumes" (Lettinga, Baasten, & van Peursen 2012: 18, § 7a; Joüon & Muraoka 2013: 58, § 15e). This designation emphasises only the recitative function of the accents.

4. Other Texts with Masoretic Accents

The Masoretic accents are best known from their use in the Masoretic text (MT) of the Hebrew Bible; yet their occurrence is not limited to biblical manuscripts alone. Not only were Masoretic notes inserted into Targum Onkelos (Tᴼ; see Dotan 2007: 622), but also the Tiberian accentuation was introduced into the authoritative Aramaic translation of the Pentateuch. This tradition comes to light in some early printed editions, such as the so-called Rabbinic Bible (Tomášek 2017: 268–84),[13] where the accents are distributed in the same way as in MT, for as long as this is possible. We see this in Gen 1:1:

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disjunctive and conjunctive accents because of the double accentuation (so-called "higher" and "lower" accentuation) in the Decalogue (Exod 20:2–17; Deut 5:6–21), which she reads as one single system of marking the text. She disregards the two different traditions of synagogal reading, based on the two different ways of accentuating, stating without any argument that in these synagogal reading traditions "the juxtaposition of the signs [is] appearing nonsensical" (1991: 36 [1978: 55]). Regarding the double system of accentuation in the Decalogue, cf. the studies by Breuer (1990) and de Hoop (2013b).

[13] The text of the Rabbinic Bible is based on many manuscripts, collated by the editors (Ginsburg 1966: 956–74).

MT   בְּרֵאשִׁ֖ית בָּרָ֣א אֱלֹהִ֑ים
אֵ֥ת הַשָּׁמַ֖יִם וְאֵ֥ת הָאָֽרֶץ׃

In the beginning [t] *created God* [a]
the heavens [t] *and the earth.* [s]

T⁰   בְּקַדְמִ֖ין בְּרָ֣א יְיָ֑
יָ֥ת שְׁמַיָּ֖א וְיָ֥ת אַרְעָֽא׃

In the former times [t] *created YY* [a]
the heavens [t] *and the earth.* [s]

In *Codex Reuchlinianus*[14] Masoretic accents are applied in the text of T[J], but only the disjunctive accents and not as consistently as MT. An illustrative example is Isa 1:10:

MT   שִׁמְע֥וּ דְבַר־יְהוָ֖ה קְצִינֵ֣י סְדֹ֑ם
הַאֲזִ֛ינוּ תּוֹרַ֥ת אֱלֹהֵ֖ינוּ עַ֥ם עֲמֹרָֽה׃

Hear the word of YHWH, [t] *you rulers of Sodom;* [a]
listen [tv] *to the law of our God,* [t] *you people of Gomorrah.* [s]

T[J]   קַבִּ֫ילוּ פִתְגָמָ֣א דַיְיָ֣ שַׁלְטוֹנַיָּ֗א דְעוֹבָדֵיה֤וֹן בִּישִׁין֙ כְּשִׁלטוֹנֵ֣י
סְדֹ֔ום
אַצֵ֫יתוּ לְאוֹרָ֣יְתָא דַאֱלָהַ֗נָא עַמָּא֙ דְעוֹבָדֵיה֣וֹן דָמַ֣ן לְעַם
עֲמֹורָֽה׃

Receive the word of Ywy, [t] *you rulers whose deeds are evil like the rulers of Sodom;* [a]
obey [tv] *the law of our God,* [t] *you people whose deeds are like the people of Gomorrah.* [s]

The text of the Targum is expanded by explanatory additions; yet the accents still follow the parsing of the text by the disjunctive accents in MT. Furthermore, the accents are also found in Targum texts with Babylonian punctuation and Palestinian Targumim with Tiberian accentuation.[15]

In the mediaeval manuscripts A and D of the non-canonical book of Ben Sira, Tiberian accent and vowel signs are sometimes used, while some Babylonian accents also occur in manuscript A (Rey 2017: 105–7). Manuscripts of Mishnah, Talmud, and other rabbinic texts display accents (Revell 1979: 151–58; Yeivin 1980: 160, § 180; Stern 2019: 96), as do the *piyyuṭ* (liturgical poetry) from the Cairo Genizah (Dotan 1968: xlii, with reference to Yeivin 1959/60ac). Copies of the Scroll of Antiochus (Stern 2019: 96), the so-called Egyptian Scroll,[16] and the Scroll of Evyatar[17] also have vowels and accents. In most of these cases the accents are found only in the manuscripts, not in the printed editions (Yeivin 1980: 160, § 180).

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[14] For this codex, see Lange 2016: 119.
[15] See, e.g., Kahle 1913: Tafel 6–7 (Cambridge B423: Judg 1:30–2:1; B151: Isa 62:8–9, Hos 14:2–3); Klein 1986: Plates 44–48 (Cambridge T-S B 8.1; 8.8, folio 1; T-S NS 161.262: Deut 5:19–26; 26:18–28:23); Plate 115–16 (Jewish Th.Sem. MS 608 [E.N.A. 656], folio 1–2: Exod 15:3–8; 19:7–14).
[16] Cambridge University Library: CUL T-S 8K10.
[17] Cambridge University Library: CUL Mosseri I.85.

Other works also have been provided with vowels and accents, such as the Book of the Calendar Controversy (sometimes designated as *Sefer ha-Moʿadim*; see Stern 2019: 89–91), *Sefer ha-ʾEgron* and *Sefer ha-Galuy* by Saadya Gaon (*892–†942), but also works by other scholars (Stern 2019: 96). Thus, the preface of *Sefer ha-ʾEgron* (*Thesaurus*, ca. 913) by Saadya Gaon is completely accented (Hitin-Mashiah 2011).[18] In the Rabbinic writings such as the Mishnah, the accentuation does not follow the arrangement in the (Tiberian) biblical manuscripts but has its own rules (Revell 1979: 151; Yeivin 1980: 160, § 180; Stern 2019: 96). The accentuation in the preface of Gaon's *ʾEgron*, however, agrees with the rules (Hitin-Mashiah 2011: 125–27).

5. PURPOSE AND FUNCTION

Why was the text of the Hebrew Bible provided with a system of signs, known as טְעָמִים or "accents"? What do these signs indicate to the reader? In general, grammars of biblical Hebrew and studies of the accentuation system distinguish three functions (cf. Blau 1976: 18–19, § 5.1; Yeivin 1980: 158, § 178; Price 1990: 11–17; Jacobson 2002: 13–14, 19; Tov 2012: 62–65; Lettinga, Baasten, & van Peursen 2012: 18, § 7a–c; Joüon & Muraoka 2013: 58, § 15e):

1. to indicate stress, since they are generally placed on a stressed syllable;
2. to indicate syntactical relationships, by connecting words that are related, or by placing a caesura between unrelated words;
3. to regulate the chant of the text, to indicate how the text should be recited.[19]

In the following sections we will discuss each of these functions critically. We will show that the main function of the Masoretic accentuation was not to give information on the first two aspects (stress and syntax). Only in a later phase of its development, in the Tiberian system, the aspect of stress began to play a role.

5.1 THE ASPECT OF STRESS

It seems obvious that one of the purposes of the Tiberian accentuation system is to indicate stress. Therefore, it is quite understandable that this function of the accents is often mentioned first. In his *Lehrgebäude*, Friedrich Eduard König begins by referring to this function of the Masoretic accentuation, mentioning the other functions thereafter. Remarkably he does so under the heading "Die Tonzeichen" ("The Markers of Stress") (König 1881: 75, § 11):

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[18] On the preface in general, see Drory 1995.

[19] Price (1990: 16–17) adds a fourth function: the poetic one. His definition is vague, but this function seems to be close to the third function, namely the recitation or reading of the text.

The word stress, which forms an essential element of a correct pronunciation, is indicated by means of the accents. These also indicate the division of the sentences, as well as the division, respectively the connection of the constituents, and thus are at the same time punctuation marks and served finally also as musical notes for the cantillating performance of the Biblical passages during the religious service.[20]

Since most of the Tiberian accents are positioned at the stressed syllable, this function seems indisputable. Yet, there is reason to be sceptical about König's emphasis on this function. In his description of the individual accents, König did not pay attention to the fact that seven of the accents (more than 22% of all the accents; De Hoop 2022: 36–38; Park 2020: 93) do not mark the stressed syllable but are either pre- or postpositive signs, occurring either at the beginning or the end of the word. These are: *s^egolta*, *zarqa* (or *ṣinnor* in the Three Books), *pašṭa*,[21] *y^etiv*,[22] *d^eḥi*, *t^eliša g^edolah*, and *t^eliša q^eṭannah*:

Accent on stressed syllable		Accent on unstressed syllable		
הָאָ֫רֶץ	Eccl 8:16	*s^egolta*:	הָאָ֓רֶץ	Eccl 8:14
לִכְלִמָּ֫ה	Isa 30:3	*d^eḥi*:	לְכְלִמָּה	Ps 4:3
וְבֶ֫כָה	Neh 5:13	*zarqa*:	וְכָכָ֘ה	Exod 12:11
אָחָ֫ז	2 Kgs 16:5	*t^eliša g^edolah*:	אָ֠חָז	Isa 7:1
עֹ֫שֶׁר	Eccl 4:8	*t^eliša q^eṭannah*:	עֹשֶׁ֩ר	Eccl 6:2

Table 1: Accents on stressed and unstressed syllables

The consistent pre- or postpositive positioning of part of the Tiberian accents indicates that the main function of the accents was not to indicate stress, even though most of the accents occur with a stressed syllable.[23] If indicating stress were the main purpose of the accentuation in general, all the accents would have been placed with the stressed syllable. Remarkably, not only in

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[20] German original: "Die Tonzeichen: Die Wortbetonung, welche doch einen wesentlichen Bestandtheil einer richtigen Aussprache bildet, wird durch die Accente angezeigt. Diese geben auch noch die Trennung der Sätze, wie auch die Trennung resp. Zusammengehörigkeit der Satztheile an, sind also zugleich Interpunctionszeichen und dienten endlich noch als Notenzeichen für den gesangartigen Vortrag der Schriftabschnitte im Gottesdienst." Similarly Margolis 1906: 149–51; Gesenius & Kautzsch 1909: 60–61, § 15b; Trompelt 2010: 334, n. 3.

[21] Pašṭa is a postpositive sign, but if the word has penultimate stress, a second pašṭa is positioned above the stressed syllable (e.g., יְרוּשָׁלַ֫͏ִם, Neh 1:3); see Joüon & Muraoka 2013: 58, § 15f.

[22] Yetiv is listed here, but this accent occurs exclusively with monosyllabic words (e.g., ה֚וּא, Neh 2:20), or with words with the stress on the first (but penultimate) syllable if the preceding accent is not a conjunctive (e.g., קַ֚מְתִּי, Ezra 9:5); see Joüon & Muraoka 2013: 59, § 15g.

[23] Sperber (1966: 459–62) offers several lists of examples in which the word is marked by two different accents instead of one.

the Tiberian manuscripts but especially in Babylonian and Palestinian manuscripts, the accents do not consistently mark the stressed syllable (Kahle 1922: 139–40; Revell 1972; 1977: 201–16). The Babylonian system reveals a historical development, since in the early manuscripts none of the accents are marked with the stressed syllable, and only in later stages do they gradually start marking the stressed syllable (Shoshany 2011: 264–65; 2013: 273–74; *pace* Park 2020: 135). John Revell has shown that part of the Palestinian accent signs is either pre- or postpositive, just like some Tiberian accent signs (Revell 1972). In a different context, Revell concluded that "the marking of the position of the stress is an incidental function of the individual signs (any sign would do) not of the system as a whole" (Revell 1977: 169, n. 1).

The manuscripts with the Babylonian or Palestinian punctuation demonstrate that the disjunctive accents were added before the conjunctive accents, which were adopted only in the later Babylonian or Palestinian manuscripts on the basis of the Tiberian system. Actually, in many Babylonian and Palestinian manuscripts not only the conjunctive accents but even disjunctive accents were often omitted if their occurrence was predictable (Kahle 1902: 49; Dietrich 1968: 53, 98–99; Revell 1979: 142, 144; see Section 7). This confirms the impression that the original function of the accents was not to mark the stress of every word (See Kahle 1913: 172; 1922: 139–40; Sperber 1966: 457–58; Dietrich 1968: 103; Revell 2000: 67; Shoshany 2013: 269).

It would also have been superfluous to develop the elaborate accentuation systems if marking stress were their main function (Aronoff 1985: 33; Dresher 1994: 5). In sum, it is beyond doubt that the initial reason for adding the accents was not to mark the stressed syllable of words (similarly Park 2014: 73–75).

5.2   THE ASPECT OF SYNTAX

The accentuation system, using conjunctive and disjunctive accents, makes it possible to connect words or to separate them in finely calibrated degrees. According to many scholars, the accents divide the Hebrew text into syntactical units. In their *Grammar*, Wilhelm Gesenius and Ernst Kautzsch referred not only to the accents' alleged function of stress marking, but also to the use of the accents to delimit syntactical units:

> According to their original design they have also a twofold use which is still of the greatest importance for grammar (and syntax), viz. their value (*a*) as *marking the tone*, (*b*) as *marks of punctuation* to indicate the logical (syntactical) relation of single words to their immediate surroundings, and thus to the whole sentence (Gesenius, Kautzsch, and Cowley 1910: 61, § 15b).[24]

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[24] See also Kahle (1922: 137–38, § 9m), who wrote, " . . .at the same time, the accents [form] a kind of punctuation marks [. . .], not in the sense of punctuation with question marks, exclamation marks and the like, but in such a way that they mark the sense units within the verses

Emanuel Tov succinctly describes one of the accents' functions as follows:

> to denote the syntactical relation between the words as either disjunctive or conjunctive (Tov 2012: 63).

Kevin Trompelt wrote in his article on the syntactical background of the Masoretic accentuation:

> . . . syntactical considerations, which were placed in the service of text comprehension, are the starting point of the accentuation.[25]

In view of such statements, we would expect a conjunctive accent with a word if there is a strong syntactical relationship with the following word, for instance in the case of the genitive construct. Indeed, in such cases there is often a conjunctive accent with the *nomen regens*, for instance, *merᵉka* in פְּנֵי יְהוָה, "face of YHWH" (Job 1:12), and *munaḥ* in אֵשׁ אֱלֹהִים, "fire of God" (Job 1:16). However, in many other cases there is a disjunctive accent with a *nomen regens* (see Section 5.2.1). Aware of this, Trompelt wrote:

> Instead of identifying syntactical structures such as *constructus* combinations or predicate-object relationships from the outset, the accentuation is based on the direct syntactical correlations that exist between the members of a structure and changes accordingly.[26]

Even if this is the case, surely, we can still expect a disjunctive accent between the introduction to direct speech and the direct speech proper, indicating the transition by means of a break. This occurs in Ps 3:3, for example, where the transition to direct speech is marked by *ᶜole wᵉyored*:

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and the closer or less close relationships among the individual words of the verse." (Original: " . . .die Akzente [bilden] zugleich eine Art von Interpunktionszeichen [. . .], nicht im Sinne einer Interpunktion mit Frage-, Ausrufezeichen und dergleichen, aber doch so, daß sie die Sinneinschnitte innerhalb der Verse und die engere oder weniger enge Zusammengehörigkeit der einzelnen Worte des Verses erkennen lassen"). Similarly Baer 1894: 835; Meyer 1966: 75, § 15.4; Aronoff 1985: 28–72; Mashiah 2005: 65–75; Burns 2011: 29, 90–95.

[25] Trompelt 2008–11: 171, n. 41. The quotation above is part of a concluding remark: "Indem die vorliegende Studie die syntaktischen Motive aufzeigt, die hinter der Akzentuation selbst kleinster dreigliedriger Strukturen stehen, liefert sie einen weiteren überzeugenden Beweis dafür, dass syntaktische Erwägungen, die in den Dienst des Textverständnisses gestellt wurden, den Anfangsgrund der Akzentuation darstellen." Long before Trompelt, Salomon Hanau (1762) and Aron Ackermann (1893) already assumed that there is a strong relationship between the accentuation and syntax.

[26] Trompelt (2008–11: 165): "Statt syntaktische Strukturen wie etwa *Constructus*-Verbindungen oder Prädikat-Objekt-Verhältnisse von vornherein zu kennzeichnen, basiert die Akzentuation auf den direkten syntaktischen Korrelationen, die zwischen den Gliedern einer Struktur bestehen, und ändert sich dementsprechend."

רַבִּים֮ אֹמְרִ֪ים לְנַ֫פְשִׁ֥י   Ps 3:3
אֵ֤ין יְֽשׁוּעָ֖תָה לֹּ֥ו בֵֽאלֹהִ֣ים סֶֽלָה׃

Many [sn] *say to my soul:* [oy]²⁷
"There is no salvation for him from God"; selah. [s]

Also in other verses, the transition between the introduction and
the direct speech is marked by a disjunctive accent.²⁸ However,
in many cases there is a conjunctive accent with the final word
of the introduction, as we will show in Section 5.2.2. In addition,
in Ps 3:3 we also see the unexpected use of a conjunctive accent
before the word סֶלָה, viz. on בֵאלֹהִים (with *ʿilluy*). The occur-
rence of conjunctive accents before the word סֶלָה will be dis-
cussed in Section 5.2.3.

5.2.1 The Genitive Construct

The *nomen regens* in a genitive construct can have a disjunctive
accent (similarly Park 2020: 97–100). To illustrate this, we first
refer to some phrases in which the noun רוּחַ is a *nomen regens*
provided with a disjunctive accent. We begin with a clear exam-
ple from Exodus:

וְר֙וּחַ֙ הַקָּדִ֔ים   Exod 10:13
נָשָׂ֖א אֶת־הָֽאַרְבֶּ֑ה׃

And the wind [p] *of the east* [z]
carried [t] *the locusts.* [s]

In this verse it is obvious that one cannot break the construct
chain וְרוּחַ הַקָּדִים to obtain another meaning (cf. Park 2020: 98).
Elsewhere too, רוּחַ with a disjunctive accent is clearly a *nomen
regens*:²⁹

וַתְּחִ֕י ר֖וּחַ יַעֲקֹ֥ב אֲבִיהֶֽם׃   Gen 45:27
Then revived [zg] *the spirit of* [t] *Jacob their father.* [s]

Isa 40:13 has attracted attention in scholarly literature concern-
ing the accents. In this verse, the noun רוּחַ has also been pro-
vided with a disjunctive accent. The following translation expres-
ses the usual interpretation of אֶת־רוּחַ יְהוֶה as a construct chain:

מִֽי־תִכֵּ֥ן אֶת־ר֖וּחַ יְהוָ֑ה   Isa 40:13
וְאִ֥ישׁ עֲצָת֖וֹ יוֹדִיעֶֽנּוּ׃

Who has directed the spirit [t] *of YHWH,* [a]
(who is) his counselor [t] *who informs him?* [s]

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²⁷ A list of sigla is provided at the end of this article (p. 53–4 below).

²⁸ E.g., כֹּ֤ה אָמַר֙ אֲדֹנָ֣י יְהוִ֔ה לֹ֥א תָק֖וּם וְלֹ֥א תִֽהְיֶֽה, *Thus says* [t] *the Lord
YHWH* [a] *"It shall not stand,* [t] *and it shall not come to pass"* [s] (Isa 7:7);
אָמַ֥ר נָבָ֛ל בְּלִבּ֖וֹ אֵ֣ין אֱלֹהִ֑ים, *The fool says in his heart:* [dh] *"there is no God"* [a]
(Ps 14:1); אָמַ֗רְתִּי אֱלֹ֖הַי אָֽתָּה, *I say:* [rm] *"My God are You"* [s] (Ps 31:15).

²⁹ See further Isa 28:6 (*ṭifḥa*); 61:1 (*ṭvir*); Jer 13:24 (*ṭifḥa*); 51:11
(*pašṭa*); Ezek 27:26 (*yᵊtiv*); Hag 1:14 (*pašṭa; zaqef qaton;* contrast first רוּחַ,
with *tᵊliša qṭannah*); Job 12:10 (*rᵊviaʿ mugraš*); Eccl 3:21 (*yᵊtiv, pašṭa*); Ezra
1:1 (*pašṭa*); 1 Chr 5:26 (1ˢᵗ: *ᵊgarmeh*); 2 Chr 36:22 (*pašṭa*).

Because of the disjunctive *ṭip̄ḥa* with אֶת־רֽוּחַ, Miles B. Cohen argued that the Masoretes did not regard רוּחַ as a *nomen regens* but interpreted v. 13a as a question and answer: "Who fixed the wind? YHWH!"[30] However, much earlier Ibn Ezra had already pointed out that the relationship of v. 13b with v. 13a becomes quite problematic if such an interpretation is adopted (Fried-länder 1873: 175).[31]

There is often a strong relationship between the Masoretic accentuation and the syntax of a text.[32] However, the supposition that this is always the case is certainly wrong. The Masoretic accentuation is based on the principle of continuous dichotomy, which requires a disjunctive accent in clauses in which a sub-division may seem awkward from a syntactical perspective, quite often even in two-word clauses.[33] These are examples of two-word construct chains ending with *atnaḥ* or *silluq* and subdivided by *ṭip̄ḥa*:

Lev 23:44	*the set times* [t] *of YHWH* [a][34]	אֶת־מֹועֲדֵי יְהוָֽה
Song 3:6	*like a column* [t] *of smoke* [a]	כְּתִימֲרֹות עָשָׁ֑ן
Song 4:8	*from the mountains* [t] *of leopards* [s]	מֵהַרְרֵי נְמֵרִֽים׃
Lam 2:11	*in the streets* [t] *of the city* [s]	בִּרְחֹבֹות קִרְיָֽה׃

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[30] Cohen 1972: 7, with reference to the similar interpretations of the Masoretic accentuation by Saadya Gaon and Rashi (but for Rashi, see also n. 31 below). Cohen's assumption that the accentuation indicates that the Masoretes interpreted the text as a question followed by an answer is shared by Breuer 1982: 373; Oosting 2008: 354. We found a comparable interpretation of the *ṭip̄ḥa* in Isa 56:9b with Freedman & Cohen (1974: 37; see p. 1 above). For additional exegetical conclusions based on the Masoretic accentuation, see Kogut 1996; 2011; Trompelt 2008–11: 168–70; Khan 2020: 52–54.

[31] Ibn Ezra explicitly rejected Saadya Gaon's interpretation of Isa 40:13a as a question and an answer. Such an interpretation occurred also in Tᴶ: מן תקין ית רוח קודשא בפום כל נבייא הלא יוי, "Who pre-pared the holy spirit in the mouth of all the prophets? Is it not the Lord?" Rashi (acc. to Miqraot Gedolot) first seems to follow the inter-pretation of Tᴶ, but when reflecting on 40:13b he departs from this interpretation: מי תכן את רוחו ומי איש עצתו אשר יודיענו להקב״ה עצה, "Who directed his spirit and who is his counselor who informs him, the Holy One, blessed be He, of counsel?" This ultimate interpretation of Rashi was shared by Luzzatto 1855–67: 452–453, who regarded the accentuation of Isa 40:13a as exegetically relevant but inaccurate. Note that Septuagint, Peshitta and Vulgate also repeat the interrogative par-ticle at the beginning of 40:13b. As Ibn Ezra suggested, the omission of the article before רוּחַ ("*a* wind/ spirit") also makes the interpretation of 40:13a as question and answer unlikely. The object marker אֶת mostly introduces a definite direct object, only rarely an indefinite object; see Waltke & O'Connor 1990: 177–81; Joüon & Muraoka 2013: § 125.e–f, h. Apparently, Cohen (1972: 8) saw Ibn Ezra's argument as convincing and cast doubt on the presumed interpretation by the Mas-oretes.

[32] For examples, see Trompelt 2008-11.

[33] See further Section 6.1 below; Park 2020: 14, with n. 5.

[34] Cf. מִקְדְּשֵׁי יְהוָה (Lev 5:15); מֵאִשֵּׁי יְהוָה (Lev 6:11; 7:35; 10:13).

Such occurrences of *ṭifḥa* cannot imply that the Masoretes denied the occurrence of a genitive construction, as was also recognised by Trompelt.[35]

This evidence does not prove that in Isa 40:13a (ת־אֶ מִי־תִכֵּן רוּחַ יְהוָה) the Masoretes interpreted רוּחַ as a *nomen regens*. It remains remarkable that the *ṭifḥa* occurs with רוּחַ instead of תִכֵּן. Additional evidence, however, demonstrates that the interpretation of רוּחַ as a *nomen regens* is certainly possible. Compare the following phrases, which have exactly the same syntactical structure:

Deut 1:26   אֶת־פִּי יְהוָה אֱלֹהֵיכֶם:

the command of YHWH [t] *your God* [s]

Num 22:18   אֶת־פִּי יְהוָה אֱלֹהָי

the command [p] *of YHWH my God* [z]

Trompelt distinguished two accentuation schemes for such three-word clauses. Scheme I implies a disjunctive accent with the second word-unit: [c] ‖ [b] − [a] (see Deut 1:26). Scheme II, however, implies a disjunctive accent with the first word-unit: [c] − [b] ‖ [a]. The accentuation of Scheme II in Num 22:18 is perfectly in line with the second law of correlation formulated by Trompelt:

> If the middle word correlates syntactically with its successor, this is accentuated by scheme II – regardless of an existing relationship between the first and second word: [c] − [b] ‖ [a]. Scheme II does not exclude other syntactic correlations, but only reproduces one due to the system.[36]

Trompelt's approach does not take certain other possibilities into account, as the application of Scheme I in Deut 1:26 shows. The accentuation of the formula in this verse is certainly not unique, but has clear parallels, for instance, in Deut 4:23; 9:23; 29:24; 31:26. Trompelt argues that the accentuation according to Scheme I "rules out a syntactical correlation between the last two words."[37] Yet, this certainly does not agree with the syntactical

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[35] Trompelt (2010: 352, n. 35) assumes that in general a disjunctive subdividing a two-word clause is not a real disjunctive accent and loses its syntactical aspect. He argues this with reference to Breuer (1982: 28), who had indicated that the subdivision of such clauses is due to musical reasons. Of course, the implication of such approaches is that the Masoretic accentuation does not consistently represent syntax. Other factors must have played a role in the selection of either a disjunctive or a conjunctive accent.

[36] Trompelt (2008–11: 165): "Korreliert das Mittelglied syntaktisch mit seinem Nachfolger, wird dies akzentuell durch Schema II angezeigt—ungeachtet eines bestehenden Bezuges zwischen erstem und zweitem Glied. [c] − [b] ‖ [a] Schema II schließt demnach andere syntaktische Korrelationen nicht aus, sondern gibt systembedingt nur eine wieder."

[37] Trompelt (2008–11: 165): "Schema I schließt folglich eine syntaktische Korrelation zwischen den beiden letzten Gliedern von vornherein aus."

structure of the three-word clause in Deut 1:26 and other clauses.[38]

Apparently, not only syntactical factors influenced the positioning of the disjunctive and conjunctive accents. According to Sung Jin Park (2020: 100), the preferred recitation of the text must sometimes have played a decisive role. He noted that in Isa 40:13a the surprising accentuation reinforces a proper pronunciation. Regarding the subject of pronunciation, Park had referred to Cohen (Park 2020: 81), who observed that unexpected accentuation reflects an attempt to ensure "the exact pronunciation of the text in situations where normal speech patterns would tend to increase carelessness of pronunciation . . ." (Cohen 1969: 81). The considerations of the Masoretes with regard to the preferred pronunciation of רוּחַ יְהוָה in Isa 40:13 apparently differed from those with regard to the same expression in Isa 40:7, where they did not mark a break between רוּחַ and יהוה (רוּחַ יְהוָה). The exact background of these differing considerations remains unknown, just as in the case of the corresponding expressions in Deut 1:26 and Num 22:18.

In view of the evidence presented thus far, it will not be surprising that also longer chains of genitive constructs are often subdivided into smaller units by disjunctive accents. We give two examples of relatively short construct chains:[39]

| Lev 7:15 | וּבְשַׂר זֶבַח תּוֹדַת שְׁלָמָיו |

And the flesh [r] *of sacrifice* [y] *of thanksgiving of his well-being* [z].

| Jer 39:3 | וְכָל־שְׁאֵרִית שָׂרֵי מֶלֶךְ בָּבֶל: |

and all of the remnant [z] *of the officers* [t] *of the king of Babylon* [s].

The following long construct chains also illustrate the principle of disjunctive accents separating words even when the grammatical construct is joining the words:

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[38] Revell (2000: 70, with reference to Breuer 1958: 156) already called attention to the phenomenon that a construct chain in a three-word nominal clause may be subdivided by a disjunctive accent, "rather than, as expected, marking the division between subject and predicate." See זֹאת תּוֹרַת הַצָּרָעַת:, "this is the law of [t] leprosy [s]" (Lev 14:57). The accentuation of this three-word clause is also according Trompelt's Scheme I, which, as noted above, excludes a syntactical correlation between the last two words from the outset. Furthermore, Revell (2000: 70) referred to the predicate of a two-word nominal clause, which may be separated from the following prepositional modifier. An example is זֹאת הַתּוֹרָה לְכָל־נֶגַע הַצָּרַעַת וְלַנָּתֶק:, "This (is) [t] the law [a!] for every mark of leprosy [t] and for scalls [s]" (Lev 14:54). Here *atnaḥ* separates the predicate and prepositional modifier, whereas such a separation is usually marked by means of weaker accents, such as *r̊via*ʿ, *zaqef gadol*, or *zaqef qaṭon* (e.g., Lev 7:37).

[39] See also Job 2:11: שְׁלֹשֶׁת ׀ רֵעֵי אִיּוֹב, "three of [lg] the friends of Job [r]" (Job 2:11). Cf. also Gen 6:5; Exod 13:12; Deut 32:14; 1 Sam 9:21; Isa 10:12 (2x). For additional examples of a disjunctive accent marking a *nomen regens*, see Sperber 1966: 463–64; de Moor 1978: 134–35; Yeivin 1980: 174–75, §§ 203–6; Revell 2000: 70, with reference to Breuer 1958: 156.

Num 14:5

וַיִּפֹּ֤ל מֹשֶׁה֙ וְאַהֲרֹ֔ן עַל־פְּנֵיהֶ֑ם לִפְנֵ֕י כָּל־קְהַ֖ל
עֲדַ֣ת בְּנֵ֥י יִשְׂרָאֵֽל׃

Then fell Moses [tv] *and Aaron* [t] *on their faces* [a] *in front of* [zg]
all of the assembly of the congregation [t] *of the sons of Israel* [s].

Judg 9:1

וַיֵּ֨לֶךְ אֲבִימֶ֤לֶךְ בֶּן־יְרֻבַּ֙עַל֙ שְׁכֶ֔מָה אֶל־אֲחֵ֖י אִמּ֑וֹ
וַיְדַבֵּ֣ר אֲלֵיהֶ֗ם וְאֶל־כָּל־מִשְׁפַּ֛חַת בֵּית־אֲבִ֥י אִמּ֖וֹ לֵאמֹֽר׃

Abimelech Jerubbaal's son went [p] *to Shechem* [z] *to the brothers* [t]
of his mother [a] *and spoke to them* [z] *and to all of the clan* [tv] *of*
the family of his mother [t] *saying,* [s]

In Num 14:5b, after the *atnaḥ*, we find לִפְנֵ֕י, which is marked with
zaqef gadol, even though the word is obviously the first element
of a construct chain. Later in this chain, we find the *nomen regens*
עֲדַ֣ת, "the congregation of," with *ṭifḥa*. In Judg 9:1 אֶל־אֲחֵ֖י, "to
the brothers of," has *ṭifḥa*, while a *tevir* occurs with the phrase
וְאֶל־כָּל־מִשְׁפַּ֛חַת, "and to all of the clan of." Even though the
accents *ṭifḥa* and *tevir* are relatively weak disjunctive accents (see
Section 6.1 below), they are unmistakably disjunctive in the sense
that they separate the words with which they occur from the fol-
lowing words.[40]

How can such remarkable divisions be explained? The
accentuation system is apparently not intended to consistently
connect the elements of genitive chains. Both shorter and longer
genitive chains can be subdivided by disjunctive accents.

5.2.2 Introduction to Direct Speech

While in the case of genitive constructions the *nomen regens* is
sometimes marked with a disjunctive accent, the end of an
introduction to direct speech is not always marked by means of
a disjunctive accent. At the beginning of this essay, we referred
to Isa 41:26a (Section 1 above), but there are many more exam-
ples of introductions to direct speech that end with a conjunctive
accent (de Hoop 2008: 105–8; similarly, Revell 2000: 69–70
[referring to Avinun 1988/89: 157–92; Breuer 1958: 156]; Park
2020: 122–25). See, for instance:

Isa 40:6a

ק֤וֹל אֹמֵר֙ קְרָ֔א
וְאָמַ֖ר מָ֥ה אֶקְרָ֑א

A voice [y] *says, "Proclaim!"* [z]
And it is said, [t] *"What shall I proclaim?"* [a]

In the first line we see that the subject (ק֤וֹל) is positioned
emphatically and marked with the disjunctive *yetiv*. The next
word, however, is marked with a conjunctive accent, so the tran-
sition from introduction to direct speech proper is not marked

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[40] As noted above, Sperber 1966: 462–65, concludes on the basis
of such evidence that the distinction between disjunctive and conjunc-
tive is dubious (see p. 10, n. 12 above; cf. also n. 35 above, regarding
Trompelt's approach).

by a break in the recitation. This can happen if an introductory formula is short (one or two words):[41]

<div dir="rtl">

Hos 2:25b   וְאָמַרְתִּ֤י לְלֹא־עַמִּי֙ עַמִּי־אַ֔תָּה
וְה֖וּא יֹאמַ֥ר אֱלֹהָֽי׃
</div>

And I will say to Not-my-people, [p] *"My-people are you,"* [z]
And he [t] *will say, "My God."* [s]

<div dir="rtl">

Amos 6:10   וְאָמֹ֞ר לַאֲשֶׁ֣ר בְּיַרְכְּתֵ֣י הַבַּ֗יִת הַע֥וֹד עִמָּ֛ךְ וְאָמַ֥ר אָ֖פֶס
וְאָמַ֣ר הָ֔ס כִּ֛י לֹ֥א לְהַזְכִּ֖יר בְּשֵׁ֥ם יְהֹוָֽה׃
</div>

And he says [gm] *to one at the rear of the house,* [tv] *"Are there still any with you?"* [t] *He will say, "None."* [a]
He will say, "Hush!" [z] *For* [tv] *no one may utter* [t] *in the name of YHWH.* [s]

These two examples show that in the Hebrew Bible a disjunctive accent may separate an introduction from the following direct speech. Such a case is found in Hos 2:25bA (with *paṣṭa*) and Amos 6:10a (with *ṭvir*). In Hos 2:25bB, however, the subject וְה֖וּא is separated from the predicate יֹאמַ֥ר by means of the disjunctive *ṭifḥa*, whereas the predicate is combined with the speech proper (אֱלֹהָֽי) by means of the conjunctive *merᵉka*. In Amos 6:10a, the first introduction is separated from the direct speech by a *ṭvir*, but immediately thereafter the introduction וְאָמַ֥ר is combined with the following direct speech (אָ֖פֶס) by means of the conjunctive *munaḥ*, while in 6:10b the same phenomenon occurs (וְאָמַ֣ר הָ֔ס).

Although there are numerous cases in which a disjunctive accent marks the transition from the introduction to the direct speech, examples such as those given above demonstrate that, unlike the punctuation of European languages, the accentuation is not intended to clarify the syntactical structure of the text. In this context, it is useful to refer to William Wickes's discussion of the accentuation of verses that include an introduction as well as direct speech (1887: 35–36). Wickes argued that in such verses, the main division occurs within the direct speech, not within the introductory formula. In his view, the words that introduce direct speech "constantly occupy a *subordinate* position," even "as if the introductory words were absent" (Wickes 1887: 35). He illustrates this statement with several examples (Gen 1:6; 4:15; Exod 35:30; Amos 4:2; Dan 2:12[*sic!* 2:15?]; 3:10) in which the end of the introductory formula is not marked by the main verse divider *atnaḥ*, but by a subordinate disjunctive accent (Wickes 1887: 35). Wickes's statement was endorsed by Mark Aronoff (1985: 50–51), who also emphasised the subordination of the introductory phrase with regard to the following discourse. The function of the introduction would be similar to

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[41] For additional examples, see Judg 18:19; 1 Sam 12:10; 2 Sam 12:19; 1 Kgs 22:6; Isa 41:6; 44:16; 57:14; 58:9; Jer 2:25; 20:9; Amos 5:16; 9:1; Job 34:5, 18; Eccl 2:2; 7:23. Cf. also Revell's discussion of examples of the transition from introduction to direct speech indicated by a minor disjunctive accent, as in 1 Chr 14:10 (Revell 2000: 69).

that of adverbial expressions, which the Masoretes treated in a similar way.

Yet, the evidence is more diverse than Wickes and Aronoff suggested. Whereas Wickes suggested that the introductory phrase is accented as a subordinate phrase, it is sometimes also accented with *atnaḥ* or *silluq*, marking it as an independent (at least not as a subordinate) phrase (de Hoop 2003: 37–38, 40). An example is Hag 1:2a: כֹּה אָמַר יְהֹוָה צְבָאוֹת לֵאמֹר, "Thus says [tv] YHWH of hosts, [t] saying, [a]." Other examples occur in Ruth 2:6; 3:1; Hag 1:13, Zech 4:4. Reference can also be made to introductory phrases with a *silluq* with the final word, qualifying it as an independent and not as a subordinate phrase. See, for instance, Jonah 1:1: וַיְהִי דְּבַר־יְהֹוָה אֶל־יוֹנָה בֶן־אֲמִתַּי לֵאמֹר, "And came [p] the word of YHWH [z] to Jonah, son of Amitai, [t] saying, [s]." For other examples, see Gen 8:15; 9:8; 23:5; 34:20; Lev 1:1; 4:1; Num 2:1; Jer 1:4; 2:1; Jonah 1:1; 3:1; Hag 2:2.

This shows that the Masoretic accentuation does not consistently treat the introductory formula as a subordinate phrase, as was suggested by Wickes and Aronoff. The end of introductions can be marked by *silluq*, *atnaḥ*, weaker disjunctive accents, and even—if the introductions are short—conjunctive accents.

5.2.3 The Word סֶלָה

We might expect that the word סֶלָה, which is a para-textual addition to the text, would usually be separated from the main text by means of a disjunctive accent, or even that it would have been excluded from the accentuation. However, there are only three cases in which סֶלָה is preceded by a word with a disjunctive accent, one in Ps 55:20 (*rᵉviaʿ gadol*), and two in the psalm of Habakuk (3:3, 13; *ṭifḥa*).

Hab 3:3　　　　אֱלֹוהַ מִתֵּימָן יָבֹוא
　　　　וְקָדֹושׁ מֵהַר־פָּארָן סֶלָה

God [p] *came from Teman* [z]
and the Holy One from Mount Paran; [t] *selah.* [a]

In a vast majority of cases, סֶלָה is preceded by a word with a conjunctive accent. See, in addition to the example of Ps 3:3 (Section 5.2 above), for instance:

Ps 4:5　　　　אִמְרוּ בִלְבַבְכֶם עַל־מִשְׁכַּבְכֶם
　　　　וְדֹמּוּ סֶלָה׃

Speak in your hearts [dh] *on your beds* [rᵃ]
and be silent; selah. [s]

Ps 21:3b　　　　וַאֲרֶשֶׁת שְׂפָתָיו בַּל־מָנַעְתָּ סֶלָה׃

The request of his lips [rm] *You never withheld; selah.* [s]

In these and other cases[42] the accentuation of the text does not separate the words as we might logically expect it to if the accentuation were a system of syntax.

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[42] Hab 3:9; Pss 39:6; 57:4; 60:6; 62:5; 68:20; 77:10; 82:2; 84:5; 88:8, 11; 89:38; 140:9.

5.2.4 Summary

The evidence presented above clearly demonstrates that the accentuation does not always express the syntactical relationships of a verse, nor need it indicate the coherence or non-coherence of the words in a verse.[43] We must conclude that the ultimate purpose of the accents is different (Yeivin 1980: 158, § 178; Waltke & O'Connor 1990: 519–21; Jacobson 2002: 499; Park 2020: 94, 100–102). Regarding the syntactical function of the Masoretic accentuation John Revell rightly remarked:

> Divisions marked by major disjunctive accents rarely conflict with syntactic structure in this way, but they are clearly not intended to mark it. The accentuation divides the verse into units of content, just as the verses themselves are units of content, and not grammatically defined (Revell 2000: 68; see also 1992: 595; 2007: 66–67, with n. 16; 89).[44]

It is interesting that Revell came to a similar conclusion regarding the distribution of pausal forms in the text, which in his view expresses a semantic rather than a syntactical division (Revell 2015: 20).[45]

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[43] Revell (1992: 595–96) mentions some other examples, such as אֶת Gen 2:13, marked with *ṭifḥa* and thus separated from the following object. Some other random examples of the direct object marker אֶת with a disjunctive accent are found in Gen 1:16 (*ṭifḥa*); 1:25 (*t'vir*); 2:11 (*y'tiv*); 2:19 (*pašṭa*); Exod 18:3 (*ṭifḥa*); Deut 34:2 (*pašṭa*). The preposition אֶת(מֵ) carries a disjunctive accent in Gen 23:20 (*ṭifḥa*); 49:30 (*t'vir*); Exod 29:28 (*pašṭa*). The preposition אַחַר/אַחֲרֵי has a disjunctive accent in Gen 5:7, 10, 13 (*pašṭa*); 11:23 (*t'vir*); 15:1 (*l'garmeh*); 22:13 (*zaqef gadol*); 24:36 (*ṭifḥa*); Exod 18:2 (*ṭifḥa*); Deut 6:14 (*ṭifḥa*); 8:19 (*pašṭa*), etc.

[44] In a same vein Dresher writes (1994: 6): "Note that the three ways in which the accents can be said to convey the sense of the text correspond to three distinct linguistic levels—semantic, syntactic, and prosodic. In simple sentences the three levels are often isomorphic . . . It is in the more complex cases that we will be able to distinguish between these representations. The claim that will be pursued here is that where these representations diverge, the system of accentuation reflects the prosody" (cf. also Park 2020: 103–15). And Price (1990: 13, n. 34) cautiously writes: "The rules of the accents are not wholly governed by the syntax of the text, but also to some degree by musical considerations. [. . .] Thus, a certain amount of disharmony is expected."

[45] Actually, the fact that the disjunctive accents do not separate syntactical units from each other can be illustrated by additional phenomena. In the phrase וְתָגֵ֤ל עֲרָבָה֙ וְתִפְרַ֔ח כַּחֲבַצָּֽלֶת (Isa 35:1), the expression כַּחֲבַצָּלֶת, "like a crocus," is separated from the preceding verb, which has *ṭifḥa*. Mashiah (2005: 65–66) concluded that according to the accentuation the expression כַּחֲבַצָּלֶת, "like a crocus," relates to all the three preceding words: "'the wilderness shall rejoice (*like a crocus*) and shall blossom *like a crocus*." In her view, *ṭifḥa* is the main divider and thus separates the simile from the two preceding verbs. However, since the accents do not indicate syntactical relationships, her interpretation is problematic.

To a certain degree these conclusions correspond with the ideas of Trompelt. After his definition of two basic laws (cf. Section 5.2.1 above), he observes that "both laws imply that syntactical correlations include a semantic modification."[46] Trompelt rightly discerns such modifications in the accentual patterns. In other cases, however, the accentuation cannot be forced into a mould of the laws of correlation (cf. n. 38 above). Apparently, the syntax of the text is less decisive than we may be inclined to think.[47]

5.3   THE ASPECT OF RECITATION

If the two other aspects are ruled out as the *raison d'être* for the Masoretic accentuation, only the third function, the recitative function, is left. The ancient names נְגִינוֹת, "melodies," and טְעָמִים, "tastes, meanings" (cf. Section 3 above), seem to relate to this function.

The common emphasis on the *melodic* aspect of this recitative function was instigated by the use of the accents for the synagogal chant. Of course, it seems to correspond also with the designation נְגִינוֹת, which was used from the late Rabbinic writers onwards (Wickes 1881: 10; 1887: 9). The assumption that the accentuation represents melodies can be found with many scholars, for instance with Joshua Blau:

> The accent signs are mainly musical notes for synagogical chanting (Blau 1976: 18, § 5.1).

Although he did refer to the other functions of the accents, John Revell also emphasised their musical function:

> Accent signs do not represent individual notes, but groups of notes ("motifs" or "tropes") used in a particular form of chant . . . The chant presents the text meaningfully to the congregation. The musical motifs mark off words, phrases, or larger units of meaning, and in combination show the relation of these units to each other. Consequently the accent signs in the text have something of the function of punctuation (Revell 1992: 594; cf. Revell 2000: 68; 2015: 8).

Since the Masoretic accentuation is a refined set of signs that regulate the recitation of the text, also other scholars tend to consider the accents primarily as "musical signs" (Wickes 1881: 2; 1887: 1), "musikalische Noten" (Gesenius & Kautzsch 1909: 60–61, § 15.b1), or "neumes" (Lettinga, Baasten, & van Peursen 2012: 18, § 7a; Joüon & Muraoka 2013: 58, § 15e).

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[46] Trompelt 2008–11: 165: "Für beide Gesetzmäßigkeiten gilt dabei, dass syntaktische Korrelationen eine semantische Modifizierung einschließen."

[47] Shoshany (2013: 271–72; cf. Spanier 1927: 99–107) has demonstrated that the positioning of weaker disjunctive accents, which subdivide relatively small accentual units, may partly be due to metrical preferences. In earlier Babylonian mss there is a preference for a "iambic" pattern ([c] – [b] ‖ [a]), whereas in later mss and in the Tiberian tradition a "trochaic" pattern ([c] ‖ [b] – [a]) is more widespread.

Unlike the designation נְגִינוֹת, the term טְעָמִים, "tastes, meanings," seems to relate to the recitative function, a reading of the text that expresses the proper understanding (Jacobson 2002: 19–24; cf. Aronoff 1985: 35; Dresher 1994: 6; Revell 2000: 66; 2007: 61; Himmelfarb 2014: 191, with n. 4). The designation טְעָמִים seems to be more appropriate than the later term נְגִינוֹת. That the original function of the accents was not musical is suggested by their appearance in non-biblical texts, especially Rabbinic texts, and in the introduction of Saadia Gaon's *Sefer ha-ʾEgron* (see Section 4). The Rabbinic texts and Gaon's work were definitely not sung. However, it is clear that the accents represent a certain division of the text and, consequently, a specific interpretation. As was noted before, the relationship between the accentuation and the pronunciation of the *bᵉgadkᵉfat* consonants shows that the accents influenced the recitation (cf. Section 3 above). The disjunctive accents indicate that breaks must be inserted, while the conjunctive accents are intended to prevent such breaks. Of course, the presence and absence of breaks during the recitation imply a certain understanding of the text, or impose a specific implication on the text.

Nevertheless, it cannot be denied that in Judaism the understanding of the accentuation as indicating melody is widespread. Many scholars do not regard this function as secondary. The melodic understanding of the recitative aspect of the Masoretic accentuation has even led to the assumption that the Masoretic accentuation reflects the melodies from the biblical era (HaïkVantoura 1991; Burns 2011; Mitchell 2012; 2015). According to several scholars, in the initial transmission of the melodies an important role was played by "chironomy," which is defined as "the art of moving the hand to regulate the voice" (Levin 1968: 59). It is believed that only at a later stage the written accent signs began to replace the chironomy to represent the ancient melodies (Wickes 1881: 1, with n. 2; Haïk-Vantoura 1991: 69–94; Burns 2011: 23–25; Mitchell 2012: 364–66; 2015: § 1; Revell 1979: 141). The movement of the hand is believed to have formed the "code" through which all the accents were transmitted until they were frozen in the written signs as we know them.

The biblical text was already being chanted at the beginning of the common era, as may be deduced from the Rabbinic discussions concerning reading Scripture without melody or tune (see Jacobson 2002: 366–77). Although it is possible that chironomy played a role in the tradition of reciting the text, it is still open to discussion whether the movements of the hand represented melodies. If chironomy must be related to the melodic presentation of the text, it must have been quite an equivocal means of transmission. Nevertheless, Jeffrey Burns (2011: 19) assumes that there was a close relationship between the accentuation and chironomy, although he believes that the exact performance of the melody was not regarded as essential and could vary from one locality to another.

As far as the melodic interpretations of the accents are concerned, there appear to be conspicuous differences not only

between the Ashkenazic and the Sephardic traditions, but also within each of these traditions. Revell (1979: 140, n. 3) refers to R. Petaḥya of Regensburg, who, "when visiting the Baghdad community in the twelfth century, was impressed by the number of tunes available for each psalm." Also in the Ashkenazic chanting tradition, there is no one-to-one correspondence between an individual sign and a specific melody. For instance, in Lamentations *atnaḥ* and *silluq* are chanted identically, but in Esther nearly identically; while in Esther *ḳgarmeh* and *t^eliša* are chanted according to the same melody (Jacobson 2002: 373; Malin 2016: 15). Another example is that in the Torah *s^egolta* and *ṭifḥa* are identical and nearly identical to *zaqef qaṭon* (Jacobson 2002: 551, 567, 584; Malin 2016: 18). In the Sephardic tradition the accents *silluq*, *atnaḥ*, and *s^egolta* are all chanted with the same motif (Idelsohn 1929: 44–45), while *paš̌ta* may also have been chanted with this motif (Jacobson 2002: 373).

That there is no one-to-one correspondence between an individual sign and a melody, is also illustrated by the two figures with regard to the motifs of *t^evir*:

Figure 1: *t^evir* in the Torah in seven Jewish traditions

Figure 2: *t^evir* in six different liturgical contexts in the Lithuanian tradition[48]

1. Figure 1 shows that there are considerable differences between the interpretations of individual accents in the same part of Scripture by the various communities.

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[48] Jacobson 2002: 15–16; 2013a: 278. The use of both figures is by courtesy of Professor J. R. Jacobson.

2. Figure 2 demonstrates that even within one tradition, the interpretation of each individual accent depends on the liturgical context.[49]

All in all, the evidence demonstrates that there was no such thing as a single tradition of cantillation (cf. Idelsohn 1929; Jacobson 2002: 551, 567, 584; Malin 2016). For that reason, it is improbable that the melodic aspect of the recitation was the main concern of the Masoretic accentuation (Burns 2011: 19). Of course, it became a very important aspect in liturgical and private settings, but the fact that the melodies vary considerably suggests that there was another, more important aspect.

The idea that the accents represent specific melodies does not seem to do justice to the character of traditional Near Eastern music. As Burns (2011: 19) has shown, in this kind of music, where the pitch of the voice is raised or lowered is crucial, so that each phrase is understood correctly.[50] Here, Burns touches on the character of chanting, which would be misunderstood if it were regarded as the performance of melodies, as is the case in European music. Chant is in fact an "elevated reading style" (Revell 1979: 163), or "formal speech" (Dresher 1994: 48), or, more adequately, "a form of speech marked by cadential formulas" (Park 2014: 87).

Regarding the accentuation of Hebrew and Greek biblical texts, Revell stated that the text was divided into units, "each of which was marked by an accent sign: at the end in Hebrew, at both beginning and end in Greek." He added: "Each accent had a 'musical value' in that it indicated the cadence to which the textual unit was chanted" (Revell 1979: 140). This corresponds with the earlier observation of Paul Kahle that the accents are grouped in fixed pairs that indicate cadences in which the pauses indicated by the signs are rather important (Kahle 1902: 49; 1922: 142–43; cf. Dietrich 1968: 97–98). The accents indicate cadences, not melodies. Such remarks make sense and do justice to the character of traditional Near Eastern music.

It is logical that the term "punctuation" is used for the system, but regrettably this generally has a syntactical connotation (cf. Section 5.2). The units demarcated by the accents are not syntactical units, but rather prosodic units, with the accents indicating the "rhythm of speech" (Dresher 2008: 43; similarly Park 2020: 103–15; see also 93–94, 136–42). The Hebrew term טְעָמִים, "tastes, meanings," seems to relate to the interpretation of the text as expressed by this rhythm:[51] "the Masoretes

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[49] About figure 2 Jacobson (2002: 15) remarks that "each of the variants has a similar contour, indicating the likelihood of a common origin." However, it must be kept in mind that all these variants are part of a single tradition, the Lithuanian one. See furthermore Malin 2016: 21–27; Tunkel 2006: 125–43, esp. p. 136.

[50] Regrettably, Burns relates this phenomenon to syntax and to syntactical constructions, whereas his examples contradict this suggestion; see de Hoop 2013a: 197.

[51] For the possibility that in *bMeg.* 3a the term טְעָמִים already relates to the accents, see Section 7.1. Here, the טְעָמִים are said to contribute to the proper understanding of the text.

intended to convey the sense of the text, not abstractly but through utterance” (Janis 1987: 10; Dresher 1994: 6; see also Wickes 1881: 3; Spanier 1927: 110–11; Aronoff 1985: 35; Revell 1992: 594; 2007: 61; Jacobson 2002: 19–24).

Two examples will demonstrate how the recitation indicated by the accents influences the interpretation of the text. In Ps 44:5, the major break marked by *atnaḥ* suggests that the vocative אֱלֹהִים, “o God,” is part of 44:5a (while it could have been recited as the first word of 44:5b):[52]

אַתָּה־הוּא מַלְכִּי אֱלֹהִים	5a
צַוֵּה יְשׁוּעוֹת יַעֲקֹב:	5b

You are my King, o God, [a]
ordain [rm] the victories of Jacob. [s]

More interesting from a theological point of view are the rhythm and the breaks indicated by the accentuation of Judg 5:20:

מִן־שָׁמַיִם נִלְחָמוּ	20a
הַכּוֹכָבִים מִמְּסִלּוֹתָם	20b
נִלְחֲמוּ עִם־סִיסְרָא:	20c

From heaven [t] *they fought;* [a]
the stars [p] *from their courses,* [z]
they fought [t] *against Sisera.* [s]

A more natural division would have been (cf. *BHS*):

מִן־שָׁמַיִם נִלְחֲמוּ הַכּוֹכָבִים	20a
מִמְּסִלּוֹתָם נִלְחֲמוּ עִם־סִיסְרָא:	20b

From heaven fought the stars,
from their courses they fought against Sisera.

In this verse, the Masoretic division seems to be secondary and may be due to the theological motive of suppressing idolatry. According to this division the armies which the preceding verses referred to, can also be the subject of the repeated verb נִלְחֲמוּ, “they fought.” The accentuation may be intended to prevent the implication that the stars fought together with humans.[53]

6. Systematics of the Tiberian Accentuation

One aspect of the Tiberian accentuation is beyond doubt: The disjunctive accents indicate a break after the word with which they occur, while the conjunctive accents do not (see Section 3 above). This fuels the tendency already discussed above to see the disjunctive accentuation as some kind of “punctuation” (Revell 1976: 181; Joüon & Muraoka 2013: 58, § 15e; Himmelfarb 2014: 191). Scholars are inclined to treat the disjunctive

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[52] See Strawn 2017: 53, with additional references to the accentuation of Pss 42:4; 75:2; 77:7, where a different division would also have been possible. See also Exod 20:23 (chiastic structure disregarded by the Masoretes) and Ps 2:7 (*ʿole nᵉyored* with אֵל חֹק, not with יְהֹוָה; cf. de Hoop 2022: 69–70).

[53] See Smelik 1995: 466–68, who shows that the rendering in the Targum probably wants to prevent the same idolatrous idea.

accents as full stops, commas, semicolons, and colons. Eduard König explicitly referred to the accents as "Interpunctionszeichen" (see Section 5.1). Paul Kahle referred to the different cadences indicated by the disjunctive accents as a full-stop, colon, and comma cadence.[54] If the accents were to be regarded as punctuation, some accents are used illogically. This would prevent a straightforward application of the accents in exegesis (cf. Revell 2007: 65–66).

In European languages, the full-stop, colon and comma each have a well-defined function. Israel Yeivin and others, however, have demonstrated that in the Hebrew Bible the weight of a disjunctive accent is relative and not absolute (Yeivin 1980: 169, § 197; see also Wickes 1887: 58; LaSor 1979: 327; Dotan 2007: 637, § 5.3.3.0.1; Price 1990: 40–46; de Hoop 2000a: 59; Tunkel 2006: 24). The weight of each individual disjunctive accent depends on the other disjunctive accents in the context. Most of the discussions of this principle are based on the accentuation of the Twenty-one Books, but the principle applies also to the accentuation of the Three Books.

6.1 TWENTY-ONE BOOKS

The pausal weight of each of the Masoretic disjunctive accents in the Twenty-one Books was classified according to hierarchy, usually including the classical ranks of emperors, kings, dukes, and counts (Trompelt 2010: 335–37; cf. also Price 1990: 26–27; Hitin-Mashiah 2013: 284). This system of ranking wrongly suggests that a pause after an accent of a higher grade is always stronger or longer than the pause after accents of lower grades (Wickes 1887: 14–15; Yeivin 1980: 169, § 196). For that reason, Yeivin decided to omit such names, thereby avoiding the idea of a fixed hierarchy. He simply numbered the grades, which in his view still provides a useful guide.

Grade	Accents
I	*silluq* (& *sof passuq*) :א; *atnaḥ* א
II	*sᵉgolta* א; *šalšelet* א; *ṭifḥa* א; *zaqef* א
III	*zarqa* א; *pašṭa* א (*yᵉtiv* א); *tᵉvir* א; *rᵉviaʿ* א
IV	*pazer* א; *tᵉliša* א; *gereš* א; *lᵉgarmeh* |א

Table 2: Grades of Accents acc. to Yeivin (1980: 169, § 197).

In this scheme, the pausal weight of the grade is relative, not absolute: "disjunctives of grade II are not characterized by a longer pause than those of grade III, but by the fact that their clause is normally divided by a disjunctive of grade III" (Yeivin 1980: 169, § 197). James Price objected that within each verse the accents of the same grade have the same weight: "within a verse as far as the syntax laws of the accents themselves are concerned, the hierarchy is absolute" (Price 1990: 27, n. 5; cf. Park

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[54] Kahle 1922: 142, § 9v: "die Punkt-, Kolon- und Kommakadenz." However, see also his qualifications quoted above (n. 24).

2020: 10, 16–17). However, Price's observation is not correct. William Wickes already argued that within the same grade one accent could be subordinate to another, stronger accent, e.g., within grade I *atnaḥ* to *silluq*.[55]

Every verse of the Hebrew Bible is divided according to the principle of continuous dichotomy. First, a disjunctive accent divides the verse into two parts. If the verse is not very short, these parts are again divided into two parts by disjunctive accents of a lower grade. This goes on until there are no longer any words that must be separated from each other (Wickes 1881: 38; 1887: 29; Yeivin 1980: 169, § 197; Jacobson 2002: 57; 2013b: 302–03; Trompelt 2010; Khan 2013: 38; Hitin-Mashiah 2013: 284; 2016: 199; Park 2020: 10, 14).

The subordinate disjunctive accent that subdivides the clause whose end is marked by a stronger disjunctive accent can be designated as the "precursor" of the stronger disjunctive accent (Joüon & Muraoka 2013: 61–62, § 15i–j).[56] The precursor subdivides the domain of that stronger disjunctive accent into two parts. A precursor and the following disjunctive accent always form a fixed pair of accents that belong together. Thus, a precursor always occurs together with the major disjunctive accent to which it is subordinate. For instance, if the domain of the *atnaḥ* is subdivided into two parts, the end of the first part is always marked by a *ṭifḥa*. See the following table:[57]

[55] Regarding the accents of the first grade, William Wickes wrote: "*Athnach* and *Silluq* are both made *Imperatores*, although . . . the former is as much subordinate to the latter, as *Zaqeph* is to *Athnach*" (Wickes 1887: 15).

[56] The "precursor" is called the "near disjunctive" by Price (1990: 29–30; cf. Park 2020: 19), while others use the confusing designation "final disjunctive" (Shoshany 2013: 271–72; Park 2020: 18–20).

[57] The table is based on the table in Joüon & Muraoka 2013: 61, § 15i. Two corrections were applied, however:

1. The accent *ṭifḥa* was listed as having a precursor, which seems to suggest that *ṭifḥa* also marks the end of a larger unit. However, *ṭifḥa* is never a major accent, but always only a precursor of *silluq* or *atnaḥ*. Although *ṭifḥa* is sometimes preceded by another minor disjunctive accent (*ṭvir*), it always remains the precursor of *atnaḥ* or *silluq*. The more complex (so-called "trichotomic") structures that are thus created are discussed by de Hoop (2003).

2. The accent *rᵉviaʿ* has as its regular precursor *gereš* (*garšayim*) or *ḷgarmeh*, not *pazer*, which in general precedes *gereš* (cf. Wickes 1887: 93–97; Price 1990: 102–7).

Major accents	Precursors
silluq : דָּבָר	*ṭifḥa* דָּבָֽר
atnaḥ דָּבָ֑ר	*ṭifḥa* דָּבָ֖ר
sᵉgolta דָּבָר֒	*zarqa* דָּבָ֮ר
šalšelet ׀ דָּבָ֓ר	*zarqa* דָּבָ֮ר
zaqef qaṭon דָּבָ֔ר	*pašṭa* דָּבָ֙ר (מֶלֶךְ *yᵉtiv*)
rᵉviaʿ דָּבָ֗ר	*gereš* דָּבָ֜ר (*garšayim* דָּבָ֞ר) or *lᵉgarmeh* ׀ דָּבָ֣ר

Table 3: Major Accents with their Precursors

The juxtaposition of disjunctive accents from different grades creates a certain cadence in the recitation of the text. The verse is recited "as a succession of musical units comprised of pairs of musical motifs, with each motif attached to a specific accent. Each such pair of accents . . . involves a one-level ascent in pausing power—from a lower-level accent to a following accent of the next higher level" (Hitin-Mashiah 2013: 284). In this way a kind of hierarchy of cadences develops in the chant, with cadence understood as "a musical pattern indicating an ending of a musical unit" (Hitin-Mashiah 2013: 284). Within the domain of a stronger disjunctive accent, the preceding disjunctive accent indicates an intermediate pause, expressed as a "soft cadence," and the second accent indicates a steadier pause, expressed as a "stronger cadence" (Hitin-Mashiah 2013: 284; cf. also Tunkel 2006: 43–46). This cadence of softer and stronger pauses is such a regular pattern in the synagogal chant, that a textual unit in the Torah with a disjunctive accent only with the final word tends to be chanted as if there were a preceding disjunctive accent, which is not in agreement with the accentuation (Mashiah & Sharvit 2001: 93–94).[58]

We can usefully compare the division of poetic texts by the disjunctive accents with the typical poetic layouts in the earliest Masoretic Bible codices. In these codices, most of the text is displayed in running format, but certain poetic sections are distinguished by special arrangements with at least one blank space in each line. In the Twenty-one Books, the sections with such poetic layouts are Exod 15:1–19, Deut 32:1–43, Judg 5, 2 Sam 22, and 1 Chr 16:8–36. Previous analyses of the most relevant layouts of Deut 32:1–43 and 2 Sam 22 have shown that there is a strong relationship between the layout and the accentuation of these poems (Sanders 1996: 102–19; 2000: 279–87).[59] In virtually all the lines, the unit to the right of the blank space and the unit to the left of this space coincide with a colon, a textual unit that is recited in one breath. This implies that the blank spaces and the line-breaks mark the ends of units of recitation and guide the

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[58] This description of the musical aspects agrees with the analyses of the accentuation in Babylonian and Palestinian manuscripts; see Section 7 below.

[59] The same will be shown with regard to the layouts of Exod 15:1–19, Judg 5, and 1 Chr 16:8–36 (Sanders & de Hoop forthcoming).

oral performance of the text. Most of the blank spaces and line-breaks appear to occur after a word provided with a relatively strong disjunctive accent that is preceded by a subordinate precursor. In the case of Deut 32:1–43 it is especially the layout in the Damascus Pentateuch (MT[D])[60] that appeared to be quite appropriate (Sanders 1996: 102–19). 2 Sam 22 appeared to have been written with a well-considered colometric layout in the Cairo Codex of the Prophets (MT[C]; Sanders 2000: 283–87).[61]

The analyses of the "colographic" layouts were confirmed by an examination of other texts whose colometric division is relatively clear, such as the acrostics of Lamentations 3 and 4, as well as Lamentations 5 (de Hoop 2000b: 70).[62] Further, in the ancient scroll 1QIsa[a], Isa 61:10–62:9 appeared to have a colometric layout that largely agrees with the much later division of the text with the Tiberian accents (de Moor 1996; de Hoop 2000b: 69–70; 2020: 30–31).

Our analyses led to the hypothesis that the following accents mark the end of a colon:[63]

silluq [s] – *atnaḥ* [a] – *sᵉgolta** [sg] – *zaqef qaṭon** [z] – *rᵉviaʿ** [r]

**Table 4: Accents marking the end of a colon
(Twenty-one Books)[64]**

The accents *sᵉgolta*, *zaqef qaṭon*, and *rᵉviaʿ*, marked with an asterisk (*), are assumed to indicate the end of a colon only if they are preceded by their regular precursor, *zarqa*, *pašṭa*, and *gereš*, respectively. The accents *silluq* and *atnaḥ* are virtually always preceded by a precursor, namely *ṭifḥa*.[65]

The following examples are all drawn from Deut 32:1–43 and 2 Sam 22. Each colon is written in its own line. The delimitation of the cola corresponds to the division in MT[C] (2 Sam 22) and MT[D] (Deut 32:1–43).

In 2 Sam 22:3 and 22:8–9, the demarcation of the cola is clear. Some cola are demarcated by a *silluq* or an *atnaḥ*, while the other cola are demarcated by a *zaqef qaṭon* preceded by a *pašṭa* (22:3bB, 8A, 9A), or a *rᵉviaʿ* preceded by a *garšayim* (22:3bA). The cola ending with an *atnaḥ* or *silluq* are subdivided by *ṭifḥa*.

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[60] For this codex, see Lange 2016: 120.

[61] For this codex, see Lange 2016: 118.

[62] Lamentations 5 is not an acrostic but could be included in the analysis since its colometric division is quite unproblematic (cf. *BHS*, *BHQ*). Although Lamentations 1 and 2 are acrostic poems, their colometry is disputed; see de Hoop 2000c: 93–97.

[63] This hypothesis is based on earlier research, as published in studies mentioned above, as well as in de Hoop 1993; 2000a; 2000c; 2003; cf. also Renz 2003: 88–103; Park 2013.

[64] The accent *sᵉgolta* will not be included in the following outline, because it does not occur in the colographic texts, nor in the texts mentioned below.

[65] In Deut 32:1–43 and 2 Sam 22, the only exception is 2 Sam 22:2, where the *atnaḥ* occurs with the first word (וַיֹּאמַ֑ר).

2 Sam 22:3 (MT^C)

אֱלֹהֵי צוּרִי אֶחֱסֶה־בֹּו	3aA
מָגִנִּי וְקֶרֶן יִשְׁעִי	3bA
מִשְׂגַּבִּי וּמְנוּסִי	3bB
מֹשִׁעִי מֵחָמָס תֹּשִׁעֵנִי:	3bC

O God of my rock [t] *wherein I take shelter:* [a]
my shield [gs] *and the horn of my salvation,* [r]
my stronghold [p] *and my refuge,* [z]
my saviour, [zg] *from violence* [t] *You save me.* [s]

2 Sam 22:8–9 (MT^C)

וַתִּגְעַשׁ⁶⁶ וַתִּרְעַשׁ הָאָרֶץ	8A
מוֹסְדוֹת הַשָּׁמַיִם יִרְגָּזוּ	8B
וַיִּתְגָּעֲשׁוּ כִּי־חָרָה לֹו:	8C
עָלָה עָשָׁן בְּאַפֹּו	9A
וְאֵשׁ מִפִּיו תֹּאכֵל	9B
גֶּחָלִים בָּעֲרוּ מִמֶּנּוּ:	9C

Then rocked and quaked [p] *the earth,* [z]
the foundations of heaven [t] *shook* [a]
and reeled [t] *because of His anger.* [s]
Smoke went up [p] *from His nostrils,* [z]
and fire from His mouth [t] *was devouring,* [a]
burning coals [t] *flamed forth from Him.* [s]

If no disjunctive accent precedes *zaqef qaton* or *r^via*, or the disjunctive accent preceding *zaqef qaton* or *r^via* is not the regular precursor (viz. *pašta* [variant: *y^tiv*] or *gereš* [variant: *garšayim*]), the *zaqef qaton* or *r^via* does not occur at the end of a colon but subdivides a colon. This is similar to the function of *zaqef gadol*, which is never preceded by a precursor and generally emphasises the first word of a colon, like מֹשִׁעִי in 2 Sam 22:3bC (see above). This phenomenon is also found in 2 Sam 22:18: the *zaqef gadol* with יַצִּילֵנִי marks the first word of the first colon, while the *zaqef qaton* with מִשֹּׂנְאַי marks the first word of the second colon.

2 Sam 22:18 (MT^C)	יַצִּילֵנִי מֵאֹיְבִי עָז	18A
	מִשֹּׂנְאַי כִּי אָמְצוּ מִמֶּנִּי:	18B

He delivered me [zg] *from my enemy* [t] *strong,* [a]
from my haters, [z] *for they were mightier* [t] *than me.* [s]

Even within the same verse, one *zaqef qaton* may mark the end of a colon, while another *zaqef qaton* does not. This confirms the idea that the weight of the *zaqef qaton* is relative and depends on the series of disjunctive accents in which it occurs. In 2 Sam 22:16, the *zaqef qaton* of יָם (22:16A) is preceded by the precursor *pašta* (וַיֵּרָאוּ), whereas the *zaqef qaton* with יְהֹוָה (22:16C) is not:

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⁶⁶ We follow the *k^tib*; cf. Ps 18:8.

2 Sam 22:16 (MT^C)	וַיֵּרָאוּ֙ אֲפִ֣קֵי יָ֔ם	16A
	יִגָּל֖וּ מֹסְד֣וֹת תֵּבֵ֑ל	16B
	בְּגַעֲרַ֣ת יְהוָ֔ה מִנִּשְׁמַ֖ת ר֥וּחַ אַפּֽוֹ׃	16C

Then were exposed [p] the channels of the sea, [z]
were laid bare [t] the foundations of the world, [a]
at the rebuke of YHWH, [z] at the blast [t] of the wind of his
nostrils. [s]

Another example is 2 Sam 22:44a, where the first *zaqef qaṭon* (on וַתְּפַלְּטֵ֙נִי֙) is not preceded by a precursor, while the second *zaqef qaṭon* is preceded by the precursor *pašṭa* (תִּשְׁמְרֵ֙נִי֙).

2 Sam 22:44 (MT^C)	וַתְּפַלְּטֵ֙נִי֙ מֵרִיבֵ֣י עַמִּ֑י	44aA
	תִּשְׁמְרֵ֙נִי֙ לְרֹ֣אשׁ גּוֹיִ֔ם	44bA
	עַ֥ם לֹא־יָדַ֖עְתִּי יַעַבְדֻֽנִי׃	44bB

You have delivered me [z] from the strife [t] of my people; [a]
You kept me [p] as the head of the nations, [z] people whom I did not
know [t] served me. [s]

In Deut 32:17, the *rᵉviaʿ* of יִזְבְּחֹוּ (17aA) is not assumed to mark the end of a colon, since it is not preceded by a precursor.

Deut 32:17 (MT^D)	יִזְבְּחֹ֗וּ לַשֵּׁדִים֙ לֹ֣א אֱלֹ֔הַ	17aA
	אֱלֹהִ֖ים לֹ֣א יְדָע֑וּם	17aB
	חֲדָשִׁים֙ מִקָּרֹ֣ב בָּ֔אוּ	17bB
	לֹ֥א שְׂעָר֖וּם אֲבֹתֵיכֶֽם׃	17bB

They sacrificed [r] to the Šedim, [p] a no-god, [z]
gods [t] that they had not known; [a]
new ones, [p] recently they had come in, [z]
whom did not fear [t] your fathers. [s]

Note that in 2 Sam 22:3bA (see p. 33 above) the *rᵉviaʿ* is preceded by a precursor and does mark the end of a colon. The weight of the *rᵉviaʿ* appears to depend on the series of disjunctive accents in which it occurs, and whether it is preceded by its regular precursor, or not.[67]

6.2 THREE BOOKS

The accentuation system of the Three Books is more complex. Within the system, it is necessary to distinguish between different types of *rᵉviaʿ*, although the sign that is used is identical for each type. The first distinction is relatively simple. Close to the end of verses, a *rᵉviaʿ* is often accompanied by a *gereš*. Such a *rᵉviaʿ*, which is designated as a *rᵉviaʿ mugraš* (e.g., לֵצִ֗ים, Ps 1:1), occurs with the first or second word-unit before the word-unit with *silluq*. The *gereš* distinguishes the *rᵉviaʿ* from the other types of *rᵉviaʿ*.

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[67] In Deut 32:17aA (*rᵉviaʿ*), 2 Sam 22:3bC (*zaqef gadol*, see above), 22:18A (*zaqef gadol*, see above) and 22:18B (*zaqef qaṭon*), we find a second subordinate accent that subdivides the colon and creates a more extended cadence. This phenomenon is called "trichotomy" (in addition to the more usual "dichotomy"); see de Hoop 2003.

Three types of *rᵉviaʿ* without a *gereš* appear to exist. A *rᵉviaʿ* that precedes an *ʿole wᵉyored* without any intervening disjunctive accent (as in Pss 3:6; 7:1; 9:7, etc.) is interpreted as a *rᵉviaʿ qaṭon* (Yeivin 1980: 267–68, § 363; Price 1990: 243–47). An unaccompanied *rᵉviaʿ* that occurs with the first or second word-unit before the word-unit with *silluq* (as in Ps 5:1, 2, 7, etc.) is a different type of *rᵉviaʿ*. Such a *rᵉviaʿ* is sometimes designated as "defective *rᵉviaʿ mugraš*" (Price 1990: 202–9), or "*rᵉviaʿ mugraš* without *gereš*" (Yeivin 1980: 267–68, § 363; 270, § 367), but it is actually nothing but a type of the usual *rᵉviaʿ* (Breuer 1982: 218–19; Dotan 2001: xvi).[68] In this situation, the *rᵉviaʿ* occurs where the accent *atnaḥ* may be expected (Wickes 1881: 74–76; Yeivin 1980: 267–68, § 363; 270, § 367; Price 1990: 202–9), thus "functioning in place of an *atnaḥ*" (Dotan 2001: xvi). For that reason, we will denote this *rᵉviaʿ* as "*rᵉviaʿ* replacing *atnaḥ*," or [rᵃ].[69] All the other occurrences of the unaccompanied *rᵉviaʿ* are examples of the *rᵉviaʿ gadol* (Yeivin 1980: 267–68, § 363; Price 1990: 244, 247).

Our analyses suggest that in the Three Books the following accents mark the end of a colon:[70]

$$silluq \text{ [s]} - ʿole \ wᵉyored \text{ [oy]} - atnaḥ \text{ [a]} - rᵉviaʿ \text{ repl. } atnaḥ \text{ [r}ᵃ\text{]}$$
$$rᵉviaʿ \ gadol^* \text{ [rg]} - ṣinnor^* \text{ [sn]}$$

**Table 5: Accents marking the end of a colon
(Three Books)**

We assume that the accents marked with an asterisk (*****) indicate the end of a colon only if the preceding disjunctive accent is a precursor. Although this interpretation of the accents is justifyable, further analysis will show that it needs to be refined in several respects (Sanders & de Hoop forthcoming).

The distinction of three types of the accent *rᵉviaʿ* in the Three Books has consequences for the delimitation of cola. The accentuation of Ps 18:3 suggests that וּמְצוּדָתִ֥י (with *rᵉviaʿ qaṭon*, followed by *ʿole wᵉyored*) is not the last word of a colon:[71]

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[68] Wickes (1881: 74–76) argued that the absence of the *gereš* sign is erroneous and that the sign should be treated as a complete *rᵉviaʿ mugraš*. Breuer (1982: 218–19) contradicted this view and demonstrated that the accent must be considered as an unaccompanied *rᵉviaʿ* (cf. also Dotan 2001: xvi).

[69] In Ps 14:1, the *rᵉviaʿ* without *gereš* on the second word before the word-unit with *silluq* does not replace *atnaḥ* since there is an *atnaḥ* earlier in the verse. This case is exceptional. In addition to Ps 14:1, Price (1990: 206–7, with n. 15) mentions four additional verses (Pss 44:19; 61:9; 88:4; Job 9:10) in which such an unaccompanied *rᵉviaʿ* follows an *atnaḥ*. Unfortunately, Price based his analysis on *BHS*, not on the Aleppo Codex and Leningrad Codex, in which the *rᵉviaʿ* in these verses is accompanied by a *gereš* (*rᵉviaʿ mugraš*). In the Aleppo Codex the *gereš* is also found in Job 9:10, while its omission in the Leningrad Codex seems to be an error.

[70] This hypothesis was developed in de Hoop 2000a; Sanders 2000; 2002.

[71] Breuer (1982: 211–12) offered a scheme of the accents of the

Ps 18:3	יְהֹוָה׀ סַלְעִי וּמְצוּדָתִי וּמְפַלְטִי	3A
	אֵלִי צוּרִי אֶחֱסֶה־בּוֹ	3B
	מָֽגִנִּי וְקֶֽרֶן־יִשְׁעִי מִשְׂגַּבִּֽי׃	3C

O YHWH, [ml] my rock, my fortress, [rq] and my deliverer, [oy]
my God, my rock [dh] in whom I seek refuge, [a]
my shield and the horn of my salvation, [rm] my stronghold. [s]

In Psalm 119:2 the *rᵉviaʿ* of עֵדֹתָיו is a *rᵉviaʿ* replacing *atnaḥ*. Consequently, the verse is interpreted as a bicolon:

Ps 119:2	אַשְׁרֵי נֹצְרֵי עֵדֹתָיו	2A
	בְּכָל־לֵב יִדְרְשֽׁוּהוּ׃	2B

Happy [dh] those who keep his decrees, [rᵃ]
with their whole heart seek him. [s]

In Psalm 57:2, the *rᵉviaʿ gadol* with the second חָנֵּנִי is preceded by a precursor (*azla ḷgarmeh*). Although *ʿole wᵉyored* follows this *rᵉviaʿ*, the disjunctive accent *ṣinnor* (on בְךָ֘) comes between *rᵉviaʿ* and *ʿole wᵉyored*, which means that *rᵉviaʿ* is *not rᵉviaʿ qaton* but *rᵉviaʿ gadol*. Therefore, this *rᵉviaʿ* is assumed to mark the end of a colon:

Ps 57:2	חָנֵּנִי אֱלֹהִים ׀ חָנֵּנִי	2aA
	כִּי בְךָ֘ חָסָ֣יָה נַפְשִׁי	2aB
	וּבְצֵל־כְּנָפֶיךָ אֶחְסֶה	2bA
	עַד יַעֲבֹר הַוֺּֽת׃	2bB

Have mercy on me, O God, [al] have mercy on me, [rg]
for in You [sn] my soul takes refuge; [oy]
in the shadow of Your wings I will take refuge, [a]
until [rm] destroying storms pass by. [s]

In Psalm 68:8, however, the *rᵉviaʿ gadol* of אֱלֹהִים is not preceded by a precursor. Therefore, this *rᵉviaʿ* is not assumed to mark the end of a colon:

Ps 68:8	אֱלֹהִים בְּצֵאתְךָ לִפְנֵי עַמֶּךָ	8A
	בְּצַעְדְּךָ בִישִׁימוֹן סֶֽלָה׃	8B

O God, [rg] when You went out [dh] before your people, [a]
when You marched through the wilderness; selah. [s]

The examples above show that not only in the Twenty-one Books but also in the Three Books many cola are subdivided by at least one disjunctive accent. There appear to be other cola that lack subdivision by disjunctive accents. Apparently, the accentuation of the Three Books prescribes the insertion of fewer pauses in the recitation than the accentuation of the Twenty-one Books. This is illustrated by a systematic comparison of 2 Samuel

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Three Books according to the division of emperors, kings, etc., as generally happens with those in the Twenty-one Books (cf. p. 30 above). He subsequently compared the function and weight of these accents with those in the Twenty-one Books. According to his scheme *ʿole wᵉyored* equals *sᵉgolta* in the Twenty-one Books, whereas *rᵉviaʿ qaton* equals *zarqa* (the precursor of *sᵉgolta*). These are the accents we find in Ps 18:3A above in the main text (see also Yeivin 1980: 270, § 368). Next, the domain of *rᵉviaʿ qaton* in v. 3A is subdivided by *mahpak ḷgarmeh*, which occurs as a subdivider by many disjunctives (see Price 1990: 259).

22 and Psalm 18, a slightly different version of the same poem (Sanders 2000: 280–82, 309–11, with reference to Wickes 1881 and Price 1990). See further Section 8 below.

7. HISTORICAL BACKGROUND

The Masoretic accentuation system as we know it from the editions of the Hebrew Bible is based on the work of the Tiberian Masoretes, who completed their work at the end of the ninth or the beginning of the tenth centuries C.E. It appears, however, that the division of the text by means of disjunctive accents corresponds quite closely to divisions in much older biblical manuscripts.

Already in some of the Dead Sea Scrolls, blank spaces and sometimes also line-breaks are used to demarcate textual units smaller than a verse. These scrolls date to several centuries before the introduction of the Masoretic accentuation systems. In 4QDan[a,d], spaces in the text appear to occur after words that the Masoretes provided with a *silluq* or *atnaḥ* (Pfann 1991: 136; 1996: 46–53). However, the special arrangements occur especially in poetic sections, such as Deut 32:1–43, the Psalms, Proverbs, and Ben Sira (Tov 2004: 167–69), where the small textual units coincide with cola. We have already referred to the correspondence between the colometric layout of Isa 61:10–62:9 in 1QIsa[a] and the much later division of the text by the major disjunctive accents (see p. 32 above). In the near future, we will demonstrate that the other colometric layouts of the Dead Sea Scrolls also closely correspond with the division of poetic text by means of the accents, despite the time gap (Sanders & de Hoop forthcoming).

Ancient divisions are also found in some of the earliest extant manuscripts of the Greek translation of the Hebrew Bible, which not only have spaces indicating verses ("short sense units") but also demarcating "groups of words" (Revell 1971/72; 1976; Tov 2004: 303–15, esp. 304). Since most of these manuscripts predate the common era, they are of unmistakable Jewish origin (Tov 2004: 314).

The Tiberian tradition was not an isolated phenomenon but appears to have been part of a long process that started very early. In this section, we will first discuss the question of when the Masoretic accentuation began. Since the Babylonian and Palestinian accentuation traditions started before the Tiberian tradition, their characters will also be described.

7.1 THE ANTIQUITY OF THE MASORETIC ACCENTUATION

In his study on the indication of small sense units (stichs and verses) in biblical manuscripts, Emanuel Tov described the oral traditions with regard to the division of the biblical text into verses, followed by a survey of the written evidence in Hebrew and Aramaic biblical texts, the Targumim, Greek translations, and the Samaritan Pentateuch (Tov 2003: 476–81 [2004: 136–40]). Concerning the Masoretic accentuation, he wrote:

Various early written traditions concerning the division of
the text into small units (verses) have come down to us as
described above. All these texts are based probably on an
ancient reading tradition that initially was oral. Such an oral
reading tradition was put into writing at a later stage and
integrated into the recording of the accents of MT (Tov
2003: 481 [2004: 140]; cf. 2012: 62–64; Revell 2000: 72).

Exactly when the Masoretes began to introduce the vocalisation
and accentuation into the written text is hard to establish. Gen-
erally, vowels and accents are considered to be a single entity that
was introduced all at once. The date *post quem* is commonly fixed
after Jerome (end fourth / beginning fifth century C.E.) who
stated that Jews did not have signs for the notation of vowels
(Dotan 1981: 89). Most scholars date the introduction of the
accents also after the completion of the Babylonian Talmud (±
550 C.E.), since they assume that there are no references to
vowel and accentuation signs in it (e.g., Wickes 1887: 5, n. 9).
They argue that the word טְעָמִים, which does occur in the Tal-
mud (see below), did not yet designate the accents. On the other
hand, the introduction of the vowel and accent signs must pre-
date the first Masoretes, namely Asher the Elder (second half
eighth century C.E.) and Pinḥas Rosh HaYeshiva (first half ninth
century C.E.), who were already familiar with these signs (Wickes
1887: 4–8; Dotan 1981: 89–92; 2007: § 2.2.2).

The date *post quem* is mainly based on references to the
vocalisation, especially Jerome's statement regarding the nota-
tion of vowels (Wickes 1887: 5, n. 9). Since the accentuation and
vocalisation were generally regarded as one entity, such state-
ments were considered as evidence for the insertion of the
accents too. Actually, however, such statements refer solely to
the vocalisation. Aaron Dotan has argued that it is reasonable to
assume that the accentuation was introduced before the vocali-
sation (Dotan 1981: 92–95; 1987: 355–65). Only after the intro-
duction of the accents were the vowel signs positioned in the
text, where there was still room for them. Since most of the old-
est, Babylonian disjunctive accents had been positioned above
the line, this was mostly below the line, where the conjunctive
accents began to be written as well. According to Dotan (1981:
92–95), the priority of the accentuation signs can also be
deduced from the fact that in both the Babylonian and the Pal-
estinian tradition the signs indicating the pronunciation of the
text (vowels, etc.) are "second-choice" signs. Apparently, the
"first-choice" had already been taken for the accentuation. In the
Palestinian tradition, for example, one single dot was already
used for the accents, so more than one dot had to be used for
vowels (Revell 1976: 181).

If the assumption that vowels and accents were introduced
at the same time is abandoned, certain passages in the Talmud
referring to the טְעָמִים can be understood differently. Ear-
lier—when this assumption was still held—occurrences of the
word טְעָמִים were assumed to relate to manual signs (e.g. Wickes
1881: 1, with n. 2) not to the written accent-signs (Dotan 1981:
96). It now seems justified to take the word in the sense of

"accents," as Dotan suggests. In *bBer.* 62a it is evident that טעמי תורה is understood as signs pointed at by hand signals during the reading of the Torah (Dotan 1981: 96–97; 2007: 611; Burns 2011: 23):

> "Why should one מפני מה אין מקנחין בימין אלא בשמאל wipe (oneself clean) with the left hand and not with the right?" . . . ר ' עקיבא אומר מפני שמראה בה טעמי תורה Rabbi Akiba is saying: "because with it [the right hand] he points to the *ṭᵉʿamim* of the Torah."

Another example is found in the homiletic interpretation of Neh 8:8 in *bMeg.* 3a (parallels: *Gen.Rab.* 36:8; *yMeg.* 4, 74d; *bNed.* 37b; see Dotan 2007: 610):[72]

> ויקראו בספר תורת האלהים מפורש ושום שכל ויבינו במקרא "And they read in the book of the law of God, with an interpretation, and they gave the sense, and caused them to understand the reading" (Neh 8:8). ויקראו בספר תורת האלהים זה מקרא, "and they read in the book of the law of God": this indicates the [Hebrew] text; מפורש זה תרגום "with an interpretation": this indicates the Targum; ושום שכל אלו הפסוקין "and they gave the sense": this indicates the verse stops; טעמים[73] [פיסקי] אלו ויביבו במקרא "and caused them to understand the reading": this refers to [the divisions of] the *ṭᵉʿamim*.

These and other references to the טְעָמִים in the Talmud render it quite likely that the tradition of the accents did exist at an early stage, perhaps already in the fourth century C.E. (Dotan 1981: 98; cf. also Tov 2012: 63). *bEruvin* 21b transmits a homiletic interpretation by Rava (first half 4th century) of "he taught the people knowledge" in Eccl 12:9 as meaning "he taught them *ṭᵉʿamim* signs" (סימני טעמים). On this basis, Dotan (1981: 98) suggests cautiously that written accent signs existed already:

> . . . there is no evidence whatsoever in the Talmud that accent signs did *not* exist before its completion. On the contrary, there is evidence which *may* be interpreted that they did exist, perhaps already in the fourth century.

Whether the signs did exist in writing or not by then, is not entirely clear. However, it is evident that accents were used before the development of the Tiberian accentuation system. The older Babylonian and Palestinian accentuation systems each have their own specific features. In contrast to the two Tiberian systems of accentuation, one for the Three and one for the Twenty-one Books, the Babylonian system did not know any subsystems and applied a single system to all the books of the Hebrew Bible. Like the Tiberian tradition, the Palestinian tradition seems to have distinguished two subsystems for the

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[72] See also Dotan 1981: 97; van der Kooij 1991: 80–81; Trompelt 2010: 333–34; Tov 2012: 63.

[73] *Gen.Rab.* 36:8 and *yMeg.* 4, 74d read אילו טעמים, "these are the *ṭᵉʿamim*."

Twenty-one Books and the Three Books, but this is not entirely clear (Dotan 2007: 629–30 § 5.1.3.3). The Babylonian system is the oldest and is followed by the Palestinian system, although some phases of the latter tradition may be later than the Tiberian tradition.

7.2 The Babylonian Tradition

In the Babylonian tradition, the accents are marked supra-linearly, mostly in the form of Hebrew characters, "apparently the first letter of the accent's name" (Shoshany 2013: 269). Several examples are shown in Tabel 6. The *zayin* mostly represents the equivalent of the Tiberian *zaqef*. Unfortunately, not every accent name represented by a letter is still known, especially the names denoted by *šin*,[74] which is the equivalent of *sᵉgolta*, by *taw*, equivalent of *pašṭa*, *rᵉviaʿ* and *tᵉvir*;[75] and by *ḥet*, equivalent of *rᵉviaʿ* (Shoshany 2011: 254–55, 257–61; 2013: 270, 272–73). In some manuscripts, the end of the verse is indicated by the well-known two dots for *sof pasuq* (:) (Shoshany 2013: 269), the sign that is already found in 4Q156 (4QtgLev; Milik 1977: 86–87). In other manuscripts, the end of a verse is marked by a small high circle positioned to the left of the final letter and resembling the *samekh*, thus probably the abbreviation for *sof pasuq*, although the shape is equivocal (Shoshany 2013: 269; cf. Weerts 1906: 65; Kahle 1913: 175). In addition to these, there is the supra-linear grapheme for *šihfa*, the equivalent of the Tiberian *atnaḥ* in the Twenty-one Books and generally the equivalent of Tiberian *ʿole wᵉyored* in the Three Books. The supra-linear accent *rimya* is the equivalent of the *ṭifḥa* before an *atnaḥ* (Shoshany 2013: 269–70, 272–73).[76] In the Three Books, the Babylonian accent *zayin* generally equals Tiberian *atnaḥ* (Spanier 1927: 107; Himmelfarb 2014: 197).

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[74] Remarkably, in recent scholarly literature the sign for *šin* is represented as a—sometimes slanted—*ʿayin*. The sign is "represented in the manuscripts by two hanging arcs which look like a part of the letter *šin*" (Soshany 2013: 270). Kahle (1902: 47) first rendered this accent as two "hanging arcs" (see Figure 3), but later (1913: 124, 174) indicated the accent by means of a slanted *ʿayin* (𝑦), without any explanation.

[75] Park 2020: 145–46, equates the Bab. accent *taw* with Tiberian *tᵉvir*, which may be correct regarding its name (cf. Kahle 1913: 174) but is incorrect with regard to its function. Shoshany 2011: 257–61 (cf. also 2013: 272) lists several examples in which the Bab. accent *taw* equals either *rᵉviaʿ*, or *pašṭa*, or *tᵉvir* (but once even *maqqef*).

[76] Both symbols are quite big in Kahle 1902: 46–47; 1913: 1 (cf. אַ and אֲ), but the facsimiles testify to the regular shape of both signs; see already Weerts 1906: 65–66, 76–84.

Accent	Sign	Accent	Sign
zayin	אֿ	*šin*	אֳ/א�̈
taw	אֿ	*ḥet*	אֿ
sof passuq	:/אֿ	*daleth*	אֿ/אֿ
siḥfa	אֿ	*rimya*	אֿ

Table 6: Some of the Babylonian accents

In his analyses of the Babylonian tradition, Kahle remarked that research on the disjunctive accents is especially difficult because in the earlier stages they were not marked consistently.[77] He argued that pairs of accents represent cadences: *paʃṭa-ẓaqef*, *ṭiḥa-atnaḥ*; *ẓarqa-sᵉgolta* (Kahle 1902: 49). He explained the regular omission of accents as due to the use of such fixed pairs. If the reader saw a *paʃṭa*, he knew that a "*ẓaqef* cadence" began, so the *ẓaqef* sign could be left unwritten (Kahle 1902: 49; see also Himmelfarb 2014: 194–95, n. 20).[78] Similarly, the vocalisation of the texts is far from complete. In the earliest Babylonian manuscripts, vowels were only added where different interpretations were possible, while some words were only vocalised the first time they occurred in a text (Kahle 1902: 11–12; Weerts 1906: 51).

The incompleteness of the system is illustrated by the fact that even the entire pair *ṭiḥa-atnaḥ* was often omitted (Kahle 1902: 47) in Codex Berlin Or.Qu. 680.[79] See, for example, Ps 96:13 (Kahle 1902: 94), especially v. 13b:

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[77] "The study of these accents is complicated by the fact that they are not applied regularly" (Original: "Die Untersuchung dieser Accente wird dadurch schwierig, weil sie nicht regelmäßig gesetzt sind"; Kahle 1902: 45; see also 1913: 173). See also Weerts 1906: 65–67; Shoshany 2013: 273; Himmelfarb 2014: 203.

[78] Trompelt (2010: 352, n. 35) refers to the omission of accents in two-word clauses in the Babylonian tradition (cf. n. 35 above). He suggests that the Babylonian tradition did not use disjunctive accents to subdivide a two-word unit ending with *atnaḥ* or *silluq*, while the Tiberian system in such cases has a *ṭiḥa*. Trompelt seems to have overlooked several Babylonian manuscripts published by Kahle (1913: 1–2), here rendered with the Tiberian punctuation: וּלְיִשְׁמָעֵאל֙ שְׁמַעְתִּ֔יךָ (Gen 17:20); וְהִנֵּה־ (Gen 41:35); הַבָּ֣את הָאֵ֑לֶּה (Gen 21:23); וּלְנִינִ֖י וּלְנֶכְדִּ֑י (Gen 21:23); נַ֤עַר בֹּכֶ֔ה (Exod 2:6). It is true that the Babylonian manuscript Cambridge T-S B 15.1 does not have any disjunctive accents in the long clause in Isa 62:8, not even at its end, whereas the Tiberian text has two disjunctive accents in the same clause: אִם־אֶתֵּן֩ אֶת־דְּגָנֵ֨ךְ ע֤וֹד מַֽאֲכָל֙ לְאֹ֣יְבַ֔יִךְ (Kahle 1913: 36–38; see also de Hoop 2022: 61–65). However, in the same manuscript we have a clause of two word-units with a disjunctive accent with the first word: וְהִֽלְל֖וּ אֶת־יְהוָ֑ה (Isa 62:9).

[79] For this Babylonian codex, see Barthélemy 2012: 241–42.

Babylonian accentuation		Tiberian accentuation
לפני יהוה כי בא֚	(13a)	לפני יהוֹה ׀ כי בֹ֖א
כי בא֚ לשפט הארץ	(13b)	כי בא֩ לישפט הָאָ֗רץ
ישפט תב֖ל בצד֖ק	(13c)	ישפט־תב֖ל בצֶ֑דק
ועמים באמונתו	(13d)	וֹעמ֣ים באמונתֽו׃

before Y*HWH, for He is coming,*
for He is coming to judge the earth;
He will judge the mainland in righteousness,
and the peoples with his truth.

See also Lam 1:1-2 (Kahle 1902: 106), especially vv. 1c and 2c:

Babylonian accentuation		Tiberian accentuation
איכה ישבה בד֖ד	(1a)	איכָ֣ה ׀ ישבָ֣ה בד֔ד
העיר רבתי ע֖ם	(1b)	העיר֩ רבָ֨תי עָ֜ם
היתה כאלמנה	(1c)	היתָ֣ה כאלמ֔נה
רבתי בגוים שרתי במד֖ינות	(1d)	רבָ֣תי בגוֹים שרתי֙ במדי֔נֹות
היתה למס׃	(1e)	היתָ֖ה למַֽס׃
בכו תבכה בלילה֚	(2a)	בכֹ֤ו תבכֹה֙ בלֹ֔ילה
ודמעתה על לחיה֚	(2b)	ודמעתה֙ עַ֣ל לחיָ֔ה
אין לה מנחם מכל אהביה	(2c)	אֽין־לָ֤ה מנחם֙ מכל־אֹ֣הבֶ֔יה
כל ר֖עיה בגדו בה	(2d)	כל־רעֹיה֙ בָ֣גדו בָ֔ה
היו לה לאיבים׃	(2e)	הָ֥יו לָ֖ה לאֹיבֽים׃

Alas! Lonely she sits,
the city, great with people,
she has become like a widow;
great among the peoples, a princess among provinces,
she has become a slave.
Bitterly she weeps in the night,
her tears on her cheeks,
there is none to comfort her of all her lovers;
all her friends have betrayed her,
they have become her foes.

Initially, the Babylonian system did not know of any conjunctive accents, but in a number of manuscripts they were later added on the basis of Tiberian punctuated texts, although they do not fit in with the Babylonian system (Shoshany 2013: 268; earlier: Wickes 1887: 142–50; Kahle 1901: 186; 1913: 171–72; 1922: 138, § 9p; Weerts 1906: 65).

In general, the accentuation systems in the Babylonian and Tiberian traditions represent corresponding patterns of cadences in the text. There are some differences, which are either seen as quite relevant (Revell 1979: 149–50), or as limited to details (Shoshany 2013: 272). The correspondences concern not only the main divisions of the verses but also their more detailed subdivision (Shoshany 2013: 272; Himmelfarb 2014: 194–95), for example by *rᵉviaʿ mugraš* in the Three Books (Weerts 1906: 65–67). According to Shoshany (2013: 272) the original purpose of the accents was merely to indicate punctuation, but at a later stage they acquired a musical role. If the accentuation was

intended to indicate the cadence of the reading with (short and longer) pauses in the text, we do not have to assume a real shift in their role. Only later, the exact position of the accent above the word, more specifically above the stressed syllable, became important.

7.3   THE PALESTINIAN TRADITION

The Palestinian system is often regarded as a pre-Tiberian system since it has many features in common with the Tiberian system but is less extensive and complete (Kahle 1930: 45*). Against this view, John Revell has argued that there is reason to assume a different development in which both systems existed side by side and used the same body of material (Revell 1974: 87–88; 1979: 148–49). In his view, the Palestinian system reflects a partial and inexact use of that material. The tradition even continued to develop after the Tiberian system had been fixed (Revell 1979: 148–49). Revell believed that, while the Tiberian system developed in a scholarly atmosphere, the Palestinian system had a more or less provincial background, with less uniformity, as the congregations were more scattered (Revell 1974: 98).

Like the Babylonian system, the Palestinian system did not attempt to provide a complete set of accents. For instance, when a clause could have been accented with the regular pair *ṭifḥa–atnaḥ*, the major accent (here *atnaḥ*) was considered superfluous and therefore left out (Kahle 1930: 43; Revell 1974: 90; 1979: 144 [with n. 12], 147; Dotan 2007: 628–29, § 5.1.3.2–3). Furthermore, the Palestinian system is problematic because it does not exclusively use one symbol for one accent, although early studies suggested this (Kahle 1922: 139–41). Revell (1979: 145) has shown that this sometimes led to the false conclusion that a single dot indicated the disjunctives *rᵉviaʿ*, *zaqef*, and *sᵉgolta*, and that it was impossible to establish which one was meant. He argued, however, that the position of the dot and the combination with other accents shows which accent the dot represents.

Another example occurs in manuscript Cambridge T-S 20.59, which has no specific sign for the *atnaḥ* but uses the sign that is also used for the *zaqef*, i.e., a supra-linear dot.[80] In the Palestinian system, *ṭifḥa* is marked with a sub-linear dot and *pašṭa* with two supra-linear dots. See the text of Ezek 13:13 with Palestinian (Cambridge T-S 20.59) and Tiberian accentuation:[81]

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[80] The manuscript was first published in Kahle 1930: 66–72; plate 7, and can now be consulted on the website of the Cambridge University Library (CUL T-S 20.59). Not only Cambridge T-S 20.59 but also Cambridge T-S Misc. 29:19 uses the *zaqef* sign for *atnaḥ*. These two manuscripts are peripheral to the Palestinian tradition because the accentuation system differs also in other respects (Revell 1979: 146–47). In other manuscripts *atnaḥ* is often marked with the *ṭifḥa* sign, a sub-linear dot.

[81] לָכֵן (first word in the text) is marked with *rᵉviaʿ* without its regular precursor, and is thus not to considered as the end of a colon (cf. p. 35 above). לָכֵן at the beginning of a clause generally has a disjunctive accent. Note that in the Palestinian pointing, לכן is marked with a dot

Palestinian accentuation		Tiberian accentuation
לכן כה·אמׄר אדני·יהוה	(13a)	לָכֵ֗ן כֹּ֤ה אמַר֙ אדֹנָ֣י יהֹוִ֔ה
ובקעתי·רוח·סערות בחמׄתי	(13b)	ובִקַּעְתִּ֥י רֽוּחַ־סְעָר֖וֹת בַּחֲמָתִ֑י
וגשם·שוטֵף באפי·יהׄיה	(13c)	וגֶ֤שֶׁם שֹׁטֵף֙ בּאַפִּ֣י יהְיֶ֔ה
ואבני·אלגביש בחמה לכלה:	(13d)	וֽאַבְנֵ֥י אֶלְגָּבִ֖ישׁ בּחֵמָ֥ה לכלה:

For sure, thus says the Lord YHWH:
I will let loose a hurricane wind in My fury;
a driving rain in My anger will there be,
and great hailstones in destructive fury.

This example with Palestinian pointing demonstrates that even though the signs for *atnaḥ* and *zaqef* are identical, these accents can be differentiated by the way in which the signs are used. Since the supra-linear dots in 13a and 13c are preceded by a *pašṭa* (two supra-linear dots), it is obvious that they represent a *zaqef*. In 13b the supra-linear dot is preceded by the *ṭifḥa* (sub-linear dot), which requires a following *atnaḥ*. Thus, on the basis of the existence of fixed pairs the reader knew whether he had to read *zaqef* or *atnaḥ*. Even the first supra-linear dot in 13a (on לכן) is obviously a *rᵉviaʿ* because in general a single *zaqef* does not precede a cadence of *pašṭa–zaqef*, whereas *rᵉviaʿ* does. The latter phenomenon shows that the Tiberian and the Palestinian systems are largely in agreement, which can only be explained if both traditions had the same body of material as the basis for their tradition.

7.4   Concluding remarks

The extant manuscripts from the three different Masoretic traditions (Babylonian, Palestinian, Tiberian) show that there were gradual as well as more fundamental developments. The ongoing reading tradition was alive and involved changes when communities or individuals felt the need to adapt existing traditions (Revell 1971/72: 219). Of course, there are differences at the level of the accentuation, especially between the Babylonian tradition on the one hand, and the Palestinian and Tiberian traditions on the other hand. Yet, these differences do not nullify the fact that, in general, the traditions correspond with regard to the division and subdivision of the verses. One of the correspondences concerns the fact that groups of words (phrases, or cola in the case of poetry) are marked by pairs of accents, such as *gereš–rᵉviaʿ* and *pašṭa–zaqef qaṭon*. This phenomenon is known as dichotomy. The first accent of the pair subdivides the unit and the second accent marks its end. The fact that in the Babylonian and Palestinian traditions the second accent of the pair (and occasionally also the first) could be left out as superfluous,

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for *rᵉviaʿ* as well. In the Tiberian tradition, it depends on the length of the clause whether the regular "precursor" of the final accent is used to mark a word like לָכֵן, thus forming a dichotomic pattern (e.g., *pašṭa-zaqef qaṭon* in Mic 2:5aA), or whether an additional accent is used, thus forming a trichotomic pattern (e.g., *rᵉviaʿ-pašṭa-zaqef qaṭon*), as in Mic 2:3aA (de Moor 2002: 102–3) or in Ezek 13:13a (see main text above).

demonstrates that such dichotomic patterns were already known before the different traditions were laid down in writing. This seems to strengthen Dotan's suggestion that the Talmudic references to t^eʿ*amim* were indeed references to accents, even though in some cases it is not clear whether by then they were still part of the oral tradition, or already of the written tradition. Further analysis of the division of biblical texts by means of blank spaces in some of the Dead Sea Scrolls will cast more light on the origin of the biblical accentuation (see Sanders & de Hoop forthcoming).

8. THE CHRONOLOGICAL ORDER OF THE TWO TIBERIAN SUBSYSTEMS

As mentioned above (Section 3), the Tiberian tradition comprises two different subsystems of accentuation, namely the subsystem of the Three Books (Psalms, Job 3:2–42:6, Proverbs) and the subsystem of the Twenty-one Books (the so-called Prose Books). In this respect, the Palestinian tradition probably agrees with the Tiberian tradition (cf. end of Section 7.1 above), whereas the Tiberian tradition clearly differs from the Babylonian tradition, which applies a single system to all the biblical books (Shoshany 2013: 271).[82]

The Tiberian system of the Three Books is also applied to the superscriptions and introductions to the Psalms (e.g., 8:2; 18:1; 19:8; 52:2; 59:1; 60:1–2; 88:1) and to the narrative section of Job 32:1–5. In the relatively long verses of Ps 18:1 and Job 32:1–5, the accentuation system of the Three Books is obviously inadequate (Wickes 1881: 9, n. 18; 76, n. 8; Price 1990: 179 [with n. 11], 189, n. 10; Sanders 2000: 290, n. 41). The system of the Twenty-one Books has been used for texts that are clearly poetic, such as Song of Songs, Lamentations, and even poetry that recurs in the book of Psalms (2 Samuel 22 // Psalm 18; 1 Chr 16:8–36a // Pss 105:1–15; 96:1–13; 106:1, 47–48). This suggests that there is no absolute need for two different subsystems (Wickes 1881: 8; Mitchell 2017: § 11).

The application of the system of the Twenty-one Books to poetic texts was quite unproblematic. This fact may shed light on the historical development of the two systems. Wickes (1881: 7–9) suggested that the system of the Three Books is a secondary refinement of the system of the Twenty-one Books, compensating for the short verses in the Three Books. The character of the refinement would be purely musical: the refined system would offer "a finer and fuller, more artificial and impressive melody" (Wickes 1881: 9; cf. Baer 1894: 835). According to Wickes (1881: 8), the melodies indicated by the accentuation of the Three

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[82] Spanier (1927: 107–9) suggested that the Babylonian system already hints at the two different subsystems for the Three and the Twenty-one Books. In his view the Babylonian system in the Three Books reflects the Tiberian system of the Three Books, whereas the former would also differ from the same system in the Twenty-one Books. Since his arguments were not convincing, this suggestion has been ignored in later research.

Books correspond more frequently with the logical or grammatical structure of the verses than those indicated in the Twenty-one Books. Since the melodies were regarded as quite suitable in the case of the Psalms, they were also introduced in Job and Proverbs (Wickes 1881: 9).[83]

Wickes's theory has some problems. It is unclear how the alleged refinement and improvement would have taken place. Had the Tiberian accents of the Twenty-one Books already been applied in the Three Books and were they later replaced by the new, "refined" system? Or had these books not yet been accented and were the accents only added when the new subsystem became available? If the refined system replaced the older accentuation, why was the refined system applied to the narrative section of Job 32:1–5, where the older system would have been more suitable, whereas in Job 1–2 and 42:7–17 the older system was not replaced by the new system?[84]

A second option is that the Tiberian Masoretes had access to both subsystems from the beginning. In that case also, it remains inexplicable that the narrative section of Job 32:1–5 was provided with the system of the Three Books, unlike Job 1–2 and 42:7–17. Furthermore, it would be hard to explain why the Masoretes provided Job 1–2 and 42:7–17 with the accentuation of the Twenty-one Books and the rest of the book with the accentuation of the Three Books (Mitchell 2017: § 12), but did not make the same shift in the poetic texts in prose contexts, such as Exodus 15, Deut 32:1–43 and 2 Samuel 22.[85] The latter poems virtually always have a colometric layout in the Masoretic manuscripts, just like Psalms, Job 3:2–42:6, Proverbs, so their poetic character was beyond doubt (Sanders & de Hoop forthcoming). It is also unclear why the Book of Job was not completely provided with the system of the Twenty-one Books, whereas exclusively poetic books such as Lamentations and

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[83] Crowther (2015: 152–56; cf. also Notarius 2018: 341), following Wickes (1881: 8–9) argues that the system was developed because many of the verses in the Three Books are short, in contrast to the verses in the Twenty-one Books. He illustrates his argument by means of a table with the average number of words in the verses of all the biblical Books (2015: 154). A serious flaw of such a comparison is, however, that it does not consider the presence of several bicola (or tricola) within one Masoretic verse (e.g., in Lamentations 1–2 or Song of Songs) in contrast to the Three Books, where one Masoretic verse often consists of only one bi- or tricolon.

[84] In the Aleppo Codex and Leningrad Codex, Job 32:1–5 has been written with a blank space in several lines, which creates the impression that the layout is colometric, like the arrangement of the preceding and following poetry. However, the layout is only partially colometric, like the arrangement of Ps 60:1–2 in the Aleppo Codex. In contrast to the poetry of Job, Job 32:1–5 is displayed as prose in the Babylonian codex Berlin Or.Qu. 680 (Barthélemy 2012: 241–42). This raises the question of what came first: the (pseudo-)colometrical layouts, or the accentuation?

[85] Regrettably Crowther (2015: 152–56) did not consider the problems mentioned above, which is a weak point in his study.

Song of Songs were marked satisfactorily with the accents of the Twenty-one Books.

There is another, more attractive option. If the system of the Three Books was developed first and was applied in Psalms, Job 3:2–42:6, and Proverbs, it may have been deemed unsuitable for the longer "prose" verses (Burns 2011: 101). This must have been an incentive to develop a different system that suited both narrative texts (Job 1–2, 42:7–17, etc.) and poetic texts (Song of Songs, Lamentations, etc.). Therefore, it is not unthinkable for the system of the Twenty-one Books to represent a secondary improvement of the less suitable system of the Three Books.

In his study of the accents of the Three Books, Burns (2011: 1–2) said that after the destruction of the Second Temple the reading tradition of the Three Books was lost. Since they belong to the Writings, these books were no longer read in the synagogues, whereas the reading tradition of the Torah and the Prophets remained unbroken. Burns may have offered an explanation as to why the accentuation system of the Three Books may have developed first.[86] The need to preserve the reading tradition of the Three Books, including the cadences, may have been more urgent than the incentive to record the reading tradition of the Torah and the Prophets, which was still in regular use, with an intact tradition of oral transmission. From an early stage the Psalms, Job 3:2–42:6 and Proverbs were transmitted with their colometric layout (see Sanders & de Hoop forthcoming). Thus, it is possible that the first Tiberian system of accentuation was developed for these colometrically written texts. Thereafter, the refined system was developed for the Twenty-one Books.[87]

Several observations substantiate the priority of the system of the Three Books. The Palestinian and the Tiberian accentuation have several traits in common and seem to stem from one older system of disjunctive accentuation (Revell 1974: 95–97). The Palestinian system could use the same sign for different accents, e.g., for *atnaḥ* and *zaqef qaṭon* or *ṭifḥa*. Which accent was meant becomes clear only from its position and the combination with the surrounding accents (see Section 7.3). The Tiberian system in the Three Books is comparable in the case of *revia ͨ*, which is applied in four different ways: *revia ͨ mugraš*, *revia ͨ* replacing *atnaḥ*, *revia ͨ gadol* and *revia ͨ qaṭon* (see Section 6.2). Only the position of the *revia ͨ* and its relationship with the surrounding accents, including the *gereš* of *revia ͨ mugraš*, show which of them was intended. In this sense, the Tiberian disjunctive accentuation

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[86] Burns (2011: 31, cf. also 101) claims that Revell's study (1977) has proven that "the Palestinian accent system, as well as the Palestinian style of pronunciation, . . . were the models that led directly into the work of the Tiberian school." However, this assumption is due to misunderstanding of Revell's argument. "Revell just argues that these traditions existed side by side and that the Palestinian tradition even continued to develop the Tiberian system" (de Hoop 2013a: 196; see Revell 1977: 183–96; 1979: 148–49).

[87] According to Park 2020: xii, 133, the system of the Twenty-one Books is "more developed and improved" and "simpler."

in the Three Books still represents the "principle of economy of sign form" (Revell 1974: 96), which uses a minimum of graphic signs to represent the accents.[88] This means that the Tiberian accentuation in the Three Books is still quite close to the earlier Palestinian tradition. It seems to reflect an early stage in the development of the Tiberian system and has disadvantages that are no longer found in the system of the Twenty-one Books.

If the Tiberian and the Palestinian systems stem from a single older system, this older system is probably the Babylonian one. Significantly, in the Babylonian system, a single sign was used for different accents. According to Ronit Shoshany (2013: 270), the accentuation rules in the later strata of the Babylonian system ("b" and "c" strata) resemble the Tiberian rules of the Twenty-one Books, with several differences. The accent *ḥet* appears to have had a role comparable to the Tiberian *rᵉviaʿ* in the Three Books. "The main difference is the multiple roles of the *ḥet*. The multiple roles may cause some uncertainty in the division of the domains. In the Tiberian system of the Twenty-one Books there is no room for confusion . . ."[89] While the Tiberian system of the Twenty-one Books may not arouse confusion, in the system of the Three Books *rᵉviaʿ* has a complicated role, especially if we take the *rᵉviaʿ* replacing *atnaḥ* into account.

Another conspicuous aspect of the Tiberian system in the Three Books is the frequent absence of the precursor *dᵉḥi* in the domain of *atnaḥ*, and the precursor *rᵉviaʿ mugraš* in the domain of *silluq* (see Section 6.2). Wickes observed that *dᵉḥi* or *rᵉviaʿ mugraš* are absent only when they seem to be due with the first word before the word marked with *atnaḥ* or *silluq*. He argued that these precursors were replaced by conjunctive accents for musical reasons alone (Wickes 1881: 98). Regarding the frequent omission of *dᵉḥi* before *atnaḥ* he said (Wickes 1881: 60; cf. Price 1990: 234):

> This change is, of course, simply musical, and is occasioned by the *shortness* of that part of Athnach's word which precedes the tone. When it contains two (or more) syllables, or one long syllable, followed by vocal Sh'va, D'chî can stand. Otherwise, a servus must come instead.

Wickes (1881: 69, 98–100; cf. Price 1990: 209–10) assumed that immediately before a *silluq* the *rᵉviaʿ mugraš* was transformed into a conjunctive accent under exactly the same circumstances.

The "law of transformation" formulated by Wickes should not be taken too rigidly. He himself refers to possible exceptions (Wickes 1881: 98–99).[90] However, Wickes's observation that if a

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[88] It is remarkable that the number of Tiberian disjunctive signs is smaller in the Three Books than in the Twenty-one Books, while the number of conjunctive signs is equal. This seems to reflect a historical development in which the disjunctive accents were introduced before the conjunctive accents (Dotan 1987; differently: Breuer 1988/89).

[89] Shoshany 2013: 273. The domain of *taw* is divided by the *ḥet*, which is not identical to the *ḥet* dividing the domain of the *śin*, although the signs are identical (271).

[90] The precursor may be absent even if the following word or word-unit (see n. 5) with *atnaḥ* or *silluq* is quite long; see, e.g.,אֲפָפ֣וּנִי חֶבְלֵי־

precursor is absent, it would have been expected with the word before *atnaḥ* or *silluq* and not earlier, is still correct. This is illustrated by a comparison of the accentuation of Psalm 18 with the accentuation of 2 Samuel 22 (see Sanders 2000: 280–82; 309–11).

The frequent absence of a precursor in the Three Books in the Tiberian tradition can be compared with patterns in the Babylonian tradition, which omits disjunctive accents—also the precursors—quite often, especially in the earlier strata. Apparently, the Babylonian copyists assumed that the readers knew where the unwritten disjunctive accents were to be read (see Section 7.2). The comparison can be made based on Kahle's reproduction, side by side, of Job 40:6–32 in four different Babylonian manuscripts, namely Petersburg EVR II B 5, Berlin Or.Qu. 680, London BM Or. 2372, and Cambridge T-S A 39.12 (Kahle 1913: 58–63).[91] The relatively late EVR II B 5 corresponds to Codex Babylonicus Petropolitanus (916 C.E.)[92] in that the accents occur above the stressed syllables (Kahle 1913: 126, 136–37; 1922: 130). In EVR II B 5, the cadence of each verse in Job 40:6–32 is marked completely, namely by *yod–zayin* in the first colon and by *dalet–sof pasuq* in the second. This is comparable to the Tiberian system of accentuation in the Twenty-one Books. Such comprehensiveness is not found in the earlier Babylonian manuscripts, which only rarely display precursors. Berlin Or.Qu. 680 often omits the precursor *taw*, which is expected in the first colon before *zayin*, while BM Or. 2372 marks the end of the first colon with *siḥfa* (Tib. *atnaḥ*) and the end of the second colon with *sof pasuq* but omits the precursors in both cola. Illustrative is the accentuation of Job 40:13–14 in these manuscripts (Kahle 1913: 58–59) in comparison with the Tiberian tradition (with only the disjunctive accents displayed):[93]

מֶֽוֶת (Ps 18:5a); בְלִיַּעַל יְבַעֲתֽוּנִי׃ (Ps 18:5b); יְקַדְּמֽוּנִי בְיֽוֹם־אֵידִ֑י (Ps 18:19a); נִפְלְאוֹתֽיו (Ps 18:42a); וּתְקוּפָתֽוֹ עַל־קְצוֹתָ֑ם (Ps 19:7); יְשַׁוְּעֽוּ וְאֵֽין־מוֹשִׁ֑יעַ (Ps 105:5).

[91] For these manuscripts, see Kahle 1913: 136–37; Barthélemy 2012: 241–42; Kahle 1913: 134–35; 137–39, respectively.

[92] For this codex containing the Latter Prophets, see Lange 2016: 119.

[93] In the surviving fragments of Job 40, Cambridge T-S A 39.12 virtually always marks *zayin* at the end of the first colon, but due to the damage it is often unclear whether in the first colon the precursor was marked (Kahle 1913: 59, 63). In six of the nine *second* cola of Job 40:10–15 and 40:28–30 (40:31–41:1 is damaged), the precursor *dalet* is visible. Remarkably, the *dalet* is written when the Tiberian MT displays the precursor *rᵉviaʿ mugraš*, but is left unwritten when the precursor is also omitted in the Tiberian MT.

EVR II B 5	פֿניהם חבוש בטמון׃ כי תושיע לךֿ ימינך׃	טמנם בעפֿר יֹחד וגם־אני אודֹך
Or.Qu. 680	פניהם חבוש בטמון׃ כי תושיע לך ימינך׃	טמנם בעפר יחדֿ וגֶם אני אודֿך
BM Or. 2372	פניהם חבש בטמון׃ כי תושע לך ימינך׃	טמנם בעפר יחֹד וגם אני אודך
T-S A 39.12	פֿניהם חבש בטמון׃ כי תושע לך ימינך׃	‏[טמנם בעפר י]חד ‏[וגם אני אודך]
Tib. MT	פְּנֵיהֶם חֲבֹשׁ בַּטָּמֽוּן׃ כִּי־תוֹשִׁעַ לְךָ יְמִינֶֽךָ׃	טָמְנֵם בֶּעָפָר יָֽחַד וְגַם־אֲנִי אוֹדֶֽךָּ

Just like the incomplete accentuation of the early Babylonian manuscripts, the Tiberian accentuation may give the impression of being incomplete. The late Babylonian EVR II B 5 indicates the complete cadences of precursor and main accent.[94] In Job 40:13–14 the Tiberian MT omits some of the precursors that in EVR II B 5 occur with the first word before *atnaḥ* or *silluq*. Does this mean that the Tiberian disjunctive accentuation is incomplete, like the accentuation of the early Babylonian manuscripts?

In the Tiberian tradition, the conjunctive accents were added later than the disjunctive ones (Dotan 1981: 94; 1987; Himmelfarb 1998: 246, with n. 11). The reason for adding conjunctive accents in positions in which a precursor could have been read is unclear. As Wickes suggested, this may have been for musical reasons, implying that reading a pause immediately before the main accent *atnaḥ* or *silluq* was not appropriate. However, it is not less thinkable that the Tiberian conjunctive accents of the Three Books were added in one or more manuscripts in which many precursors had been left unwritten, as they were in the early Babylonian manuscripts, and contrary to the later Babylonian EVR II B 5. The Masoretes who inserted the conjunctive accents may have used manuscripts in which the precursors were omitted if they were due immediately before the word(-unit) with *atnaḥ* or *silluq*.[95] If in such manuscripts phrases did not contain a written precursor, the readers would have understood that a disjunctive accent was presupposed with the penultimate word and that a minor pause had to be inserted thereafter. The Tiberian Masoretes may have considered the disjunctive accentuation of such manuscripts as an authoritative tradition which should not

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[94] In Job 40, EVR II B 5 only omits the following precursors: *yod* in 40:9a and *dalet* in 40:28b (Kahle 1913: 58, 60). In the reprint of Kahle's book (1984) it seems that in 40:22a and 40:26a the precursor *yod* is missing as well, but in the original edition the *yod* is clearly visible in both cases.

[95] Cambridge T-S A 39.12 may represent such a tradition; see n. 91 above.

be altered by inserting additional disjunctive accents (cf. Himmelfarb 1998: 246). They may have inserted conjunctive accents where disjunctive accents were due but had been left unwritten. After taking the decision to add conjunctive accents at such positions, they may have decided to treat these accents as real conjunctives, as appears from the spirantisation of the *bᵉgadkᵉfat* letter with which certain words with *atnaḥ* or *silluq* begin (Sanders 2000: 282, n. 17).

There is an additional phenomenon suggesting that in the Three Books the Tiberian Masoretes sometimes inserted conjunctive accents where they were not quite suitable. The conjunctive accents are sometimes overruled by a secondary *paseq*—a vertical line between words indicating a pause, although the preceding word has a conjunctive accent (Saebø 2006: 229–30; Dotan 2007: 640–41, § 5.3.3.3.1.1; Joüon & Muraoka 2013: 63, § 15m; Himmelfarb 2014: 200; Park 2020: 157–62). The scholarly literature differentiates between two kinds of these vertical strokes: the *paseq* occurring after any conjunctive accent, and the *paseq* which together with another sign (mostly a sign for a conjunctive) forms one of the disjunctive accents *šalšelet*, *munaḥ lᵉgarmeh*, *šalšelet gᵉdolah*, *azla lᵉgarmeh*, *mahpak lᵉgarmeh* (Dotan 2007: 640–41, § 5.3.3.3.1.1).[96]

Lea Himmelfarb compared the occurrences of the *paseq* in Tiberian MT with the accentuation in Babylonian MT. She demonstrated that in the early as well as the late Babylonian manuscripts a disjunctive accent occurs frequently at the position of *paseq* in Tiberian MT (Himmelfarb 2014: 200–205). Illustrative is the accentuation of Job 40:9 in Berlin Or.Qu. 680, where an uncommon Babylonian disjunctive accent (cf. Kahle 1913: 174) occurs at the position of the Tiberian conjunctive accent *merᵉka*, which is followed by a *paseq* (Kahle 1913: 58; Himmelfarb 2014: 201):

| Or.Qu. 680 | וְאִם זרוע כאל לָֽך [ובקול] כמהו תרעם: |
| Tib. MT | וְאִם זְרוֹעַ כָּאֵ֥ל ׀ לָ֑ךְ וּבְק֕וֹל כָּמֹ֖הוּ תַרְעֵֽם׃ |

In cases like this one, the *paseq* seems to have been added since the conjunctive accent was regarded as inadequate.

All in all, there is enough reason to further investigate the possibility that the Tiberian accentuation system of the Three Books predates the more refined and more adequate system of the Twenty-one Books. In the Babylonian tradition, there was a

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[96] This differentiation is sometimes difficult. *Paseq* may be used in combination with *munaḥ* whereas the combination of the two signs is not intended as *munaḥ lᵉgarmeh*; see Isa 42:5 and the *masorah parva* of the Leningrad Codex (Yeivin 1980: 214, § 278). The differentiation seems to be somewhat artificial, which explains why scholars occasionally interpret the occurrences differently (Himmelfarb 1998: 245–46, n. 10). Whether this differentiation was intended originally or is a later, artificial distinction is not important for the present discussion. Even in the case of the disjunctive accents *šalšelet*, *munaḥ lᵉgarmeh*, etc., *paseq* seems to have been inserted to transform conjunctive accents into disjunctive accents.

gradual development towards marking the disjunctive accents as consistently as possible. The final stage of this development, which is represented by EVR II B 5, corresponds quite closely with the Tiberian accentuation system of the Twenty-one Books. The Tiberian accentuation system of the Three Books, with its omission of many precursors, shows correspondences with the earlier Babylonian manuscripts, in which many disjunctive accents were still left unwritten.

9. CONCLUSIONS

After a short survey of earlier scholarly literature and an analysis of the terminology used to designate the Masoretic accents, it was possible to create more clarity with regard to their function and prehistory. Of course, most of the results of our analysis are not new. Similar conclusions were drawn by other scholars. The outcome of our research can be summarised as follows:

1. Initially, the Masoretic accents were added neither to indicate the stressed syllable of words, nor the syntactical aspects of the text, nor to represent melodies. From their first occurrence, the recitative function of the accents was their true *raison d'être*. It is obvious that the musical (i.e. melodic) function was not a major concern for the Masoretes.

2. The recitative function of the accents gives meaning to the text by delimiting reading units within the verses. This is not only the case in the Tiberian tradition, but also in the Palestinian tradition and the older Babylonian tradition. In general, the Babylonian, Palestinian and Tiberian divisions of textual units correspond to a very high degree. Similar divisions by means of blank spaces occur already in some of the Dead Sea Scrolls, especially for biblical poetry.

3. The three accentuation traditions mark the cadences of the recitation by means of fixed pairs of accents, a major disjunctive accent at the end of the textual unit and a subordinate precursor that subdivides the unit. Since the precursor indicates which major disjunctive accent will follow, the latter accent was often left unwritten in the Babylonian and Palestinian traditions.

4. The comprehensive Tiberian system of accentuation includes a subsystem for the Three Books (Psalms, Job 3:2–42:6. Proverbs) and another one for the Twenty-one Books (rest of the Hebrew Bible). The more equivocal and less adequate accentuation system of the Three Books is the oldest. In certain respects, it resembles the earliest stages of the Babylonian accentuation system. The system of the Twenty-one Books is more transparent and adequate. It can be considered as the final product of an extended process.

Appendix: Sigla for the Tiberian accents

Twenty-one Books		
דָּבֶ֑ר	*a*	*Atnaḥ*
דָּבָ֨ר	*az*	*Azla*
דָּבֶ֧ר	*d*	*Darga*
דָּבָ֜ר	*g*	*Gereš*
דָּבֶ֜֗ר	*gg*	*Galgal*
דָּבָ֞ר	*gs*	*Garšayim*
דָּבֶ֣רו	*lg*	*Lᵉgarmeh*
דָּבֶ֥ר	*m*	*Munaḥ*
דָּבֶ֤ר	*mh*	*Mᵉhuppaḵ*
דָּבֶ֦ר	*mk*	*Merᵉḵa kᵉfula*
דָּבֶ֥ר	*mr*	*Merᵉḵa*
דָּבֶ֥ר	*my*	*Mayᵉla* [97]
וְהָאָדָ֔ם	*mz*	*Munaḥ-Zaqef*
דָּבָ֙ר	*p*	*Pašṭa* [98]
דָּבָ֟ר	*pg*	*Pazer gadol*
דָּבָ֡ר	*pz*	*Pazer*
דָּבָ֗ר	*r*	*Rᵉviaʿ*
דָּבֶ֑ר׃	*s*	*Silluq*
דָּבָ֒ר	*sg*	*Sᵉgolta*
דָּבָ֓רו	*sl*	*Šalšelet*
דָּבֶ֖ר	*t*	*Ṭifḥa*
דָּבָ֠ר	*tl*	*Tᵉliša gᵉdolah*
דָּבָ֩ר	*tq*	*Tᵉliša qᵉṭannah*
דָּבֶ֛ר	*tv*	*Tᵉḇir*
מֶ֚לֶךְ	*y*	*Yᵉtiḇ*
דָּבָ֔ר	*z*	*Zaqef qaṭan*
דָּבָ֕ר	*zg*	*Zaqef gadol*
דָּבָ֮ר	*zr*	*Zarqa*

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[97] In the "Table of Accents", *BHQ* notes with regard to *mayᵉla*: "rare; looks like *ṭifḥa*, but always used as a secondary accent with the same phonetic unit as *atnaḥ* or *silluq*"; see, e.g., בְּשָׁבֻעֹתֵיכֶם (Num 28:26) and לְהֵחַלּֽוֹ׃ (Lev 21:4).

[98] *Pašṭa* is postpositive, but if the stress is on the penultimate sylla-ble, the sign is placed twice: postpositive and with the stressed syllable, e.g., מֶ֛֙לֶךְ֙.

Three Books		
דָּבֶר	*a*	*Atnaḥ*
דָּבָֽרוּ	*al*	*Azla lᵉgarmeh*
דָּבָ֫ר	*az*	*Azla*
דֶּבָר	*dh*	*Dᵉḥi*
דָּבֶ֜ר	*gg*	*Galgal*
דָּבָ֬ר	*i*	*ʿIlluy*
דָּבֶר	*m*	*Munaḥ*
דָּבֶר	*mh*	*Mᵉhuppak̲*
דָּבֵֽרוּ	*ml*	*Mᵉhuppak lᵉgarmeh*
דָּבֶר	*mr*	*Merᵉk̲a*
דְּבָר	*oy*	*ʿOle wᵉyored*
דָּבָ֗ר	*pz*	*Pazer*
דָּבָ֗ר	*rg*	*Rᵉviaʿ gadol*
דָֿבָ֗ר	*rm*	*Rᵉviaʿ mugraš*
דָּבָ֗ר	*r* ᵃ	*Rᵉviaʿ replacing atnaḥ*
דְּבָ֗ר	*rq*	*Rᵉviaʿ qaṭan*
דָּבֶר׃	*s*	*Silluq*
דָּבָֽרוּ	*sg*	*Šalšelet gᵉdolah*
דָּבֶר	*sm*	*Sofar mᵉhuppak̲*
דָּבָ֮ר	*sn*	*Ṣinnor*
דְּבָ֓ר	*sq*	*Šalšelet qᵉṭannah*
כִּ֘י	*st*	*Ṣinnorit* [99]
דָּבֶר	*tr*	*Ṭarḥa*

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[99] The conjunctive accent *ṣinnorit* (א֮֯, not postpositive, unlike the disjunctive *ṣinnor* [א֮]) appears before *merᵉka*, sometimes even with the same word, like יִתְעֵ֫ב (Ps 5:7). Furthermore, it is also used before *sofar mᵉhuppak*, as in כִּ֘י ה֣וּא (Ps 95:7).

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